



Brainteaser

D9.3 Project Ontology and Terminology, Including Data Mapper and RDF Graph Builder (M36)



Project Title	BRinging Artificial INTElligence home for a better cAre of amyotrophic lateral sclerosis and multiple ScLERosis
Grant Agreement No	GA101017598
Contract start date	01/01/2021
Contract duration	48 Months

Document ID	BRAINTEASER_D9.3 Project Ontology and Terminology, Including Data Mapper and RDF Graph Builder
Deliverable leader	UNIPD
Due date	31/12/2023
Deliverable date	08/01/2024
Dissemination level	PUBLIC

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DOCUMENT HISTORY

Version	Date	Author/Organization	Modifications	Status
0.1	01/10/2023	UNIPD	Initial outline	Draft
0.2	30/10/2023	UNIPD	First draft	Draft
0.3	15/11/2023	UNIPD	Second draft	Draft
0.4	30/11/2023	UNIPD	Formatting	Draft

Version	Date	Author/Organization	Modifications	Status
0.5	10/12/2023	UNIPD	Revising	Pre-final
1.0	08/01/2024	Maria F. Cabrera/UPM	Final review and final version	Final

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EXECUTIVE SUMMARY

The goal of this deliverable is to document the design and development of the third version of BRAINTEASER Ontology (BTO), the ontology developed in the context of BRAINTEASER project, to provide a unifying data structure and ontologically model clinical data concerning patients affected by Amyotrophic Lateral Sclerosis (ALS) and Multiple Sclerosis (MS).

With respect to BTO 2.0, described in Deliverable 9.2, BTO 3.0 does not present major updates in terms of modeling design. As the previous version, BTO 3.0 aims at implementing FAIR principles. This is achieved by adopting external referencing whenever possible and reusing classes already defined in other ontologies, employing unique namespaces and providing a fully functional documentation and annotation of the classes.

Furthermore, in this deliverable we present our effort concerning the multilingual terminological database, with the definition of concepts and terms, the description of the conceptual scheme, and the analysis of the linguistic networks.

In terms of content, the new version of BTO integrates prospective data coming from sensors provided to patients and questionnaires filled through the BRAINTEASER app and using a clinical tool form developed within the consortium.

1. INTRODUCTION

Predicting the progression of diseases automatically (DPP) is crucial for supporting medical practitioners and enhancing patient well-being, yet it's challenging due to the need for substantial data, often unavailable within a single medical center. This challenge intensifies for rare diseases due to their scarcity and swift progression, making it harder to gather sufficient data for training predictive algorithms (Schaefer Et Al 2020).

To address this, modern methodologies rely on Ontology-Based Data Access techniques to standardize retrospective data collection and encourage the adoption of a shared, interoperable semantic framework (Calvanese et al. 2018). By utilizing a common ontology, disparate data models and schemas from various medical centers can be integrated, ensuring uniform data collection and consistent semantics across equivalent information.

Moreover, existing literature emphasizes the significance of ontologies in enabling effective predictive models and automated decision-making in medical contexts (Alshamrani et al. 2020, Cimiano, Unger, and McCrae 2014).

This work introduces the BRAINTEASER Ontology version 3.0 (BTO 3.0), specifically designed to model the medical history of patients afflicted with MS or ALS and the progression of these diseases. BTO 3.0 serves multiple purposes: it establishes a unified model, integrates data from diverse medical centers regarding ALS and MS, and empowers AI tools for diagnosis and disease progression prediction based on informed knowledge.

Furthermore, BTO 3.0 acts as the schema for a Knowledge Base (KB) derived from retrospective data contributed by multiple centers within the Brainteaser consortium and also from prospective data, through their questionnaires and wearable devices, produced by patients enrolled in the Brainteaser process. This utilization of BTO facilitates the sharing and reuse of the Brainteaser KB, aligning with Open Science and the FAIR principles (Findability, Accessibility, Interoperability, Reusability). As a result, BTO 3.0 significantly enhances the quality and accessibility of medical data accessible to the broader community.

Besides developing the third version of BTO, we also present our work concerning the multilingual terminological database. In particular, we provide the definition of concepts and terms, to the description of the conceptual scheme, and to the analysis of the linguistic networks.

The remainder of this work is organized as follows: Section 2 provides an overview of the background of the development of the ontology, including the timeline and design choices; Section 3 describes the structure of the BTO 3.0 ontology and the main differences with the previous version. Section 4 contains the description of our work on the multilingual terminological database. Section 5 outlines our conclusions.

2. BACKGROUND

2.1 Co-design approach

To design the BTO, we adopted a co-design approach, strictly collaborating with the medical partners and domain experts, to embed their knowledge in the BTO and, at the same time, to validate all the design choices

For the third version of BTO, most of the interactions occurred with WP 2, as responsible of the collection, organization and storage of the prospective data.

2.1.1 BTO Timeline

The first version of BTO was developed starting from April 2021 and was finalized on November 2021. The detailed timeline is available on BRAINTEASER deliverable 9.1.

The second version of BTO was developed starting from March 2022 and was further updated according to the outcomes of the iDPP@CLEF 2022 in September 2022. The second version of the ontology was finalized in November 2022. A more detailed timeline is available in Deliverable 9.2.

Following the version 2 timeline, the development of BTO 3.0 started in early March 2023, after the project meeting. In particular, the ontology was built based on the schema used to store prospective data described in deliverables 2.2, 2.3, and 2.5, also with constant interaction with WP2. The current version of BTO was finalized in November 2023.

2.2 Implementation principles

BTO has been designed to meet the OBO and FAIR principles also favouring its adoption in heterogeneous scenarios. Such principles include *Openness*, *Common Format*, *unique URI/Identifier Space*, *Versioning*, *Scope*, *Textual Definitions associated with each class*, *reuse of already defined Relations*, *detailed Documentation*, *Documented Plurality of Users* and *Commitment To Collaboration*, *clear Locus of Authority*, *strict Naming Conventions* and *Maintenance*. How such principles have been enforced is detailed in Deliverable 9.2.

To provide consistency in BTO we expressed some basic principles to adopt when defining classes and properties. These guidelines involve external referencing, annotation properties, naming conventions, and the usage of the SKOS data model. Major details are available in Deliverable 9.2.

Following previous implementation principles:

- We adopt external referencing whenever possible, by reusing classes already defined in other ontologies, such as NCIT (Sioutos et al. 2007). In particular, external referencing has been managed with annotation properties and using the URI of the term in the original taxonomy. If the class had an equivalent in NCIT, we inherited the name and definition. In this case, we also added another annotation property called “[rdfs:seeAlso](#)” with the Internationalized Resource Identifier (IRI) corresponding to the NCIT term of reference.
- We employ two namespaces: the schema namespace <https://w3id.org/brainteaser/ontology/schema/> and the resource namespace <https://w3id.org/brainteaser/ontology/resource/>.
- For each class that had a UMLS reference, we added the annotation property “[dcterms:conformsTo](#)” with the URL of the corresponding concept.
- All components must have a label and a comment. About object properties, we used explanatory labels where we included the property range. In this case, the comment explains the relationship between the two classes involved. Concerning data properties, the label usually includes the name of the domain class so that its meaning is intuitive. We also added a comment with the attribute description and, when available, the definition source.
- We employ SKOS data model¹ To avoid classism – the design pattern where an external hierarchy is modelled as a hierarchy of ontological classes.

¹ <https://www.w3.org/TR/2009/REC-skos-reference-20090818/>

3. THE BRAINTEASER ONTOLOGY

The new version of BTO integrates prospective data coming from sensors provided to patients and questionnaires filled through the BRAINTEASER app and using a clinical tool form developed within the consortium. Concerning sensors, each patient is provided with two sensor devices: one for environmental monitoring (Atmotube) and a Garmin watch that tracks daily activities. Differently from the previous version, the new version of BTO supports the storage of information collected from wearable sensors (described in Section 3.2) and questionnaires filled by patients or clinicians (reported in Section 3.3).

3.1 Main differences with respect to BTO version 2.0

BTO version 2.0 proves to be adequate for storing information about patients, clinical events, diagnostic procedures and medications. For this reason, we maintained the same structure of version 2.0 but made some changes to integrate novel information. Due to the nature of prospective data, we changed the range of some data properties and added two data properties representing each patient's phenotype and cognitive phenotype. To better represent each patient's family history, we changed the domain class of the properties "deathDate" and "deathCause" to "Person" (originally "Patient") and we added two named individuals following the SKOS data model to represent other diseases. We also included 82 new pharmacologic substances following the SKOS data model to represent therapeutic treatments. Concerning new classes, we added 3 classes to account for environmental data collected from Atmotube devices, namely humidity, atmospheric pressure, and PM1 concentration. We also introduced menstrual cycle information and symptoms modelling.

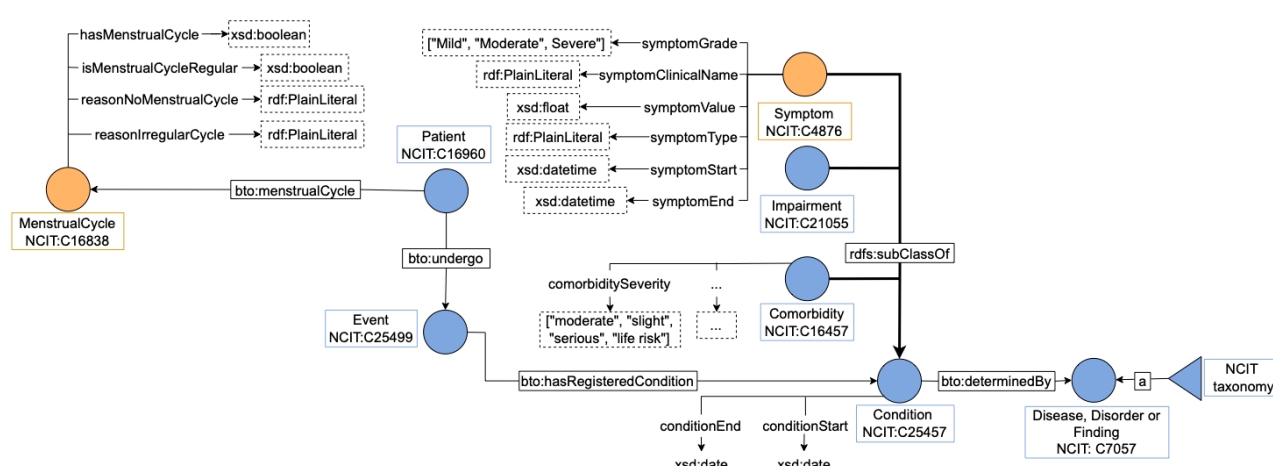


Figure 1. Menstrual Cycle and Symptom modelling. Blue nodes are classes from version 2.0, while elements highlighted in orange represent the newly added components.

Figure 1 depicts the menstrual cycle and symptom modelling. Menstrual Cycle information is directly linked to the corresponding patient with object property "bto:menstrualCycle" and comprises data about its presence and regularity. For

both pieces of information, we define two data properties, one for stating whether the patient has menstruations or if it is regular, and the other for expressing the reason of its absence, e.g. menopause, or irregularity. About symptoms, we represent them as a subclass of “Condition” and define six data properties to express when a symptom started, when it ended, its clinical name and type, its grade of severity, and, if applicable, its numerical value, e.g. fever.

3.2 Wearable data

Wearable devices are widely used in healthcare applications to monitor patients and have also been applied for monitor disease progression in ALS and MS patients (Abbadessa et al. 2021, Johnson et al. 2023). In the context of the BRAINTEASER project, patients are provided with a Garmin watch that collects information about each patient’s stress level, sleep quality, physical activity, and heart rate measurements. Figure 2 illustrates the main classes and properties involved in modelling wearable data measurements.

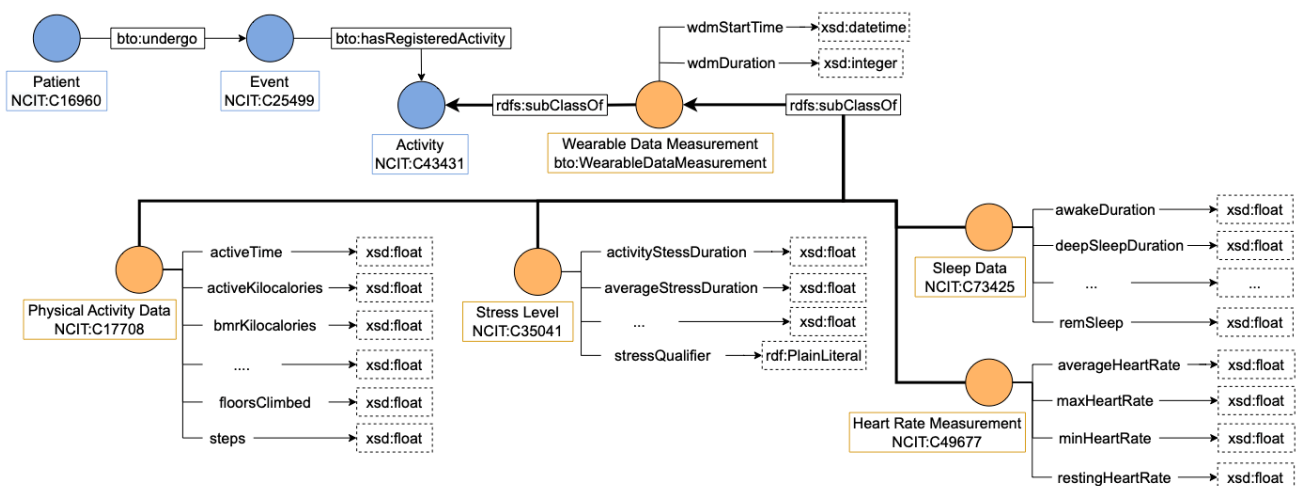


Figure 2. Wearable Data Modelling. We identify four subclasses of “Wearable Data Measurement” that group together data linked to the same aspect: “Physical Activity Data”, “Stress Level”, “Sleep Data”, and “Heart Rate Measurement”. For each measurement, we store information about the timestamp in which the measurement started, its duration and its value. Nodes in blue represent classes in BTO version 2.0, while orange identifies newly added classes.

Since we can consider wearable devices data collection as an activity, we model “Wearable Data Measurement” as a subclass of “Activity”. In this way, we can connect each patient to the corresponding measurement by means of the object property “**bto:undergo**” pointing to an event which is linked to the specific measurement with object property “**bto:hasRegisteredActivity**”. For each measure, we store the timestamp in which the device started collecting the measurement, its duration and value. We specified four subclasses of the class “Wearable Data Measurement,” each with its specific data properties. The possible measurement types are: *i)* “Physical Activity Data”, comprising information about physical exercise, such as the number of daily steps, floor climbed, etc; *ii)* “Stress Level”, representing the stress level and duration; *iii)* “Sleep Data”, containing data related

to sleep quality and duration, such as the awake duration, rem sleep duration, etc; iv) “Heart Rate Measurement”, comprising resting heart rate, maximum and minimum heart rate, and the average heart rate. The specific measurements are modeled as data properties with one of the just described subclasses as domain class.

3.3 Questionnaires

In the context of the BRAINTEASER project, both patients and clinicians can fill questionnaires provided by a mobile application and a clinical tool form respectively. In the former case, referred as “*App Questionnaires*” (Subsection 3.3.1), patients can report their health status by filling questionnaires in the BRAINTEASER app, while the latter, called “*Clinical Tool Forms*” (Subsection 3.3.2), consists of questionnaires filled by clinicians during visits. Since the two types of questionnaires resemble different concepts, we opted for two different modelling choices. Following the event-based approach we used through BTO, we define a general class called “*App Questionnaire*”, which is linked to an event with the object property “*bto:filledAppQuestionnaire*”. Each questionnaire is modelled as a subclass of the above-mentioned class. On the other hand, most clinical tool forms resembles diagnostic procedures, therapeutic procedures, and health habits. For this reason, we reuse classes already defined in BTO version 2.0 as much as possible and define new forms as subclasses of “*Diagnostic Procedure*”.

3.3.1 Application Questionnaires

The BRAINTEASER app offers 13 different questionnaires for patients. Some are general and can be filled both by ALS and MS patients while others are specific for a particular disease:

- *Weight (WEIGHT)*: One question where patients can enter their weight;
- *Pulmonary Function Testing (PFTs)*: 4 questions where patients enter the Forced Expiratory Volume (FEV) in 1 and 6 seconds reported in the spirometer;
- *Visual Analogue Scale (VAS)*: A psychometric response scale, consisting of 1 question, to assess subjective characteristics or symptoms, which relies upon a continuum of possible result values in between two fixed end-points;²
- *Visual Analogue Scale for ALS patients (VAS_ALS)*: The VAS questionnaire provided to ALS patients;
- *Sleep Quality for ALS patients (SLEEP_ALS)*: One question to assess the quality of sleep of ALS patients during the last seven days;
- *European Quality of Life Five Dimension Five Level Scale Questionnaire (EQ5D5L)*: A standardized rating scale which is used as a measure of health outcome. This instrument is a descriptive system consisting of 5 dimensions: mobility, self-care, usual activity, pain/discomfort, and anxiety/depression. Each dimension has 5 levels ranging from no problem to extreme problem or

² http://purl.obolibrary.org/obo/NCIT_C121547

incapable, which are assessed by the patient.³ We also have an additional question for rating the overall health status;

- *Dysphagia in Multiple Sclerosis (DYMUS)*: The questionnaire was initially composed of 10 items and all the answers are dichotomous, coded as 1 or 0, depending on the presence or the absence of the event (Bergamaschi et al., 2008);
- *Self-Assessed ALSFRS-R Questionnaire (ALSFRS-R)*: The ALSFRS-R questionnaire filled by ALS patients using the BRAINTEASER app;
- *Hospital Anxiety and Depression Scale (HADS)*: The Hospital Anxiety and Depression Scale is used to detect depression and anxiety in individuals in a hospital or medical outpatient clinic. This instrument is a self-administered questionnaire consisting of 14 items that assess how the individual has felt over the past week. Each item has 4 response options that are associated with a score of 0 to 3;⁴
- *Hospital Anxiety and Depression Scale for ALS patients (HADS-ALS)*: The HADS questionnaire provided to ALS patients;
- *Modified Fatigue Impact Scale (MFIS)*: A standardized rating scale which assesses how fatigue may affect a person and the impact of fatigue on quality of life. The questionnaire contains 21 questions which are scored ranging from 0 (never) to 4 (almost always);⁵
- *Pittsburg Sleep Quality Index (PSQI)*: A self-rated questionnaire consisting of 11 questions which assesses sleep quality and disturbances over a one month time interval;⁶
- *Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument (MSQOL54)*: A standardized rating scale, which combines items that are generic and disease-specific to assess quality of life and the level of physical, emotional, and cognitive functions in patients with multiple sclerosis. The questionnaire contains 54 questions and generates 12 subscales: physical function, role limitations due to physical problems, role limitations due to emotional problems, pain, emotional well-being, energy, health perceptions, social function, cognitive function, health distress, sexual function and overall quality of life.⁷

Each questionnaire is modelled as a subclass of “App Questionnaires” and its questions are defined as data properties with the question code as identifier and the “*rdfs:comment*” annotation property contains the text of each question. Figure 5 reports the modelling schema of the app questionnaires for a sample of questionnaires, the others follow the same methodology.

³ http://purl.obolibrary.org/obo/NCIT_C102117

⁴ http://purl.obolibrary.org/obo/NCIT_C103520

⁵ http://purl.obolibrary.org/obo/NCIT_C113877

⁶ http://purl.obolibrary.org/obo/NCIT_C103849

⁷ http://purl.obolibrary.org/obo/NCIT_C113878

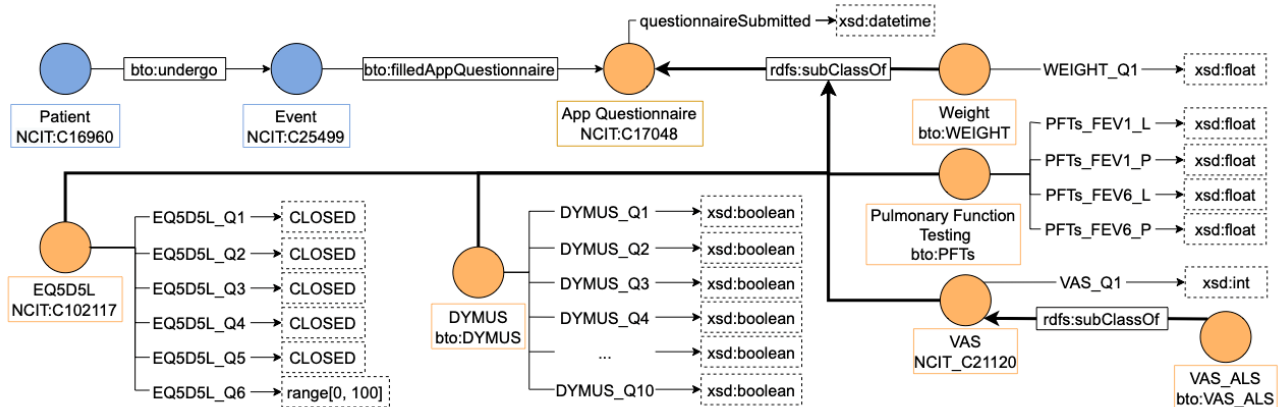


Figure 3. App Questionnaires Modelling. We report a sample of questionnaires to show the adopted modelling schema, the others follow the same methodology. Properties with range “CLOSED” are multiple-choice questions with a pre-defined set of answers. Nodes in blue represent classes in BTO version 2.0, while orange identifies newly added classes.

3.3.2 Clinical Tool Forms

The clinical tool form developed within the BRAINTEASER project offers clinicians 13 different questionnaires to fill during visits. In the following, we provide a list of the questionnaires and modelling choice we adopted:

- *Clinical Disability Function*: EDSS and ALSFRS-R visits for MS and ALS patients, respectively. We use classes “*bto:EDSS*” and “*bto:ALSFRS*”, subclasses of “Diagnostic Procedure”, already defined in version 2.0 but we added four data properties for EDSS visits;
- *Cognitive Assessment*: Different cognitive assessments are performed based on whether we consider ALS or MS patients. For the former, the Edinburgh Cognitive and Behavioural ALS Screen (ECAS) is performed. While for the latter, clinicians report the Brief Visuospatial Memory Test-Revised (BVM-T-R), Symbol Digit Modalities Test (SDMT), and California Verbal Learning Test (CVLT). For each test, we define a new subclass of “*bto:CognitiveAssessment*”, which is a newly defined subclass of “Diagnostic Procedure”;
- *Disease History for ALS patients*: This form stores information about NIV, PEG, onset, family history, and genetic mutations, all already defined in version 2.0. Clinicians also reports two diagnostic criteria: the Awaji (Costa et al., 2012) and Gold Coast criteria (Turner et al., 2022). Both diagnostic evaluations are modeled as new subclasses of “Diagnostic Procedure”, namely “*bto:AwajiClinicalEvaluation*” and “*bto:GoldCoastCriteria*”;
- *Hand Dexterity*: Test performed to assess the ability of a person to use finger, hands, and arms to perform some tasks. We define a new subclass of “Diagnostic Procedure” to store such visits called “*bto:HandDexterity*”;
- *Instrumental Evaluations*: Pulmonary Function Tests and MRIs for ALS and MS patients, respectively. We use classes “*bto:PulmonaryFunctionTest*” and “*bto:MRI*”, subclasses of “Diagnostic Procedure”, from version 2.0 and we added some data properties to account for novel insights;

- *Muscle Tone*: Muscle Tone assessment performed by means of the modified Ashworth Scale (Meseguer-Henarejos et al., 2018). We define a new subclass of “Diagnostic Procedure” called “*bto:MuscleToneAssessment*”;
- *Other Clinical Data*: This form reports information about medications, comorbidities, and other treatments. Patients’ comorbidities are modelled with the class “*bto:Comorbidity*” defined in version 2.0, while medications and other treatments are stored in the “Therapeutic Treatment” semantic area from version 2.0, which is presented in detail in Deliverable 9.2;
- *Patient Profile*: This form comprises patients personal information, such as birth year, ethnicity, and walking status. We store such information as data properties with domain class “Patient”. We added two data properties to represent each patient’s walking status, i.e., whether they walk on their own or need a wheelchair.
- *Health Habits*: This form comprises information about smoking habits and physical activities performed by each patient, that are represented by “*bto:PhysicalActivity*” and “*bto:Smoking*”, subclasses of “Activity”, already defined in version 2.0 and we added some data properties to account for new information.
- *Treatment History*: This is another form for medical treatment. We store such information with the “Therapeutic Treatment” semantic area from version 2.0;
- *Visual Acuity*: Visit to assess the sharpness of vision of each patient. We define a new class called “*bto:VisualAcuity*”, subclass of “Diagnostic Procedure”;
- *Walk Test*: Visit to assess the ability to walk of each patient. We define a new class called “*bto:WalkTest*”, subclass of “Diagnostic Procedure”, with two subclasses, one for each disease. Indeed, the form comprises different information based on whether the patient is an ALS or MS patient;
- *Weight (WEIGHT)*: One question to track the weight of each patient. We store such information by means of a data property with domain class “*bto:ClinicalEvaluation*”, subclass of “Diagnostic Procedure” and already defined in version 2.0.

3.4 Mappers

Data mappers represent the dedicated software architecture employed to transform raw data into a structured RDF graph that aligns with the specified ontology. Considering the introduction of sensor data and questionnaires and the updates to the ontology model described in Section 3, revised, updated, and extended the mappers, without significant alterations to their architecture. For a comprehensive understanding of the software architecture underpinning the mappers, please refer to the details provided in BRAINTEASER Deliverable 9.1.

The main difference with the previous approach regards the source of information we digest. While for retrospective data we considered clinical data coming from different hospitals, in this case we use a dump from the database provided by WP2, where information coming from the BRAINTEASER application, clinical tool forms, and sensors are collected and stored.

4. MULTILINGUAL TERMINOLOGICAL DATABASE

In parallel to the development of the third version of the (BTO), in this deliverable, we present the work on the multilingual terminological database that will allow the researchers and the non-expert to access the medical terminology by means of multilingual equivalents and synonyms of the same concept. The research question, in this case, goes beyond a simple (but not naïve) translation of the word of the BTO. In fact, we need an elaborate analysis that goes under the research field of Terminology that has a central role in the representation of specialized knowledge. One of the distinctive features of Terminology lies in the dual dimension of analysis: conceptual and linguistic (Santos and Costa (2015)).

For this project, we intentionally decided to perform the multilingual conceptual and linguistic analysis in two steps:

1. in this first part, the BTO has been kept separated (and hidden) from the terminological work in order to have an independent view on the same medical terminology,
2. in the second part (that will be presented in deliverable 9.5), the analysis of the overlap between this analysis and the BTO will be performed together with the enrichment of the BTO itself with the multilingual lexical network.

In the following sections, we will present the main results of the first part of the analysis starting from 1) the definition of concepts and terms, 2) to the description of the conceptual scheme, and 3) to the analysis of the linguistic networks.

4.1 The dual dimension: Definitions of concepts and terms

The analysis of the conceptual dimension involves an examination of the concepts within a specific domain, encompassing their identification and representation through the creation of what is referred to as a conceptual scheme. According to ISO 1087:2019, a concept is “a unit of knowledge created by a unique combination of characteristics.” It represents an extra-linguistic reality, as it is independent of the existence of the corresponding term. Indeed, concepts can exist even though they do not have a term to verbalize them. The concept needs a term to be verbalized, which is defined by ISO 1087:2019 as the “designation that represents a general concept by linguistic means”. It is important to note that a designation is the “representation of a concept by a sign which denotes it in a domain or subject” (ISO 1087:2019), and this sign can be either linguistic or non-linguistic.

Therefore, while concepts allow to conceptualize the world, the terms are what permit to transmit and convey the conceptualization or interpretation of the world (Costa and Santos 2015:154). According to the standard, terms can be classified as simple if they consist of a single word or lexical unit, or complex if they consist of more than one word or lexical unit.

In the analysis of the lexical dimension, the work of the terminologist consists in creating a schema, called lexical network, which represents the relations between the identified terms. However, this will be explained in more detail in the following sections concerning the development of the four lexical networks.

4.2 Conceptual dimension: The scheme

The analysis of the conceptual dimension begins with the identification of the concepts related to a specific domain. The identification of the concepts is followed by their organization and classification according to their relations, resulting in the construction of the conceptual system. The conceptual scheme was structured, especially in its first part, according to the ICD-11 classification, used as one of the main references to identify conceptual relations.

In the present scheme, shown in Figure 4, both the hierarchical (either generic or partitive) and associative types of relations were included, in particular the hierarchical relation *is_a* between a generic concept and a specific concept, together with associative relations, including *has_cause*, *has-symptoms*, *has_treatments* and other similar examples that will be illustrated in the Appendix B.

BRAINTEASER – D9.3

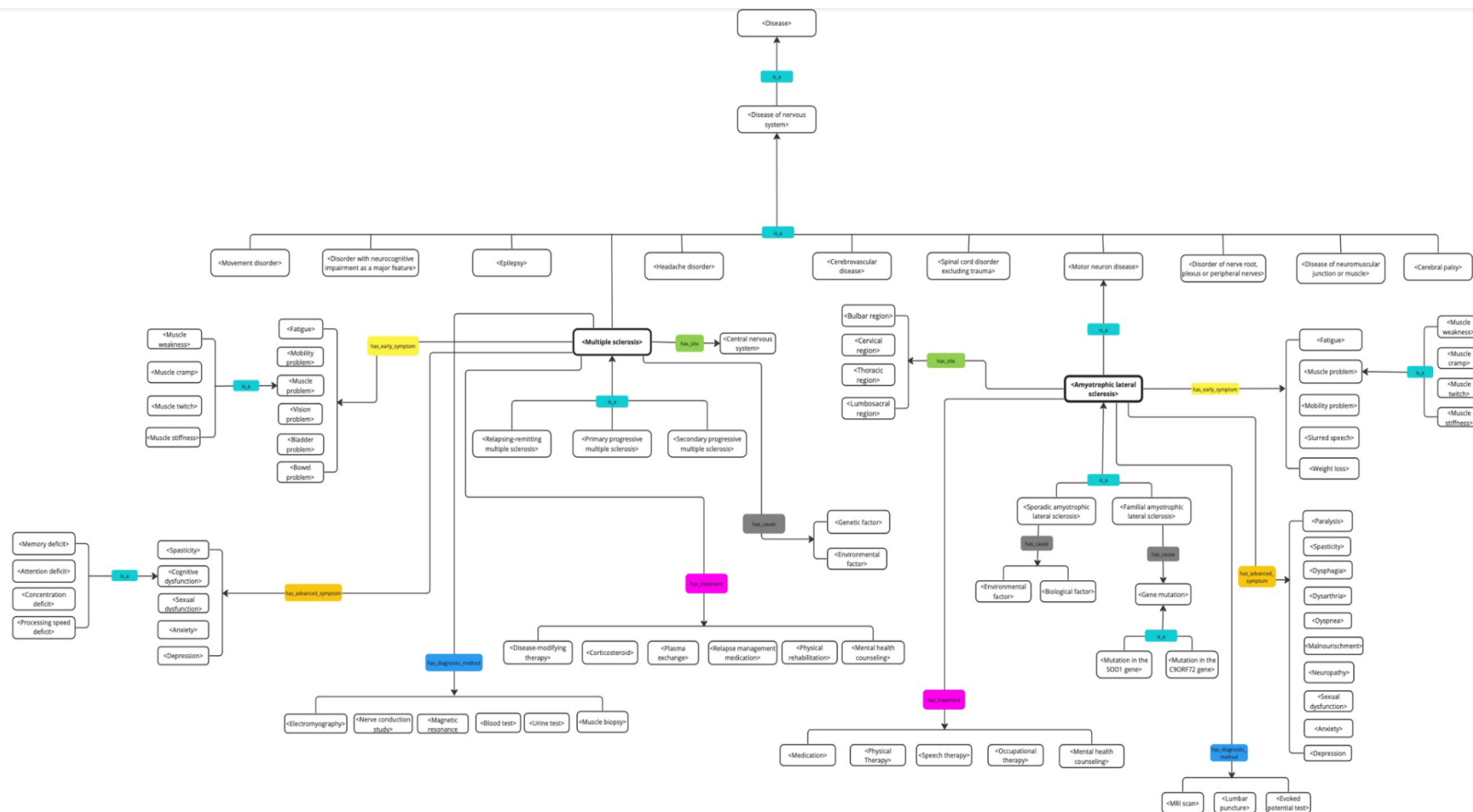


Figure 4. The conceptual scheme reporting both hierarchical and associative types of relations.

4.3 Linguistic dimension: Multilingual Lexical Networks

The analysis of the conceptual dimension was followed by an examination of the linguistic representation of the conceptualization. This process begins with the analysis of the specialised texts, which allows the terminologist to identify the correct terms to designate the concepts under study. Then, the terms are organized in the so-called lexical networks. At the visual level, lexical networks resemble conceptual schemes, but they differ significantly in terms of content. Namely, the conceptual representation shows the relations between concepts, while the lexical network contains the semantic relations existing between terms, which can be hierarchical and horizontal/equivalent (Vezzani 2022:57).

At linguistic level, hierarchical relations indicate taxonomic relations between hyponyms and hypernyms; and meronymic relations between holonyms and meronyms. In addition, horizontal relations, i.e., the relations between the terms and their synonyms, are indicated. In this context, it is important to refer to Costa (2017) definition of synonymy, which introduces a distinction between terminological synonyms and discursive synonyms. The former refers to terms that designate the same concept, while the latter are synonymous only within certain contextual limits, usually to avoid redundancy.

The objective of this phase of terminological work is to combine the information from the conceptual scheme, which is considered language-independent, and “translate” it to a lexical level. This process is not aimed at obtaining a perfect correspondence between the two dimensions but at integrating the dual perspectives for the purpose of knowledge representation (Vezzani 2022:106).

For the purposes of this project, four lexical networks were built for each working language: English, French, Italian, German. The creation was based on a careful research process, consulting the corpora, but also additional sources. Although the corpora represented an effective tool to collect information, the building of the lexical networks often required the consultation of additional sources and the conduction of specific research for each term. In particular, before including a terminological variant for a given term, the reliability of the source and its presence in other reliable sources were always verified.

With regard to synonyms in lexical networks, it should be noted that only terminological synonyms were included, while discursive synonyms were only indicated in the terminological records (described in the following chapter) in order to alert the user to their presence without running the risk of providing information that may be only partially correct.

5. CONCLUSION AND FUTURE WORKS

In this document we detailed on the development of BTO 3.0, an ontology that provides a unifying data structure and ontologically model clinical and prospective data concerning patients affected by Amyotrophic Lateral Sclerosis (ALS) and Multiple Sclerosis (MS).

Compared to the version 2.0 of BTO, the version 3.0 integrates prospective data coming from sensors provided to patients and questionnaires filled through the BRAINTEASER app and using a clinical tool form developed within the consortium. To favour its adoption, BTO has been designed following the same methodology as the version 2.0, which is described in detail in Deliverable 9.2.

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APPENDIX A. RESOURCES

Ontology Specification Draft

language [en](#)

The Brainteaser Ontology

This version:
<https://w3id.org/brainteaser/ontology/3.0/schema/>

Latest version:
<https://w3id.org/brainteaser/ontology/schema/>

Revision:
3.0

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Publisher:
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Imported Ontologies:
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[core](#)

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Cite as:
Nicola Ferro, Giorgio Maria Di Nunzio, Laura Menotti, Guglielmo Faggioli, Stefano Marchesin, Gianmaria Silvello. The Brainteaser Ontology. Revision: 3.0.
Retrieved from: <https://w3id.org/brainteaser/ontology/3.0/schema/>

Figure 5. A screenshot of the BTO documentation.

Ontology Specification Draft

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Edinburgh Cognitive and Behavioural ALS Screen^o

IRI: <https://w3id.org/brainteaser/ontology/schema/ECAS>

The ECAS is a brief multidomain assessment originally designed for people with Amyotrophic Lateral Sclerosis (ALS/Motor Neurone Disease) but is also useful in other neurodegenerative disorders. [Source: <https://ecas.psy.ed.ac.uk/>]

has super-classes
[Cognitive Assessment](#)^o

is in domain of
[ecasALSSnonSpecificScore](#) ^{dp}, [ecasALSSpecificScore](#) ^{dp}, [ecasCarerInterviewScore](#) ^{dp}, [ecasExecutiveAlternation](#) ^{dp}, [ecasExecutiveFluencyS](#) ^{dp}, [ecasExecutiveFluencyT](#) ^{dp}, [ecasExecutiveScore](#) ^{dp}, [ecasExecutiveSentenceCompletion](#) ^{dp}, [ecasHasCarerInterview](#) ^{dp}, [ecasLanguageComprehension](#) ^{dp}, [ecasLanguageNaming](#) ^{dp}, [ecasLanguageScore](#) ^{dp}, [ecasLanguageSpelling](#) ^{dp}, [ecasMemoryDelayedRecall](#) ^{dp}, [ecasMemoryDelayedRecognition](#) ^{dp}, [ecasMemoryImmediateRecall](#) ^{dp}, [ecasMemoryScore](#) ^{dp}, [ecasPsychosisScreenScore](#) ^{dp}, [ecasReverseDigitSpan](#) ^{dp}, [ecasSocialCognition](#) ^{dp}, [ecasSymptomsApathyOrInertia](#) ^{dp}, [ecasSymptomsChangePrevBehaviour](#) ^{dp}, [ecasSymptomsDisinhibition](#) ^{dp}, [ecasSymptomsHyperorality](#) ^{dp}, [ecasSymptomsLossSympathyOrEmpathy](#) ^{dp}, [ecasSymptomsPerseverativeStereotyped](#) ^{dp}, [ecasTotalScore](#) ^{dp}, [ecasVerbalFluencyScore](#) ^{dp}, [ecasVisuospatialCubeCounting](#) ^{dp}, [ecasVisuospatialDotCounting](#) ^{dp}, [ecasVisuospatialNumberLocation](#) ^{dp}, [ecasVisuospatialScore](#) ^{dp}

Figure 6. Documentation of the Edinburgh Cognitive and Behavioral ALS Screen (ECAS) Class in BTO available in the ontology documentation.

Ontology Specification Draft

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Dysphagia In Multiple Sclerosis^o

IRI: <https://w3id.org/brainteaser/ontology/schema/DYMUS>

A questionnaire to assess dysphagia in MS patients [DOI: 10.1016/j.jns.2007.12.021]

has super-classes
[Questionnaire compiled using a mobile application](#) ^o

is in domain of
[DYMUS_Q1](#) ^{dp}, [DYMUS_Q10](#) ^{dp}, [DYMUS_Q2](#) ^{dp}, [DYMUS_Q3](#) ^{dp}, [DYMUS_Q4](#) ^{dp}, [DYMUS_Q5](#) ^{dp}, [DYMUS_Q6](#) ^{dp}, [DYMUS_Q7](#) ^{dp}, [DYMUS_Q8](#) ^{dp}, [DYMUS_Q9](#) ^{dp}

Figure 7. Documentation of the Dysphagia in Multiple Sclerosis (DYMUS) questionnaire in BTO available in the ontology documentation.

APPENDIX B. TERMINOLOGY

B.1 Description of the conceptual dimension

The conceptual scheme (reported in Figure 4) was structured, especially in its first part, according to the ICD-11 classification, used as one of the main references to identify conceptual relations. The first concept at the top of the scheme is <Disease>, placed in a hierarchical and generic relation with the specific concept <Disease of nervous system>, as the disease of the nervous system is a specific type of disease related to the nervous system. This specification represents the delimiting characteristic that make the concept <Disease of nervous system> subordinate to <Disorder>. For this concept, <Disease of nervous system> seven hierarchical generic relations with its subordinate concepts were included: <Movement disorder>, <Disorder with neurocognitive impairment as a major feature>, <Epilepsy>, <Multiple sclerosis>, <Headache disorder>, <Cerebrovascular disease>, <Spinal cord disorder excluding trauma>, <Motor neuron disease>, <Disorder of nerve root, plexus or peripheral nerves>, <Disease of neuromuscular junction or muscle>, and <Cerebral palsy> which are the types of diseases of the nervous system indicated in ICD-11 classification. Nevertheless, it was decided not to include all the diseases of the nervous system listed in the classification in the scheme, as the researched domain is multiple sclerosis and amyotrophic lateral sclerosis. Therefore, the focus of the study was on developing the relations of these two concepts.

Indeed, from the two key concepts <Amyotrophic lateral sclerosis> and <Multiple sclerosis>, further hierarchical and associative relations were developed.

Starting from <Multiple sclerosis>, three generic hierarchical relations were included with the subordinate concepts <Relapsing-remitting multiple sclerosis>, <Primary progressive multiple sclerosis> and <Secondary progressive multiple sclerosis>, which represent the three types of multiple sclerosis, according to ICD-11. However, equally authoritative sources mention a further subtype of the disorder, namely progressive-relapsing MS, the rarest form of multiple sclerosis (National Institute of Neurological Disorders and Stroke 2023). The latter is referenced in several reliable sources, including the National Institute of Neurological Disorders and Stroke, and research papers published on the National Library of Medicine (Macaron and Ontaneda 2019). Even though the reason for excluding it from ICD-11 represents a medical issue, research was carried out before deciding to include or exclude it in the terminological representation. According to the results presented in the *WHO 24th expert committee on the selection and use of essential medicines* (2023), progressive relapsing MS should be considered part of primary progressive MS (PPMS), and this would explain its omission from the international classification. Thus, given the results of the research and the ICD-11 being the main source of information for this project, it was decided not to include the concept.

In terms of associative relations, <Multiple sclerosis> was related to the concepts representing its site of affection, symptoms, diagnostic methods, and treatments, to provide a comprehensive overview of the disease. Firstly, <Multiple sclerosis> it was linked <Central nervous system> with a non-hierarchical spatial relation (has_site) which specifies the affected body area of the disease.

Regarding the symptoms, <Multiple sclerosis> was linked to seven concepts that represent early symptoms and five concepts that concern advanced symptoms. In both cases, the relations are non-hierarchical and can be both defined as both temporal and causal. Temporal, as the symptoms occur after the onset of the disease; causal, as the disease is the cause of the symptoms, and they are its effect.

The seven concepts indicating early symptoms of multiple sclerosis include: <Fatigue>, <Mobility problem>, <Muscle problem>, <Vision problem>, <Bladder problem>, <Bowel problem>. For <Muscle problem> a general hierarchical relation with four specific concepts <Muscle weakness>, <Muscle cramp>, <Muscle twitch> and <Muscle stiffness>, was added to specify the different types of muscle problems. In terms of advanced symptoms, they were indicated through an associative relation between <Multiple sclerosis> and five concepts, namely <Spasticity>, <Cognitive dysfunction>, <Sexual dysfunction>, <Anxiety> and <Depression>.

The last two concepts, <Anxiety> and <Depression>, are of particular importance in this conceptual scheme, as they represent two frequent synonyms of both MS and ALS. Notwithstanding, the two diseases are often only associated with physical and mobility impairments. Since the conceptual scheme is an important part of knowledge representation, their inclusion is important not only for terminological reasons, but also to highlight the psychological damage that these conditions cause.

Proceeding with the description, for <Cognitive dysfunction> a hierarchical relationship with specific concepts was indicated, namely <Memory deficit>, <Attention deficit>, <Concentration deficit>, <Processing speed deficit>. At this point, the question might be why further relations were indicated only for this particular concept. The answer lies in the fact that in the early stages, multiple sclerosis, and ALS present with similar symptoms. However, with the disease's progression, MS is more likely to cause mental impairment than ALS (Davis and Stöppler 2022), even though the latter also affects cognitive functions. Therefore, the emphasis on the concept of <Cognitive dysfunction> highlights the different implications of the two conditions, which are often confused by non-specialists.

To illustrate the concepts related to the possible causes of the disease, another associative relation (has_cause) was indicated with <Genetic factor> and <Environmental factor>. It should be noted that the exact etiology of multiple sclerosis is still unknown (Ghasemi et al. 2017). However, genetic and environmental factors have been identified as causes in various studies; for this reason, the two concepts were included in the scheme. Even in this case, the

relations can be defined as both causal and temporal since the causes also precede the disease chronologically.

After having indicated the cause-related concepts, the diagnostic methods were researched and the following concepts were included: <Electromyography>, <Nerve conduction study>, <Magnetic resonance imaging>, <Blood test>, <Urine test> and <Muscle biopsy>. The relation between these concepts and <Multiple sclerosis> is associative and can be defined as temporal and causal. Indeed, the disease temporally precedes the search for a diagnosis, and, at the same time, its onset is the cause that prompts the adoption of diagnostic methods which represent the effect.

A further non-hierarchical relation indicates the treatments (has_treatment) that can be prescribed, such as <Disease-modifying therapy>, <Corticosteroids>, <Plasma exchange>, <Relapse management medications>, <Physical rehabilitation>, <Mental health counselling>. These concepts refer to the treatments that can be prescribed to improve the patient's condition and life expectancy. However, no cure has been found for MS (Gohil 2015).

Together with <Multiple sclerosis>, <Amyotrophic lateral sclerosis> represents the main object of analysis of the current project. Therefore, the same logic was applied to both concepts in the development of the conceptual relations. For both, the concepts concerning the existing types of the disease, the affected regions of the body, the possible causes, the methods of diagnosis and the treatments were included. The purpose of developing similar relationships for both concepts was to ensure consistent representation of both conditions and to allow comparison of their similarities and differences.

Amyotrophic lateral sclerosis is a specific type of motor neuron disease. For this reason <Motor neuron disease> (generic concept) was connected to <Amyotrophic lateral sclerosis> (specific concept) through a hierarchical generic relation.

Then, <Amyotrophic lateral sclerosis> related to <Sporadic amyotrophic lateral sclerosis> and <Familial amyotrophic lateral sclerosis> which represents the subtypes of ALS. These two diseases are not directly included in ICD-11, i.e., they do not have a specific identification code. However, they are mentioned in the description of amyotrophic lateral sclerosis provided by the ICD. But their lack of proper classification has raised questions about their relevance. Therefore, other sources were consulted, including medical journals and websites, which confirmed their acceptability. As a result, the two terms were included in the system.

<Sporadic amyotrophic lateral sclerosis> was related to two concepts indicating the causes of its onset, <Environmental factor> and <Biological factor>, by an associative casual relation (which can also be considered as a temporal relation,

since the cause precedes the disease in time). The same relation was included between Familial Amyotrophic Lateral Sclerosis and Genetic Mutation. Furthermore, the latter was related to two specific concepts such as <Mutation in the SOD1 gene> and <Mutation in the C9ORF72 gene> through a generic hierarchical relation. Indeed, the two specific concepts indicate the most common disease-causing mutations, as C9ORF72 and SOD1 mutations account for 50-60% of FALS (ICD-11 2023). Other genetic mutations, on the other hand, are less common, accounting for 3% to 5% of the cases (Wexler 2023). For this reason, they were not included in the conceptual scheme.

In other sources, a distinction emerged between limb-onset ALS and bulbar-onset ALS based on the clinical onset (Walhout et al. 2017). However, the two related concepts were not included in the schema as they are not mentioned in ICD-11. Instead, what ICD-11 mentions are the four affected regions, namely bulbar, cervical, thoracic, and lumbosacral, which were indicated by an associative relation. In fact, <Amyotrophic lateral sclerosis> it was linked to <Bulbar region>, <Cervical region>, <Thoracic region> and <Lumbosacral region> through a spatial relation (has_site).

With regards to the symptoms, the concept <Amyotrophic lateral sclerosis> was related to five concepts representing early symptoms, namely <Fatigue>, <Muscle problem>, <Mobility problem>, <Slurred speech> and <Weight loss> through a non-hierarchical relation. This, can be defined both temporal and causal, as previously explained for the concept <Multiple sclerosis> (the symptoms precede the disease chronologically, but they are also caused by the illness). Also in this case, <Muscle problem> it was related to four specific concepts through a hierarchical generic relation indicating the possible types of muscle problems, namely <Muscle weakness>, <Muscle cramp>, <Muscle twitch> and <Muscle stiffness>. As previously mentioned, at an early stage, the two diseases (MS and ALS) exhibit similar symptoms, which was intentionally highlighted in the scheme.

Furthermore, ten concepts were connected to <Amyotrophic lateral sclerosis> indicating the advanced symptoms through an associative relation (temporal and causal): <Paralysis>, <Spasticity>, <Dysphagia>, <Dysarthria>, <Dyspnea>, <Malnourishment>, <Neuropathy>, <Sexual dysfunction>, <Anxiety> and <Depression>. As previously mentioned, the psychological impact of these conditions is extremely acute and, therefore, the inclusion of <Anxiety> and <Depression> in the conceptual representation is of great importance (Kurt et al. 2007).

In conclusion, a further non-hierarchical relation was included to indicate the most common diagnostic methods, thus <Amyotrophic lateral sclerosis> was linked to <MRI scan>, <Lumbar puncture> and <Evoked potential test> through an associative relation. This can be defined as both temporal and casual, as the disease precedes the application of diagnostic methods in time, but it also represents the cause of their adoption.

B.2 Description of the linguistic networks

B.2.1 English lexical network

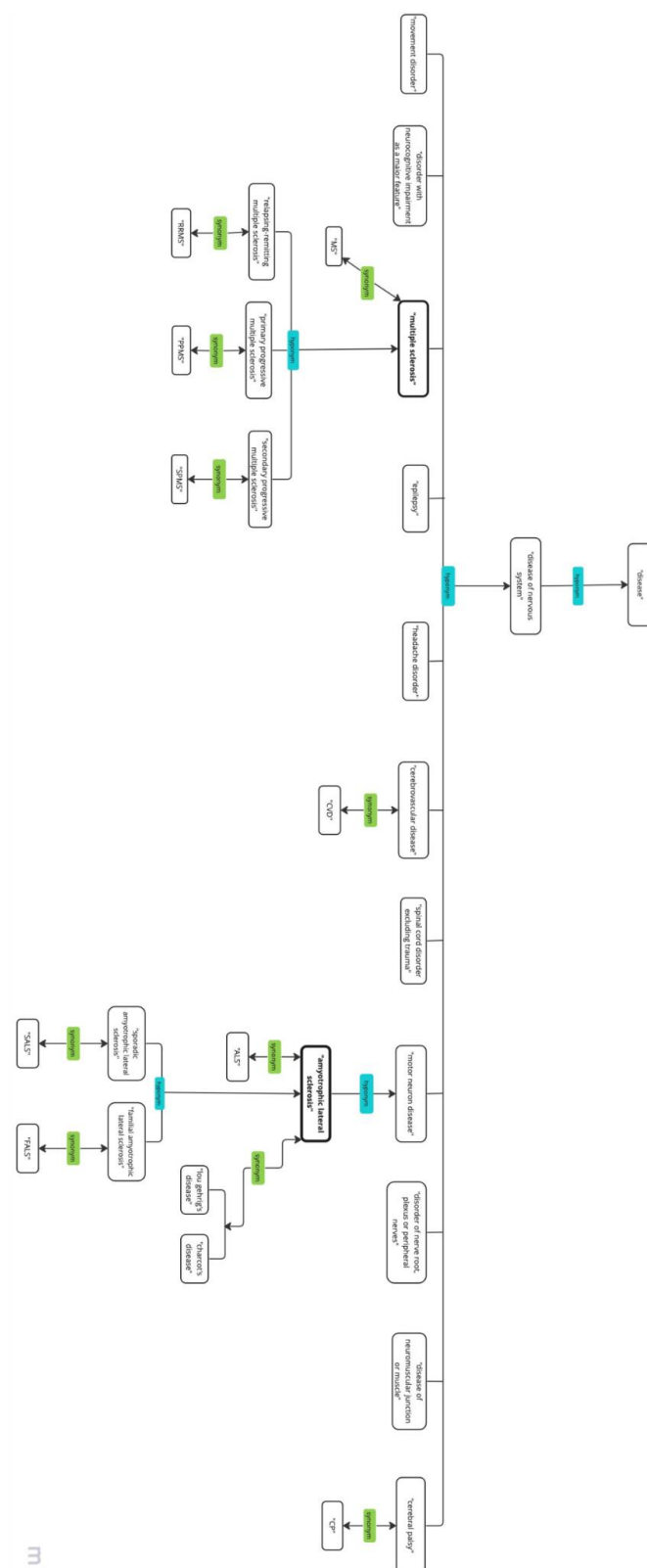


Figure 8. The English lexical network.

The ICD-11 was the main source of information for the construction of the English lexical network. But it was not the only resource consulted. The tool provided by SNOMED International, namely the SNOMED CT browser, also played a crucial role in the identification of the most appropriate synonyms for the network.

The first term in the lexical network is “disease”. By looking at the synonyms displayed in the SNOMED CT browser, “disorder” and “syndrome” are classified as acceptable synonyms. However, further research proved that they can only be considered discursive synonyms. This assumption is based on the definitions of disease, disorder, and syndrome in the Miller-Keane Encyclopaedia, which will be subsequently reported for the purpose of clarity. According to the Encyclopaedia (2003), a disease is “a definite pathological process having a characteristic set of signs and symptoms”; a disorder is “a derangement or abnormality of function; a morbid physical or mental state”; and a syndrome is “a combination of symptoms resulting from a single cause or so commonly occurring together as to constitute a distinct clinical picture”. This showed that although the three terms are often synonymous, they describe different concepts. The first refers to a definite and measurable disease, the second to an irregularity in normal functions, and the third to a group of symptoms which together constitute a definite disease, disorder or other condition (The American heritage medical dictionary 2007). For this reason, these terms were not included in the lexical network.

Another observation can be made about the term “illness”, which could be considered a possible synonym for “disease”. However, “illness” indicates a generic state of indisposition. In fact, according to The American heritage medical dictionary (2007), illness refers to “poor health resulting from disease of body or mind”. Thus, what can be assumed from this definition is that “illness” is the hypernym of “disease” as it designates a more generic concept. Therefore, the term was not included as a synonym in the network.

Proceeding with the description of the scheme, “disease” was linked to its hyponym “disease of nervous system”, for which no synonymic variants were found. However, the term was related to eleven hyponyms: “movement disorder”, “disorder with neurocognitive impairment as a major feature”, “multiple sclerosis”, “epilepsy”, “headache disorder”, “cerebrovascular disease”, “spinal cord disorder excluding trauma”, “motor neuron disease”, “disorder of nerve root, plexus or peripheral nerves”, “disease of neuromuscular junction or muscle” and “cerebral palsy”. For each of these terms, synonyms and hyponyms were researched.

Two synonyms were identified for “multiple sclerosis”, namely its acronym “MS”, which is mentioned both in specialist sources such as National library of medicine papers and in non-specialist websites such as the patient version of the MSD manual.

Furthermore, SNOMED CT browser indicates “disseminated sclerosis” as a synonym of “multiple sclerosis”. However, before inserting it the lexical

representation, in-depth research on the term was conducted. According to the results, this term was frequently mentioned in the literature of the first 20th century, as for example, in the work J.W. Dawson, *The Histology of Disseminated Sclerosis* (1916), or the article *Disseminated Sclerosis. Pathological and Biochemical Changes Produced by a “Virus” Cultivated from the Cerebro-spinal Fluid* published in 1930. Nevertheless, the term is no longer used in the contemporary writing and therefore it was not included as a synonym in the lexical network. In fact, it should be noted that the current terminology project has pursued a synchronic approach, which implies an analysis of the current terminology.

Proceeding with the network description, three hyponyms were identified for “multiple sclerosis”, namely “relapsing-remitting multiple sclerosis”, “primary progressive multiple sclerosis” and “secondary progressive multiple sclerosis”. These terms are highly frequent in medical literature and specialized sources; they are mentioned in many articles published by the National Library of Medicine (Freeman et.al 2022), but also on informative websites like the webpages of MS society (2023), and of the National Multiple Sclerosis Society (2023). Moreover, a synonym was identified for each of the three terms, consisting of their acronym: “relapsing-remitting multiple sclerosis” was linked to “RRMS”, “primary progressive multiple sclerosis” with “PPMS”, and “secondary progressive multiple sclerosis” with “SPMS”. The indicated acronyms are often mentioned after the full form. For example, in the introduction of *Primary-progressive Multiple Sclerosis* by David H Miller and Siobhan M Leary (2007), the authors write: “About 10–15% of patients with multiple sclerosis (MS) present with gradually increasing neurological disability, a disorder known as primary-progressive multiple sclerosis (PPMS)”.

The term “amyotrophic later sclerosis” represents a hyponym of “motor neuron disease” and has two hyponyms, namely “sporadic amyotrophic lateral sclerosis” and “familial amyotrophic” which designate the concepts regarding the types of ALS. The terms are frequently mentioned both in medical literature, including papers from NIH (Shanmukha et al. 2018), ScienceDirect (Ajroud-Driss et al. 2015), and popular websites such as ALS News Today (Wexler 2023), and MedlinePlus (2023). The two terms have a synonym consisting of their acronym, i.e., “SALS” for “sporadic amyotrophic lateral sclerosis” and “FALS” for “familial amyotrophic lateral sclerosis”. These acronyms are commonly used both in specialized text and general publications.

Regarding the synonyms of “amyotrophic lateral sclerosis”, its acronym “ALS” along with the terms “lou gehrig’s disease” and “charcot’s disease” were indicated in the lexical network. Using a particular term to describe the disease indicates a desire to emphasize one aspect of the disease over another. In other words, if the intention is to emphasize a specific characteristic of a concept, the concept will be designed with one term rather than another.

In this case, “lou gehrig’s disease” refers to the famous American baseball player who was diagnosed with it, so its usage underlines the reference to the athlete. The term “charcot’s disease”, on the other hand, refers to the French neurologist Jean-Martin Charcot, who was the first to diagnose it in 1869 and the usage of this term gives credit to his work. The first term (lou gehrig’s disease) is more commonly used in USA, while the second is preferred in French-speaking countries (PubMed 2019).

It can also be observed that many physicians use the term “motor neuron disease” as a synonym for “amyotrophic lateral sclerosis” (MA 2023). However, this is a discursive synonym, as the two terms designate two different concepts. The former designates a much broader concept that encompasses all types of neuron diseases including amyotrophic lateral sclerosis. Therefore, “motor neuron disease” is the hyperonym of “amyotrophic lateral sclerosis” and not a synonym of it.

For “cerebrovascular disease” and “cerebral palsy” only their acronyms were found as synonyms, namely “CVD” and “CP”, both of which are mentioned in SNOMED CT, but also in other sources, including ScienceDirect (Absher 2002).

Regarding the term “epilepsy” in-depth research was conducted to verify the possibility to consider “seizure disorder” as a valid synonym. According to the definition, the term designates a broader concept, thus it can be considered a hyperonym and, consequently, a discursive synonym.

In other cases, no synonymic variant was identified.

B.2.2 Italian lexical network

The development of the lexical network in Italian proved to be more complex than in English. This was mainly because the most recent version of the ICD did not have an Italian translation. English and French terms can therefore be found more easily using the ICD browser. In the case of the Italian and German languages, some terms do not yet exist to refer to certain concepts that are specified in the WHO classification. In addition, the lack of a tool such as SNOMED CT, which is only available in English, made the search for synonyms more difficult.

In the absence of ICD classification and SNOMED CT, more reliance was placed on specialized texts, terminology dictionaries and TriMED.

The first step in the creation of the network was the analysis of the first Italian term to designate the concept <Disease>. Given that a disease is “a definite pathological process having a characteristic set of signs and symptoms” (Miller-Keane Encyclopaedia and Dictionary of Medicine 2003), research was conducted in order to verify the correct Italian term. During the development of the English lexical network, the difference between “disease”, “disorder”, “syndrome” and “illness” was investigated.

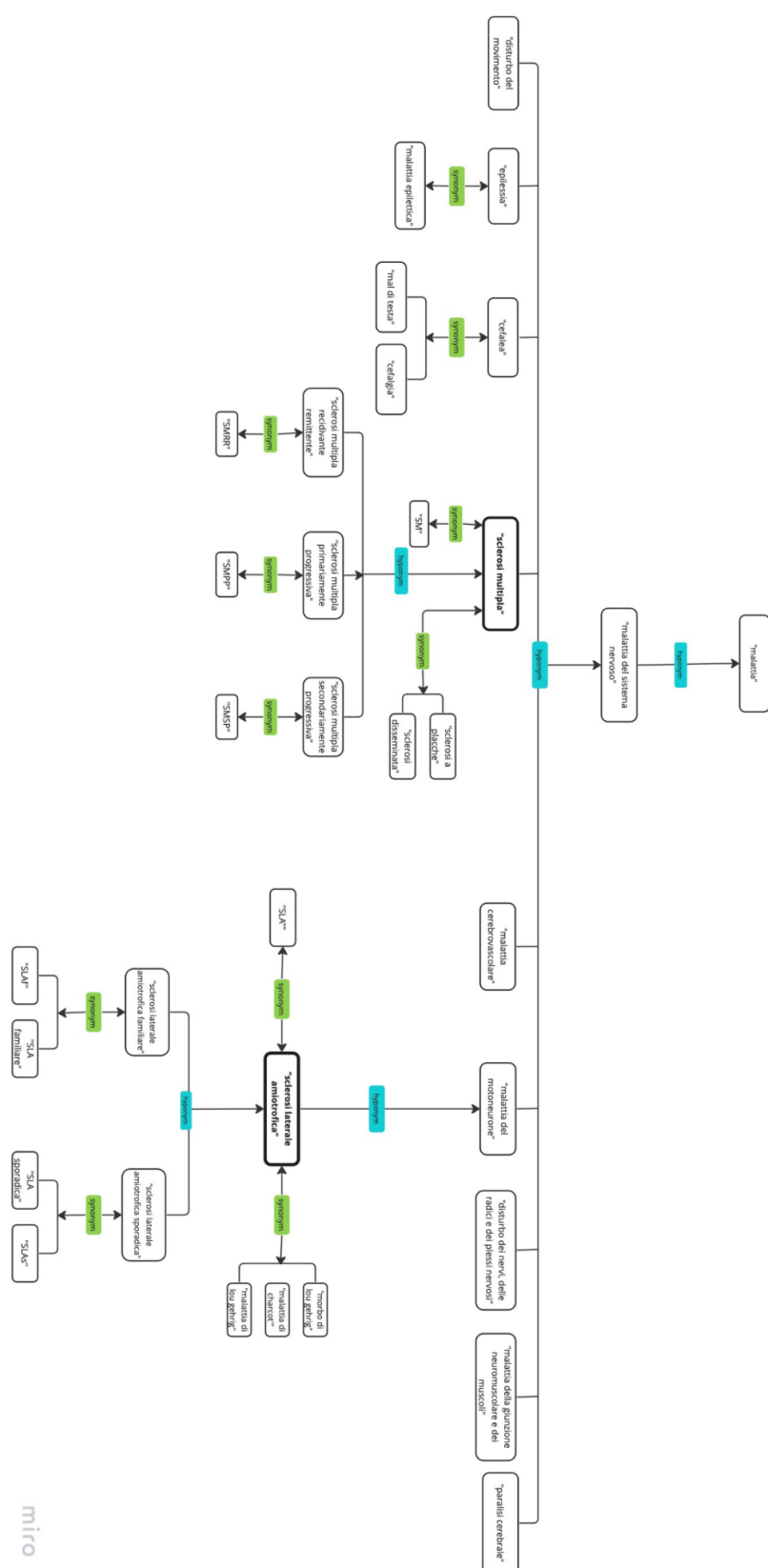


Figure 9. The Italian lexical network.

Similarly, in Italian, various terms are used to refer to the concept of <Disease>, such as “malattia”, “patologia”, “disturbo”. Regarding these terms, a question was raised as to which of these terms designates the concept under investigation and whether they can be considered terminological synonyms. To answer this question, numerous sources were consulted, from monolingual dictionaries to specialized texts. According to the definition of the medical dictionary of *Treccani* (2023), *malattia* can be defined as follows: “Stato di sofferenza di un organismo in toto o di sue parti, prodotto da una causa che lo danneggia, e il complesso dei fenomeni reattivi che ne derivano”. In addition to the dictionary references, the use and frequency of the term were verified through the analysis of specialized texts. In most of the consulted sources, the authors refer to MS and ALS by using the term “malattia”, as for example the website of the Società Italiana di Neurologia “La Sclerosi Multipla è una malattia infiammatoria cronica [...]” (2023), and MSD Manual (2022) “La sclerosi laterale amiotrofica (SLA) è la forma più comune di malattia dei neuroni motori.”. To obtain further confirmation, TriMED website was consulted.

As the correctness of the English term “disease” was verified in the previous working session, its Italian translation was researched to designate the corresponding concept. The consultation of TriMed confirmed the correctness of “malattia” as the source indicates it as the corresponding term of “disease” in the terminological records (TriMED Translator 2023).

A second question could be raised about the possible synonyms of “malattia” to be indicated in the lexical network. Among the synonyms provided by *Treccani* (2023), the following terms were analyzed to consider their possible inclusion in the representation: “patologia” and “sindrome”. Instead, other synonyms indicated in the same dictionary, such as “malore” or “malessere”, were excluded from the outset, as they designate other concepts and can only be considered as discursive synonyms in certain contexts. This assumption is based on knowledge of Italian as a native language, which would have required further research for non-Italian terminologists. Concerning the first two mentioned synonyms, in some sources, the term “patologia” is used as a synonym of “malattia”, for example in the websites of MS Manual and *Humanitas* which defines multiple sclerosis as “patologia infiammatoria del sistema nervoso centrale” (2023).

However, according to the definition of “patologia” provided by the medical dictionary of *Treccani* (2023), the term seems to indicate the study of the problems related to the human being and to animals, instead of the concept of <Disease>. This definition of *patologia* is provided by other dictionaries, as for instance the Dizionario della Salute of the Italian newspaper *Il Corriere della Sera* (2023), who describes it as the “scienza che studia le malattie [...]”. This analysis showed that in some contexts the two terms are used as synonyms, while in others they refer to different concepts. For this reason, “patologia” was not included in the lexical representation.

With regard to “sindrome”, the medical dictionary provided by *Treccani* (2010) defines it as a complex of symptoms, which can be the expression of a particular disease or of different diseases. Considering the fact that a similar result emerged for the corresponding English term (see the previous paragraph), and, also, the definitions provided by other consulted sources, it was decided not to include the term as a terminological variant of “malattia” in the lexical network.

Continuing with the description, the term “malattia” was linked with its hyponym “malattia del sistema nervoso”, which is widely mentioned in both specialized and non-specialized sources, but, most importantly, it is also reported in ICD-10 classification to identify a specific category of diseases. For example, “malattia del sistema nervoso” is used in many sources, including AISM website (2022), my personal trainer (2020), *Humanitas* (2018).

The term was connected to its hyponyms: “disturbo del movimento”, “epilessia”, “cefalea”, “sclerosi multipla”, “malattia cerebrovascolare”, “malattia del motoneurone”, “disturbo dei nervi, delle radici e dei plessi nervosa”, “malattia della giunzione neuromuscolare e dei muscoli” and “paralisi cerebrale”. The term “epilessia” was connected to its synonym “malattia epilettica”, which is mentioned in the professional version of MSD (2022), and also in other medical sites, such as *Humanitas* and specialized papers on ScienceDirect (Bahi-Buisson et al. 2009), and SpringerLink (Grattarola and Shiffer 1955).

As noted above, some of the terms describing types of diseases of the nervous system that were present in the English lexical network were not included in the Italian network due to their lack of translation, for example, the concepts <Disorder with neurocognitive impairment as a major feature> and <Spinal cord disorder excluding trauma> do not have the Italian term to be designated. As previously mentioned, this is due to the lack of an Italian version of ICD-11, which was the main reference used to build the conceptual scheme from which the four lexical networks were developed.

<Spinal cord disorder excluding trauma> is part of ICD-11 and it indicates a specific category of spinal cord disorders that does not include those caused by traumas. This macro-category encompasses various disorders such as <Cauda equina syndrome>, <Myelitis>, <Myelopathy> etc. Nevertheless, in Italian there is no term to designate the concept of a specific category of spinal cord diseases excluding traumatic cases. What does exist is the term “disturbo del midollo spinale” that designates the concept of <Disorder of spinal cord> (Rubin 2003). Furthermore, in the medical guidelines *Prospettive Internazionali sulla lesione del midollo spinale* (2016) regarding the injuries of the spinal cord, the term “patologie non-traumatiche del midollo spinale” was identified. However, as the context does not make it possible to understand whether the term refers precisely to the concept of <Spinal cord disorder excluding trauma>, and as the term does not appear in other sources, it was decided to exclude it from the lexical network.

However, for some concepts, such as <Disorder of nerve root, plexus or peripheral nerves> and <Disease of neuromuscular junction or muscle> the Italian term was found on the Italian translation of ICD-10.

Regarding the term “sclerosis multipla”, the following synonyms were identified: “SM”, “sclerosi disseminata” and “polisclerosi”. Starting with the first two synonyms, “SM” represents the acronym of the term, and it is mentioned in almost every consulted source, while “sclerosis a place” is less frequently used. Nevertheless, its credibility was affirmed through various sources, including articles of the *Giornale Italiano di Medicina Riabilitativa* (2019), and the website of *Osservatorio Malattie Rare* (2014).

Concerning “sclerosis disseminata”, the term is used in informative websites, such as pages of medical centres (Medical Control 33 2016), but also in the *Enciclopedia Medica Italia* (1975).

Lastly, the synonym “polisclerosi” is mentioned in different sources, including the *Manuale di gestione e codifica delle case di morte*, the webpage of the *Associazione Sclerosi Multipla Sardegna* (2023), and of the neurologist Vitantonio Rubino (2023).

Moreover, the term was connected to three hyponyms, namely “sclerosi multipla recidivante remittente”, “sclerosis multipla primariamente progressiva” and “sclerosi multipla secondariamente progressiva”. In addition, for each of these terms, their acronyms were indicated as synonyms: “SMRR”, “SMPP” and “SMSP”, as they were mentioned directly after the full form in most of the consulted descriptions of these pathologies (2023).

Moving forward with the description of the network, for the term “cefalea”, two synonyms were identified, namely “mal di testa” and “cefalgia”. The former is the most generic term to refer to the disease, while “cefalea” and “cefalgia” are less common (*Humanitas* 2023).

With regard to “malattia del motoneurone”, the term was linked to its hyponym “sclerosi laterale amiotrofica”, for which four synonyms were identified, namely “SLA”, “malattia di lou gehrig”, “morbo di lou gehrig”, and “malattia di charchot”. “SLA” is the acronym of the term and it almost always bracketed after the full form, or very often used as the main term to refer to the concept. The acronym is mentioned in specialized websites, such as ScienceDirect (Corcia et al. 2019), and in the professional version of the MSD manual (Rubin 2022), as well as in non-specialized sources, as for example hospitals websites, informative pages, including Mypersonaltrainer and *Pazienti.it*.

As explained in the previous section, “malattia di lou gehrig” is a synonym that highlights a particular aspect of the disease, namely the famous American baseball player who contracted it in the 1930s (Gindro, 2021). Furthermore, the

term “morbo di lou gehrig” was also used as a synonym in different sources, for example in the website of the *Associazione Italiana Sclerosi Amiotrofica* (2023), in the *Enciclopedia della Scienza e della Tecnica of Treccani* (2008), and in the page of OMAR *Osservatorio Malattie Rare* (Bartoli 2010).

Concerning “morbo di lou gehrig”, before including it as a synonym, research was carried out on the first part of the compound term, namely “morbo”. According to the definition given by *Treccani*, the term “morbo” is used, with the addition of appropriate qualifiers, to refer to specific types of disease. In this sense, the term can be seen as a hyponym of “malattia”. With regard to “morbo di lou gehrig”, it should be emphasised that, despite the meaning difference existing between “malattia” and “morbo”, the two compound terms “morbo di lou gehrig” and “malattia di lou gehrig” refer to the same concept, regardless of the context. For this reason, they should be considered synonymous in every respect.

The last identified synonym was “malattia di charcot”. As mentioned in the previous paragraph, the term refers to the French neurologist who first described it in 1860.

Although less frequent, “malattia di charcot” is mentioned in different sources, including AISLA’s website (2023), and a publication of the *Ministero della Salute*, namely *Commissione per lo studio delle problematiche concernenti la diagnosi, la cura e l’assistenza dei pazienti affetti da Sclerosi Laterale Amiotrofica* (2023).

Lastly, two hyponyms were included for “sclerosi laterale amiotrofica”, namely “sclerosi laterale amiotrofica familiare” and “sclerosi laterale amiotrofica sporadica”. These two terms are not frequently used but they are mentioned in some consulted sources, such as articles from OMAR (2016), the website of *Istituto di Ricerche Farmacologiche Mario Negri* (2023), and in the Ph.d thesis of a medicine student of the university of Padua, *Programmazione dei servizi e degli interventi a favore delle persone affette da sclerosi laterale amiotrofica* (Gelasio 2012). Regarding the last source, although it is a student research paper, it is the result of a work reviewed by Professor Paola Facchin, Associate Professor of Paediatrics at the University of Padua, who specializes in rare diseases. In particular, Dr Facchin is a member of the “Coding and Classification” and “Indicators” working groups of the European Task Force on Rare Diseases, a partner of the European commission expert group on rare diseases (Cegrd) and of the Rare 2030 panel of experts, and, more importantly, partner of the European joint action on classification and coding of rare diseases for the preparation of the ICD11 (Forward). Therefore, the inclusion of the synonym mentioned in this dissertation was considered appropriate. Furthermore, consulting this work allowed to identify two other synonyms, namely “SLA familiare” and “SLA sporadica” which are also present in other sources, as for example on the website of *Fondazione Telethon* (2023), and of the *Ospedale Niguarda* of Milan (2023).

Lastly, the two acronyms “SLAf” and “SLAs” were included as synonyms, as they are also mentioned in different sources, such as in the *Manuale di valutazione della comunicazione in ambito di assistenza alle persone con sclerosi laterale amiotrofica* (2017) promoted by the *Istituto Superiore di Sanità*; in an article of ScienceDirect (Corcia et al. 2019), and on the website of the *Consiglio Nazionale delle Ricerche* (2023).

B.2.3 French lexical network

The construction of the lexical network in French was largely based on consultation of the ICD-11 classification, which, as already mentioned, is also available in French. This did not reduce the workload but shifted the focus of the research to synonymic variants.

In fact, the terms obtained from the ICD served as the basis for a number of investigations into possible synonyms. For this purpose, medical dictionaries were consulted, in particular the dictionary of the *Académie Nationale de Médecine* whose editorial board, composed of experts in the field, ensures regular updates (2023). In addition, the *Dictionnaire médical* by Dr Christian Thomsen (2015), surgeon at Decazeville hospital, represented an important tool to look for adequate explanations of medical terms.

The first term of the network is “maladie”. As with the English and Italian networks, a search was carried out to identify potential synonyms for the term. Firstly, the definitions of “maladie” in different sources were analyzed. Secondly, they were compared with those of the potential synonyms identified.

According to the medical dictionary of the *Académie de Médecine*, “maladie” can be defined as follows: “Altération des fonctions physiques ou mentales d’une personne à l’origine de souffrances. [...] Le terme de maladie, dans le langage médical courant, correspond à un ensemble de symptômes anormaux résultant d’une même cause connue” (*Dictionnaire médical de l’Académie de Médecine* 2023). To paraphrase and summarize this definition, a *maladie* is an alteration in the physical or mental functions of a person that corresponds to specific symptoms resulting from the same cause. The *Dictionnaire médical* (2023), defines it as the alteration in health condition, specifying that it requires a diagnosis to identify its etiology. In addition to the definition, both dictionaries provide possible synonyms of the term, including “affection” and “syndrome”. This led to the question of whether these were discursive or terminological synonyms. Taking “affection” as a starting point, it is defined by the *Dictionnaire médical* (2023) as follows: “ce n’est rien d’autre qu’une maladie.” Similarly, the medical dictionary of the *Académie de médecine* (2023) describes it as: “Manifestations pathologiques qui correspondent à une entité morbide.”. Further confirmation was obtained by consulting TriMed (2023), where the term “maladie” is indicated as a synonym for “affection”. For this reason, “affection” was included as a terminological synonym of “maladie” in the lexical network.

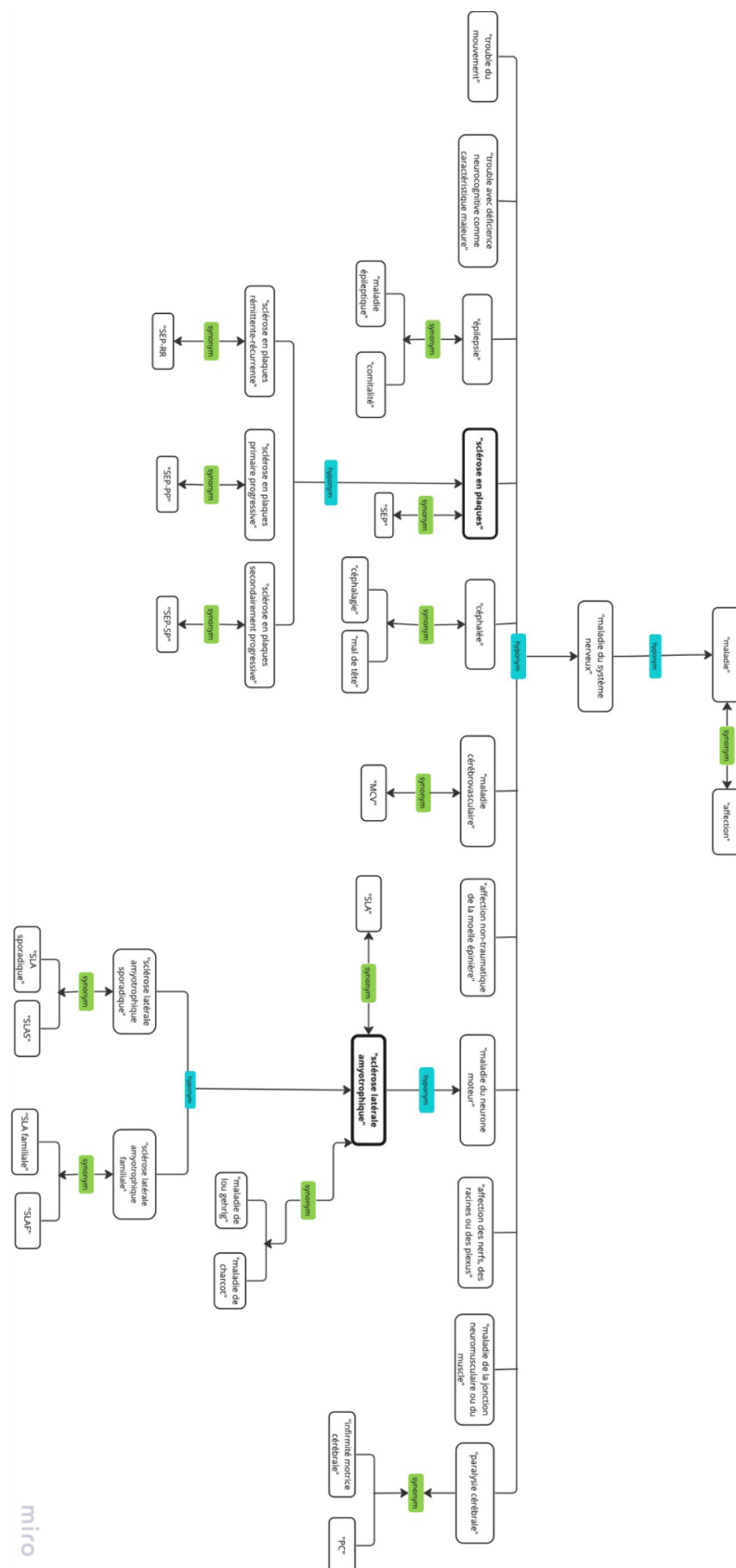


Figure 10, The French lexical network.

Continuing the analysis of the other synonyms, “syndrome” is described as “quasi equivalent de maladie” (Dictionnaire medical 2023), in fact, the term designates a set of clinical symptoms which allows for identifying a disease. This distinction is also mentioned in the medical dictionary of the *Académie de médecine* (2023) which states that “maladie est une entité précise, le syndrome peut être commun à plusieurs maladies” (maladie is a precise entity, while syndrome can be common to different diseases).

Proceeding with the description of the scheme, “maladie” was connected to its hyponym “maladie du système nerveux” which was linked to eleven hyponyms: “trouble du mouvement”, “trouble avec déficience neurocognitive comme caractéristique majeure”, “épilepsie”, “sclérose en plaques”, “céphalée”, “maladie cérébrovasculaire”, “affection non-traumatique de la moelle épinière”, “maladie du neurone moteur”, “affection des nerfs, des racines ou des plexus”, “maladie de la jonction neuromusculaire ou du muscle”, “paralysie cérébrale”. For each of these terms, possible synonyms were researched.

Starting from “épilepsie”, the *Académie de médecine* (2023) indicates the term “comitalité” as a synonym of term. However, before including it in the lexical network, other sources were consulted, namely Larousse dictionary (2023), as well as Le Robert dictionary (2023), and the website of *APF France handicap* (2023). In all the consulted dictionaries, there is a common tendency not to give a definition of *comitalité*, but to refer to the entry for *épilepsie*. This may suggest that this term exists but is not frequently used. Thus, despite its frequency, it was decided to include it in the lexical network.

As stated in the medical encyclopaedia of Larousse (2023): “On ne parle d'épilepsie, ou de maladie épileptique”, épilepsie is also called “maladie épileptique”. This synonym is also mentioned in the professional version of MSD (Adamolekun 2022), and on the website of the *FFRE Fondation Française Pour la Recherche sur l'Épilepsie* (2023). Therefore, it was considered a valid synonym of the term.

Furthermore, through the consultation of *CNRTL Central National de Ressources Textuelles et Lexicales* website (2012), two potential synonyms were identified, namely “mal caduc” and “haut mal”, which are also mentioned in the first edition of the *Dictionnaire de Académie Française* (1694). The former represent the old term used in XVIII century (*Cercle Généalogique du Pays de Caux - Seine-Maritime* 2019), which is now obsolete. Similarly, “haut mal” was the name given to epilepsy in the Middle Ages (*Ascension du Haut Mal* 2015).

In researching these terms, it became clear that epilepsy has undergone several reconceptualizations over time. As a result, it has been referred to with different terms. The word epilepsy derives from the Greek verb *epilambano*, meaning “to take by surprise”, referring to the sudden nature of epileptic seizures. Because of its symptomatology with striking and unpredictable features, namely sudden loss of consciousness with falling to the ground, stiffening of the entire body, respiratory arrest, cyanosis, foaming at the mouth, rhythmic trembling of the

entire body (*Paginemediche* 2020), epilepsy was considered a demonic possession, or it was thought to be related to the divine (Patel and Moshé 2020). This idea of a connection between the disease and supernatural phenomena was reflected in the terms used to designate the pathology, e.g., “maladie sacrée” emphasized a relation with the divine; “maladie de lune” was linked to the assumption that the epilepsy was influenced by the moon (*AlloDocteurs* 2022). Epilepsy has thus undergone various reconceptualizations, up to the most recent, in which the term “epilepsy” was introduced to designate it. However, the present terminological project is a synchronic approach that does not include an analysis of the historical development of the terms. It was therefore decided not to include obsolete terms in the lexical network.

Proceeding with the network, the term “sclérose en plaque” has only one synonym consisting in its acronym “SEP”, which is frequently mentioned in all the consulted sources, including the website of the *Ministère de la Santé et de la Prévention* (2023), as well as in the MSD Manual (Levin 2023), and in some articles published on the National Library of Medicine, including *Aspects cliniques, physiopathologiques, et thérapeutiques de la sclérose en plaques* (Ouallet and Brochet 2004).

Moreover, “sclérose en plaques” was connected to three hyponyms, namely “sclérose en plaques rémittente-récurrente”, “sclérose en plaques primaire progressive”, and “sclérose en plaques secondairement progressive” which are all mentioned in the ICD-11 classification. For each of these terms, their acronym was indicated as synonyms, such as “SEP-RR”, “SEP-PP” and “SEP-SP”; which are often mentioned both in specialized and informative sources.

The first identified synonym of “céphalée” was the general term “mal de tête”. As it might be expected, “mal de tête” is the most commonly used term, while “céphalée” is more frequently used in medical texts or in communication between professionals. Many medical information sites, where professionals communicate with patients and try to explain diseases in a simplified way, say that a headache is nothing other than a headache. For example, the website *Allo Docteurs* (2013) specifies that “une céphalée est juste un mal de tête”; in addition, on the page of VIDAL (2021), a platform that provides information on the healthcare and related products, the two terms are used as synonyms: “Les maux de tête, ou céphalées”. Thus, despite the difference in register, the two terms refer to the same concept. For this reason, they can be considered terminological synonyms.

Furthermore, Larousse dictionary (2023) indicates “céphalagie” and “migraine” as synonyms of “céphalée”. Before including them in the network, research on the terms was conducted. Starting from “céphalagie”, the term was indicated as a synonym of “mal de tête” by CNRTL *Centre National de Ressources Textuelles et Lexicales* (2012), and LeRobert dictionary. Nevertheless, “céphalagie”, rarely appears in technical or informative articles. For example, it is not mentioned in the

webpage of the *Société Française d'Études des Migraines and Céphalées* (2023), nor in the medical dictionary of the *Académie de médecine*.

However, in view of its mention in some valuable sources and the fact that the concept referred to is the same, the term can be included in the network as a correct terminological variant.

With regards to “migrain”, according to the neurologist Saad Kaasnarallah (2023), the term is often used improperly as a synonym for “céphalée”, while it represents a specific type of céphalée. This was also confirmed by Dr Elizabeth Leroux (2023), who affirmed that: “La migraine est une maladie qui se décline selon différents symptômes (à part le mal de tête), différents degrés de sévérité et différentes réponses aux traitements prescrits.”. Analyzing this statement from a terminological perspective, it emerges that the concept <Migrain> includes the characteristics of <Céphalée> plus delimitative characteristics. Therefore, the former represents the superordinate concept (general concept) and the latter the subordinate concept (specialized concept). At lexical level, this means that “migrain” is the hyponym of “céphalée”, therefore the two terms cannot be terminological synonyms.

The next term of the network, “maladies cérébrovasculaire” presents only one synonym consisting of its acronym “MCV”, which appeared in almost each consulted sources, including websites of French and Canadian organizations, including the page of NCD *Alliance* (2017), research papers from ScienceDirect (Baudin et al. 2009), and articles published by the *Institut national de santé publique du Québec* (2023). Proceeding with the description, “maladie du neurone moteur” was connected to its hyponym, namely “sclérose latérale amyotrophique”. The term has two primary synonyms, namely its acronym “SLA”, which is frequently used; and “maladie de Charcot”. The latter, as explained in the previous sections on the English and Italian lexical networks, refers to the name of the French neurologist who originally described the disease.

These two synonyms are used both in general and specialized texts, including the websites of hospitals (HCL Hospices Civils de Lyon 2022), private institutes (Institut du Cerveau 2022), but also scientific articles, as *Étude de l'expérience des malades atteints de sclérose latérale amyotrophique et de leur accompagnement* (Saillard 2017).

When researching possible synonyms, it was found that the term “maladie de lou gehrig” appears in many Canadian websites, including SLA Quebec (2023), and *Scientifique en chef du Québec* (2019), while it is less common in French sources. This discrepancy may be due to Canada's geographic proximity to the United States, which makes the reference to American football player Lou Gehrig easier for Canadian audiences to understand. In contrast, the reference to French neurologist Jean-Martin Charcot is not only more familiar to the French population, but also symbolizes recognition of a significant discovery by a French scientist.

Apart from considerations of national differences, the term is to be regarded as a terminological synonym and, therefore, included in the network.

Regarding the hyponyms of “sclérose latérale amyotrophique”, two terms were indicated, namely “sclérose latérale amyotrophique sporadique” and “sclérose latérale amyotrophique familiale”. Moreover, the two terms have terminological synonyms consisting of their acronyms, i.e., “SLAS” and “SLAF”; and their acronyms plus the adjective related to specific type of SLA, namely “SLA sporadique” and “SLA familiale” which are often mentioned not only in ICD-11, but also by Orphanet articles (Leigh and Wijesekera 2011), ALS SLA Canada (2020), and on the website of ARLSA *Association pour la recherche sur la Sclérose Latérale Amyotrophique* (2023).

With regard to “paralysie cérébrale”, in addition to his acronym “PC”, a further terminological synonym was indicated, namely “infirmité motrice cérébrale”, which is mentioned by the professional version of MSD (Victorio 2023), and also in other medical sources, including the websites of the *Institute Motricité Cérébrale* (2023), of Medtronic, one of the healthcare technologies global leader (2023); and of the *Association Cerebral Genève* (2020).

Furthermore, the term “infirmité motrice cérébrale” was connected to its synonym, namely its acronym “IMC”, which is frequently mentioned in medical websites.

For other terms, as for example “trouble avec déficience neurocognitive comme caractéristique majeure”, “affection non-traumatique de la moelle épinière”, “affection des nerfs, des racines ou des plexus”, “maladie de la jonction neuromusculaire ou du muscle”, no terminological variant was detected. This may be attributed to the fact that these terms represent the disease categories delineated by the International Classification of Diseases (ICD). These are essentially macro-categories encompassing various subtypes of pathologies, primarily for the purpose of classification. For instance, from a non-terminological standpoint, “affection des nerfs, des racines ou des plexus” constitutes a category encompassing distinct conditions, such as “affections des nerfs crâniens”, “affections des racines ou des plexus nerveux”, “polyneuropathie”, and “mononeuropathie”. Nevertheless, it is important to note that this classification is not universally applied, and as a result, terms referring to these categories are infrequently encountered in other sources and may lack synonymic variants.

B.2.4 German lexical network

A particular aspect of German medical terminology, namely the coexistence of German terms with Greek or Latin terms referring to the same concepts, should be discussed before describing the lexical network. German terms are often used together with terms of Hellenic and Latin origin, as the use of the latter is difficult for a non-medical expert. This led to the latter being used in specialist circles as they are considerate more specialized terminology, while their German

counterpart is more commonly found in everyday language (Puato 2011). For example, the concept <Myopia> can be designated both by the Greek term “myopie”, but also by the German counterpart “kurzsichtigkeit”. The former is more frequently used in medical context, while the latter is the common term to refer to the disease (DWDS 2023). Understanding this aspect of the German language prior to building the lexical network was beneficial in the synonym searching phase as at this stage, there is a general tendency to assume that very specific terms do not have synonymic variants, but this aspect of German terminology often implies that a German term exists alongside a Latin or Greek equivalent.

Before proceeding with the description of the network, it is necessary to mention an important tool that was particularly useful during the research process, namely the DWDS, a sort of dictionary with special functions. One of these is the possibility of analyzing the term within a corpus. This allows the researcher to understand the exact context in which the term is used, by observing it in its “natural environment”, i.e., the specialized texts. The resource also allows the user to consult statistics on term frequency and evolution over time, so you can see if a term is still being used or is becoming outdated. These features provided a basis for the further investigation of individual terms and the construction of the lexical network. In this way, this tool compensated for the lack of an effective resource such as SNOMED CT or Trimed, which are not available in the German language.

The first term of the network is “krankheit”. In this case, the search for synonyms in lexicographical dictionaries can be misleading. As a matter of fact, the German dictionary par excellence, Duden, indicates among the synonyms: “beschwerden”, “erkrankung”, “leiden”, “schmerz” (Duden 2023). Starting from “beschwerden”, the term is often used to describe short-term symptoms or discomfort that a person may have, but not necessarily a specific disease. For example, if someone has a headache or muscle pain, they might say they have *Beschwerden* (DWDS 2023). Therefore, the term can only be considered a discursive synonym, not a terminological variant.

Regarding “erkrankung”, the term is often indicated as a synonym of “krankheit” and, according to the consulted sources, it seems to designate the same concept. This is not only confirmed by the definition offered by DWDS, which indicates *Krankheit* in the meaning section of *Erkrankung*, but also by the fact that none of the consulted sources indicate a difference between the two terms. Furthermore, many medical websites use the two terms interchangeably, as for example *Gesundheit.gv.at* (2023) “Die Diagnose einer Erkrankung löst bei vielen Menschen Angst aus. Besonders chronische Krankheiten haben einen großen Einfluss auf das alltägliche Leben.” Lastly, further confirmation was obtained by analyzing the definition of some hyponyms of the term to verify whether they are described as “krankheit” or “erkrankung” or both. For example, the websites *Gesundheitsinformation.de* (2023), and *Deutsche Epilepsievereinigung* (2022), define the epilepsy as *Erkrankung*. Similarly, *Multiple Sklerose* is called

Erkrankung by some sources, as for example *Pflege.de* (2023); and *Krankheit* from others, including *Mein Alltag mit MS* (2022). In the professional version of MSD Manual both terms are used to refer to *Multiple Sklerose*. Thus, the analysis of dictionaries and the use of the two terms in specialized texts showed that they can be regarded as terminological synonyms.

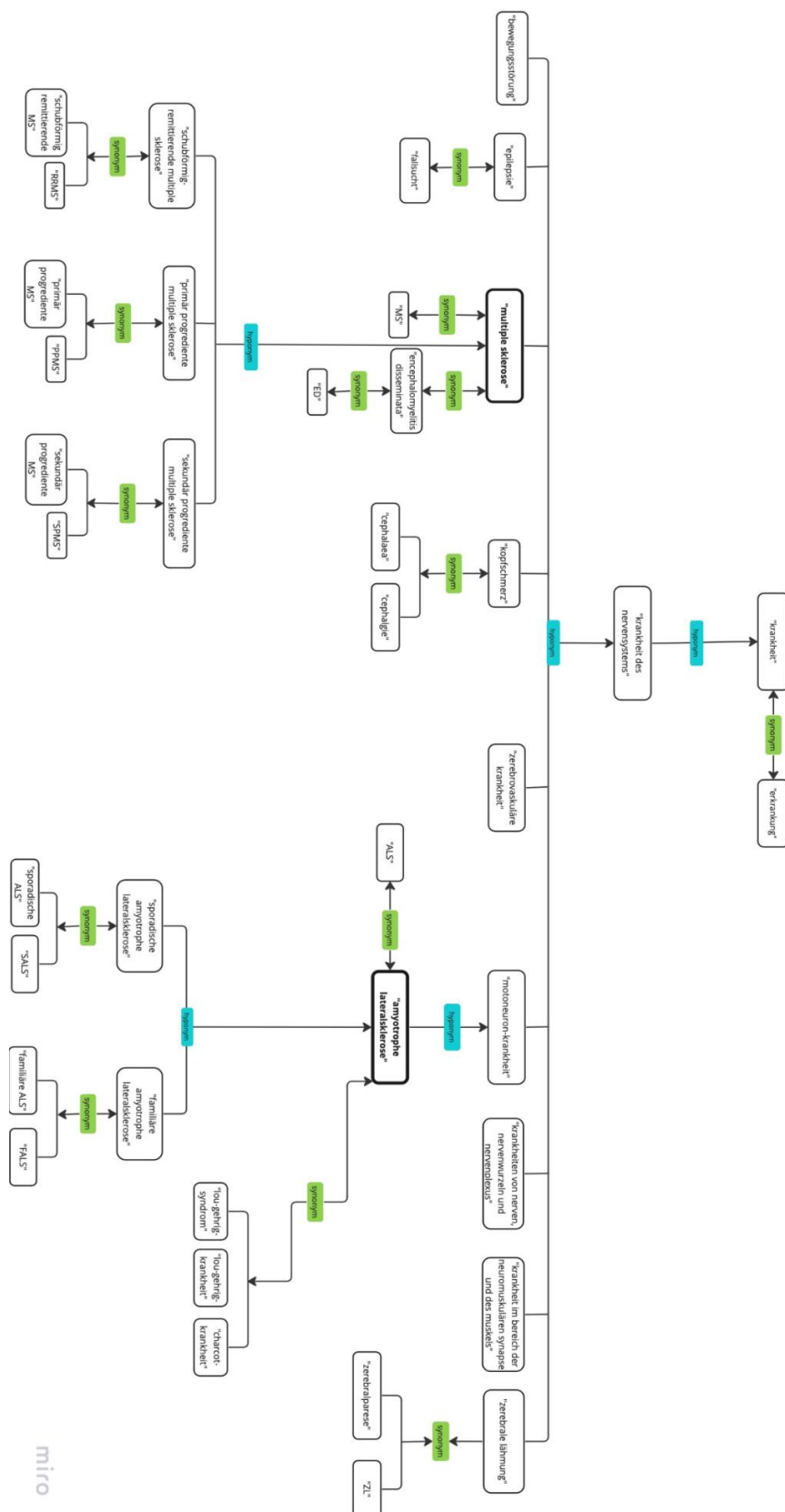


Figure 11. The German lexical network.

Proceeding with “leiden”, according to the consulted sources, the term indicates a different concept, since it describes a general state of suffering or generalized

pain. Indeed, in some cases it can be used to emphasize a painful experience associated with a chronic, incurable disease, but it is not a terminological synonym of “krankheit”.

The last analyzed potential synonym, namely “schmerz” seems to indicate more a symptom of a disease, not the disease itself. In fact, “schmerz” is the German word for pain and, therefore, it is not a terminological variant of “krankheit”.

To summarize, these examples show that the synonyms given in lexicographical sources are often discursive synonyms and less often terminological synonyms.

Continuing with the network description, the term “krankheit” was linked to its hyponym “krankheit des nervensystem” which was connected to nine hyponyms: “bewegungsstörung”, “epilepsie”, “multiple sklerose”, “kopfschmerz”, “zerebrovaskuläre krankheit”, “motoneuron-krankheit”, “krankheit von nerven, nervenwurzeln und nervenplexus”, “krankheit im bereich der neuromuskulären synapse und des muskels” and “zerebrale lähmung”. Some of these terms, for example “krankheit von nerven, nervenwurzeln und nervenplexus” “krankheit im bereich der neuromuskulären synapse und des muskels” were extracted from ICD-10, which has a German translation. In this way, it was possible to find the correct terms for certain concepts related to the disease categories in ICD-11, which have remained unchanged from the previous version. However, for other concepts that were only introduced in the latest version, there is still not a German term to describe them. Due to this lack of translation, the German and the Italian networks will look different from the English and French networks.

Proceeding with the analysis, “epilepsie” was connected to its synonym “fallsucht”. The difference between the two is in their origin, as the former is a Latin term, while the latter is its German equivalent. However, the DWDS indicates “fallsucht” as an obsolete term, and according to the graphs provided, which show the frequency of the term *Worthäufigkeit*, and its usage development from 1946 to the present *Wortverlaufkurve*, “fallsucht” appears to be rare. Furthermore, the frequency curve shows a decline in usage since the 2000s (DWDS 2023). In many of the analyzed sources, however, the term is still mentioned, including *NetDoktor* (Fux and Feichter 2022), the Austrian healthcare website *Gesundheit.gv.at* (2023), and *Gesundheitsinformation.de* (2023). Therefore, the term was included in the network as terminological variants.

For the term “multiple sklerose”, two synonyms were indicated, including its acronym “MS”, and “encephalomyelitis disseminata”. The latter is mentioned in specialized sources, as ICD-10 that labels it with the code G35 (*Gesund.bund.de* 2023), articles from *SpringerMedizin* (Stark and Gärtner 2009), and the website *Neurologen und Psychiater im Netz* (2023), which confirmed the usage of the term in medical terminology.

Moreover, “encephalomyelitis disseminata” has an acronym, namely “ED”, which was indicated as a synonym in the lexical network.

Concerning the hyponyms of “multiple sklerose”, three terms were included, such as “schubförmig-remittierende multiple sklerose”, “primär progrediente multiple sklerose” and “sekundär progrediente multiple sklerose”. A thorough search of these terms in technical texts revealed two synonymic variants for each of them. These are their acronym (“RRMS”, “PPMS”, “SPMS”) and the terms composed of the acronym of *Multiple Sklerose* and a prefixed adjective, as in the case of “schubförmig remittierende MS”, “primär progrediente MS”, and “sekundär progrediente MS”.

Continuing with the description of the terms, “kopfschmerz” was linked to two synonyms, namely “cephalaea” and “cephalgia”, which were included in the network after careful research on them. The process started with the analysis of the synonyms provided by DWDS, including *Kopweh* and *Brummschädel* (indicated as colloquial expressions); national variants as the Austrian word *Schädelweh*; and four terms labelled as *fachsprachlich* (technical terminology), namely “cephalaea”, “cephalgie”, “kephalalgie”, “kephalgie” “zephalgie”. As this paper focuses on specialized terms, Kopfweh and Brummschädel were not included because they are common words.

However, the four terms categorized by the DWDS (2023) as specialized language were subjected to further scrutiny. Starting with “cephalaea”, the term is mentioned in some sources, including two books by *Springer-Verlag*: *Kopfschmerz, Migräne und Schwindel* by Hans Curschmann (1926), and *Kopfschmerzen* by H. G. Zapotoczky (1988). From an examination of these texts, it can therefore be confirmed that the term is a valuable synonym for “kopfschmerz”.

The second analyzed term was “cephalgia” which is mentioned in an article of the magazine *Die Gastroenterologie*, titled *Diarrhö, Arthralgie und Cephalgie* (Methner-Friederich et al. 2006). The term appears also in a more recent publication, namely *Persistierende Cephalgie: Ursache und Therapie unklar* of MedicalTribune by Dr. Melanie Söchtig (2022). For this reason, “cephalgia” was included in the scheme.

With regard to “kephalalgie” “kephalgie” and “zephalgie”, they seem to be orthographic variants of “cephalgia”, therefore they were not included in the lexical network. Indeed, it was preferred to insert them in the terminological record of Fairterm under the category of orthographic variant of the term “cephalgie”.

Proceeding with the scheme, “motoneuron-krankheit” was connected to its hyponym “amyotrophe lateralsklerose”. The term has four identified synonyms, namely its acronym “ALS”, the term reporting the name of the famous French

neurologist “charcot-krankheit”, and the term related to the American football player “lou-gehrig-krankheit”.

“Charcot-krankheit” and “lou-gehrig-krankheit” are both indicated in Ophanet (2023), as synonyms of “amyotrophe lateralsklerose”. Furthermore “lou gehrig-krankheit” is also mentioned in MSD manual for professionals (Rubin 2022), together with “charcot-syndrom”. Regarding the latter, it should be noted that even though “syndrome” and “krankheit” are not terminological synonyms, the composed terms “charcot-syndrom” and “charcot-krankheit” are synonymic variants as they always designate the same concept.

Regarding the hyponyms, “amyotrophe lateralsklerose” was connected to “sporadische amyotrophe lateralsklerose” and “familiäre amyotrophe lateralsklerose”. These terms have two synonyms consisting of their acronyms, namely “SALS” and “FALS”, and of the terms composed by the acronym of “amyotrophe lateralsklerose” plus the adjective that specifies the typologies of ALS, namely “sporadische ALS” and “familiäre ALS”.

Lastly, one synonym was identified for “zerebrale lähmung”, namely the term of Latin origin “zerebralparese”. The terms “zerebrale lähmung” and “zelebralparese” are both mentioned in ICD-10 classification; the former is indicated in the macro category *Zerebrale Lähmung und sonstige Lähmungssyndrome* (code G80-G83) and the latter in the micro category *Infantile Zerebralparese* with the code G80 (ICD Code 2023). Furthermore, “zerebralparese” is also indicated in the MSD manual for patients (Victorio 2023), and in Springer’s publication *Infantile Zerebralparese* by Leonhard Döderlein (2015).

Finally, it should be noted that for some terms, as for example “krankheiten von nerven, nervenwurzeln und nervenplexus” or “krankheit im bereich der neuromuskulären synapse und des muskels”, no synonyms were found. As explained in the previous section, this may be because these terms designate concepts related to ICD classification categories and are unlikely to have synonymous variants.

APPENDIX C. TECHNICAL DOCUMENTATION

C.1 Classes

Activity

IRI: <https://w3id.org/brainteaser/ontology/schema/Activity>

An active process; excludes processes and mechanisms which fulfill biological functions. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C43431

has sub-classes

Lifestyle^c, **Physical Activity**^c, **Smoking**^c, **Wearable Data Measurement**^c

is in domain of

activityStartYear^{dp}, **activityEndYear**^{dp}, **relativeEndDate**^{dp}, **relativeStartDate**^{dp}

is in range of

hasRegisteredActivity^{op}

Administration

IRI: <https://w3id.org/brainteaser/ontology/schema/Administration>

The act of the dispensing, applying, or tendering of something to another, such as administration of a medicine. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C25409

is in domain of

administrationDose^{dp}, **administrationFrequency**^{dp}, **administrationRoute**^{dp},
administrationUoM^{dp}

is in range of

administration^{op}

Adverse Drug Reaction^c

IRI: <https://w3id.org/brainteaser/ontology/schema/AdverseDrugReaction>

Any detrimental or unintended response associated with the use of a medication in humans. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C142385

is in range of

adverseReaction^{op}

BRAINTEASER – D9.3

has members

Administration of Ineffective Drugⁿⁱ, Adverse Drug Eventⁿⁱ, Drug Hypersensitivity AEⁿⁱ, Drug Intolerance AEⁿⁱ

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS)^c

IRI: <https://w3id.org/brainteaser/ontology/schema/ALSFRS>

The Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) is an instrument for evaluating the functional status of patients with Amyotrophic Lateral Sclerosis. It can be used to monitor functional change in a patient over time. [Definition Source: Georgetown University Hospital - Medstar Health]

has super-classes

Questionnaire^c

is in domain of

alsfrs1^{dp}, alsfrs10^{dp}, alsfrs11^{dp}, alsfrs12^{dp}, alsfrs2^{dp}, alsfrs3^{dp}, alsfrs4^{dp}, alsfrs5^{dp}, alsfrs6^{dp}, alsfrs7^{dp}, alsfrs8^{dp}, alsfrs9^{dp}, alsfrsOriginal10^{dp}, bulbarSubscore^{dp}, motorSubscore^{dp}, originalALSFRS^{dp}, respiratorySubscore^{dp}, revisedALSFRS^{dp}

Anatomic Site^c

IRI: <https://w3id.org/brainteaser/ontology/schema/AnatomicalSite>

Named locations of or within the body. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C13717

is in range of

anatomicalLocation^{op}

has members

Abdomenⁿⁱ, Bone Marrowⁿⁱ, Brainⁿⁱ, Brain Stemⁿⁱ, Cerebellumⁿⁱ, Cervical Spinal Cordⁿⁱ, Cervical Spineⁿⁱ, Eyeⁿⁱ, Headⁿⁱ, L4-L5 Intervertebral Spaceⁿⁱ, Limbⁿⁱ, Lower Extremityⁿⁱ, Lumbar Spineⁿⁱ, Lumbosacral Regionⁿⁱ, Neckⁿⁱ, Pelvisⁿⁱ, Sphincterⁿⁱ, Spinal Cordⁿⁱ, Supratentorial Brainⁿⁱ, Thoracic Spinal Cordⁿⁱ, Thoracic Spineⁿⁱ, Thoraxⁿⁱ, Upper Extremityⁿⁱ, Vertebral Columnⁿⁱ

Atmospheric Pressure^c

IRI: <https://w3id.org/brainteaser/ontology/schema/AtmosphericPressure>

The pressure at any point in an atmosphere due solely to the weight of the atmospheric gases above the point concerned. [Definition Source: MSH]

has super-classes

Weather Data^c

has sub-classes

Daily Average Sea Level Pressure^c

Awaji Clinical Evaluation^c

IRI: <https://w3id.org/brainteaser/ontology/schema/AwajiClinicalEvaluation>

BRAINTEASER – D9.3

Diagnostic assessment of ALS following the Awaji recommendations
(doi.org/10.1016/j.clinph.2007.09.143).

has super-classes

Diagnostic Procedure ^c

is in domain of

awajiClinicalLMNBulbar ^{dp}, **awajiClinicalLMNCervical** ^{dp}, **awajiClinicalLMNLumboSacral** ^{dp}, **awajiClinicalLMNThoracic** ^{dp}, **awajiClinicalUMNBulbar** ^{dp}, **awajiClinicalUMNCervical** ^{dp}, **awajiClinicalUMNLumboSacral** ^{dp}, **awajiDiagnosisCriteria** ^{dp}, **awajiEMGLMBulbar** ^{dp}, **awajiEMGLMCervical** ^{dp}, **awajiEMGLMLumboSacral** ^{dp}, **awajiEMGLMNTThoracic** ^{dp}

Before Onset ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/BeforeOnset>

Any event that happened to a patient before the onset.

has super-classes

Event ^c

is in domain of

onsetElapsedTime ^{dp}

Benzene concentration ^c

IRI: https://w3id.org/brainteaser/ontology/schema/C6H6_concentration

has super-classes

air pollution concentration

Brief Visuospatial Memory Test-Revised ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/BVMTR>

The BVMT-R measures Visuospatial Memory for Patients with Head Trauma, LD, Psychiatric Disorder, and Mixed Diagnoses. [Source: <https://www.parinc.com/Products/Pkey/30#:~:text=A%20Measure%20of%20Visuospatial%20Memory,to%20document%20changes%20over%20time.>]

has super-classes

Cognitive Assessment ^c

is in domain of

bmvtrTotal ^{dp}, **bvmtrTrial1** ^{dp}, **bvmtrTrial2** ^{dp}, **bvmtrTrial3** ^{dp}

California Verbal Learning Test - Second Edition ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/CVLTII>

The second version of California Verbal Learning Test, a neuropsychological test developed to make a comprehensive and detailed assessment of verbal learning and memory in individuals ranging in age from 16 to 89 years. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C120257

BRAINTEASER – D9.3

has super-classes

Cognitive Assessment ^c

is in domain of

cvltIITotalCorrect ^{dp}, **cvltIITotalInterferences** ^{dp}, **cvltIITotalPerseverations** ^{dp},
cvltIITrial1Correct ^{dp}, **cvltIITrial1Interferences** ^{dp}, **cvltIITrial1Perseverations** ^{dp},
cvltIITrial2Correct ^{dp}, **cvltIITrial2Interferences** ^{dp}, **cvltIITrial2Perseverations** ^{dp},
cvltIITrial3Correct ^{dp}, **cvltIITrial3Interferences** ^{dp}, **cvltIITrial3Perseverations** ^{dp},
cvltIITrial4Correct ^{dp}, **cvltIITrial4Interferences** ^{dp}, **cvltIITrial4Perseverations** ^{dp},
cvltIITrial5Correct ^{dp}, **cvltIITrial5Interferences** ^{dp}, **cvltIITrial5Perseverations** ^{dp}

Carbon Monoxide concentration ^c

IRI: https://w3id.org/brainteaser/ontology/schema/CO_concentration

The determination of the amount of carbon monoxide present in a sample. [Definition Source: NCI]

has super-classes

air pollution concentration

Clinical Evaluation ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/ClinicalEvaluation>

An assessment of an individual's physical, mental, or emotional condition; information can be gathered from multiple sources, including physical exam, personal interview and observation, medical history, laboratory and imaging tests. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C124351

has super-classes

Diagnostic Procedure ^c

is in domain of

bodyMassIndex ^{dp}, **height** ^{dp}, **homeWalkingStatus** ^{dp}, **moreThan10PercentWeightloss** ^{dp},
multipleSclerosisType ^{dp}, **outsideWalkingStatus** ^{dp}, **predominantLimbsImpairment** ^{dp},
predominantLimbsSide ^{dp}, **predominantMotorNeuron** ^{dp}, **weight** ^{dp}

Clinical Trial ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/ClinicalTrial>

A research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C71104

is in domain of

clinicalTrialDescription ^{dp}, **conductedInClinic** ^{op}, **isAboutDisease** ^{op}

BRAINTEASER – D9.3

is in range of

inClinicalTrial ^{op}

Clinical Trial Participation^c

IRI: <https://w3id.org/brainteaser/ontology/schema/ClinicalTrialParticipation>

The participation in a clinical trial

Is defined by

<http://purl.bioontology.org/ontology/SNOMEDCT/709491003>

is in domain of

endReason ^{dp}, **inClinicalTrial** ^{op}, **participationEnd** ^{dp}, **participationStart** ^{dp}

is in range of

enrolledIn ^{op}

Clinics and Hospitals^c

IRI: <https://w3id.org/brainteaser/ontology/schema/ClinicsAndHospitals>

Institutions with an organized medical staff for the medical care, treatment, and cure of the sick and wounded, for the study of disease, and for the training of physicians, nurses, and allied health personnel. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C19326

is in range of

conductedInClinic ^{op}

has members

Hospital General Universitario Gregorio Marañón ⁿⁱ, **Institute of Molecular Medicine Joao Lobo Antunes** ⁿⁱ, **Mondino Foundation** ⁿⁱ, **University of Padua** ⁿⁱ, **University of Turin** ⁿⁱ

Cognitive Assessment^c

IRI: <https://w3id.org/brainteaser/ontology/schema/CognitiveAssessment>

The examination of the cognitive capacities or deficits of an individual through the application of tests that probe that individual's ability to perform various mental activities such as perception, learning, and reasoning. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C62736

has super-classes

Diagnostic Procedure ^c

has sub-classes

Brief Visuospatial Memory Test-Revised ^c, **California Verbal Learning Test - Second Edition** ^c, **Edinburgh Cognitive and Behavioural ALS Screen** ^c, **Symbol Digit Modalities Functional Test** ^c

BRAINTEASER – D9.3

Comorbidity^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Comorbidity>

The coexistence of two or more disease processes. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C16457

has super-classes

Condition^c

is in domain of

comorbiditySeverity^{dp}, **comorbidityTreatment^{dp}**, **determinedBy^{op}**

Condition^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Condition>

A state of being, such as a state of health. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C25457

has sub-classes

Comorbidity^c, **Impairment^c**, **Symptom^c**

is in domain of

conditionEnd^{dp}, **conditionStart^{dp}**

is in range of

hasRegisteredCondition^{op}

CSF Analysis^c

IRI: <https://w3id.org/brainteaser/ontology/schema/CSFAnalysis>

A laboratory analysis of a sample of cerebrospinal fluid. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C173272

has super-classes

Diagnostic Procedure^c

is in domain of

IgGIndexCSF^{dp}, **albuminCSF^{dp}**, **alterationCSF^{dp}**, **glucoseCSF^{dp}**, **granulocytesCSF^{dp}**,
immunoglobulinGCSF^{dp}, **leukocytesCountCSF^{dp}**, **lymphocytesCSF^{dp}**,
pathologicalJCCSF^{dp}, **proteinsCSF^{dp}**, **quotientAlbuminCSF^{dp}**,
testedForOligoclonalBands^{op}, **virusJCTestedCSF^{dp}**

Daily Average Relative Humidity^c

IRI: <https://w3id.org/brainteaser/ontology/schema/AvgRelHumidity>

has super-classes

Humidity^c

BRAINTEASER – D9.3

Daily Average Sea Level Pressure^c

IRI: <https://w3id.org/brainteaser/ontology/schema/AvgSeaLvlPressure>

has super-classes

Atmospheric Pressure^c

Daily Maximum Temperature^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MaxTemp>

has super-classes

Temperature^c

Daily Mean Global Radiation^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MeanGlobRadiation>

has super-classes

Weather Data^c

Daily Mean Temperature^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MeanTemp>

has super-classes

Temperature^c

Daily Mean Wind Speed^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MeanWindSpeed>

has super-classes

Weather Data^c

Daily Minimum Temperature^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MinTemp>

has super-classes

Temperature^c

Daily Precipitation Sum^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PrecipitationSum>

has super-classes

Weather Data^c

Diagnosis^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Diagnosis>

The investigation, analysis and recognition of the presence and nature of disease, condition, or injury from expressed signs and symptoms; also, the scientific determination of any kind; the concise results of such an investigation. [Definition Source: NCI]

BRAINTEASER – D9.3

Is defined by

http://purl.obolibrary.org/obo/NCIT_C15220

has super-classes

Event ^c

is in domain of

diagnosticCriteria ^{dp}, **diagnosticDelay** ^{dp}

Diagnostic Imaging ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/DiagnosticImaging>

Any method that uses a visual display of structural or functional patterns of organs or tissues for diagnostic evaluation. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C16502

has super-classes

Diagnostic Procedure ^c

has sub-classes

Magnetic Resonance Imaging (MRI) ^c, **Positron Emission Tomography (PET)** ^c

Diagnostic Procedure ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/DiagnosticProcedure>

Any procedure or test to diagnose a disease or disorder. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C18020

has super-classes

Intervention or Procedure ^c

has sub-classes

Awaji Clinical Evaluation ^c, **CSF Analysis** ^c, **Clinical Evaluation** ^c, **Cognitive Assessment** ^c, **Diagnostic Imaging** ^c, **Evoked Potentials** ^c, **Expanded Disability Status Scale (EDSS)** ^c, **Gold Coast Diagnosis Criteria** ^c, **Hand Dexterity** ^c, **Hematology Test** ^c, **Muscle Tone Assessment** ^c, **Pulmonary Function Test** ^c, **Questionnaire** ^c, **Visual Acuity** ^c, **Walk Test** ^c

Disease, Disorder or Finding ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/DiseaseDisorderOrFinding>

A condition that is relevant to human neoplasms and non-neoplastic disorders. This includes observations, test results, history and other concepts relevant to the characterization of human pathologic conditions. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C7057

is in range of

determinedBy ^{op}, **hasDisease** ^{op}, **isAboutDisease** ^{op}

BRAINTEASER – D9.3

has members

Abdominal Painⁿⁱ, Acquired Hypothyroidismⁿⁱ, Acquired Immunodeficiency Syndrome (AIDS)ⁿⁱ, Acute Cystitisⁿⁱ, Acute Myeloid Leukemiaⁿⁱ, Acute Myocardial Infarctionⁿⁱ, Acute Pyelonephritisⁿⁱ, Acute Respiratory Failureⁿⁱ, Acute Tonsillitisⁿⁱ, Adenocarcinomaⁿⁱ, Ageusiaⁿⁱ, Alanine Aminotransferase Increasedⁿⁱ, Alcohol Dependenceⁿⁱ, Allergic Asthmaⁿⁱ, Allergic Rhinitisⁿⁱ, Alzheimer's Diseaseⁿⁱ, Amenorrheaⁿⁱ, Amenorrhea due to Pituitary Dysfunctionⁿⁱ, Amyotrophic Lateral Sclerosisⁿⁱ, Anemiaⁿⁱ, Angioedemaⁿⁱ, Ankle Fractureⁿⁱ, Ann Arbor Stage IV Mantle Cell Lymphomaⁿⁱ, Ann Arbor Stage IV T-Cell Non-Hodgkin Lymphomaⁿⁱ, Anorectal Fistulaⁿⁱ, Anorexiaⁿⁱ, Anosmiaⁿⁱ, Anxiety Disorderⁿⁱ, Arrhythmiaⁿⁱ, Arthritisⁿⁱ, Aspiration Pneumonitisⁿⁱ, Asthmaⁿⁱ, Atopic Dermatitisⁿⁱ, Atrial Fibrillationⁿⁱ, Atrial Flutterⁿⁱ, Autoimmune Diseaseⁿⁱ, Autoimmune Nervous System Disorderⁿⁱ, Autoimmune Pancytopeniaⁿⁱ, B-Cell Non-Hodgkin Lymphomaⁿⁱ, Bacterial Pneumoniaⁿⁱ, Baker Cystⁿⁱ, Basal Cell Carcinomaⁿⁱ, Behavioral Impairmentⁿⁱ, Bell's Palsyⁿⁱ, Benign Prostatic Hyperplasiaⁿⁱ, Bipolar Disorderⁿⁱ, Blepharitisⁿⁱ, Blepharospasmⁿⁱ, Bowel Obstructionⁿⁱ, Bradycardiaⁿⁱ, Breast Carcinomaⁿⁱ, Breast Ductal Carcinomaⁿⁱ, Brown-Sequard Syndromeⁿⁱ, COVID-19 Infectionⁿⁱ, Carcinomaⁿⁱ, Cardiovascular Disorderⁿⁱ, Cavernous Hemangiomaⁿⁱ, Celiac Diseaseⁿⁱ, Central Nervous System Degenerative Disorderⁿⁱ, Cervical Carcinomaⁿⁱ, Cervical Intraepithelial Neoplasia Grade 2/3ⁿⁱ, Chalazionⁿⁱ, Chicken Poxⁿⁱ, Cholelithiasisⁿⁱ, Chronic Atrophic Gastritisⁿⁱ, Chronic Lung Disorderⁿⁱ, Chronic Obstructive Pulmonary Diseaseⁿⁱ, Cleft Palateⁿⁱ, Closed Dislocation of Shoulderⁿⁱ, Closed Fracture of Ribⁿⁱ, Closed Fracture of Tibiaⁿⁱ, Cognitive Impairmentⁿⁱ, Cold Soreⁿⁱ, Colon Adenocarcinomaⁿⁱ, Colon Dysplasiaⁿⁱ, Colorectal Carcinomaⁿⁱ, Common Bile Duct Stoneⁿⁱ, Congenital Adrenal Hyperplasiaⁿⁱ, Cranial Nerve VII Palsyⁿⁱ, Cutaneous Melanomaⁿⁱ, Cystⁿⁱ, Deep Vein Thrombosisⁿⁱ, Dementiaⁿⁱ, Depressionⁿⁱ, Diabetes Mellitusⁿⁱ, Diabetic Ketoacidosisⁿⁱ, Disease or Disorderⁿⁱ, Dog Biteⁿⁱ, Drug Hypersensitivity Syndromeⁿⁱ, Dyslipidemiaⁿⁱ, Eczemaⁿⁱ, Endometriosisⁿⁱ, Epidermal Inclusion Cystⁿⁱ, Essential Hypertensionⁿⁱ, Extrapyrmidal Disorderⁿⁱ, Favismⁿⁱ, Female Reproductive System Disorderⁿⁱ, Femur Fractureⁿⁱ, Fever Chillsⁿⁱ, Fibromaⁿⁱ, Fibromyalgiaⁿⁱ, Findingⁿⁱ, Flu-Like Symptomsⁿⁱ, Frontotemporal Dementiaⁿⁱ, Fungal Infectionⁿⁱ, Gastritisⁿⁱ, Gastroenteritisⁿⁱ, Gastroesophageal Refluxⁿⁱ, Gastroesophageal Reflux Diseaseⁿⁱ, Generalized Epilepsyⁿⁱ, Glaucomaⁿⁱ, Hashimoto Thyroiditisⁿⁱ, Head Traumaⁿⁱ, Head and Neck Findingⁿⁱ, Headacheⁿⁱ, Heart Disorderⁿⁱ, Heart Failureⁿⁱ, Hematomaⁿⁱ, Hepatic Toxicityⁿⁱ, Hepatitisⁿⁱ, Hepatitis A Infectionⁿⁱ, Hepatitis C Infectionⁿⁱ, Hereditary Factor XI Deficiencyⁿⁱ, Hereditary Hemolytic Anemiaⁿⁱ, Herniaⁿⁱ, Herpes Simplex Keratitisⁿⁱ, Herpes Simplex Virus Infectionⁿⁱ, Herpes Zosterⁿⁱ, High Grade Cervical Squamous Intraepithelial Neoplasiaⁿⁱ, Hip Osteoarthritisⁿⁱ, Hypercholesterolemiaⁿⁱ, Hyperhomocysteinemiaⁿⁱ, Hypersensitivityⁿⁱ, Hypertensionⁿⁱ, Hypertensive Crisisⁿⁱ, Hyperthyroidismⁿⁱ, Hypertriglyceridaemiaⁿⁱ, Hypertrophyⁿⁱ, Hypothyroidismⁿⁱ, Ichthyosisⁿⁱ, Infectious Mononucleosisⁿⁱ, Inguinal Herniaⁿⁱ, Injuryⁿⁱ, Insomniaⁿⁱ, Interstitial Pneumoniaⁿⁱ, Intervertebral Disc Prolapseⁿⁱ, Intestinal Pseudo-Obstructionⁿⁱ, Intraepithelial Neoplasiaⁿⁱ, Iridocyclitisⁿⁱ, Iron-Deficiency Anemiaⁿⁱ, Keratitisⁿⁱ, Keratoconusⁿⁱ, Kidney Carcinomaⁿⁱ, Klippel-Feil Syndromeⁿⁱ, Knee Injuryⁿⁱ, Langerhans Cell Histiocytosisⁿⁱ, Leukoaraiosisⁿⁱ, Leukopeniaⁿⁱ, Long QT Syndromeⁿⁱ, Lumbar Herniaⁿⁱ, Lumbar Puncture Headacheⁿⁱ, Lymphopeniaⁿⁱ, MTHFR Gene Mutationⁿⁱ, Macular Degenerationⁿⁱ, Malignant Colon Neoplasmⁿⁱ, Malignant Neoplasmⁿⁱ, Malignant Skin Neoplasmⁿⁱ, Malignant Thyroid

Gland Neoplasmⁿⁱ, Melanocytic Nevusⁿⁱ, Menopausal Symptomⁿⁱ, Migraineⁿⁱ, Migraine With Auraⁿⁱ, Molluscum Contagiosum Virusⁿⁱ, Monoclonal B_Cell Lymphocytosisⁿⁱ, Monoclonal Gammopathyⁿⁱ, Mood Disorderⁿⁱ, Motor Neuron Diseaseⁿⁱ, Multiple Sclerosisⁿⁱ, Mumpsⁿⁱ, Myasthenia Gravisⁿⁱ, Myeloproliferative Neoplasmⁿⁱ, Myocardial Infarctionⁿⁱ, Neck Traumaⁿⁱ, Neonatal Hearing Impairmentⁿⁱ, Neoplasmⁿⁱ, Nervous System Disorderⁿⁱ, Neurofibromatosisⁿⁱ, Neutropenic Disorderⁿⁱ, Non-Hodgkin Lymphomaⁿⁱ, Non-Neoplastic Central Nervous System Disorderⁿⁱ, Obesityⁿⁱ, Obstructive Sleep Apnea Syndromeⁿⁱ, Opioid Use Disorderⁿⁱ, Optic Neuritisⁿⁱ, Osteoporosisⁿⁱ, Palmar Fibromatosisⁿⁱ, Pancytopeniaⁿⁱ, Panic Disorderⁿⁱ, Parkinson's Diseaseⁿⁱ, Penicillin Allergyⁿⁱ, Personality Disorderⁿⁱ, Pituitary Neuroendocrine Tumorⁿⁱ, Pityriasis Roseaⁿⁱ, Pleural Effusionⁿⁱ, Pneumococcal Pneumoniaⁿⁱ, Pneumoniaⁿⁱ, Pneumonia Caused By SARS-CoV-2ⁿⁱ, Post-Herpetic Neuralgiaⁿⁱ, Primary Lateral Sclerosisⁿⁱ, Primary Neoplasmⁿⁱ, Primary Progressive Aphasiaⁿⁱ, Progressive Bulbar Palsyⁿⁱ, Progressive Multifocal Leukoencephalopathyⁿⁱ, Progressive Muscular Atrophyⁿⁱ, Prolapsed Lumbar Intervertebral Discⁿⁱ, Proteinuriaⁿⁱ, Psoriasisⁿⁱ, Psoriatic Arthritisⁿⁱ, Psychiatric Disorderⁿⁱ, Psychosisⁿⁱ, Pulmonary Embolismⁿⁱ, Pulmonary Insufficiencyⁿⁱ, Pulmonary Sarcoidosisⁿⁱ, Pulmonary Thromboembolismⁿⁱ, Radius Fractureⁿⁱ, Recurrent Acute Myeloid Leukemiaⁿⁱ, Renal Colicⁿⁱ, Retinal Detachmentⁿⁱ, Rheumatoid Arthritisⁿⁱ, Rheumatologic Disorderⁿⁱ, Sarcoidosisⁿⁱ, Scarlet Feverⁿⁱ, Sciaticaⁿⁱ, Seizure Disorderⁿⁱ, Septicemiaⁿⁱ, Serositisⁿⁱ, Serum Glutamic Pyruvic Transaminase, CTCAEⁿⁱ, Shoulder Dislocationⁿⁱ, Signⁿⁱ, Sign or Symptomⁿⁱ, Sinusitisⁿⁱ, Sjogren Syndromeⁿⁱ, Skin Basal Cell Carcinomaⁿⁱ, Skin Basosquamous Cell Carcinomaⁿⁱ, Skin Carcinomaⁿⁱ, Skin Cystⁿⁱ, Spina Bifidaⁿⁱ, Spinal and Bulbar Muscular Atrophy, X-linked 1ⁿⁱ, Staphylococcal Infectionⁿⁱ, Strokeⁿⁱ, Subdural Hematomaⁿⁱ, Symptomⁿⁱ, Syncopeⁿⁱ, Tetralogy of Fallotⁿⁱ, Thalassemiaⁿⁱ, Thoracic Traumaⁿⁱ, Thrombocytopeniaⁿⁱ, Thromboembolismⁿⁱ, Thyroid Gland Disorderⁿⁱ, Thyroiditisⁿⁱ, Tibia Fractureⁿⁱ, Tinea Versicolorⁿⁱ, Tooth Abscessⁿⁱ, Toxoplasmosisⁿⁱ, Transient Ischemic Attackⁿⁱ, Trigeminal Nerve Disorderⁿⁱ, Two Vessel Coronary Diseaseⁿⁱ, Type 1 Diabetes Mellitusⁿⁱ, Type 2 Diabetes Mellitusⁿⁱ, Ureteral Stenosisⁿⁱ, Urinary Stoneⁿⁱ, Urticariaⁿⁱ, Uterine Corpus Leiomyomaⁿⁱ, Vertigoⁿⁱ, Viral Pericarditisⁿⁱ, Viral Respiratory Tract Infectionⁿⁱ, Vitamin D Deficiencyⁿⁱ, Vitiligoⁿⁱ, Vulvovaginal Candidiasisⁿⁱ, Vulvovaginitisⁿⁱ

Dysphagia In Multiple Sclerosis^c

IRI: <https://w3id.org/brainteaser/ontology/schema/DYMUS>

A questionnaire to assess dysphagia in MS patients [DOI: 10.1016/j.jns.2007.12.021]

has super-classes

Questionnaire filled using a mobile application.^c

is in domain of

DYMUS_Q1^{dp}, DYMUS_Q10^{dp}, DYMUS_Q2^{dp}, DYMUS_Q3^{dp}, DYMUS_Q4^{dp}, DYMUS_Q5^{dp}, DYMUS_Q6^{dp}, DYMUS_Q7^{dp}, DYMUS_Q8^{dp}, DYMUS_Q9^{dp}

Edinburgh Cognitive and Behavioural ALS Screen^c

IRI: <https://w3id.org/brainteaser/ontology/schema/ECAS>

BRAINTEASER – D9.3

The ECAS is a brief multidomain assessment originally designed for people with Amyotrophic Lateral Sclerosis (ALS/Motor Neurone Disease) but is also useful in other neurodegenerative disorders. [Source: <https://ecas.psy.ed.ac.uk/>]

has super-classes

Cognitive Assessment ^c

is in domain of

ecasALSnonSpecificScore ^{dp}, **ecasALSspecificScore** ^{dp}, **ecasCarerInterviewScore** ^{dp},
ecasExecutiveAlternation ^{dp}, **ecasExecutiveFluencyS** ^{dp}, **ecasExecutiveFluencyT** ^{dp},
ecasExecutiveScore ^{dp}, **ecasExecutiveSentenceCompletion** ^{dp}, **ecasHasCarerInterview** ^{dp},
ecasLanguageComprehension ^{dp}, **ecasLanguageNaming** ^{dp}, **ecasLanguageScore** ^{dp},
ecasLanguageSpelling ^{dp}, **ecasMemoryDelayedRecall** ^{dp},
ecasMemoryDelayedRecognition ^{dp}, **ecasMemoryImmediateRecall** ^{dp}, **ecasMemoryScore** ^{dp},
ecasPsychosisScreenScore ^{dp}, **ecasReverseDigitSpan** ^{dp}, **ecasSocialCognition** ^{dp},
ecasSymptomsApathyOrInertia ^{dp}, **ecasSymptomsChangePrevBehaviour** ^{dp},
ecasSymptomsDisinhibition ^{dp}, **ecasSymptomsHyperorality** ^{dp},
ecasSymptomsLossSympathyOrEmpathy ^{dp}, **ecasSymptomsPerseverativeStereotyped** ^{dp},
ecasTotalScore ^{dp}, **ecasVerbalFluencyScore** ^{dp}, **ecasVisuospatialCubeCounting** ^{dp},
ecasVisuospatialDotCounting ^{dp}, **ecasVisuospatialNumberLocation** ^{dp},
ecasVisuospatialScore ^{dp}

End Therapy Reason ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/EndTherapyReason>

The motivation for the interruption of the therapeutic treatment.

is in domain of

adverseReaction ^{op}, **confirmedPregnancy** ^{op}, **endTherapyReason** ^{dp}

European Quality of Life Five Dimension Five Level Scale Questionnaire ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/EQ5D5L>

A standardized rating scale which is used as a measure of health outcome. This instrument is a descriptive system consisting of 5 dimensions: mobility, self-care, usual activity, pain/discomfort, and anxiety/depression. Each dimension has 5 levels ranging from no problem to extreme problem or incapable, which are assessed by the patient. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C102117

has super-classes

Questionnaire filled using a mobile application. ^c

is in domain of

EQ5D5L_Q1 ^{dp}, **EQ5D5L_Q2** ^{dp}, **EQ5D5L_Q3** ^{dp}, **EQ5D5L_Q4** ^{dp}, **EQ5D5L_Q5** ^{dp}, **EQ5D5L_Q6** ^{dp}

Event ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Event>

BRAINTEASER – D9.3

Something that happens at a given place and time. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C25499

has sub-classes

Before Onset^c, **Diagnosis**^c, **Onset**^c, **Protocol Event**^c

is in domain of

consists^{op}, **eventEnd**^{dp}, **eventStart**^{dp}, **filledAppQuestionnaire**^{op}, **hasRegisteredActivity**^{op}, **hasRegisteredCondition**^{op}, **pregnancy**^{op}, **relapse**^{op}, **trauma**^{op}

is in range of

undergo^{op}

Evoked Potentials^c

IRI: <https://w3id.org/brainteaser/ontology/schema/EvokedPotentials>

Electrical responses recorded from nerve, muscle, SENSORY RECEPTOR, or area of the CENTRAL NERVOUS SYSTEM following stimulation. They range from less than a microvolt to several microvolts. The evoked potential can be auditory (EVOKED POTENTIALS, AUDITORY), somatosensory (EVOKED POTENTIALS, SOMATOSENSORY), visual (EVOKED POTENTIALS, VISUAL), or motor (EVOKED POTENTIALS, MOTOR), or other modalities that have been reported. [Definition Source: MSH]

Is defined by

<http://purl.bioontology.org/ontology/SNOMEDCT/386205007>

has super-classes

Diagnostic Procedure^c

is in domain of

evokedPotentialsLocation^{dp}, **evokedPotentialsResponse**^{dp}, **evokedPotentialsType**^{dp}, **visualEvokedPotentialAmplitude**^{dp}, **visualEvokedPotentialLatency**^{dp}

Expanded Disability Status Scale (EDSS)^c

IRI: <https://w3id.org/brainteaser/ontology/schema/EDSS>

A system for quantifying disability in multiple sclerosis (MS). Based on a standard neurological examination, the Expanded Disability Status Scale quantifies disability in seven Functional Systems (plus "Other") and assigns a Functional System Score in each. Results are ranked as steps from 0 to 10, with steps 1 through 4.5 describing MS patients who are fully ambulatory and steps 5 through 9.5 describing increasing impairment to ambulation. Step 10 refers to death due to MS. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C98302

has super-classes

Diagnostic Procedure^c

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is in domain of

ambulationEDSS ^{dp}, **ambulationEDSSAssistance** ^{dp}, **ambulationEDSSObservedTime** ^{dp},
ambulationEDSSPatientDistance ^{dp}, **ambulationEDSSPatientTime** ^{dp},
bowelAndBladderEDSS ^{dp}, **brainstemEDSS** ^{dp}, **cerebellarEDSS** ^{dp}, **cerebralEDSS** ^{dp},
clinicallyEvaluatedEDSS ^{dp}, **pyramidalEDSS** ^{dp}, **sensoryEDSS** ^{dp}, **visualEDSS** ^{dp}

Gene^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Gene>

A functional unit of heredity which occupies a specific position on a particular chromosome and serves as the template for a product that contributes to a phenotype or a biological function. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C16612

is in range of

onGene ^{op}

has members

AR Gene ⁿⁱ, **C9orf72 Gene** ⁿⁱ, **DCTN1 Gene** ⁿⁱ, **FUS Gene** ⁿⁱ, **OPTN Gene** ⁿⁱ, **SOD1 Gene** ⁿⁱ,
SQSTM1 Gene ⁿⁱ, **TARDBP Gene** ⁿⁱ, **TBKI Gene** ⁿⁱ

Genetic Testing^c

IRI: <https://w3id.org/brainteaser/ontology/schema/GeneticTesting>

The process of isolating and testing the DNA of an embryo or a person to detect the presence of genetic alterations or defects that may predispose to the future development of a disease or disorder. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C15709

is in domain of

hasMutation ^{dp}, **mutationType** ^{dp}, **onGene** ^{op}

is in range of

tested ^{op}

Gold Coast Diagnosis Criteria^c

IRI: <https://w3id.org/brainteaser/ontology/schema/GoldCoastCriteria>

Diagnostic assessment of ALS following the Gold Coast criteria
(doi.org/10.1136/practneurol-2021-003256).

has super-classes

Diagnostic Procedure ^c

is in domain of

goldCoastExcludingOthers ^{dp}, **goldCoastProgressiveMotorImpairment** ^{dp},
goldCoastUMNandLMN ^{dp}

BRAINTEASER – D9.3

Group (social concept)^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Group>

A group of individuals united by a common factor (e.g., geographic location, ethnicity, disease, age, gender) [Definition Source: NCI]

Is defined by

<http://purl.bioontology.org/ontology/SNOMEDCT/389109008>

is in range of

hasEthnicity^{op}

has members

Asian (ethnic group)ⁿⁱ, Black (ethnic group)ⁿⁱ, Caucasianⁿⁱ, Hispanicⁿⁱ

Hand Dexterity^c

IRI: <https://w3id.org/brainteaser/ontology/schema/HandDexterity>

Test performed to assess the ability of a person to use the fingers, hands and arms to perform a task. [Definition Source: physio-pedia.com]

has super-classes

Diagnostic Procedure^c

is in domain of

dominantHandTrial1^{dp}, dominantHandTrial2^{dp}, dominantHandTrialDone^{dp}, factorsAffectedHandTrial^{dp}, nonDominantHandTrial1^{dp}, nonDominantHandTrial2^{dp}, nonDominantHandTrialDone^{dp}, otherFactorsAffectedHandTrial^{dp}

Heart Rate Measurement^c

IRI: <https://w3id.org/brainteaser/ontology/schema/HeartRateMeasurement>

The number of heartbeats per unit of time, usually expressed as beats per minute. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C49677

has super-classes

Wearable Data Measurement^c

is in domain of

averageHeartRate^{dp}, maxHeartRate^{dp}, minHeartRate^{dp}, restingHeartRate^{dp}

Hematology Test^c

IRI: <https://w3id.org/brainteaser/ontology/schema/HematologyTest>

A laboratory test to measure hematopoietic components and investigate hematologic disorders in a blood sample. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C49286

BRAINTEASER – D9.3

has super-classes

Diagnostic Procedure ^c

is in domain of

observedResult ^{op}

Hospital Anxiety and Depression Scale ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/HADS>

A standardized survey developed and copyrighted by A. S. Zigmond and R. P. Snaith in 1983, 1992, 1994 and published in the Acta Psychiatrica Scandinavica journal (A.S. Zigmond and R.P. Snaith. The Hospital Anxiety and Depression Scale. Acta psychiatr. scand. 1983, 67:361-370) which is used to detect depression and anxiety in individuals in a hospital or medical outpatient clinic. This instrument is a self-administered questionnaire consisting of 14 items that assess how the individual has felt over the past week. Each item as 4 response options that are associated with a score of 0 to 3. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C103520

has super-classes

Questionnaire filled using a mobile application. ^c

has sub-classes

Hospital Anxiety and Depression Scale for ALS patients ^c

is in domain of

HADS_Q1 ^{dp}, **HADS_Q10** ^{dp}, **HADS_Q11** ^{dp}, **HADS_Q12** ^{dp}, **HADS_Q13** ^{dp}, **HADS_Q14** ^{dp},
HADS_Q2 ^{dp}, **HADS_Q3** ^{dp}, **HADS_Q4** ^{dp}, **HADS_Q5** ^{dp}, **HADS_Q6** ^{dp}, **HADS_Q7** ^{dp},
HADS_Q8 ^{dp}, **HADS_Q9** ^{dp}

Hospital Anxiety and Depression Scale for ALS patients ^c

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_ALS

Hospital Anxiety and Depression Scale questionnaire administered to ALS patients.

has super-classes

Hospital Anxiety and Depression Scale ^c

Humidity ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Humidity>

A measure of the water vapor content of air. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C88206

has super-classes

Weather Data ^c

has sub-classes

Daily Average Relative Humidity ^c

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Impairment^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Impairment>

Loss or abnormality of psychological, physiological, or anatomic structure or function.
[Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C21055

has super-classes

Condition^c

Intervention or Procedure^c

IRI: <https://w3id.org/brainteaser/ontology/schema/InterventionOrProcedure>

An activity that produces an effect, or that is intended to alter the course of a disease in a patient or population. This is a general term that encompasses the medical, social, behavioral, and environmental acts that can have preventive, therapeutic, or palliative effects. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C25218

has sub-classes

Diagnostic Procedure^c, Surgical Procedure^c, Therapeutic Procedure^c

is in domain of

procedureEnd^{dp}, procedureStart^{dp}

is in range of

consists^{op}

King's Clinical Staging Method^c

IRI: <https://w3id.org/brainteaser/ontology/schema/KingsClinicalStaging>

The King's staging system consists of five disease stages, with Stage 5 being death. Stages 1–3 are based upon the number of El Escorial central nervous system (CNS) regions involved in the disease, measured by weakness, wasting, spasticity, dysphagia, or dysarthria. Stage 4 is nutritional failure, defined by the requirement for gastrostomy, or respiratory failure, defined by the requirement for noninvasive ventilation (NIV), and based upon the National Institute for Clinical Excellence MND Guidelines (Supplemental Material). [Definition Source: Balendra, Rubika et al. "A standard operating procedure for King's ALS clinical staging." Amyotrophic lateral sclerosis & frontotemporal degeneration vol. 20,3-4 (2019): 159-164.]

has super-classes

Questionnaire^c

is in domain of

kingsValue^{dp}

Kinship^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Kinship>

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The relationship between members of the same family. [Cambridge Dictionary]

Is defined by

<https://dictionary.cambridge.org/dictionary/english/kinship>

is in domain of

hasKinshipType^{op}, **inKinshipWith**^{op}

is in range of

hasKinship^{op}

KinshipType^c

IRI: <https://w3id.org/brainteaser/ontology/schema/KinshipType>

The type of the relationship between members of the same family.

is in range of

hasKinshipType^{op}

has members

Auntⁿⁱ, **Brother**ⁿⁱ, **Cousin**ⁿⁱ, **Daughter**ⁿⁱ, **Father**ⁿⁱ, **First Cousin**ⁿⁱ, **First Degree Relative**ⁿⁱ, **Granddaughter**ⁿⁱ, **Grandfather**ⁿⁱ, **Grandmother**ⁿⁱ, **Grandson**ⁿⁱ, **Maternal Aunt**ⁿⁱ, **Maternal Uncle**ⁿⁱ, **Mother**ⁿⁱ, **Nephew**ⁿⁱ, **Niece**ⁿⁱ, **Paternal Aunt**ⁿⁱ, **Paternal Uncle**ⁿⁱ, **Second Degree Relative**ⁿⁱ, **Sister**ⁿⁱ, **Son**ⁿⁱ, **Third Degree Relative**ⁿⁱ, **Uncle**ⁿⁱ

Laboratory Test Result^c

IRI: <https://w3id.org/brainteaser/ontology/schema/LaboratoryTestResult>

The outcome of a laboratory test. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C36292

is in domain of

componentName^{dp}, **measuredLevel**^{dp}, **normalLevel**^{dp}, **positivityResult**^{dp}, **unitOfMeasure**^{dp}

is in range of

observedResult^{op}

Lifestyle^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Lifestyle>

A manner of living that reflects the person's values and attitudes. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C16795

has super-classes

Activity^c

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is in domain of

alcoholUse^{dp}, **diet**^{dp}, **sexuality**^{dp}, **sunExposure**^{dp}

Magnetic Resonance Imaging (MRI)^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MRI>

Imaging that uses radiofrequency waves and a strong magnetic field rather than x-rays to provide detailed pictures of internal organs and tissues. The technique is valuable for the diagnosis of many pathologic conditions, including cancer, heart and vascular disease, stroke, and joint and musculoskeletal disorders. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C16809

has super-classes

Diagnostic Imaging^c

is in domain of

brainAtrophyMRI^{dp}, **burdenT1Lesions**^{dp}, **burdenT2Lesions**^{dp}, **contiguousLesionsMRI**^{dp}, **gadoliniumLesionsT1MRI**^{dp}, **gadoliniumLesionsT1MRINumber**^{dp}, **lesionsT1MRI**^{dp}, **lesionsT2MRI**^{dp}, **newOrEnlargedLesionsT2MRI**^{dp}, **newOrEnlargedLesionsT2MRINumber**^{dp}, **numberSpinalCordLesions**^{dp}, **spinalCordLesions**^{dp}, **totalLesionsT2MRI**^{dp}

is in range of

requiredMRI^{op}

Menstrual Cycle^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MenstrualCycle>

The Menstrual Cycle involves regularly recurring hormonal changes and physiologic endometrial changes during the reproductive period in human females, and some primates, and culminates in partial sloughing of the endometrium (menstruation) in the absence of fertilization. For most women, one cycle takes 28 days. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C16838

is in domain of

hasMenstrualCycle^{dp}, **isMenstrualCycleRegular**^{dp}, **reasonIrregularCycle**^{dp}, **reasonNoMenstrualCycle**^{dp}

is in range of

menstrualCycle^{op}

Milano-Torino Functional Staging System (MiToS)^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MiToSFunctionalStaging>

The Milano–Torino (MiToS) Staging system comprises six stages, based on functional impairment as assessed by the revised ALS Functional Rating Scale (ALSFRS-R). [Definition Source: Balendra, Rubika et al. “A standard operating procedure for King's ALS clinical staging.” Amyotrophic lateral sclerosis & frontotemporal degeneration vol. 20,3-4 (2019): 159-164.]

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has super-classes

Questionnaire ^c

is in domain of

mitosValue ^{dp}

Modified Fatigue Impact Scale ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MFIS>

A standardized rating scale developed by Fisk et al in 1994, which assesses how fatigue may affect a person and the impact of fatigue on quality of life. The questionnaire contains 21 questions which are scored ranging from 0 (never) to 4 (almost always). [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C113877

has super-classes

Questionnaire filled using a mobile application. ^c

is in domain of

MFIS_Q1 ^{dp}, **MFIS_Q10** ^{dp}, **MFIS_Q11** ^{dp}, **MFIS_Q12** ^{dp}, **MFIS_Q13** ^{dp}, **MFIS_Q14** ^{dp}, **MFIS_Q15** ^{dp}, **MFIS_Q16** ^{dp}, **MFIS_Q17** ^{dp}, **MFIS_Q18** ^{dp}, **MFIS_Q19** ^{dp}, **MFIS_Q2** ^{dp}, **MFIS_Q20** ^{dp}, **MFIS_Q21** ^{dp}, **MFIS_Q3** ^{dp}, **MFIS_Q4** ^{dp}, **MFIS_Q5** ^{dp}, **MFIS_Q6** ^{dp}, **MFIS_Q7** ^{dp}, **MFIS_Q8** ^{dp}, **MFIS_Q9** ^{dp}

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MSQOL54>

A standardized rating scale developed by Vickrey et al in 1995 and 1997, which combines items that are generic and disease-specific to assess quality of life and the level of physical, emotional, and cognitive functions in patients with multiple sclerosis. The questionnaire contains 54 questions and generates 12 subscales: physical function, role limitations due to physical problems, role limitations due to emotional problems, pain, emotional well-being, energy, health perceptions, social function, cognitive function, health distress, sexual function and overall quality of life. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C113878

has super-classes

Questionnaire filled using a mobile application. ^c

is in domain of

MSQOL54_Q1 ^{dp}, **MSQOL54_Q10** ^{dp}, **MSQOL54_Q11** ^{dp}, **MSQOL54_Q12** ^{dp}, **MSQOL54_Q13** ^{dp}, **MSQOL54_Q14** ^{dp}, **MSQOL54_Q15** ^{dp}, **MSQOL54_Q16** ^{dp}, **MSQOL54_Q17** ^{dp}, **MSQOL54_Q18** ^{dp}, **MSQOL54_Q19** ^{dp}, **MSQOL54_Q2** ^{dp}, **MSQOL54_Q20** ^{dp}, **MSQOL54_Q21** ^{dp}, **MSQOL54_Q22** ^{dp}, **MSQOL54_Q23** ^{dp}, **MSQOL54_Q24** ^{dp}, **MSQOL54_Q25** ^{dp}, **MSQOL54_Q26** ^{dp}, **MSQOL54_Q27** ^{dp}, **MSQOL54_Q28** ^{dp}, **MSQOL54_Q29** ^{dp}, **MSQOL54_Q3** ^{dp}, **MSQOL54_Q30** ^{dp}, **MSQOL54_Q31** ^{dp}, **MSQOL54_Q32** ^{dp}, **MSQOL54_Q33** ^{dp}, **MSQOL54_Q34** ^{dp}, **MSQOL54_Q35** ^{dp}, **MSQOL54_Q36** ^{dp}, **MSQOL54_Q37** ^{dp}, **MSQOL54_Q38** ^{dp}, **MSQOL54_Q39** ^{dp}, **MSQOL54_Q4** ^{dp}, **MSQOL54_Q40** ^{dp}, **MSQOL54_Q41** ^{dp}, **MSQOL54_Q42** ^{dp}, **MSQOL54_Q43** ^{dp}, **MSQOL54_Q44** ^{dp}, **MSQOL54_Q45** ^{dp},

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MSQOL54_Q46^{dp}, MSQOL54_Q47^{dp}, MSQOL54_Q48^{dp}, MSQOL54_Q49^{dp},
MSQOL54_Q5^{dp}, MSQOL54_Q50^{dp}, MSQOL54_Q51^{dp}, MSQOL54_Q52^{dp}, MSQOL54_Q53^{dp},
MSQOL54_Q54^{dp}, MSQOL54_Q6^{dp}, MSQOL54_Q7^{dp}, MSQOL54_Q8^{dp}, MSQOL54_Q9^{dp}

Muscle Tone ALS^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MuscleToneALS>

Muscle tone assessment performed to ALS patients.

has super-classes

muscle tone^c

Muscle Tone Assessment^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MuscleToneAssessment>

Muscle Tone measured by the modified Ashworth scale. The modified Ashworth scale is a muscle tone assessment scale used to assess the resistance experienced during passive range of motion, which does not require any instrumentation and is quick to perform. [Source: ncbi.nlm.nih.gov/books/NBK554572/]

has super-classes

Diagnostic Procedure^c

is in domain of

ashworthLeftArm^{dp}, ashworthLeftLeg^{dp}, ashworthRightArm^{dp}, ashworthRightLeg^{dp}

Muscle Tone MS^c

IRI: <https://w3id.org/brainteaser/ontology/schema/MuscleToneMS>

Muscle tone assessment performed to MS patients.

has super-classes

muscle tone^c

Occupation^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Occupation>

The principal activity that a person does to earn money. [Definition Source: NCI]

Is defined by

<http://data.europa.eu/esco/isco>

is in range of

hasOccupation^{op}

has members

Administrative and commercial managersⁿⁱ, Agricultural, forestry and fishery labourersⁿⁱ, Armed forces occupationsⁿⁱ, Armed forces occupations, other ranksⁿⁱ, Assemblersⁿⁱ, Building and related trades workers, excluding electriciansⁿⁱ, Business and administration associate professionalsⁿⁱ, Business and administration professionalsⁿⁱ, Chief executives, senior officials and legislatorsⁿⁱ, Cleaners and helpersⁿⁱ, Clerical

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support workersⁿⁱ, Commissioned armed forces officersⁿⁱ, Craft and related trades workersⁿⁱ, Customer services clerksⁿⁱ, Drivers and mobile plant operatorsⁿⁱ, Electrical and electronic trades workersⁿⁱ, Elementary occupationsⁿⁱ, Food preparation assistantsⁿⁱ, Food processing, wood working, garment and other craft and related trades workersⁿⁱ, General and keyboard clerksⁿⁱ, Handicraft and printing workersⁿⁱ, Health associate professionalsⁿⁱ, Health professionalsⁿⁱ, Hospitality, retail and other services managersⁿⁱ, Information and communications techniciansⁿⁱ, Information and communications technology professionalsⁿⁱ, Labourers in mining, construction, manufacturing and transportⁿⁱ, Legal, social and cultural professionalsⁿⁱ, Legal, social, cultural and related associate professionalsⁿⁱ, Managersⁿⁱ, Market-oriented skilled agricultural workersⁿⁱ, Market-oriented skilled forestry, fishery and hunting workersⁿⁱ, Metal, machinery and related trades workersⁿⁱ, Non-commissioned armed forces officersⁿⁱ, Numerical and material recording clerksⁿⁱ, Other clerical support workersⁿⁱ, Personal care workersⁿⁱ, Personal service workersⁿⁱ, Plant and machine operators and assemblersⁿⁱ, Production and specialised services managersⁿⁱ, Professionalsⁿⁱ, Protective services workersⁿⁱ, Refuse workers and other elementary workersⁿⁱ, Sales workersⁿⁱ, Science and engineering associate professionalsⁿⁱ, Science and engineering professionalsⁿⁱ, Service and sales workersⁿⁱ, Skilled agricultural, forestry and fishery workersⁿⁱ, Stationary plant and machine operatorsⁿⁱ, Street and related sales and service workersⁿⁱ, Subsistence farmers, fishers, hunters and gatherersⁿⁱ, Teaching professionalsⁿⁱ, Technicians and associate professionalsⁿⁱ

Oligoclonal Bands^c

IRI: <https://w3id.org/brainteaser/ontology/schema/OligoclonalBands>

The presence of more than one immunoglobulin band in the serum, urine, or cerebrospinal fluid. It usually results from infectious or immunologic disorders. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C113809

is in domain of

oligoclonalBandsNumber^{dp}, **oligoclonalBandsPresence**^{dp}, **oligoclonalBandsType**^{dp}

is in range of

testedForOligoclonalBands^{op}

Onset^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Onset>

The start, beginning, or early stages. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C25279

has super-classes

Event^c

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is in domain of

ageOnset^{dp}, axialOnset^{dp}, bulbarOnset^{dp}, generalizedOnset^{dp}, limbsOnset^{dp}, otherOnset^{dp}

Particulate Matter <1 µm concentration^c

IRI: https://w3id.org/brainteaser/ontology/schema/PM1_concentration

has super-classes

air pollution concentration

Patient^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Patient>

A person who receives medical attention, care, or treatment, or who is registered with medical professional or institution with the purpose to receive medical care when necessary. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C16960

has super-classes

Person^c

is in domain of

MSInPaediatricAge^{dp}, alive^{dp}, cognitivePhenotype^{dp}, dextricity^{dp}, educationLevel^{dp}, genomeSequencing^{dp}, hasEthnicity^{op}, hasKinship^{op}, hasOccupation^{op}, maritalStatus^{dp}, menopauseStatus^{dp}, menstrualCycle^{op}, notes^{dp}, phenotype^{dp}, privacyPreservingDeathDate^{dp}, retiredAtDiagnosis^{dp}, tested^{op}, undergo^{op}

Person^c

IRI: <http://www.w3.org/2000/10/swap/pim/contact#Person>

A human being. [Definition Source: NCI]

has sub-classes

Patient^c

is in domain of

birthYear^{dp}, birthplace^{op}, deathCause^{dp}, deathDate^{dp}, enrolledIn^{op}, hasDisease^{op}, ownsSensingDevice^{op}, residence^{op}, sex^{dp}

is in range of

inKinshipWith^{op}

has members

Gianmaria Silvelloⁿⁱ, Giorgio Maria Di Nunzioⁿⁱ, Guglielmo Faggioliⁿⁱ, Laura Menottiⁿⁱ, Nicola Ferroⁿⁱ, Stefano Marchesinⁿⁱ

Pharmacologic Substance^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PharmacologicSubstance>

Any natural, endogenously-derived, synthetic or semi-synthetic compound with pharmacologic activity. A pharmacologic substance has one or more specific

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mechanism of action(s) through which it exerts one or more effect(s) on the human or animal body. They can be used to potentially prevent, diagnose, treat or relieve symptoms of a disease. Formulation specific agents and some combination agents are also classified as pharmacologic substances. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C1909

is in range of

pharmacologicSubstance ^{op}

has members

ACE Inhibitors, Plain ⁿⁱ, Acetylcarnitine ⁿⁱ, Acetylsalicylic Acid ⁿⁱ, Acetylsalicylic Acid, Combinations excl. Psycholeptics ⁿⁱ, Aciclovir ⁿⁱ, Ademetonine ⁿⁱ, Agents Acting on the Renin-Angiotensin System ⁿⁱ, Alectinib ⁿⁱ, Alemtuzumab ⁿⁱ, Alfuzosin ⁿⁱ, Alimentary Tract and Metabolism ⁿⁱ, All Other Non-Therapeutic Products ⁿⁱ, All Other Therapeutic Products ⁿⁱ, Allergens ⁿⁱ, Alpha-Lipoic Acid ⁿⁱ, Alprazolam ⁿⁱ, Amantadine ⁿⁱ, Ambrisentan ⁿⁱ, Amiodarone ⁿⁱ, Amitriptyline ⁿⁱ, Amitriptyline and Psycholeptics ⁿⁱ, Amlodipine ⁿⁱ, Amoxicillin and Beta-Lactamase Inhibitor ⁿⁱ, Anabolic Agents for Systemic Use ⁿⁱ, Analgesics ⁿⁱ, Anesthetics ⁿⁱ, Anthelmintics ⁿⁱ, Anti-Acne Preparations ⁿⁱ, Anti-Parkinson Drugs ⁿⁱ, Antianemic Preparations ⁿⁱ, Antibacterials for Systemic Use ⁿⁱ, Antibiotics and Chemotherapeutics for Dermatological Use ⁿⁱ, Antidepressants ⁿⁱ, Antidiarrheals, Intestinal Antiinflammatory/Anti-infective Agents ⁿⁱ, Antiemetics and Antinauseants ⁿⁱ, Antiepileptics ⁿⁱ, Antifungals for Dermatological Use ⁿⁱ, Antigout Preparations ⁿⁱ, Antihemorrhagics ⁿⁱ, Antihistamines for Systemic Use ⁿⁱ, Antihypertensives ⁿⁱ, Anti-infectives for Systemic Use ⁿⁱ, Antiinflammatory and Antirheumatic Products ⁿⁱ, Antiinflammatory and Antirheumatic Products, Non-Steroids ⁿⁱ, Antimycobacterials ⁿⁱ, Antimycotics for Systemic Use ⁿⁱ, Antineoplastic Agents ⁿⁱ, Antineoplastic and Immunomodulating Agents ⁿⁱ, Antiobesity Preparations, excl. Diet Products ⁿⁱ, Antiparasitic Products, Insecticides and Repellents ⁿⁱ, Antiprotozoals ⁿⁱ, Antipruritics, incl. Antihistamines, Anesthetics, etc. ⁿⁱ, Antipsoriatics ⁿⁱ, Antisepetic and Disinfectants ⁿⁱ, Antithrombotic Agents ⁿⁱ, Antivirals for Systemic Use ⁿⁱ, Anxiolytics ⁿⁱ, Apixaban ⁿⁱ, Appetite Stimulants ⁿⁱ, Aripiprazole ⁿⁱ, Atenolol ⁿⁱ, Atenolol and Other Diuretics ⁿⁱ, Atrovastatin ⁿⁱ, Azathioprine ⁿⁱ, BCG Vaccine ⁿⁱ, BG-12 ⁿⁱ, Baclofen ⁿⁱ, Barbexaclone ⁿⁱ, Barnidipine ⁿⁱ, Beta Blocking Agents ⁿⁱ, Betahistine ⁿⁱ, Betamethasone ⁿⁱ, Bile Therapy ⁿⁱ, Bile and Liver Therapy Drugs ⁿⁱ, Biotin ⁿⁱ, Bisoprolol ⁿⁱ, Blood Substitutes and Perfusion Solutions ⁿⁱ, Blood and Blood Forming Organs ⁿⁱ, Botulinum Toxin ⁿⁱ, Bromazepam ⁿⁱ, Brotizolam ⁿⁱ, Cabergoline ⁿⁱ, Calcifediol ⁿⁱ, Calcium Channel Blockers ⁿⁱ, Calcium Folate ⁿⁱ, Calcium Homeostasis ⁿⁱ, Calcium, Combinations with Vitamin D and/or Other Drugs ⁿⁱ, Candesartan and Diuretics ⁿⁱ, Cannabidiol ⁿⁱ, Cannabinoids ⁿⁱ, Carbamazepine ⁿⁱ, Cardiac Therapy ⁿⁱ, Cardiovascular System ⁿⁱ, Ceftriaxone ⁿⁱ, Cetirizine ⁿⁱ, Chlorphenamine ⁿⁱ, Cinnarizine ⁿⁱ, Cinnarizine, Combinations ⁿⁱ, Citalopram ⁿⁱ, Cladribine ⁿⁱ, Cladribine ⁿⁱ, Clobazam ⁿⁱ, Clonazepam ⁿⁱ, Clopidogrel ⁿⁱ, Codeine, Combinations excl. Psycholeptics ⁿⁱ, Colecalciferol ⁿⁱ, Contrast Media ⁿⁱ, Corticosteroids for Systemic Use ⁿⁱ, Corticosteroids, Dermatological Preparations ⁿⁱ, Corticotropin ⁿⁱ, Cough and Cold Preparations ⁿⁱ, Covid-19 Vaccines ⁿⁱ, Cyanocobalamin ⁿⁱ, Cyclophosphamide ⁿⁱ, Dabigatran Etexilate ⁿⁱ, Daclizumab ⁿⁱ, Dantrolene ⁿⁱ, Deflazacort ⁿⁱ, Denosumab ⁿⁱ, Dermatologicals ⁿⁱ, Desogestrel ⁿⁱ, Desogestrel and Ethinylestradiol ⁿⁱ, Desvenlafaxine ⁿⁱ, Dexamethasone ⁿⁱ,

Diagnostic Agentsⁿⁱ, Diagnostic Radiopharmaceuticalsⁿⁱ, Diazepamⁿⁱ, Dienogest and Estradiolⁿⁱ, Dietary Supplementⁿⁱ, Digestives, incl. Enzymesⁿⁱ, Dimethyl Fumarateⁿⁱ, Diphtheria Vaccinesⁿⁱ, Diureticsⁿⁱ, Domperidoneⁿⁱ, Drospirenone and Ethinylestradiolⁿⁱ, Drugs Used in Diabetesⁿⁱ, Drugs for Acid Related Disordersⁿⁱ, Drugs for Bile Therapy and Lipotropics in Combinationⁿⁱ, Drugs for Constipationⁿⁱ, Drugs for Functional Gastrointestinal Disordersⁿⁱ, Drugs for Obstructive Airway Diseasesⁿⁱ, Drugs for Treatment of Bone Diseasesⁿⁱ, Duloxetineⁿⁱ, Dutasterideⁿⁱ, Ectoparasiticides, incl. Scabicides, Insecticides and Repellentsⁿⁱ, Ecunervⁿⁱ, Emollients and Protectivesⁿⁱ, Enalaprilⁿⁱ, Endocrine Therapyⁿⁱ, Escitalopramⁿⁱ, Esomeprazoleⁿⁱ, Etizolamⁿⁱ, Etonogestrelⁿⁱ, Etoricoxibⁿⁱ, Ezetimibeⁿⁱ, Fampridineⁿⁱ, Fingolimodⁿⁱ, Flunarizineⁿⁱ, Fluoxetineⁿⁱ, Flurazepamⁿⁱ, Fluticasoneⁿⁱ, Formoterol and Budesonideⁿⁱ, Furosemideⁿⁱ, Gabapentinⁿⁱ, General Nutrientsⁿⁱ, Genito Urinary System and Sex Hormonesⁿⁱ, Glatiramer Acetateⁿⁱ, Gliclazideⁿⁱ, Glimepirideⁿⁱ, Glucocorticoids, Systemicⁿⁱ, Gynecological Antiinfectives and Antisepticsⁿⁱ, HMG CoA Reductase Inhibitorsⁿⁱ, Hepatitis B, Purified Antigenⁿⁱ, Hydrochlorothiazideⁿⁱ, Hydrocortisoneⁿⁱ, Hydrocortisoneⁿⁱ, Hydroxychloroquineⁿⁱ, Hypnotics and Sedativesⁿⁱ, Ibuprofenⁿⁱ, Immune Sera and Immunoglobulinsⁿⁱ, Immunoglobulins, Normal Human, for Intravascular Adm.ⁿⁱ, Immunostimulantsⁿⁱ, Immunosuppressantsⁿⁱ, Indometacinⁿⁱ, Insulin Glargineⁿⁱ, Insulin Lisproⁿⁱ, Insulins and Analoguesⁿⁱ, Interferon Beta Naturalⁿⁱ, Interferon Beta-1aⁿⁱ, Interferon Beta-1bⁿⁱ, Ketorolacⁿⁱ, Lactuloseⁿⁱ, Lamotrigineⁿⁱ, Lercanidipineⁿⁱ, Levetiracetamⁿⁱ, Levocetirizineⁿⁱ, Levodopa and Decarboxylase Inhibitorⁿⁱ, Levothyroxine Sodiumⁿⁱ, Lipid Modifying Agentsⁿⁱ, Liver Therapy, Lipotropicsⁿⁱ, Lorazepamⁿⁱ, Losartanⁿⁱ, Malgradateⁿⁱ, Medicated Dressingsⁿⁱ, Melatoninⁿⁱ, Mesalazineⁿⁱ, Metforminⁿⁱ, Methotrexateⁿⁱ, Methotrexateⁿⁱ, Methylprednisoloneⁿⁱ, Mineral Supplementsⁿⁱ, Mitoxantroneⁿⁱ, Mitrazapineⁿⁱ, Modafinilⁿⁱ, Montelukastⁿⁱ, Muscle Relaxantsⁿⁱ, Musculo-Skeletal Systemⁿⁱ, Naltrexoneⁿⁱ, Nasal Preparationsⁿⁱ, Natalizumabⁿⁱ, Nebivololⁿⁱ, Nervous Systemⁿⁱ, Nicergolineⁿⁱ, Ocrelizumabⁿⁱ, Ofatumumabⁿⁱ, Olanzapineⁿⁱ, Olmesartan Medoxomilⁿⁱ, Olmesartan Medoxomil and Amlodipineⁿⁱ, Omeprazoleⁿⁱ, Ophthalmologicalsⁿⁱ, Ophthalmologicals and Otologicals Productsⁿⁱ, Other Alimentary Tract and Metabolismⁿⁱ, Other Dermatological Preparationsⁿⁱ, Other Drugs for Disorders of the Musculo-Skeletal Systemⁿⁱ, Other Gynecologicalsⁿⁱ, Other Hematological Agentsⁿⁱ, Other Nervous System Drugsⁿⁱ, Other Respiratory System Productsⁿⁱ, Other Vaccinesⁿⁱ, Otologicalsⁿⁱ, Oxcarbazepineⁿⁱ, Oxybutyninⁿⁱ, Ozanimodⁿⁱ, Paliperidoneⁿⁱ, Pancreatic Hormonesⁿⁱ, Pantoprazoleⁿⁱ, Paracetamolⁿⁱ, Paroxetineⁿⁱ, Peginterferon Alfa-2bⁿⁱ, Peginterferon Beta-1aⁿⁱ, Perindopril and Amlodipineⁿⁱ, Peripheral Vasodilatorsⁿⁱ, Phenobarbitalⁿⁱ, Phenytoinⁿⁱ, Pituitary and Hypothalamic Hormones and Analoguesⁿⁱ, Poliomyelitis, Trivalent, Inactivated, Whole Virusⁿⁱ, Pramipexoleⁿⁱ, Prasugrelⁿⁱ, Prazepamⁿⁱ, Prednisoloneⁿⁱ, Prednisoneⁿⁱ, Pregabalinⁿⁱ, Preparations for Treatment of Wounds and Ulcersⁿⁱ, Progestogens and Estrogens Systemic Contraceptives, Sequential Preparationsⁿⁱ, Proglumideⁿⁱ, Propanololⁿⁱ, Psychoanalepticsⁿⁱ, Psycholepticsⁿⁱ, Quetiapineⁿⁱ, Ramiprilⁿⁱ, Reboxetineⁿⁱ, Repaglinideⁿⁱ, Respiratory Systemⁿⁱ, Rifampicinⁿⁱ, Riluzoleⁿⁱ, Rituximabⁿⁱ, Rivaroxabanⁿⁱ, Rivastigmineⁿⁱ, Ropiniroleⁿⁱ, Rosuvastatinⁿⁱ, Salbutamolⁿⁱ, Secukinumabⁿⁱ, Semaglutideⁿⁱ, Sensory Organsⁿⁱ, Sertralineⁿⁱ, Sex Hormones and Modulators of the Genital Systemⁿⁱ, Sildenafilⁿⁱ, Simvastatinⁿⁱ, Siponimodⁿⁱ, Sitagliptinⁿⁱ, Stomatological Preparationsⁿⁱ, Sulfasalazineⁿⁱ, Sumatriptanⁿⁱ, Surgical Dressingsⁿⁱ,

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Systemic Hormonal Preparations, excl. Sex Hormones and Insulinsⁿⁱ, Tadalafilⁿⁱ, Tafluprostⁿⁱ, Tamoxifenⁿⁱ, Tamsulosinⁿⁱ, Telmisartanⁿⁱ, Terbutalineⁿⁱ, Teriflunomideⁿⁱ, Tetanus Immunoglobulinⁿⁱ, Tetracosactideⁿⁱ, Therapeutic Radiopharmaceuticalsⁿⁱ, Thiamazoleⁿⁱ, Thiethylperazineⁿⁱ, Throat Preparationsⁿⁱ, Thyroid Therapyⁿⁱ, Tiboloneⁿⁱ, Ticlopidineⁿⁱ, Tiotropium Bromideⁿⁱ, Tizanidineⁿⁱ, Tocilizumabⁿⁱ, Tolterodineⁿⁱ, Tonicsⁿⁱ, Topical Products for Joint and Muscular Painⁿⁱ, Topiramateⁿⁱ, Trastuzumabⁿⁱ, Trazodoneⁿⁱ, Triazolamⁿⁱ, Trosipiumⁿⁱ, Urologicalsⁿⁱ, Ursodeoxycholic Acidⁿⁱ, Ustekinumabⁿⁱ, Vaccinesⁿⁱ, Valaciclovirⁿⁱ, Valproic Acidⁿⁱ, Valsartanⁿⁱ, Variousⁿⁱ, Vasoprotectivesⁿⁱ, Venlafaxineⁿⁱ, Verapamilⁿⁱ, Vertioxetineⁿⁱ, Vigabatrinⁿⁱ, Vitaminsⁿⁱ, Warfarinⁿⁱ, Zolmitriptanⁿⁱ, Zolpidemⁿⁱ, Zuclopenthixolⁿⁱ

Physical Activity^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PhysicalActivity>

Any form of exercise or movement. Physical activity may include planned activity such as walking, running, basketball, or other sports. Physical activity may also include other daily activities such as household chores, yard work, walking the dog, etc. [Definition Source: NCI][attribution: from NIDDK Glossary; <http://www.niddk.nih.gov/health/nutrit/pubs/glossary/glossaryintro.htm>]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C17708

has super-classes

Activity^c

is in domain of

activityIntensity^{dp}, **activityType^{dp}**, **weeklyFrequency^{dp}**

Physical Activity Data^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PhysicalActivityData>

Any form of exercise or movement. Physical activity may include planned activity such as walking, running, basketball, or other sports. Physical activity may also include other daily activities such as household chores, yard work, walking the dog, etc. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C17708

has super-classes

Wearable Data Measurement^c

is in domain of

activeKilocalories^{dp}, **activeTime^{dp}**, **activityDistance^{dp}**, **activitySteps^{dp}**, **activityStepsGoal^{dp}**, **bmrKilocalories^{dp}**, **floorsClimbed^{dp}**, **floorsClimbedGoal^{dp}**, **intensityDurationGoal^{dp}**, **moderateIntensityDuration^{dp}**, **vigorousIntensityDuration^{dp}**

Pittsburgh Sleep Quality Index^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PSQI>

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A self-rated questionnaire which assesses sleep quality and disturbances over a one month time interval. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C103849

has super-classes

Questionnaire filled using a mobile application. ^c

is in domain of

PSQI_Q1 ^{dp}, **PSQI_Q10** ^{dp}, **PSQI_Q11A** ^{dp}, **PSQI_Q11B** ^{dp}, **PSQI_Q11C** ^{dp}, **PSQI_Q11D** ^{dp},
PSQI_Q11E ^{dp}, **PSQI_Q2** ^{dp}, **PSQI_Q3** ^{dp}, **PSQI_Q4** ^{dp}, **PSQI_Q5A** ^{dp}, **PSQI_Q5B** ^{dp}, **PSQI_Q5C** ^{dp},
PSQI_Q5D ^{dp}, **PSQI_Q5E** ^{dp}, **PSQI_Q5F** ^{dp}, **PSQI_Q5G** ^{dp}, **PSQI_Q5H** ^{dp}, **PSQI_Q5I** ^{dp},
PSQI_Q5J_1 ^{dp}, **PSQI_Q5J_2** ^{dp}, **PSQI_Q6** ^{dp}, **PSQI_Q7** ^{dp}, **PSQI_Q8** ^{dp}, **PSQI_Q9** ^{dp}

Place ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Place>

A particular part or region of space; a physical locality, a locale; a spot, a location.
 [Definition Source: Oxford English Dictionary]

is in domain of

placeArea ^{dp}, **zipCode** ^{dp}, **zipHashed** ^{dp}

is in range of

birthplace ^{op}, **coveredPlace** ^{op}, **placeLocation** ^{op}

Positron Emission Tomography (PET) ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PET>

A technique for measuring the gamma radiation produced by collisions of electrons and positrons (anti-electrons) within living tissue. In positron emission tomography (PET), a subject is given a dose of a positron-emitting radionuclide attached to a metabolically active substance (for example, 2-fluoro-2-deoxy-D-glucose (FDG), which is similar to a naturally occurring sugar, glucose, with the addition of a radioactive fluorine atom). When living tissue containing the positron emitter is bombarded by electrons, gamma radiation produced by collisions of electrons and positrons is detected by a scanner, revealing in fine detail the tissue location of the metabolically-active substance administered. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C17007

has super-classes

Diagnostic Imaging ^c

Pregnancy ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Pregnancy>

The state or condition of having a developing embryo or fetus in the body (uterus), after union of an ovum and spermatozoon, during the period from conception to birth.
 [Definition Source: NCI]

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Is defined by

http://purl.obolibrary.org/obo/NCIT_C25742

is in domain of

pregnancyComplications^{dp}, **pregnancyEnd**^{dp}, **pregnancyEndEvent**^{dp}, **pregnancyStart**^{dp}

is in range of

coexistingPregnancy^{op}, **confirmedPregnancy**^{op}, **pregnancy**^{op}

Protocol Event^c

IRI: <https://w3id.org/brainteaser/ontology/schema/ProtocolEvent>

Other important events that occur during a trial but are not driven by protocol requirements. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C74589

has super-classes

Event^c

Pulmonary Function Test^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PulmonaryFunctionTest>

A broad range of tests that are performed to assess how well lungs inhale and exhale air and how efficiently they transfer oxygen into the blood. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C38081

has super-classes

Diagnostic Procedure^c

is in domain of

pulmonaryAOPAbs^{dp}, **pulmonaryFEV6**^{dp}, **pulmonaryFVCLyingDown**^{dp},
pulmonaryFVCLyingDownPercentage^{dp}, **pulmonaryFVCRel**^{dp}, **pulmonaryFVCSitting**^{dp},
pulmonaryFVCSittingPercentage^{dp}, **pulmonaryMEP**^{dp}, **pulmonaryMEPAbs**^{dp},
pulmonaryMEPpercentage^{dp}, **pulmonaryMIP**^{dp}, **pulmonaryMIPAbs**^{dp},
pulmonaryMIPpercentage^{dp}, **pulmonaryNIP**^{dp}, **pulmonaryPCF**^{dp}, **pulmonaryPCO2**^{dp},
pulmonaryPO2^{dp}, **pulmonaryVCABs**^{dp}

Pulmonary function testing^c

IRI: <https://w3id.org/brainteaser/ontology/schema/PFTs>

A broad range of tests that are performed to assess how well lungs inhale and exhale air and how efficiently they transfer oxygen into the blood. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C38081

has super-classes

Questionnaire filled using a mobile application.^c

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is in domain of

PFTs_FEV1_L^{dp}, PFTs_FEV1_P^{dp}, PFTs_FEV6_L^{dp}, PFTs_FEV6_P^{dp}

Questionnaire^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Questionnaire>

A predetermined set of questions. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C17048

has super-classes

Diagnostic Procedure^c

has sub-classes

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS)^c, King's Clinical Staging Method^c, Milano-Torino Functional Staging System (MiToS)^c

Questionnaire filled using a mobile application.^c

IRI: <https://w3id.org/brainteaser/ontology/schema/AppQuestionnaire>

A predetermined set of questions. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C17048

has sub-classes

Dysphagia In Multiple Sclerosis^c, European Quality of Life Five Dimension Five Level Scale Questionnaire^c, Hospital Anxiety and Depression Scale^c, MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument^c, Modified Fatigue Impact Scale^c, Pittsburgh Sleep Quality Index^c, Pulmonary function testing^c, Self assessed ALSFRS-R questionnaire^c, Sleep Quality^c, Visual Analogue Scale^c, Weight^c

is in domain of

questionnaireSubmitted^{dp}

is in range of

filledAppQuestionnaire^{op}

Relapse^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Relapse>

The return of a disease after a period of remission. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C38155

is in domain of

bowelAndBladderRelapse^{dp}, brainstemRelapse^{dp}, cerebellarRelapse^{dp}, coexistingPregnancy^{op}, cognitiveRelapse^{dp}, otherRelapse^{dp}, pyramidalRelapse^{dp}, relapseClinicalTherapy^{dp}, relapseCortisoneTherapy^{dp}, relapseDuration^{dp}, relapseEnd^{dp}, relapseHospitalAdmission^{dp}, relapseImpactOnADL^{dp}, relapseRecovery^{dp},

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relapseSequela^{dp}, relapseSeverity^{dp}, relapseStart^{dp}, requiredMRI^{op}, sensoryRelapse^{dp}, visualRelapse^{dp}

is in range of

relapse^{op}

Residence^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Residence>

Any address at which a person dwells more than temporarily. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C25273

is in domain of

placeLocation^{op}, residenceEnd^{dp}, residenceStart^{dp}

is in range of

residence^{op}

Self assessed ALSFRS-R questionnaire^c

IRI: <https://w3id.org/brainteaser/ontology/schema/SelfALSFRSR>

ALSFRS-R assessed by the patient using the mobile questionnaires.

has super-classes

Questionnaire filled using a mobile application.^c

is in domain of

ALSFRSR_Q1^{dp}, ALSFRSR_Q10^{dp}, ALSFRSR_Q10alt^{dp}, ALSFRSR_Q11^{dp}, ALSFRSR_Q11alt^{dp}, ALSFRSR_Q12^{dp}, ALSFRSR_Q12alt^{dp}, ALSFRSR_Q1alt^{dp}, ALSFRSR_Q2^{dp}, ALSFRSR_Q2alt^{dp}, ALSFRSR_Q3^{dp}, ALSFRSR_Q3alt^{dp}, ALSFRSR_Q4^{dp}, ALSFRSR_Q4alt^{dp}, ALSFRSR_Q5A^{dp}, ALSFRSR_Q5Aalt^{dp}, ALSFRSR_Q5B^{dp}, ALSFRSR_Q5Balt^{dp}, ALSFRSR_Q6^{dp}, ALSFRSR_Q6alt^{dp}, ALSFRSR_Q7^{dp}, ALSFRSR_Q7alt^{dp}, ALSFRSR_Q8^{dp}, ALSFRSR_Q8alt^{dp}, ALSFRSR_Q9^{dp}, ALSFRSR_Q9alt^{dp}, ALSFRS_R_WHO_COMPLETED^{dp}

Sleep Data^c

IRI: <https://w3id.org/brainteaser/ontology/schema/SleepData>

A natural and periodic state of rest during which consciousness of the world is suspended. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C73425

has super-classes

Wearable Data Measurement^c

is in domain of

awakeDuration^{dp}, deepSleepDuration^{dp}, lightSleepDuration^{dp}, remSleep^{dp}, totalSleepDuration^{dp}, unmeasurableSleepDuration^{dp}

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Sleep Quality^c

IRI: https://w3id.org/brainteaser/ontology/schema/SLEEP_ALS

A question about an individual's sleeping. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C173925

has super-classes

Questionnaire filled using a mobile application. ^c

is in domain of

SLEEP_ALS_Q1 ^{dp}

Smoking^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Smoking>

The act of puffing and/or inhaling the combustion products of a substance so as to be tasted and absorbed into the bloodstream. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C154329

has super-classes

Activity ^c

is in domain of

before20Years ^{dp}, **dailyCigarettes** ^{dp}, **packYear** ^{dp}, **smokersNumber** ^{dp},
smokingExpositionType ^{dp}

Stress Level^c

IRI: <https://w3id.org/brainteaser/ontology/schema/StressLevel>

The negative mental, emotional, and physical reactions that occur when environmental stressors are perceived as exceeding the individual's adaptive capacities. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C35041

has super-classes

Wearable Data Measurement ^c

is in domain of

activityStressDuration ^{dp}, **averageStressLevel** ^{dp}, **highStressDuration** ^{dp},
lowStressDuration ^{dp}, **maxStressLevel** ^{dp}, **mediumStressDuration** ^{dp}, **restStressDuration** ^{dp},
stressDuration ^{dp}, **stressQualifier** ^{dp}

Surgical Procedure^c

IRI: <https://w3id.org/brainteaser/ontology/schema/SurgicalProcedure>

A diagnostic or treatment procedure performed by manual and/or instrumental means, often involving an incision and the removal or replacement of a diseased organ or tissue;

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of or relating to or involving or used in surgery or requiring or amenable to treatment by surgery. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C15329

has super-classes

Intervention or Procedure ^c

is in domain of

surgicalType ^{op}

Surgical Procedure Type ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/SurgicalType>

It defines some type of surgical procedures a patient could undergo.

is in range of

surgicalType ^{op}

has members

Abdominoplasty ⁿⁱ, **Appendectomy** ⁿⁱ, **Cardioversion** ⁿⁱ, **Cholecystectomy** ⁿⁱ, **Cone Biopsy** ⁿⁱ, **Conization** ⁿⁱ, **Coronary Artery Bypass Graft** ⁿⁱ, **Discectomy** ⁿⁱ, **Drainage of Bartholin's Abscess** ⁿⁱ, **Emergency Tracheostomy** ⁿⁱ, **Excision of Basal Cell Carcinoma** ⁿⁱ, **Excision of Benign Neoplasm** ⁿⁱ, **Excision of Cyst** ⁿⁱ, **Excision of Neoplasm** ⁿⁱ, **Excision of dermatofibroma** ⁿⁱ, **Gastroplasty** ⁿⁱ, **Gastric Bypass** ⁿⁱ, **Head and Neck Approaches** ⁿⁱ, **Head and Neck Surgery** ⁿⁱ, **Hysterectomy** ⁿⁱ, **Insertion of Implantable Intrathecal Access System** ⁿⁱ, **Laminectomy** ⁿⁱ, **Lumbar Spinal Fusion** ⁿⁱ, **Operation on Abdominal Region** ⁿⁱ, **Operative Procedure on Lumbosacral Spinal Structure** ⁿⁱ, **Operative Procedure on Thoracic Spinal Structure** ⁿⁱ, **Operative Procedure on Upper Extremity** ⁿⁱ, **Partial Cystectomy** ⁿⁱ, **Percutaneous Endoscopic Gastrostomy (PEG)** ⁿⁱ, **Procedure on Pelvic Region of Trunk** ⁿⁱ, **Removal of Acoustic Neuroma** ⁿⁱ, **Repair of Bladder** ⁿⁱ, **Repair of Knee Cruciate Ligaments** ⁿⁱ, **Replacement of Aortic Valve** ⁿⁱ, **Rhinoseptoplasty** ⁿⁱ, **Salpingectomy** ⁿⁱ, **Surgical Procedure on Cervical Spine** ⁿⁱ, **Surgical Procedure on Lower Extremity** ⁿⁱ, **Surgical Procedure on Thorax** ⁿⁱ, **Thyroid Gland Excision** ⁿⁱ, **Transplantation** ⁿⁱ, **Transurethral Prostatectomy** ⁿⁱ, **Turbinectomy** ⁿⁱ

Symbol Digit Modalities Functional Test ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/SDMT>

A standardized rating scale developed by Aaron Smith in 1982, which is used to identify individuals with neurological impairment, as well as to assess divided attention, visual scanning and motor speed. This functional test measures the time to pair abstract symbols with specific numbers with a 90 second time limit. Scoring of this test is based on the total number of correctly coded items from 0-110 in 90 seconds. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C115793

BRAINTEASER – D9.3

has super-classes

Cognitive Assessment ^c

is in domain of

sdmtCorrect ^{dp}, **sdmtIncorrect** ^{dp}

Symptom ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Symptom>

Subjective evidence of disease perceived by the patient. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C4876

has super-classes

Condition ^c

is in domain of

symptomClinicalName ^{dp}, **symptomEnd** ^{dp}, **symptomGrade** ^{dp}, **symptomStart** ^{dp},
symptomType ^{dp}, **symptomValue** ^{dp}

Temperature ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Temperature>

The temperature of the surroundings. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C90380

has super-classes

Weather Data ^c

has sub-classes

Daily Maximum Temperature ^c, **Daily Mean Temperature** ^c, **Daily Minimum Temperature** ^c

Therapeutic Procedure ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/TherapeuticProcedure>

An action or administration of therapeutic agents to produce an effect that is intended to alter or stop a pathologic process. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C49236

has super-classes

Intervention or Procedure ^c

is in domain of

performedTreatment ^{op}

Therapeutic Procedure Type ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/TherapeuticProcedureType>

BRAINTEASER – D9.3

It defines some type of therapeutic procedures that could be administered to a patient.

is in range of

therapyType^{op}

has members

Anticonvulsant Agentⁿⁱ, **Cortisone Therapy for Relapse**ⁿⁱ, **Drugs for MS Symptomatic Therapy**ⁿⁱ, **Drugs for MS Therapy Side Effects**ⁿⁱ, **Drugs for Other Diseases**ⁿⁱ, **Immunoactive Drugs**ⁿⁱ, **Non-Invasive Mechanical Ventilation (NIV)**ⁿⁱ, **Plasmapheresis**ⁿⁱ

Therapeutic Treatment^c

IRI: <https://w3id.org/brainteaser/ontology/schema/TherapeuticTreatment>

The therapeutic treatment that has been administered to a patient.

is in domain of

administration^{op}, **pharmacologicSubstance**^{op}, **therapyType**^{op}

is in range of

performedTreatment^{op}

Trauma^c

IRI: <https://w3id.org/brainteaser/ontology/schema/Trauma>

Damage inflicted on the body as the direct or indirect result of an external force, with or without disruption of structural continuity. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C3671

is in domain of

traumaDate^{dp}, **traumaDescription**^{dp}

is in range of

trauma^{op}

Visual Acuity^c

IRI: <https://w3id.org/brainteaser/ontology/schema/VisualAcuity>

Sharpness of vision, the ability to discern fine detail. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C87149

has super-classes

Diagnostic Procedure^c

is in domain of

visualAcuityLeft^{dp}, **visualAcuityRight**^{dp}

Visual Analogue Scale^c

IRI: <https://w3id.org/brainteaser/ontology/schema/VAS>

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A psychometric response scale to assess subjective characteristics or symptoms, which relies upon a continuum of possible result values in between two fixed end-points.
[Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C121547

has super-classes

Questionnaire filled using a mobile application. ^c

has sub-classes

Visual Analogue Scale for ALS patients ^c

is in domain of

VAS_Q1 ^{dp}

Visual Analogue Scale for ALS patients ^c

IRI: https://w3id.org/brainteaser/ontology/schema/VAS_ALS

Visual Analogue Scale questionnaire administered to ALS patients.

has super-classes

Visual Analogue Scale ^c

Volatile Organic Compound concentration ^c

IRI: https://w3id.org/brainteaser/ontology/schema/VOC_concentration

has super-classes

air pollution concentration

Walk Test ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/WalkTest>

Test performed to assess the walking abilities of patients.

has super-classes

Diagnostic Procedure ^c

has sub-classes

Walk Test ALS ^c, **Walk Test MS** ^c

is in domain of

ankleFootOrthosis ^{dp}, **reasonWalkTestNotCompleted** ^{dp}, **walkAssistiveDevice** ^{dp},
walkAssistiveDeviceUsed ^{dp}, **walkTestNotCompleted** ^{dp}

Walk Test ALS ^c

IRI: <https://w3id.org/brainteaser/ontology/schema/WalkTestALS>

Walk test performed to ALS patients.

has super-classes

Walk Test ^c

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is in domain of

metersWalkedFirstMin^{dp}, **metersWalkedTwoMins**^{dp}, **walkingTime10Meters**^{dp}

Walk Test MS^c

IRI: <https://w3id.org/brainteaser/ontology/schema/WalkTestMS>

Walk test performed to MS patients.

has super-classes

Walk Test^c

is in domain of

walkingTime25Steps^{dp}

Wearable Data Measurement^c

IRI: <https://w3id.org/brainteaser/ontology/schema/WearableDataMeasurement>

Measurements collected by wearables.

has super-classes

Activity^c

has sub-classes

Heart Rate Measurement^c, **Physical Activity Data**^c, **Sleep Data**^c, **Stress Level**^c

is in domain of

wearableDataMeasurementDuration^{dp}, **wearableDataMeasurementStartTime**^{dp}

Weather Data^c

IRI: <https://w3id.org/brainteaser/ontology/schema/WeatherData>

The different weather information registered by sensing devices.

has super-classes

quantity

has sub-classes

Atmospheric Pressure^c, **Daily Mean Global Radiation**^c, **Daily Mean Wind Speed**^c, **Daily Precipitation Sum**^c, **Humidity**^c, **Temperature**^c

Weight^c

IRI: <https://w3id.org/brainteaser/ontology/schema/WEIGHT>

The weight of a subject. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C81328

has super-classes

Questionnaire filled using a mobile application.^c

is in domain of

WEIGHT_Q1^{dp}

C.2. Object properties

administration^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/administration>

It defines the relationship between a therapeutic treatment and the specific administration details.

has domain

Therapeutic Treatment ^c

has range

Administration ^c

adverseReaction^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/adverseReaction>

It defines the relationship between The end therapy reason and the adverse reaction occurred.

has domain

End Therapy Reason ^c

has range

Adverse Drug Reaction ^c

anatomicalLocation^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/anatomicalLocation>

It defines the location of a trauma, onset, surgical procedure or diagnostic imaging.

has domain

Clinical Evaluation ^c or **Diagnostic Imaging** ^c or **Onset** ^c or **Surgical Procedure** ^c or **Trauma** ^c

has range

Anatomic Site ^c

APConcentrationTime^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/APConcentrationTime>

It defines the relationship between air pollution concentration individuals and their time of recording.

has domain

air pollution concentration or **Weather Data** ^c

has range

instant

birthplace^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/birthplace>

BRAINTEASER – D9.3

It defines the relationship between a person and his or her birthplace.

has domain

Person ^c

has range

Place ^c

coexistingPregnancy^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/coexistingPregnancy>

It defines the relationship between a relapse and a co-occurring pregnancy.

has domain

Relapse ^c

has range

Pregnancy ^c

conductedInClinic^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/conductedInClinic>

It defines the relationship between a clinical trial and a clinic or hospital. In particular, a clinical trial is conducted in a clinic or hospital.

has domain

Clinical Trial ^c

has range

Clinics and Hospitals ^c

confirmedPregnancy^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/confirmedPregnancy>

It defines the relationship between the end therapy reason and a pregnancy, meaning the therapeutic treatment was interrupted due to a confirmed pregnancy.

has domain

End Therapy Reason ^c

has range

Pregnancy ^c

consists^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/consists>

It defines the relationship between an event and an intervention or procedure. In particular, an event could consist in an intervention or procedure.

has domain

Event ^c

has range

Intervention or Procedure ^c

BRAINTEASER – D9.3

coveredPlace^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/coveredPlace>

It defines the relationship between the sensing device for environmental data and the covered place.

has domain

sensing device

has range

Place^c

determinedBy^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/determinedBy>

It defines the relationship between a comorbidity and the disease that determines it.

has characteristics: **functional**

has domain

Comorbidity^c

has range

Disease, Disorder or Finding^c

enrolledIn^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/enrolledIn>

It defines the relationship between a person and a clinical trial participation. In particular, a person can be enrolled in a clinical trial participation.

has domain

Person^c

has range

Clinical Trial Participation^c

filledAppQuestionnaire^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/filledAppQuestionnaire>

Links each app questionnaire to the event in which it was filled.

has domain

Event^c

has range

Questionnaire filled using a mobile application.^c

hasDisease^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasDisease>

It defines the relationship between a person and a disease which he or she suffers from.

BRAINTEASER – D9.3

has domain

Person ^c

has range

Disease, Disorder or Finding ^c

hasEthnicity^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasEthnicity>

It defines the patient's ethnicity. For instance, we say that: :Peter :hasEthnicity _:b . _:b a Group (social concept); a skos:Concept.

has characteristics: **functional**

has domain

Patient ^c

has range

Group (social concept) ^c

hasKinship^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasKinship>

It defines the relation between a patient and a kinship. For instance, we say that: :Peter :hasKinship _:b . _:b a Kinship; :hasKinshipType http://aunt. http://aunt a KinshipType; a skos:Concept.

has characteristics: **functional**

has domain

Patient ^c

has range

Kinship ^c

hasKinshipType^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasKinshipType>

It defines the relation between a Kinship and a KinshipType. For instance, we say that: :Peter :hasKinship _:b . _:b a Kinship; :hasKinshipType http://aunt. http://aunt a KinshipType; a skos:Concept.

has characteristics: **functional**

has domain

Kinship ^c

has range

KinshipType ^c

hasOccupation^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasOccupation>

It defines the relationship between a patient and his or her occupation.

BRAINTEASER – D9.3

has characteristics: **functional**

has domain

Patient ^c

has range

Occupation ^c

hasRegisteredActivity^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasRegisteredActivity>

It defines the relationship between an event and an activity. In particular, during an event a specific type of activity can be registered.

has domain

Event ^c

has range

Activity ^c

hasRegisteredCondition^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasRegisteredCondition>

It defines the relationship between an event and a comorbidity. In particular, during an event a preexisting condition can be registered.

has domain

Event ^c

has range

Condition ^c

inClinicalTrial^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/inClinicalTrial>

It defines the relationship between a clinical trial participation and a clinical trial. In particular, a clinical trial participation refers to a clinical trial.

has characteristics: **functional**

has domain

Clinical Trial Participation ^c

has range

Clinical Trial ^c

inKinshipWith^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/inKinshipWith>

The relationship of kinship between a patient with another Person (who might also be a Patient)

has domain

Kinship ^c

BRAINTEASER – D9.3

has range

Person ^c

isAboutDisease^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/isAboutDisease>

It defines the relationship between a clinical trial and the disease studied in it.

has domain

Clinical Trial ^c

has range

Disease, Disorder or Finding ^c

menstrualCycle^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/menstrualCycle>

Links a patient to the information about her menstrual cycle.

has domain

Patient ^c

has range

Menstrual Cycle ^c

observedResult^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/observedResult>

It defines the relationship between an hematology test and the observed laboratory results.

has domain

Hematology Test ^c

has range

Laboratory Test Result ^c

onGene^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/onGene>

It defines the relationship between a genetic testing and a gene. In particular, a genetic testing looks for some genetic mutations on a gene.

has domain

Genetic Testing ^c

has range

Gene ^c

ownsSensingDevice^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/ownsSensingDevice>

Links each person to the sensing device they are carrying.

BRAINTEASER – D9.3

has domain

Person ^c

has range

sensing device

performedTreatment^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/performedTreatment>

It defines the relationship between the therapeutic procedure and the performed therapeutic treatments.

has domain

Therapeutic Procedure ^c

has range

Therapeutic Treatment ^c

pharmacologicSubstance^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/pharmacologicSubstance>

It defines the relationship between a therapeutic treatment and the employed pharmacologic substance.

has domain

Therapeutic Treatment ^c

has range

Pharmacologic Substance ^c

placeLocation^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/placeLocation>

It defines the relationship between a patient's residence and its location.

has characteristics: **functional**

has domain

Residence ^c

has range

Place ^c

pregnancy^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/pregnancy>

It defines the relationship between an event and a pregnancy that can be registered during the event.

has domain

Event ^c

has range

Pregnancy ^c

BRAINTEASER – D9.3

relapse^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/relapse>

It defines the relationship between an event and a relapse that can be registered during the event.

has domain

Event ^c

has range

Relapse ^c

requiredMRI^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/requiredMRI>

It defines the relationship between a relapse and a MRI that has been required.

has domain

Relapse ^c

has range

Magnetic Resonance Imaging (MRI) ^c

residence^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/residence>

It defines the relationship between a person and his or her residence.

has domain

Person ^c

has range

Residence ^c

surgicalType^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/surgicalType>

It defines the relationship between the surgical procedure and the specific type of surgical procedure.

has characteristics: **functional**

has domain

Surgical Procedure ^c

has range

Surgical Procedure Type ^c

tested^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/tested>

It defines the relationship between a patient and a genetic testing. In particular, a patient can be tested for genetic mutations.

BRAINTEASER – D9.3

has domain

Patient ^c

has range

Genetic Testing ^c

testedForOligoclonalBands^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/testedForOligoclonalBands>

It defines the relationship between a CSF Analysis and a test for the presence of oligoclonal bands.

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

Oligoclonal Bands ^c

therapyType^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/therapyType>

It defines the relationship between the therapeutic treatment and the type of therapeutic procedure that has been administered.

has domain

Therapeutic Treatment ^c

has range

Therapeutic Procedure Type ^c

trauma^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/trauma>

It defines the relationship between an event and a trauma that can be registered during the event.

has domain

Event ^c

has range

Trauma ^c

undergo^{op}

IRI: <https://w3id.org/brainteaser/ontology/schema/undergo>

It defines the relationship between patient and event. In particular, a patient can undergo some events.

has domain

Patient ^c

BRAINTEASER – D9.3

has range

Event ^c

C.3 Data Properties

activityStartYear^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activityStartYear>

The year in which the activity started.

has characteristics: **functional**

has domain

Activity ^c

has range

g year

activeKilocalories^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activeKilocalories>

Active kilocalories registered by the wearable device. [uom: kcal]

has domain

Physical Activity Data ^c

has range

float

activeTime^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activeTime>

Active time registered by the wearable device. [uom: seconds]

has domain

Physical Activity Data ^c

has range

float

activityDistance^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activityDistance>

Activity distance registered by the wearable device. [uom: meters]

has domain

Physical Activity Data ^c

has range

float

BRAINTEASER – D9.3

activityEndYear^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activityEndYear>

The year in which an activity ended.

has characteristics: **functional**

has domain

Activity ^c

has range

g year

activityIntensity^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activityIntensity>

The level of intensity with which the physical activity is carried out.

has domain

Physical Activity ^c

has range

{ "Intense" , "Moderate" , "Professional" , "Soft" }

activitySteps^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activitySteps>

Activity steps registered by the wearable device.

has domain

Physical Activity Data ^c

has range

float

activityStepsGoal^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activityStepsGoal>

Activity steps goal registered by the wearable device.

has domain

Physical Activity Data ^c

has range

float

activityStressDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activityStressDuration>

Activity stress duration registered by the wearable device. [uom: seconds]

has domain

Stress Level ^c

BRAINTEASER – D9.3

has range

float

activityType^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/activityType>

The type of physical activity carried out.

has domain

Physical Activity ^c

has range

plain literal

administrationDose^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/administrationDose>

A definite quantity of a medicine or drug given or prescribed to be given at one time.
[Definition Source: Oxford English Dictionary]

has characteristics: functional

has domain

Administration ^c

has range

float

administrationFrequency^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/administrationFrequency>

The frequency of administration of the pharmacological substance.

has characteristics: functional

has domain

Administration ^c

has range

plain literal

administrationRoute^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/administrationRoute>

Designation of the part of the body through which or into which, or the way in which, the medicinal product is intended to be introduced. In some cases a medicinal product can be intended for more than one route and/or method of administration. [Definition Source: NCI][attribution: ICH]

has characteristics: functional

has domain

Administration ^c

BRAINTEASER – D9.3

has range

plain literal

administrationUoM^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/administrationUoM>

The Unit of Measure (UoM) of the administration dose.

has characteristics: functional

has domain

Administration ^c

has range

plain literal

ageOnset^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ageOnset>

Age of the patient at the onset.

has characteristics: functional

has domain

Onset ^c

has range

float

albuminCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/albuminCSF>

A quantitative measurement of albumin present in a sample of CSF. Unit of measure : [mg/l].

has characteristics: functional

has domain

CSF Analysis ^c

has range

float

alcoholUse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alcoholUse>

Whether a patient drinks alcohol.

has characteristics: functional

has domain

Lifestyle ^c

BRAINTEASER – D9.3

has range

boolean

alive^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alive>

Whether the patient is still alive.

has characteristics: **functional**

has domain

Patient ^c

has range

boolean

alsfrs1^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs1>

Item 1 for ALSFRS: Speech.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

alsfrs10^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs10>

Item 10 for Revised ALSFRS: Dyspnea.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

alsfrs11^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs11>

Item 11 for Revised ALSFRS: Orthopnea.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

BRAINTEASER – D9.3

*alsfrs12^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs12>

Item 12 for Revised ALSFRS: Respiratory Insufficiency.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer*alsfrs2^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs2>

Item 2 for ALSFRS: Salivation.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer*alsfrs3^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs3>

Item 3 for ALSFRS: Swallowing.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer*alsfrs4^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs4>

Item 4 for ALSFRS: Handwriting.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer*alsfrs5^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs5>

BRAINTEASER – D9.3

Item 5 for ALSFRS: Cutting food and handling utensils.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

alsfrs6^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs6>

Item 6 for ALSFRS: Dressing and hygiene.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

alsfrs7^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs7>

Item 7 for ALSFRS: Turning in bed and adjusting blankets.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

alsfrs8^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs8>

Item 8 for ALSFRS: Walking.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

alsfrs9^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrs9>

Item 9 for ALSFRS: Climbing Stairs.

BRAINTEASER – D9.3

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

ALSFRS_R_WHO_COMPLETED^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRS_R_WHO_COMPLETED

Please indicate who completed this survey

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Caregiver alone" , "Patient" , "Patient with assistance" , "Patient with assistance from caregiver or family member" }

alsfrsOriginal10^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alsfrsOriginal10>

Original item 10 for ALSFRS: Breathing.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

ALSFRSR_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q1

Q1: Speech

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Detectable speech disturbance" , "Intelligible with repeating" , "Normal speech process" }

ALSFRSR_Q10^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q10

Q10: Dyspnea

has domain

Self assessed ALSFRS-R questionnaire ^c

BRAINTEASER – D9.3

has range

{ "None" , "Occurs at rest: difficulty breathing when either sitting or lying" , "Occurs with one or more of the following: eating, bathing, dressing" }

ALSFRSR_Q10alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q10alt

Do you experience shortness of breath or have difficulty breathing?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "no change" , "shortness of breath at rest while either sitting or lying down" , "shortness of breath only with walking" , "shortness of breath with minimal exertion (i.e. talking, eating, bathing or dressing)" , "significant shortness of breath (all of the time) and considering using mechanical ventilation" }

ALSFRSR_Q11^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q11

Q11: Orthopnea

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Needs extra pillows in order to sleep (more than two)" , "None" , "Some difficulty sleeping at night due to shortness of breath, does not routinely use more than two pillows" , "Unable to sleep without mechanical assistance" }

ALSFRSR_Q11alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q11alt

Do you experience shortness of breath or have difficulty breathing while lying down on your back?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Unable to sleep without mechanical assistance" , "no change" , "occasional shortness of breath while lying on back but don't routinely use more than two (2) pillows to sleep" , "shortness of breath while lying on back and require more than two pillows (or an equivalent) to sleep" }

ALSFRSR_Q12^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q12

Q12: Respiratory Insufficiency

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has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Continuous use of BiPAP during the night" , "Intermittent use of BiPAP" ,
"None" }

ALSFRSR_Q12alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q12alt

Do you require respiratory (breathing) support?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "continuous use of BiPAP at night" , "continuous use of BiPAP at night and
during the day (nearly 24 hours per day)" , "intermittent use of BiPAP" ,
"mechanical ventilation by intubation or tracheostomy" , "no respiratory support"
}

ALSFRSR_Q1alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q1alt

Have you noticed any changes in your speech?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "no change" , "noticeable speech difference" , "speech has changed; asked often
to repeat words or phrases" , "speech has changed; sometimes need the use of
alternative communication methods (i.e. computer, writing pad, letter board or
eye chart)" , "unable to communicate verbally" }

ALSFRSR_Q2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q2

Q2: Salivation

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Moderately excessive saliva; may have minimal drooling" , "Normal" , "Slight but
definite excess of saliva in mouth; may have night time drooling" }

ALSFRSR_Q2alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q2alt

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Have you noticed any changes (increases) in the amount of saliva in your mouth (regardless of any medication use)?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "marked amounts of excessive saliva with some daytime drooling" , "marked excessive saliva with marked drooling requiring a constant tissue or handkerchief" , "moderate amounts of excessive saliva with or without minimal day time drooling" , "no change" , "slight but definite excess of saliva with or without night time drooling" }

ALSFRSR_Q3^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q3

Q3: Swallowing

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Early eating problems - occasional choking" , "Normal eating habits" }

ALSFRSR_Q3alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q3alt

Have there been any changes in your ability to swallow?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "do not eat anything by mouth and receive all nutrition through a feeding tube (PEG)" , "no changes (all foods and liquids)" , "some changes in swallowing or occasional choking episodes (including coughing during swallowing)" , "unable to eat all consistencies of food and have modified the consistency of foods eaten" , "use a feeding tube (PEG) to supplement what is eaten by mouth" }

ALSFRSR_Q4^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q4

Q4: Handwriting

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "No words are legible, but can still grip pen" , "Normal" , "Not all words are legible" , "Slow" }

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ALSFRSR_Q4alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q4alt

Has your handwriting changed? Please choose the best answer that describes your handwriting with your dominant (usual) hand without a cuff or brace.

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "able to hold a pen but unable to write" , "no changes" , "not all words are legible" , "slower and/or sloppier but all the words are legible" , "unable to hold a pen" }

ALSFRSR_Q5A^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q5A

Q5A: Cutting Food and Handling Utensils (without gastrostomy)

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Can cut most foods (> 50%), although slow and clumsy; some help needed" , "Food must be cut by someone, but can still feed slowly" , "Normal" , "Somewhat slow and clumsy, but no help needed" }

ALSFRSR_Q5Aalt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q5Aalt

Cutting food and handling utensils

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "food must be cut by someone else but can feed slowly without assistance" , "needs to be fed" , "no change" , "sometimes need help with cutting more difficult foods" , "somewhat slow and clumsy (or different than before) but no assistance or adaptive equipment" }

ALSFRSR_Q5B^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q5B

Q5B: Cutting Food and Handling Utensils (with gastrostomy)

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

plain literal

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ALSFRSR_Q5Balt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q5Balt

Using a feeding tube (PEG)

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "require assistance with closures and fasteners" , "unable to perform any of the manipulations" }

ALSFRSR_Q6^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q6

Q6: Dressing and Hygiene

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Independent; Can complete self-care with effort or decreased efficiency" , "Intermittent assistance or substitute methods" , "Needs attendant for self-care" , "Normal function" }

ALSFRSR_Q6alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q6alt

Has your ability to dress and perform self-care activities (i.e. bathing, teeth brushing, shaving, combing your hair, other hygienic activities) changed?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "do not perform self-care activities and completely dependent on caregiver" , "no change" , "perform self-care activities without assistance but with increased effort or decreased efficiency" , "require daily assistance" , "require intermittent assistance or use different methods (i.e. sit down to get dressed, fasten buttons with a fastener or your non-dominant hand)" }

ALSFRSR_Q7^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q7

Q7: Truning in Bed and Adjusting Bed Clothes

has domain

Self assessed ALSFRS-R questionnaire ^c

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has range

{ "Can turn alone, or adjust sheets, but with great difficulty" , "Normal function" , "Somewhat slow and clumsy, but no help needed" }

ALSFRSR_Q7alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q7alt

Has your ability to turn in bed and adjust the bed clothes (i.e. cover yourself with the sheet or blanket) changed?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "can initiate turning in bed or adjusting the bed clothes but require assistance to complete the task" , "can turn in bed and adjust the bed clothes without assistance but it is slower or more clumsy" , "can turn in bed or adjust the bedclothes without assistance but with great difficulty" , "helpless in bed" , "no change" }

ALSFRSR_Q8^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q8

Q8: Walking

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Early ambulation difficulties" , "Non-ambulatory functional movement only" , "Normal" , "Walks with assistance" }

ALSFRSR_Q8alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q8alt

Has your ability to walk changed?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "can move legs or stand up but unable to walk from room to room" , "cannot walk or move my legs" , "no change" , "require assistance to walk (i.e. cane, walker, foot brace or hand held assistance)" , "walking has changed but do not require any assistance or devices (i.e. foot brace, cane, walker)" }

ALSFRSR_Q9^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q9

Q9: Climbing Stairs

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has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "Cannot do" , "Mild unsteadiness or fatigue" , "Needs assistance" , "Normal" , "Slow" }

ALSFRSR_Q9alt^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/ALSFRSR_Q9alt

Has your ability to climb stairs changed?

has domain

Self assessed ALSFRS-R questionnaire ^c

has range

{ "cannot climb stairs" , "no change" , "require assistance (i.e. using the handrail, cane or person)" , "slower" , "unsteady and/or more fatigued" }

alterationCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/alterationCSF>

Whether the CSF specimen is normal or presents alterations.

has characteristics: functional

has domain

CSF Analysis ^c

has range

{ "atypical alteration for MS" , "normal" , "traumatic" , "typical alteration for MS" }

ambulationEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ambulationEDSS>

Expanded Disability Status Score (EDSS) score for ambulation.

has characteristics: functional

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

ambulationEDSSAssistance^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ambulationEDSSAssistance>

Whether the patient used assistance to perform the ambulation test.

has domain

Expanded Disability Status Scale (EDSS) ^c

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has range

boolean

ambulationEDSSObservedTime^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ambulationEDSSObservedTime>

Observed time to walk 500m (in minutes)

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

float

ambulationEDSSPatientDistance^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ambulationEDSSPatientDistance>

Distance reported by patient (in meters) without stopping

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

ambulationEDSSPatientTime^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ambulationEDSSPatientTime>

Time reported by patient (in minutes) without stopping

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

ankleFootOrthosis^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ankleFootOrthosis>

Whether the patient has ankle/foot orthosis.

has domain

Walk Test ^c

has range

boolean

ashworthLeftArm^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ashworthLeftArm>

Muscle tone assessment of the left arm.

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has domain

Muscle Tone Assessment ^c

has range

ashworthLeftLeg^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ashworthLeftLeg>

Muscle tone assessment of the left leg.

has domain

Muscle Tone Assessment ^c

has range

ashworthRightArm^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ashworthRightArm>

Muscle tone assessment of the right arm.

has domain

Muscle Tone Assessment ^c

has range

ashworthRightLeg^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ashworthRightLeg>

Muscle tone assessment of the right leg.

has domain

Muscle Tone Assessment ^c

has range

averageHeartRate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/averageHeartRate>

Average heart rate registered by the wearable device. [uom: bpm]

has domain

Heart Rate Measurement ^c

has range

float

averageStressLevel^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/averageStressLevel>

Average stress level registered by the wearable device.

has domain

Stress Level ^c

BRAINTEASER – D9.3

has range

float

awajiClinicalLMNBulbar^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiClinicalLMNBulbar>

Whether the patient presents clinical Lower Motor Neuron (LMN) signs in the Bulbar region.

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiClinicalLMNCervical^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiClinicalLMNCervical>

Whether the patient presents clinical Lower Motor Neuron (LMN) signs in the Cervical region.

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiClinicalLMNLumboSacral^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiClinicalLMNLumboSacral>

Whether the patient presents clinical Lower Motor Neuron (LMN) signs in the Lumbo-Sacral region.

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiClinicalLMNThoracic^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiClinicalLMNThoracic>

Whether the patient presents clinical Lower Motor Neuron (LMN) signs in the Thoracic region.

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

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awajiClinicalUMNBulbar^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiClinicalUMNBulbar>

Whether the patient presents clinical Upper Motor Neuron (UMN) signs in the Bulbar region.

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiClinicalUMNCervical^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiClinicalUMNCervical>

Whether the patient presents clinical Upper Motor Neuron (UMN) signs in the Cervical region.

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiClinicalUMNLumboSacral^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiClinicalUMNLumboSacral>

Whether the patient presents clinical Upper Motor Neuron (UMN) signs in the Lumbo-Sacral region.

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiDiagnosisCriteria^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiDiagnosisCriteria>

ALS diagnosis according to the Awaji criteria.

has domain

Awaji Clinical Evaluation ^c

has range

{ "Definite" , "Possible" , "Probable" }

awajiEMGLMNBulbar^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiEMGLMNBulbar>

Whether the patient presents Lower Motor Neuron (LMN) signs in the Bulbar region, using needle electromyography (EMG).

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has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiEMGLMNCervical^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiEMGLMNCervical>

Whether the patient presents Lower Motor Neuron (LMN) signs in the Cervical region, using needle electromyography (EMG).

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiEMGLMNLumboSacral^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiEMGLMNLumboSacral>

Whether the patient presents Lower Motor Neuron (LMN) signs in the Lumbo-Sacral region, using needle electromyography (EMG).

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awajiEMGLMNThoracic^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awajiEMGLMNThoracic>

Whether the patient presents Lower Motor Neuron (LMN) signs in the Thoracic region, using needle electromyography (EMG).

has domain

Awaji Clinical Evaluation ^c

has range

{ "ND" , "No" , "Yes" }

awakeDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/awakeDuration>

Awake duration registered by the wearable device. [uom: seconds]

has domain

Sleep Data ^c

has range

float

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axialOnset^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/axialOnset>

Whether the patient experienced axial onset. The Axial Skeleton is the part of the skeleton that includes the skull and spinal column and sternum and ribs. [Definition Source: NCI]

has characteristics: **functional**

has domain

Onset^c

has range

boolean

before20Years^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/before20Years>

Whether a patient smoked before the age of 20.

has characteristics: **functional**

has domain

Smoking^c

has range

boolean

birthYear^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/birthYear>

The year in which a person was born. [Definition Source: NCI]

has characteristics: **functional**

has domain

Person^c

has range

g year

bmrKilocalories^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bmrKilocalories>

BMR kilocalories registered by the wearable device. [uom: kcal]

has domain

Physical Activity Data^c

has range

float

BRAINTEASER – D9.3

bmvtrTotal^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bmvtrTotal>

Brief Visuospatial Memory Test-Revised Total Score.

has domain

Brief Visuospatial Memory Test-Revised ^c

has range

integer

bodyMassIndex^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bodyMassIndex>

Weight in kilograms divided by the square of the height in metres, used esp. as an indicator of obesity or general nutritional status; also called Quetelet index; abbreviated BMI. [Definition Source: Oxford English Dictionary]

has characteristics: **functional**

has domain

Clinical Evaluation ^c

has range

float

bowelAndBladderEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bowelAndBladderEDSS>

Expanded Disability Status Score (EDSS) score for bowel and bladder functions.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

bowelAndBladderRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bowelAndBladderRelapse>

Whether the relapse involved bowel and bladder functions.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

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brainAtrophyMRI^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/brainAtrophyMRI>

The level of brain atrophy (cerebral atrophy) found in the brain of the patient shown by the MRI.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

{ "high" , "mild" , "moderate" , "none" }

brainstemEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/brainstemEDSS>

Expanded Disability Status Score (EDSS) score for brainstem functions.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

brainstemRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/brainstemRelapse>

Whether the relapse involved the brainstem functions.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

bulbarOnset^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bulbarOnset>

Whether the patient experienced bulbar onset, which means he or she first notice speech or swallowing problems. [Definition Source: National Institute of Neurological Disorders and Stroke]

has characteristics: **functional**

has domain

Onset ^c

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has range

boolean

bulbarSubscore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bulbarSubscore>

Bulbar ALSFRS subscore. Sum of items: 1, 2 and 3.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

burdenT1Lesions^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/burdenT1Lesions>

The burden of T2 lesions showed in the MRI.

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

{ "High" , "Mild" , "Moderate" }

burdenT2Lesions^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/burdenT2Lesions>

The burden of T1 lesions showed in the MRI.

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

{ "High" , "Mild" , "Moderate" }

bvmtrTrial1^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bvmtrTrial1>

Brief Visuospatial Memory Test-Revised Immediate Recall Trial 1 Score.

has domain

Brief Visuospatial Memory Test-Revised ^c

has range

integer

bvmtrTrial2^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bvmtrTrial2>

Brief Visuospatial Memory Test-Revised Immediate Recall Trial 2 Score.

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has domain

Brief Visuospatial Memory Test-Revised ^c

has range

integer

bvmtrTrial3^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/bvmtrTrial3>

Brief Visuospatial Memory Test-Revised Immediate Recall Trial 3 Score.

has domain

Brief Visuospatial Memory Test-Revised ^c

has range

integer

cerebellarEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cerebellarEDSS>

Expanded Disability Status Score (EDSS) score for cerebellar functions.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

cerebellarRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cerebellarRelapse>

Whether the relapse involved the cerebellar functions.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

cerebralEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cerebralEDSS>

Expanded Disability Status Score (EDSS) score for cerebral functions.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

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has range

integer

clinicallyEvaluatedEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/clinicallyEvaluatedEDSS>

Expanded Disability Status Score (EDSS) evaluated by the physician.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

float

clinicalTrialDescription^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/clinicalTrialDescription>

The description of a clinical trial.

has domain

Clinical Trial ^c

has range

plain literal

cognitivePhenotype^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cognitivePhenotype>

Cognitive phenotype is defined as the broad set of measurable parameters associated with cognition, including not only behavioral symptoms and specific neurocognitive probes, but also physiological and structural indices which we can use to characterize cognitive function at the neural systems. [Source: doi.org/10.1007/978-1-4614-3846-5_4]

has domain

Patient ^c

has range

plain literal

cognitiveRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cognitiveRelapse>

Whether the relapse involved the mental functions.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

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comorbiditySeverity^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/comorbiditySeverity>

The severity of a comorbidity.

has characteristics: **functional**

has domain

Comorbidity ^c

has range

{ "life risk", "moderate", "serious", "slight" }

comorbidityTreatment^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/comorbidityTreatment>

The treatment used for the comorbidity.

has domain

Comorbidity ^c

has range

plain literal

componentName^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/componentName>

The name of the hematopoietic component tested in the laboratory test result.

has characteristics: **functional**

has domain

Laboratory Test Result ^c

has range

plain literal

concentrationMeasurement^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/concentrationMeasurement>

Raw air pollution concentration measured by the Sensing Device.

has domain

air pollution concentration or **Weather Data** ^c

has range

float

conditionEnd^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/conditionEnd>

The calendar date of the end of the registered conditon.

has characteristics: **functional**

BRAINTEASER – D9.3

has domain

Condition ^c

has range

date

conditionStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/conditionStart>

has characteristics: **functional**

has domain

Condition ^c

has range

date

contiguousLesionsMRI^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/contiguousLesionsMRI>

Whether the MRI detected the presence of extended contiguous lesions equal to or greater than three vertical segments.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

boolean

cvltIITotalCorrect^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITotalCorrect>

California Verbal Learning Test Total Corrected Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIITotalInterferences^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITotalInterferences>

California Verbal Learning Test Total Interferences Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

BRAINTEASER – D9.3

*cvltIIITotalPerseverations^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITotalPerseverations>

California Verbal Learning Test Total Perseverations Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

*cvltIIITrial1Correct^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial1Correct>

California Verbal Learning Test Trial 1 Corrected Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

*cvltIIITrial1Interferences^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial1Interferences>

California Verbal Learning Test Trial 1 Interferences Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

*cvltIIITrial1Perseverations^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial1Perseverations>

California Verbal Learning Test Trial 1 Perseverations Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

*cvltIIITrial2Correct^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial2Correct>

California Verbal Learning Test Trial 2 Corrected Score.

has domain

California Verbal Learning Test - Second Edition ^c

BRAINTEASER – D9.3

has range

integer

cvltIIITrial2Interferences^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial2Interferences>

California Verbal Learning Test Trial 2 Interferences Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIIITrial2Perseverations^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial2Perseverations>

California Verbal Learning Test Trial 2 Perseverations Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIIITrial3Correct^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial3Correct>

California Verbal Learning Test Trial 3 Corrected Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIIITrial3Interferences^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial3Interferences>

California Verbal Learning Test Trial 3 Interferences Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIIITrial3Perseverations^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIIITrial3Perseverations>

California Verbal Learning Test Trial 3 Perseverations Score.

BRAINTEASER – D9.3

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIITrial4Correct^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITrial4Correct>

California Verbal Learning Test Trial 4 Corrected Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIITrial4Interferences^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITrial4Interferences>

California Verbal Learning Test Trial 4 Interferences Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIITrial4Perseverations^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITrial4Perseverations>

California Verbal Learning Test Trial 4 Perseverations Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIITrial5Correct^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITrial5Correct>

California Verbal Learning Test Trial 5 Corrected Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIITrial5Interferences^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITrial5Interferences>

BRAINTEASER – D9.3

California Verbal Learning Test Trial 5 Interferences Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

cvltIITrial5Perseverations^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/cvltIITrial5Perseverations>

California Verbal Learning Test Trial 5 Perseverations Score.

has domain

California Verbal Learning Test - Second Edition ^c

has range

integer

dailyCigarettes^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/dailyCigarettes>

The number of cigarettes smoked in one day on average.

has characteristics: functional

has domain

Smoking ^c

has range

integer

deathCause^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/deathCause>

The circumstance or condition that results in the death of a living being. [Definition Source: NCI]

has characteristics: functional

has domain

Person ^c

has range

plain literal

deathDate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/deathDate>

The calendar date of subject's death. [Definition Source: NCI]

has characteristics: functional

BRAINTEASER – D9.3

has domain

Person ^c

has range

date

deepSleepDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/deepSleepDuration>

Deep sleep duration registered by the wearable device. [uom: seconds]

has domain

Sleep Data ^c

has range

float

dextricity^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/dextricity>

The preferred hand of use for controlled and efficient performance of motor tasks.
[Definition Source: NCI]

has characteristics: **functional**

has domain

Patient ^c

has range

integer

diagnosticCriteria^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/diagnosticCriteria>

A standard from which a judgment concerning a medical diagnosis can be established.
[Definition Source: NCI]

has characteristics: **functional**

has domain

Diagnosis ^c

has range

plain literal

diagnosticDelay^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/diagnosticDelay>

The Difference (in days) between the date of diagnosis and the date of onset.
(diagnosis_date-onset_date)

has domain

Diagnosis ^c

BRAINTEASER – D9.3

has range

float

diet^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/diet>

Regular course of eating and drinking adopted by a person or animal. [Definition

Source: MSH]

has characteristics: **functional**

has domain

Lifestyle ^c

has range

plain literal

dominantHandTrial1^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/dominantHandTrial1>

Hand Dextrcity on dominant hand (Trial 1).

has domain

Hand Dexterity ^c

has range

float

dominantHandTrial2^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/dominantHandTrial2>

Hand Dextrcity on dominant hand (Trial 2).

has domain

Hand Dexterity ^c

has range

float

dominantHandTrialDone^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/dominantHandTrialDone>

Whether the hand dextricity was performed on the dominant hand.

has domain

Hand Dexterity ^c

has range

boolean

DYMUS_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q1

BRAINTEASER – D9.3

Do you have difficulties swallowing solid food (such as meat, bread, and the like)?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

DYMUS_Q10^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q10

Do you have weight loss?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

DYMUS_Q2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q2

Do you have difficulties swallowing liquids (such as water, milk, and the like)?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

DYMUS_Q3^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q3

Do you have a globus sensation in your throat during swallowing?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

DYMUS_Q4^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q4

Do you have food sticking in your throat?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

BRAINTEASER – D9.3

*DYMUS_Q5^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q5

Do you cough or do you have a choking sensation after ingesting solid foods?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

*DYMUS_Q6^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q6

Do you cough or do you have a choking sensation after ingesting liquids?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

*DYMUS_Q7^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q7

Do you need to swallow several times before completely swallowing solid food?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

*DYMUS_Q8^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q8

Do you need to cut food in small pieces before swallowing?

has domain

Dysphagia In Multiple Sclerosis ^c

has range

boolean

*DYMUS_Q9^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/DYMUS_Q9

Do you need to take many sips before completely swallowing liquid?

has domain

Dysphagia In Multiple Sclerosis ^c

BRAINTEASER – D9.3

has range

boolean

ecasALSnonSpecificScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasALSnonSpecificScore>

Edinburgh Cognitive and Behavioural ALS Screen ALS non-specific Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasALSspecificScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasALSspecificScore>

Edinburgh Cognitive and Behavioural ALS Screen ALS-specific Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasCarerInterviewScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasCarerInterviewScore>

Edinburgh Cognitive and Behavioural ALS Screen Carer Interview Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasExecutiveAlternation^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasExecutiveAlternation>

Edinburgh Cognitive and Behavioural ALS Screen Executive Alteration score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasExecutiveFluencyS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasExecutiveFluencyS>

Edinburgh Cognitive and Behavioural ALS Screen Executive Fluency of Letter S Score.

BRAINTEASER – D9.3

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasExecutiveFluencyT^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasExecutiveFluencyT>

Edinburgh Cognitive and Behavioural ALS Screen Executive Fluency of Letter T Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasExecutiveScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasExecutiveScore>

Edinburgh Cognitive and Behavioural ALS Screen Executive Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasExecutiveSentenceCompletion^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasExecutiveSentenceCompletion>

Edinburgh Cognitive and Behavioural ALS Screen Executive Sentence Completion Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasHasCarerInterview^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasHasCarerInterview>

Whether during the ECAS test a carer interview was performed.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

boolean

ecasLanguageComprehension^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasLanguageComprehension>

BRAINTEASER – D9.3

Edinburgh Cognitive and Behavioural ALS Screen Language Comprehension Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasLanguageNaming^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasLanguageNaming>

Edinburgh Cognitive and Behavioural ALS Screen Language Naming Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasLanguageScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasLanguageScore>

Edinburgh Cognitive and Behavioural ALS Screen Language Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasLanguageSpelling^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasLanguageSpelling>

Edinburgh Cognitive and Behavioural ALS Screen Language Spelling score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasMemoryDelayedRecall^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasMemoryDelayedRecall>

Edinburgh Cognitive and Behavioural ALS Screen Memory Delayed Recall Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

BRAINTEASER – D9.3

ecasMemoryDelayedRecognition^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasMemoryDelayedRecognition>

Edinburgh Cognitive and Behavioural ALS Screen Memory Delayed Recognition Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

boolean

ecasMemoryImmediateRecall^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasMemoryImmediateRecall>

Edinburgh Cognitive and Behavioural ALS Screen Memory Immediate Recall Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasMemoryScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasMemoryScore>

Edinburgh Cognitive and Behavioural ALS Screen Memory Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasPsychosisScreenScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasPsychosisScreenScore>

Edinburgh Cognitive and Behavioural ALS Screen Psychosis Screen Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasReverseDigitSpan^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasReverseDigitSpan>

Edinburgh Cognitive and Behavioural ALS Screen Reverse Digit Span Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

BRAINTEASER – D9.3

has range

integer

ecasSocialCognition^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasSocialCognition>

Edinburgh Cognitive and Behavioural ALS Screen Social Cognition Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasSymptomsApathyOrInertia^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasSymptomsApathyOrInertia>

Whether the patient presents apathy or inertia symptoms.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasSymptomsChangePrevBehaviour^{dp}

IRI:

<https://w3id.org/brainteaser/ontology/schema/ecasSymptomsChangePrevBehaviour>

Whether the patient presents symptoms change from previous behaviour.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

boolean

ecasSymptomsDisinhibition^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasSymptomsDisinhibition>

Whether the patient presents disinhibition symptoms.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

boolean

ecasSymptomsHyperorality^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasSymptomsHyperorality>

Whether the patient presents hyperorality symptoms.

BRAINTEASER – D9.3

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

boolean

ecasSymptomsLossSympathyOrEmpathy^{dp}

IRI:

<https://w3id.org/brainteaser/ontology/schema/ecasSymptomsLossSympathyOrEmpathy>

Whether the patient presents loss sympathy or empathy symptoms.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

boolean

ecasSymptomsPerseverativeSterotyped^{dp}

IRI:

<https://w3id.org/brainteaser/ontology/schema/ecasSymptomsPerseverativeSterotyped>

Whether the patient presents perseverative stereotyped symptoms.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

boolean

ecasTotalScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasTotalScore>

Edinburgh Cognitive and Behavioural ALS Screen Total Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasVerbalFluencyScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasVerbalFluencyScore>

Edinburgh Cognitive and Behavioural ALS Screen Verbal Fluency score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

BRAINTEASER – D9.3

ecasVisuospatialCubeCounting^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasVisuospatialCubeCounting>

Edinburgh Cognitive and Behavioural ALS Screen Visuospatial Cube Counting Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasVisuospatialDotCounting^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasVisuospatialDotCounting>

Edinburgh Cognitive and Behavioural ALS Screen Visuospatial Dot Counting Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasVisuospatialNumberLocation^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasVisuospatialNumberLocation>

Edinburgh Cognitive and Behavioural ALS Screen Visuospatial Number Location Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

ecasVisuospatialScore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/ecasVisuospatialScore>

Edinburgh Cognitive and Behavioural ALS Screen Visuospatial Score.

has domain

Edinburgh Cognitive and Behavioural ALS Screen ^c

has range

integer

educationLevel^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/educationLevel>

An indication of the years of schooling completed in graded public, private, or parochial schools, and in colleges, universities, or professional schools. [Definition Source: NCI]

has characteristics: **functional**

BRAINTEASER – D9.3

has domain

Patient ^c

has range

int

endReason^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/endReason>

The reason for the interruption of the subject's participation in a clinical trial.

has domain

Clinical Trial Participation ^c

has range

plain literal

endTherapyReason^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/endTherapyReason>

The reason for the interruption of the therapeutic treatment.

has characteristics: **functional**

has domain

End Therapy Reason ^c

has range

plain literal

EQ5D5L_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/EQ5D5L_Q1

Mobility

has domain

European Quality of Life Five Dimension Five Level Scale Questionnaire ^c

has range

{ "I am unable to walk about" , "I have moderate problems in walking about" , "I have no problems in walking about" , "I have severe problems in walking about" , "I have slight problems in walking about" }

EQ5D5L_Q2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/EQ5D5L_Q2

Self-care

has domain

European Quality of Life Five Dimension Five Level Scale Questionnaire ^c

BRAINTEASER – D9.3

has range

{ "I am unable to wash or dress myself" , "I have moderate problems washing or dressing myself" , "I have no problems washing or dressing myself" , "I have severe problems washing or dressing myself" , "I have slight problems washing or dressing myself" }

EQ5D5L_Q3^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/EQ5D5L_Q3

Usual activities

has domain

European Quality of Life Five Dimension Five Level Scale Questionnaire ^c

has range

{ "I am unable to do my usual activities" , "I have moderate problems doing my usual activities" , "I have no problems doing my usual activities" , "I have severe problems doing my usual activities" , "I have slight problems doing my usual activities" }

EQ5D5L_Q4^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/EQ5D5L_Q4

Pain/Discomfort

has domain

European Quality of Life Five Dimension Five Level Scale Questionnaire ^c

has range

{ "I have moderate pain or discomfort" , "I have no pain or discomfort" , "I have severe pain or discomfort" , "I have slight pain or discomfort" }

EQ5D5L_Q5^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/EQ5D5L_Q5

Anxiety/Depression

has domain

European Quality of Life Five Dimension Five Level Scale Questionnaire ^c

has range

{ "I am extremely anxious or depressed" , "I am moderately anxious or depressed" , "I am not anxious or depressed" , "I am severely anxious or depressed" , "I am slightly anxious or depressed" }

EQ5D5L_Q6^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/EQ5D5L_Q6

Health today

BRAINTEASER – D9.3

has domain

European Quality of Life Five Dimension Five Level Scale Questionnaire ^c

has range

eventEnd^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/eventEnd>

The calendar date of the end of the event.

has characteristics: functional

has domain

Event ^c

has range

date

eventStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/eventStart>

The calendar date of the start of the event.

has characteristics: functional

has domain

Event ^c

has range

date

evokedPotentialsLocation^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/evokedPotentialsLocation>

The body location of the evoked potential test.

has characteristics: functional

has domain

Evoked Potentials ^c

has range

{ "left" , "lower" , "lower left" , "lower right" , "right" , "upper" , "upper left" , "upper right" }

evokedPotentialsResponse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/evokedPotentialsResponse>

The evoked potential function test result.

has characteristics: functional

has domain

Evoked Potentials ^c

BRAINTEASER – D9.3

has range

{ "altered" , "normal" }

evokedPotentialsType^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/evokedPotentialsType>

Whether the test was a Visual Evoked Potential (VEP), Auditory Evoked Potential (AEP), Somatosensory Evoked Potential (SSEP) or Motor Evoked Potential (MEP).

has characteristics: functional

has domain

Evoked Potentials^c

has range

{ "auditory" , "motor" , "somatosensory" , "visual" }

factorsAffectedHandTrial^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/factorsAffectedHandTrial>

The factors that affected the hand dexterity test.

has domain

Hand Dexterity^c

has range

{ "Difficulty seeing" , "Dropped PEG" , "Has a Cold" , "Other" , "Talked" }

floorsClimbed^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/floorsClimbed>

Floors climbed registered by the wearable device.

has domain

Physical Activity Data^c

has range

float

floorsClimbedGoal^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/floorsClimbedGoal>

Floors climbed goal registered by the wearable device.

has domain

Physical Activity Data^c

has range

float

gadoliniumLesionsT1MRI^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/gadoliniumLesionsT1MRI>

BRAINTEASER – D9.3

Whether the MRI detected some gadolinium-enhanced lesions in T1.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

boolean

gadoliniumLesionsT1MRINumber^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/gadoliniumLesionsT1MRINumber>

The number of gadolinium-enhanced lesions in T1.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

integer

generalizedOnset^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/generalizedOnset>

Whether the patient experienced generalized onset, that are widespread symptoms.

has characteristics: **functional**

has domain

Onset ^c

has range

boolean

genomeSequencing^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/genomeSequencing>

A procedure that can determine the DNA sequence for nearly the entire genome of an individual. [Definition Source: NCI]

has characteristics: **functional**

has domain

Patient ^c

has range

plain literal

glucoseCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/glucoseCSF>

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A quantitative measurement of blood sugar present in a sample of CSF. Unit of measure : [mg/l].

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

float

goldCoastExcludingOthers^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/goldCoastExcludingOthers>

Whether other disease processes has been excluded. [Source: doi.org/10.1016/j.clinph.2020.04.005]

has domain

Gold Coast Diagnosis Criteria ^c

has range

boolean

goldCoastProgressiveMotorImpairment^{dp}

IRI:

<https://w3id.org/brainteaser/ontology/schema/goldCoastProgressiveMotorImpairment>

Whether the patient presents progressive motor impairment documented by history or repeated clinical assessment, preceded by normal motor function. [Source: doi.org/10.1016/j.clinph.2020.04.005]

has domain

Gold Coast Diagnosis Criteria ^c

has range

boolean

goldCoastUMNandLMN^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/goldCoastUMNandLMN>

Whether the patient presents UMN and LMN signs in at least one body region. [Source: doi.org/10.1016/j.clinph.2020.04.005]

has domain

Gold Coast Diagnosis Criteria ^c

has range

boolean

granulocytesCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/granulocytesCSF>

The percentage of granulocytes present in a sample of CSF. Unit of measure : [%].

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has characteristics: **functional**

has domain

CSF Analysis ^c

has range

float

HADS_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q1

I feel tense or 'wound up'

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "A lot of the time" , "From time to time, occasionally" , "Most of the time" , "Not at all" }

HADS_Q10^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q10

I have lost interest in my appearance

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Definitely" , "I don't take as much care as I should" , "I may not take quite as much care" , "I take just as much care as ever" }

HADS_Q11^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q11

I feel restless as I have to be on the move

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Not at all" , "Not very much" , "Quite a lot" , "Very much indeed" }

HADS_Q12^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q12

I look forward with enjoyment to things

has domain

Hospital Anxiety and Depression Scale ^c

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has range

{ "As much as I ever did" , "Definitely less than I used to" , "Hardly at all" , "Rather less than I used to" }

HADS_Q13^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q13

I get sudden feelings of panic

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Not at all" , "Not very often" , "Quite often" , "Very often indeed" }

HADS_Q14^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q14

I can enjoy a good book or radio or TV program

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Not often" , "Often" , "Sometimes" , "Very seldom" }

HADS_Q2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q2

I still enjoy the things I used to enjoy

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Definitely as much" , "Hardly at all" , "Not quite so much" , "Only a little" }

HADS_Q3^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q3

I get a sort of frightened feeling as if something awful is about to happen

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "A little, but it doesnt worry me" , "Not at all" , "Very definitely and quite badly" , "Yes, but not too badly" }

HADS_Q4^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q4

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I can laugh and see the funny side of things

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "As much as I always could" , "Definitely not so much now" , "Not at all" , "Not quite so much now" }

HADS_Q5^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q5

Worrying thoughts go through my mind

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "A great deal of the time" , "A lot of the time" , "From time to time, but not too often" , "Only occasionally" }

HADS_Q6^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q6

I feel cheerful

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Most of the time" , "Not often" , "Sometimes" }

HADS_Q7^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q7

I can sit at ease and feel relaxed

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Definitely" , "Not at all" , "Not often" , "Usually" }

HADS_Q8^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q8

I feel as if I am slowed down

has domain

Hospital Anxiety and Depression Scale ^c

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has range

{ "Nearly all the time" , "Not at all" , "Sometimes" , "Very often" }

HADS_Q9^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/HADS_Q9

I get a sort of frightened feeling like 'butterflies' in the stomach

has domain

Hospital Anxiety and Depression Scale ^c

has range

{ "Not at all" , "Occasionally" , "Quite often" , "Very often" }

hasMenstrualCycle^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasMenstrualCycle>

Whether the patient has the menstrual cycle.

has domain

Menstrual Cycle ^c

has range

boolean

hasMutation^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/hasMutation>

Whether the gene tested positive or negative for mutations during genetic testing.

has characteristics: **functional**

has domain

Genetic Testing ^c

has range

boolean

height^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/height>

Distance or measurement from the base upwards; altitude; stature (of the human body).
[Source: Oxford English Dictionary]

has characteristics: **functional**

has domain

Clinical Evaluation ^c

has range

float

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highStressDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/highStressDuration>

High stress duration registered by the wearable device. [uom: seconds]

has domain

Stress Level ^c

has range

float

homeWalkingStatus^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/homeWalkingStatus>

The ambulatory status of the patient within the house. (e.g., whether they walk on their own or they need assistive devices)

has domain

Clinical Evaluation ^c

has range

{ "Crutches" , "Fully ambulatory" , "Orthosis" , "Walker" , "Walking stick" , "Wheelchair" }

IgGIndexCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/IgGIndexCSF>

The IgG index is the ratio of the quotients for IgG and albumin (IgGcsf/IgGs)/(Albcsf/Albs). It is a quantitative analysis of the relationship between CSF IgG and serum IgG, divided by the same relationship for albumin. [Definition Source: Simonsen, Cecilia Smith et al. "The diagnostic value of IgG index versus oligoclonal bands in cerebrospinal fluid of patients with multiple sclerosis." Multiple sclerosis journal - experimental, translational and clinical vol. 6,1 2055217319901291. 22 Jan. 2020]

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

float

immunoglobulinGCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/immunoglobulinGCSF>

A quantitative measurement of Immunoglobulin G (IgG) present in a sample of CSF. Unit of measure : [mg/l].

has characteristics: **functional**

has domain

CSF Analysis ^c

BRAINTEASER – D9.3

has range

float

intensityDurationGoal^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/intensityDurationGoal>

Intensity duration goal registered by the wearable device. [uom: seconds]

has domain

Physical Activity Data ^c

has range

float

isMenstrualCycleRegular^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/isMenstrualCycleRegular>

Whether the patient has a regular menstrual cycle.

has domain

Menstrual Cycle ^c

has range

boolean

kingsValue^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/kingsValue>

The patient's disease stage according to the King's Staging System.

has characteristics: functional

has domain

King's Clinical Staging Method ^c

has range

integer

lesionsT1MRI^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/lesionsT1MRI>

Whether the MRI detected some lesions in T1.

has characteristics: functional

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

boolean

lesionsT2MRI^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/lesionsT2MRI>

BRAINTEASER – D9.3

Whether the MRI detected some lesions in T2.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

boolean

leukocytesCountCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/leukocytesCountCSF>

A quantitative measurement of leukocytes present in a sample of CSF. Unit of measure : [/mm³].

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

float

lightSleepDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/lightSleepDuration>

Light sleep duration registered by the wearable device. [uom: seconds]

has domain

Sleep Data ^c

has range

float

limbsOnset^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/limbsOnset>

Whether the patient experienced limb onset, which means symptoms began in the arms or legs. [Definition Source: National Institute of Neurological Disorders and Stroke]

has characteristics: **functional**

has domain

Onset ^c

has range

boolean

lowStressDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/lowStressDuration>

Low stress duration registered by the wearable device. [uom: seconds]

BRAINTEASER – D9.3

has domain

Stress Level ^c

has range

float

lymphocytesCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/lymphocytesCSF>

The percentage of lymphocytes present in a sample of CSF. Unit of measure : [%].

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

float

maritalStatus^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/maritalStatus>

A demographic parameter indicating a person's current conjugal status. [Definition Source: NCI]

has characteristics: **functional**

has domain

Patient ^c

has range

plain literal

maxHeartRate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/maxHeartRate>

Max heart rate registered by the wearable device. [uom: bpm]

has domain

Heart Rate Measurement ^c

has range

float

maxStressLevel^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/maxStressLevel>

Max stress level registered by the wearable device.

has domain

Stress Level ^c

BRAINTEASER – D9.3

has range

float

measuredLevel^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/measuredLevel>

The level of the hematopoietic component measured in the laboratory test result.

has characteristics: functional

has domain

Laboratory Test Result ^c

has range

float

measurementCalibrated^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/measurementCalibrated>

Air pollution concentration value with seasonal components and noise removed.

has domain

air pollution concentration or Weather Data ^c

has range

float

mediumStressDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/mediumStressDuration>

Medium stress duration registered by the wearable device. [uom: seconds]

has domain

Stress Level ^c

has range

float

menopauseStatus^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/menopauseStatus>

An indicator as to whether the female subject is in menopause. [Defintion source: NCI]

has characteristics: functional

has domain

Patient ^c

has range

boolean

metersWalkedFirstMin^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/metersWalkedFirstMin>

BRAINTEASER – D9.3

How many meters the patient walked in the first minute.

has domain

Walk Test ALS ^c

has range

float

metersWalkedTwoMins^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/metersWalkedTwoMins>

How many meters the patient walked in two minutes.

has domain

Walk Test ALS ^c

has range

float

MFIS_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q1

I have been less alert

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q10^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q10

I have trouble maintaining physical effort for long periods

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q11^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q11

I have had difficulty making decisions

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

BRAINTEASER – D9.3

*MFIS_Q12^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q12

I have been less motivated to do anything that requires thinking

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

*MFIS_Q13^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q13

My muscles have felt weak

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

*MFIS_Q14^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q14

I have been physically uncomfortable

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

*MFIS_Q15^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q15

I have had trouble finishing tasks that require thinking

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

*MFIS_Q16^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q16

I have had difficulty organizing my thoughts when doing things at home or at work

has domain

Modified Fatigue Impact Scale ^c

BRAINTEASER – D9.3

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q17^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q17

I have been less able to complete tasks that require physical effort

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q18^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q18

My thinking has been slowed down

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q19^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q19

I have had trouble concentrating

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q2

I have had difficulty paying attention for long periods of time

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q20^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q20

I have limited my physical activities

BRAINTEASER – D9.3

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q21^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q21

I have needed to rest more often or for longer periods

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q3^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q3

I have been unable to think clearly

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q4^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q4

I have been clumsy and uncoordinated

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q5^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q5

I have been forgetful

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q6^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q6

BRAINTEASER – D9.3

I have had to pace myself in my physical activities

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q7^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q7

I have been less motivated to do anything that requires physical effort

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q8^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q8

I have been less motivated to participate in social activities

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

MFIS_Q9^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MFIS_Q9

I have been limited in my ability to do things away from home

has domain

Modified Fatigue Impact Scale ^c

has range

{ "Almost always" , "Never" , "Often" , "Rarely" , "Sometimes" }

minHeartRate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/minHeartRate>

Min heart rate registered by the wearable device. [uom: bpm]

has domain

Heart Rate Measurement ^c

has range

float

BRAINTEASER – D9.3

mitosValue^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/mitosValue>

The patient's disease stage according to the MiToS staging system.

has characteristics: **functional**

has domain

Milano-Torino Functional Staging System (MiToS) ^c

has range

integer

moderateIntensityDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/moderateIntensityDuration>

Moderate intensity duration registered by the wearable device. [uom: seconds]

has domain

Physical Activity Data ^c

has range

float

moreThan10PercentWeightloss^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/moreThan10PercentWeightloss>

Whether a patient lost more than 10% of his or her body weight.

has characteristics: **functional**

has domain

Clinical Evaluation ^c

has range

boolean

motorSubscore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/motorSubscore>

Motor ALSFRS subscore. Sum of items: 4, 5, 6, 7, 8 and 9.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

MSInPaediatricAge^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/MSInPaediatricAge>

An indicator of whether the patient contracted Multiple Sclerosis (MS) in paediatric age.

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has characteristics: **functional**

has domain

Patient ^c

has range

boolean

MSQOL54_Q7^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q7

In general, would you say your health is:

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Excellent" , "Fair" , "Good" , "Very good" }

MSQOL54_Q10^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q10

Does your health limit you in walking several blocks? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q11^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q11

Does your health limit you in walking one block? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q12^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q12

Does your health limit you in bathing and dressing yourself? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

BRAINTEASER – D9.3

*MSQOL54_Q13^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q13

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? Cut down on the amount of time you could spend on work or other activities

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

boolean*MSQOL54_Q14^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q14

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? Accomplished less than you would like

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

boolean*MSQOL54_Q15^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q15

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? Were limited in the kind of work or other activities

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

boolean*MSQOL54_Q16^{dp}*IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q16

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of your physical health? Had difficulty performing the work or other activities (for example, it took extra effort)

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

boolean

BRAINTEASER – D9.3

MSQOL54_Q17^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q17

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious). Cut down on the amount of time you could spend on work or other activities

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

boolean

MSQOL54_Q18^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q18

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious). Accomplished less than you would like

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

boolean

MSQOL54_Q19^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q19

During the past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems (such as feeling depressed or anxious). Didn't do work or other activities as carefully as usual

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

boolean

MSQOL54_Q2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q2

Compared to one year ago, how would you rate your health in general now?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "About the same" , "Much better now than one year ago" , "Much worse now than one year ago" , "Somewhat better now than one year ago" , "Somewhat worse now than one year ago" }

BRAINTEASER – D9.3

MSQOL54_Q20^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q20

During the past 4 weeks, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Moderately" , "Not at all" , "Quite a bit" , "Slightly" }

MSQOL54_Q21^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q21

How much bodily pain have you had during the past 4 weeks?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Mild" , "Moderate" , "None" , "Severe" , "Very mild" }

MSQOL54_Q22^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q22

During the past 4 weeks, how much did pain interfere with your normal work (including both work outside the home and housework)?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A little bit" , "Moderately" , "Not at all" }

MSQOL54_Q23^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q23

How much of the time during the past 4 weeks did you feel full of pep?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q24^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q24

How much of the time during the past 4 weeks have you been a very nervous person?

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has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q25^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q25

How much of the time during the past 4 weeks have you felt so down in the dumps that nothing could cheer you up?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q26^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q26

How much of the time during the past 4 weeks have you felt calm and peaceful?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q27^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q27

How much of the time during the past 4 weeks did you have a lot of energy?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q28^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q28

How much of the time during the past 4 weeks have you felt downhearted and blue?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

BRAINTEASER – D9.3

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q29^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q29

How much of the time during the past 4 weeks did you feel worn out?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q3^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q3

Does your health limit you in vigorous activities, such as running, lifting heavy objects, participating in strenuous sports? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q30^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q30

How much of the time during the past 4 weeks have you been a happy person?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q31^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q31

How much of the time during the past 4 weeks did you feel tired?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

BRAINTEASER – D9.3

MSQOL54_Q32^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q32

How much of the time during the past 4 weeks did you feel rested on waking in the morning?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q33^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q33

During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities (like visiting with friends, relatives, etc.)?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q34^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q34

I seem to get sick a little easier than other people

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Definitely false" , "Definitely true" , "Mostly false" , "Mostly true" , "Not sure" }

MSQOL54_Q35^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q35

I am as healthy as anybody I know

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Definitely false" , "Definitely true" , "Mostly false" , "Mostly true" , "Not sure" }

MSQOL54_Q36^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q36

I expect my health to get worse

BRAINTEASER – D9.3

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Definitely false" , "Definitely true" , "Mostly false" , "Mostly true" , "Not sure" }

MSQOL54_Q37^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q37

My health is excellent

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Definitely false" , "Definitely true" , "Mostly false" , "Mostly true" , "Not sure" }

MSQOL54_Q38^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q38

How much of the time during the past 4 weeks were you discouraged by your health problems?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q39^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q39

How much of the time during the past 4 weeks were you frustrated about your health?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q4^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q4

Does your health limit you in moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

BRAINTEASER – D9.3

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q40^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q40

How much of the time during the past 4 weeks was your health a worry in your life?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q41^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q41

How much of the time during the past 4 weeks did you feel weighed down by your health problems?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q42^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q42

How much of the time during the past 4 weeks have you had difficulty concentrating and thinking?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q43^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q43

How much of the time during the past 4 weeks did you have trouble keeping your attention on an activity for long?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

BRAINTEASER – D9.3

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q44^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q44

How much of the time during the past 4 weeks have you had trouble with your memory?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q45^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q45

How much of the time during the past 4 weeks have others, such as family members or friends, noticed that you have trouble with your memory or problems with your concentration?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A good bit of the time" , "A little of the time" , "All of the time" , "Most of the time" , "None of the time" , "Some of the time" }

MSQOL54_Q46^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q46

How much of a problem was the lack of sexual interest for you during the past 4 weeks?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A little of a problem" , "Not a problem" , "Somewhat of a problem" , "Very much a problem" }

MSQOL54_Q47^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q47

How much of a problem was the difficulty getting or keeping an erection for you during the past 4 weeks?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

BRAINTEASER – D9.3

has range

{ "A little of a problem" , "Not a problem" , "Somewhat of a problem" , "Very much a problem" }

MSQOL54_Q48^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q48

How much of a problem was the difficulty having orgasm for you during the past 4 weeks?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A little of a problem" , "Not a problem" , "Somewhat of a problem" , "Very much a problem" }

MSQOL54_Q49^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q49

How much of a problem was the for ability to satisfy sexual partner you during the past 4 weeks?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "A little of a problem" , "Not a problem" , "Somewhat of a problem" , "Very much a problem" }

MSQOL54_Q5^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q5

Does your health limit you in lifting or carrying groceries? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q50^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q50

Overall, how satisfied were you with your sexual function during the past 4 weeks?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Neither satisfied nor dissatisfied" , "Somewhat dissatisfied" , "Somewhat satisfied" , "Very dissatisfied" , "Very satisfied" }

BRAINTEASER – D9.3

MSQOL54_Q51^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q51

During the past 4 weeks, to what extent have problems with your bowel or bladder function interfered with your normal social activities with family, friends, neighbors, or groups?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Extremely" , "Moderately" , "Not at all" , "Quite a bit" , "Slightly" }

MSQOL54_Q52^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q52

During the past 4 weeks, how much did pain interfere with your enjoyment of life?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Extremely" , "Moderately" , "Not at all" , "Quite a bit" , "Slightly" }

MSQOL54_Q53^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q53

Overall, how would you rate your own quality-of-life?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

MSQOL54_Q54^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q54

Which best describes how you feel about your life as a whole?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "Delighted" , "Mixed - about equally satisfied and dissatisfied" , "Mostly dissatisfied" , "Mostly satisfied" , "Pleased" , "Terrible" , "Unhappy" }

MSQOL54_Q6^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q6

Does your health limit you in climbing several flights of stair? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

BRAINTEASER – D9.3

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q7^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q7

Does your health limit you in climbing one flights of stair? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q8^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q8

Does your health limit you in bending, kneeling, or stooping? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

MSQOL54_Q9^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/MSQOL54_Q9

Does your health limit you in walking more than a mile? If so, how much?

has domain

MSQOL54 Multiple Sclerosis Quality of Life (MSQOL)-54 Instrument ^c

has range

{ "No, not limited at all" , "Yes, limited a little" , "Yes, limited a lot" }

multipleSclerosisType^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/multipleSclerosisType>

The Multiple Sclerosis (MS) disease course identified in the patient.

has characteristics: functional

has domain

Clinical Evaluation ^c

has range

{ "clinically isolated syndrome (CIS)" , "primary progressive MS (PP)" ,
"progressive-relapsing (PR)" , "radiologically isolated syndrome (RIS)" , "relapsing-
remitting MS (RR)" , "secondary progressive MS (SP)" }

BRAINTEASER – D9.3

mutationType^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/mutationType>

The type of mutation observed in the gene during genetic testing.

has domain

Genetic Testing ^c

has range

plain literal

newOrEnlargedLesionsT2MRI^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/newOrEnlargedLesionsT2MRI>

Whether the MRI detected new or enlarged gadolinium-enhanced lesions in T2 since the last MRI.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

boolean

newOrEnlargedLesionsT2MRINumber^{dp}

IRI:

<https://w3id.org/brainteaser/ontology/schema/newOrEnlargedLesionsT2MRINumber>

The number of new or enlarged gadolinium-enhanced lesions in T2 since the last MRI.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

integer

nonDominantHandTrial1^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/nonDominantHandTrial1>

Hand Dextrcity on non-dominant hand (Trial 1).

has domain

Hand Dexterity ^c

has range

float

nonDominantHandTrial2^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/nonDominantHandTrial2>

BRAINTEASER – D9.3

Hand Dextrcity on non-dominant hand (Trial 2).

has domain

Hand Dexterity ^c

has range

float

nonDominantHandTrialDone^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/nonDominantHandTrialDone>

Whether the hand dextricity was performed on the dominant hand.

has domain

Hand Dexterity ^c

has range

boolean

normalLevel^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/normalLevel>

Whether the measured level is within the normal range for the tested hematopoietic component.

has characteristics: **functional**

has domain

Laboratory Test Result ^c

has range

boolean

notes^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/notes>

An open box for adding notes about the patient.

has domain

Patient ^c

has range

plain literal

numberSpinalCordLesions^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/numberSpinalCordLesions>

The number of spinal cord lesions showed in the MRI.

has domain

Magnetic Resonance Imaging (MRI) ^c

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has range

float

oligoclonalBandsNumber^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/oligoclonalBandsNumber>

The number of oligoclonal bands present in the specimen.

has characteristics: **functional**

has domain

Oligoclonal Bands ^c

has range

integer

oligoclonalBandsPresence^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/oligoclonalBandsPresence>

Whether the tested specimen presents oligoclonal bands.

has characteristics: **functional**

has domain

Oligoclonal Bands ^c

has range

boolean

oligoclonalBandsType^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/oligoclonalBandsType>

Whether the oligoclonal bands were found in CSF or in CSF & serum.

has characteristics: **functional**

has domain

Oligoclonal Bands ^c

has range

{ "in CSF" , "in CSF & serum" }

onsetElapsedTime^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/onsetElapsedTime>

The time elapsed since the occurrence of an event that happened before the onset.

has characteristics: **functional**

has domain

Before Onset ^c

has range

{ "beyond 5years" , "within 5 yeras" }

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originalALSFRS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/originalALSFRS>

Amyotrophic Lateral Sclerosis Functional Rating Scale. Sum of items: 1,2,3,4,5,6,7,8,9 and old10.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

otherFactorsAffectedHandTrial^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/otherFactorsAffectedHandTrial>

Other factors that affected the hand dextricity test.

has domain

Hand Dexterity ^c

has range

plain literal

otherOnset^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/otherOnset>

Other symptoms experienced by the patient during onset.

has domain

Onset ^c

has range

plain literal

otherRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/otherRelapse>

Other functional systems involved in the relapse.

has domain

Relapse ^c

has range

plain literal

outsideWalkingStatus^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/outsideWalkingStatus>

The ambulatory status of the patient when walking outside. (e.g., whether they walk on their own or they need assistive devices)

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has domain

Clinical Evaluation ^c

has range

{ "Crutches" , "Fully ambulatory" , "Orthosis" , "Walker" , "Walking stick" , "Wheelchair" }

packYear^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/packYear>

Quantificator of lifetime tobacco exposure defined as: (number of cigarettes smoked per day) X (number of years smoked)/20.

has characteristics: **functional**

has domain

Smoking ^c

has range

float

participationEnd^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/participationEnd>

The calendar date of the end of subject's participation in a clinical trial.

has characteristics: **functional**

has domain

Clinical Trial Participation ^c

has range

date

participationStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/participationStart>

The calendar date of the start of subject's participation in a clinical trial.

has characteristics: **functional**

has domain

Clinical Trial Participation ^c

has range

date

pathologicalJCCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pathologicalJCCSF>

Whether the JC virus detected in the CSF specimen is pathological.

has characteristics: **functional**

BRAINTEASER – D9.3

has domain

CSF Analysis ^c

has range

boolean

PFTs_FEV1_L^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PFTs_FEV1_L

A test of lung function, the FEV1 is the volume exhaled during the first second of a forced expiratory maneuver started from the level of total lung capacity. It is the most frequently used index for assessing bronchoconstriction or bronchodilatation. [Definition Source: NCI]

has domain

Pulmonary function testing ^c

has range

float

PFTs_FEV1_P^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PFTs_FEV1_P

A test of lung function, the FEV1 is the volume exhaled during the first second of a forced expiratory maneuver started from the level of total lung capacity. It is the most frequently used index for assessing bronchoconstriction or bronchodilatation. [Definition Source: NCI]

has domain

Pulmonary function testing ^c

has range

float

PFTs_FEV6_L^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PFTs_FEV6_L

A test of lung function, the FEV6 is the volume exhaled during six seconds of a forced expiratory maneuver started from the level of total lung capacity. [Definition Source: NCI]

has domain

Pulmonary function testing ^c

has range

float

PFTs_FEV6_P^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PFTs_FEV6_P

BRAINTEASER – D9.3

A test of lung function, the FEV6 is the volume exhaled during six seconds of a forced expiratory maneuver started from the level of total lung capacity. [Definition Source: NCI]

has domain

Pulmonary function testing ^c

has range

float

phenotype^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/phenotype>

The observable properties present during a disease. [Definition Source: NCI]

Is defined by

http://purl.obolibrary.org/obo/NCIT_C125204

has domain

Patient ^c

has range

plain literal

placeArea^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/placeArea>

The type of populated area that better describe the place.

has domain

Place ^c

has range

{ "city" , "rural" , "town" , "urban" }

positivityResult^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/positivityResult>

Whether the laboratory test result was positive or not.

has characteristics: **functional**

has domain

Laboratory Test Result ^c

has range

boolean

predominantLimbsImpairment^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/predominantLimbsImpairment>

Whether the patient predominantly presents distal limbs impairment or proximal limbs impairment.

BRAINTEASER – D9.3

has characteristics: **functional**

has domain

Clinical Evaluation ^c

has range

{ "both" , "distal" , "proximal" }

predominantLimbsSide^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/predominantLimbsSide>

The side of the body that predominantly presents limb impariment.

has characteristics: **functional**

has domain

Clinical Evaluation ^c

has range

{ "left" , "right" , "symmetric" }

predominantMotorNeuron^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/predominantMotorNeuron>

Whether the patient presents a predominance of lower motor neuron, upper motor neuron or both.

has characteristics: **functional**

has domain

Clinical Evaluation ^c

has range

{ "both motor neuron" , "lower motor neuron" , "upper motor neuron" }

pregnancyComplications^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pregnancyComplications>

Any kind of complication related to the pregnancy.

has domain

Pregnancy ^c

has range

plain literal

pregnancyEnd^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pregnancyEnd>

The calendar date in which the pregnancy ended.

has characteristics: **functional**

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has domain

Pregnancy ^c

has range

date

pregnancyEndEvent^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pregnancyEndEvent>

The event that ended the pregnancy.

has characteristics: **functional**

has domain

Pregnancy ^c

has range

plain literal

pregnancyStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pregnancyStart>

The calendar date in which the pregnancy started.

has characteristics: **functional**

has domain

Pregnancy ^c

has range

date

privacyPreservingDate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/privacyPreservingDate>

Privacy preserving date computed according to an algorithm used to extract public instances.

has domain

air pollution concentration or **Activity** ^c or **Condition** ^c or **Event** ^c or **Intervention** or **Procedure** ^c or **Pregnancy** ^c or **Relapse** ^c or **Trauma** ^c

has range

float

privacyPreservingDeathDate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/privacyPreservingDeathDate>

Privacy preserving death date computed according to an algorithm used to extract public instances.

has characteristics: **functional**

BRAINTEASER – D9.3

has domain

Patient ^c

has range

float

procedureEnd^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/procedureEnd>

The calendar date of the end of an intervention or procedure.

has characteristics: **functional**

has domain

Intervention or Procedure ^c

has range

date

procedureStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/procedureStart>

The calendar start of an intervention or procedure.

has characteristics: **functional**

has domain

Intervention or Procedure ^c

has range

date

proteinsCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/proteinsCSF>

A quantitative measurement of proteins present in a sample of CSF [mg/l].

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

float

PSQI_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q1

During the past month, what time have you usually gone to bed at night?

has domain

Pittsburgh Sleep Quality Index ^c

BRAINTEASER – D9.3

has range

time

PSQI_Q10^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q10

Do you have a bed partner or room mate?

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "No bed partner or room mate" , "Partner in same bed" , "Partner/room mate in other room" , "Partner/room mate in same room but not same bed" }

PSQI_Q11A^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q11A

Loud snoring

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q11B^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q11B

Long pauses between breaths while asleep

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q11C^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q11C

Legs twitching or jerking while you sleep

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

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PSQL_Q11D^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQL_Q11D

Episodes of disorientation or confusion during sleep

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQL_Q11E^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQL_Q11E

Other restlessness while you sleep, please describe

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQL_Q2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQL_Q2

During the past month, how long (in minutes) has it usually taken you to fall asleep each night?

has domain

Pittsburgh Sleep Quality Index ^c

has range

int

PSQL_Q3^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQL_Q3

During the past month, what time have you usually gotten up in the morning?

has domain

Pittsburgh Sleep Quality Index ^c

has range

time

PSQL_Q4^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQL_Q4

During the past month, how many hours of actual sleep did you get at night? (This may be different than the number of hours you spent in bed.)

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has domain

Pittsburgh Sleep Quality Index ^c

has range

int

PSQI_Q5A^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5A

Cannot get to sleep within 30 minutes

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5B^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5B

Wake up in the middle of the night or early morning

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5C^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5C

Have to get up to use the bathroom

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5D^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5D

Cannot breathe comfortably

has domain

Pittsburgh Sleep Quality Index ^c

BRAINTEASER – D9.3

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5E^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5E

Cough or snore loudly

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5F^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5F

Feel too cold

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5G^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5G

Feel too hot

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5H^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5H

Have bad dreams

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

BRAINTEASER – D9.3

PSQI_Q5I^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5I

Have pain

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q5J_1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5J_1

Other reason(s), please describe:

has domain

Pittsburgh Sleep Quality Index ^c

has range

plain literal

PSQI_Q5J_2^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q5J_2

how often have you had trouble sleeping because of this?

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q6^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q6

During the past month, how often have you taken medicine to help you sleep (prescribed or “over the counter”)?

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q7^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q7

BRAINTEASER – D9.3

During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in social activity?

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Less than once a week" , "Not during the past month" , "Once or twice a week" , "Three or more times a week" }

PSQI_Q8^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q8

During the past month, how much of a problem has it been for you to keep up enough enthusiasm to get things done?

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "A very big problem" , "No problem at all" , "Only a very slight problem" , "Somewhat of a problem" }

PSQI_Q9^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/PSQI_Q9

During the past month, how would you rate your sleep quality overall?

has domain

Pittsburgh Sleep Quality Index ^c

has range

{ "Fairly bad" , "Fairly good" , "Very bad" , "Very good" }

pulmonaryAOPAbs^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryAOPAbs>

Occlusion pressure at 100 ms (P0.1) is defined as the negative pressure measured 100 ms after the initiation of an inspiratory effort performed against a closed respiratory circuit. [Definition Source: Beloncle, F., Piquilloud, L., Olivier, PY. et al. Accuracy of P0.1 measurements performed by ICU ventilators: a bench study. Ann. Intensive Care 9, 104 (2019)]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

BRAINTEASER – D9.3

pulmonaryFEV6^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryFEV6>

Forced expiratory volume (FEV) is the amount of air expired in six seconds of the FVC test. [Definition Source: John Hopkins Medicine]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryFVCLyingDown^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryFVCLyingDown>

Forced Vital Capacity (FVC) when patient is lied down.

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryFVCLyingDownPercentage^{dp}

IRI:

<https://w3id.org/brainteaser/ontology/schema/pulmonaryFVCLyingDownPercentage>

Percentage of FVC lying down.

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryFVCRel^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryFVCRel>

The percentage of Forced vital capacity (FVC) is the amount of air exhaled forcefully and quickly after inhaling as much as you can. [Defintion Source: John Hopkins Medicine]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryFVCSitting^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryFVCSitting>

BRAINTEASER – D9.3

Forced Vital Capacity (FVC) when patient is sitted.

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryFVCSittingPercentage^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryFVCSittingPercentage>

Percentage of FVC sitting

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryMEP^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryMEP>

Maximum Expiratory Pressure (MEP) is the greatest amount of pressure that can be generated by exhaling against a mouthpiece, which is a measure of the strength of respiratory muscles. [Definition Source: NCI] (uom: CMH2O)

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryMEPAbs^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryMEPAbs>

Maximum Expiratory Pressure (MEP) is the highest pressure that can be developed during a forceful expiratory effort against an occluded airway. It is usually measured at maximal inspiration and reported as a positive number in either cm H2O or mmHg. [Definition Source: The University of Texas Medical Branch]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryMEPpercentage^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryMEPpercentage>

Percentage of MEP.

BRAINTEASER – D9.3

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryMIP^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryMIP>

Maximum Inspiratory Pressure (MIP) is the greatest amount of pressure that can be generated during inhalation against a fully occluded airway, which is used to measure the strength of respiratory muscles. [Definition Source: NCI]

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryMIPAbs^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryMIPAbs>

Maximum Inspiratory Pressure (MIP) is the lowest pressure developed during a forceful inspiration against an occluded airway. It is usually measured at maximal expiration and recorded as a negative number in either cm H₂O or mmHg. [Definition Source: The University of Texas Medical Branch]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryMIPpercentage^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryMIPpercentage>

Percentage of MIP.

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryNIP^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryNIP>

Maximal Negative Inspiratory Pressure (NIP) measures the strength of the diaphragm and other muscles of inspiration and reflects the ability to maintain normal lung expansion and avoid atelectasis. [Definition Source: doi.org/10.1016/B978-032304841-5.50067-4]

BRAINTEASER – D9.3

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryPCF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryPCF>

Peak Cough Flow (PCF) is the maximum rate of air flow expelled through the mouth, endotracheal, or tracheostomy tube during a cough. [Definition Source: NCI]

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryPCO2^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryPCO2>

The partial pressure of carbon dioxide (PCO2) is the concentration of carbon dioxide in the blood. This is a sensitive indication of the efficiency or level of ventilation of the lungs. [Definition Source: Collins Dictionary of Medicine]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryPO2^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryPO2>

The partial pressure of oxygen (PO2) is the concentration of oxygen in the blood. This commonly measured parameter is an important indicator of the efficiency with which oxygen is transferred from atmosphere to blood. [Definition Source: Collins Dictionary of Medicine]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

pulmonaryVCAbs^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pulmonaryVCAbs>

BRAINTEASER – D9.3

Vital capacity (VC) is the total volume of air that can be exhaled after inhaling as much as you can. [Definition Source: John Hopkins Medicine]

has characteristics: **functional**

has domain

Pulmonary Function Test ^c

has range

float

pyramidalEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pyramidalEDSS>

Expanded Disability Status Score (EDSS) score for pyramidal functions.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

pyramidalRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/pyramidalRelapse>

Whether the relapse involved the pyramidal functions.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

questionnaireSubmitted^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/questionnaireSubmitted>

When the questionnaire was submitted.

has domain

Questionnaire filled using a mobile application. ^c

has range

date time

quotientAlbuminCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/quotientAlbuminCSF>

CSF/serum albumin ratio is performed to understand the blood–CSF barrier disruption. [Defintion Source: Luque, Francisco A, and Stephen L Jaffe. “Cerebrospinal fluid analysis in multiple sclerosis.” International review of neurobiology vol. 79 (2007)]

BRAINTEASER – D9.3

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

float

reasonIrregularCycle^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/reasonIrregularCycle>

Why the patient has an irregular menstrual cycle.

has domain

Menstrual Cycle ^c

has range

plain literal

reasonNoMenstrualCycle^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/reasonNoMenstrualCycle>

Why the patient has no menstrual cycle. (e.g., menopause)

has domain

Menstrual Cycle ^c

has range

plain literal

reasonWalkTestNotCompleted^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/reasonWalkTestNotCompleted>

The reason the walk test was not completed.

has domain

Walk Test ^c

has range

plain literal

relapseClinicalTherapy^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/relapseClinicalTherapy>

Whether the relapse required treatment in an ambulatory care clinic.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

BRAINTEASER – D9.3

*relapseCortisoneTherapy^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/relapseCortisoneTherapy>

Whether the relapse required a cortisone therapy.

has characteristics: **functional**

has domain

Relapse^c

has range

boolean*relapseDuration^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/relapseDuration>

The number of days the relapse lasted.

has characteristics: **functional**

has domain

Relapse^c

has range

integer*relapseEnd^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/relapseEnd>

The calendar date of the end of the relapse.

has characteristics: **functional**

has domain

Relapse^c

has range

date*relapseHospitalAdmission^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/relapseHospitalAdmission>

Whether the relapse required an hospital admission.

has characteristics: **functional**

has domain

Relapse^c

has range

boolean*relapseImpactOnADL^{dp}*IRI: <https://w3id.org/brainteaser/ontology/schema/relapseImpactOnADL>

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Whether the relapse affected the Activity of Daily Living (ADL).

has characteristics: **functional**

has domain

Relapse^c

has range

boolean

relapseRecovery^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/relapseRecovery>

How much the patient recovered from the relapse.

has characteristics: **functional**

has domain

Relapse^c

has range

{ "complete" , "none" , "partial" }

relapseSequela^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/relapseSequela>

Whether the patient presented symptoms continuing in time, maybe less severe.

has characteristics: **functional**

has domain

Relapse^c

has range

boolean

relapseSeverity^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/relapseSeverity>

The severity of the relapse.

has characteristics: **functional**

has domain

Relapse^c

has range

{ "life risk" , "moderate" , "serious" , "slight" }

relapseStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/relapseStart>

The calendar date of the start of the relapse.

BRAINTEASER – D9.3

has characteristics: **functional**

has domain

Relapse ^c

has range

date

relativeEndDate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/relativeEndDate>

Privacy preserving end date computed according to an algorithm used to extract public instances.

has characteristics: **functional**

has domain

Activity ^c

has range

g year

relativeStartDate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/relativeStartDate>

Privacy preserving start date computed according to an algorithm used to extract public instances.

has characteristics: **functional**

has domain

Activity ^c

has range

g year

remSleep^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/remSleep>

REM sleep duration registered by the wearable device. [uom: seconds]

has domain

Sleep Data ^c

has range

float

residenceEnd^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/residenceEnd>

The calendar end date of the patient's residence in a specific geographical location.

has characteristics: **functional**

BRAINTEASER – D9.3

has domain

Residence ^c

has range

g year

residenceStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/residenceStart>

The calendar start date of the patient's residence in a specific geographical location.

has characteristics: **functional**

has domain

Residence ^c

has range

g year

respiratorySubscore^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/respiratorySubscore>

Respiratory ALSFRS subscore. Sum of items: 10, 11 and 12.

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

restingHeartRate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/restingHeartRate>

Resting heart rate registered by the wearable device. [uom: bpm]

has domain

Heart Rate Measurement ^c

has range

float

restStressDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/restStressDuration>

Rest stress duration registered by the wearable device. [uom: seconds]

has domain

Stress Level ^c

has range

float

BRAINTEASER – D9.3

retiredAtDiagnosis^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/retiredAtDiagnosis>

An indicator of whether the patient was retired at the time of diagnosis.

has characteristics: **functional**

has domain

Patient ^c

has range

boolean

revisedALSFRS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/revisedALSFRS>

Revised Amyotrophic Lateral Sclerosis Functional Rating Scale. Sum of items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12.

Is defined by

<http://purl.bioontology.org/ontology/SNOMEDCT/718646004>

has characteristics: **functional**

has domain

Amyotrophic Lateral Sclerosis Functional Rating Scale (ALSFRS) ^c

has range

integer

sdmtCorrect^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/sdmtCorrect>

Symbol Digital Modalities Test corrected.

has domain

Symbol Digit Modalities Functional Test ^c

has range

integer

sdmtIncorrect^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/sdmtIncorrect>

Symbol Digital Modalities Test raw score.

has domain

Symbol Digit Modalities Functional Test ^c

has range

integer

BRAINTEASER – D9.3

sensoryEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/sensoryEDSS>

Expanded Disability Status Score (EDSS) score for sensory functions.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

sensoryRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/sensoryRelapse>

Whether the relapse involved sensory functions.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

sex^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/sex>

The assemblage of physical properties or qualities by which male is distinguished from female; the physical difference between male and female; the distinguishing peculiarity of male or female. [Definition Source: NCI]

has characteristics: **functional**

has domain

Person ^c

has range

{ "female", "male" }

sexuality^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/sexuality>

The feeling an individual has about their own sexual preferences and how those views are acted upon. [Definition Source: NCI]

has characteristics: **functional**

has domain

Lifestyle ^c

BRAINTEASER – D9.3

has range

plain literal

SLEEP_ALS_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/SLEEP_ALS_Q1

During the last 7 days, how would you rate your sleep quality overall? Choose a number from 1 to 10 that best describes your sleep quality

has domain

Sleep Quality ^c

has range

smokersNumber^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/smokersNumber>

The number of smokers the patient lives or works with.

has domain

Smoking ^c

has range

int

smokingExpositionType^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/smokingExpositionType>

Type of smoking exposition.

has domain

Smoking ^c

has range

{ "Living with smokers", "Smoker", "Working with smokers" }

spinalCordLesions^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/spinalCordLesions>

Whether the MRI showed spinal cord lesions.

has domain

Magnetic Resonance Imaging (MRI) ^c

has range

boolean

stressDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/stressDuration>

Stress duration registered by the wearable device. [uom: seconds]

BRAINTEASER – D9.3

has domain

Stress Level ^c

has range

float

stressQualifier^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/stressQualifier>

Stress qualifier registered by the wearable device.

has domain

Stress Level ^c

has range

plain literal

sunExposure^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/sunExposure>

The exposure to incident light from the sun. [Definition Source: NCI]

has characteristics: **functional**

has domain

Lifestyle ^c

has range

integer

symptomClinicalName^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/symptomClinicalName>

The clinical name of the symptom.

has domain

Symptom ^c

has range

plain literal

symptomEnd^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/symptomEnd>

When the symptom ended.

has domain

Symptom ^c

has range

date time

BRAINTEASER – D9.3

symptomGrade^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/symptomGrade>

The severity of the symptom.

has domain

Symptom ^c

has range

{ "Mild" , "Moderate" , "Severe" }

symptomStart^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/symptomStart>

When the symptom started.

has domain

Symptom ^c

has range

date time

symptomType^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/symptomType>

Defines the symptom's category.

has domain

Symptom ^c

has range

plain literal

symptomValue^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/symptomValue>

The numerical value associated with the symptom, e.g., the temperature fever.

has domain

Symptom ^c

has range

float

totalLesionsT2MRI^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/totalLesionsT2MRI>

The total number of lesions in T2 detected with the MRI.

has characteristics: **functional**

has domain

Magnetic Resonance Imaging (MRI) ^c

BRAINTEASER – D9.3

has range

plain literal

totalSleepDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/totalSleepDuration>

Total sleep duration registered by the wearable device. [uom: seconds]

has domain

Sleep Data ^c

has range

float

traumaDate^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/traumaDate>

The calendar date in which the trauma occurred.

has characteristics: functional

has domain

Trauma ^c

has range

date

traumaDescription^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/traumaDescription>

A description of the trauma

has domain

Trauma ^c

has range

plain literal

unitOfMeasure^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/unitOfMeasure>

The unit of measure of reference of the laboratory test result.

has characteristics: functional

has domain

Laboratory Test Result ^c

has range

plain literal

unmeasurableSleepDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/unmeasurableSleepDuration>

BRAINTEASER – D9.3

Unmeasurable sleep duration registered by the wearable device. [uom: seconds]

has domain

Sleep Data ^c

has range

float

VAS_Q1^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/VASQ1>

Choose a number from 0 to 10 that best describes your pain

has domain

Visual Analogue Scale ^c

has range

vigorousIntensityDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/vigorousIntensityDuration>

Vigorous intensity duration registered by the wearable device. [uom: seconds]

has domain

Physical Activity Data ^c

has range

float

virusJCTestedCSF^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/virusJCTestedCSF>

Whether the presence of JC virus was tested in the CSF specimen.

has characteristics: **functional**

has domain

CSF Analysis ^c

has range

boolean

visualAcuityLeft^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/visualAcuityLeft>

Visual Acuity Test on the left eye.

has domain

Visual Acuity ^c

has range

integer

BRAINTEASER – D9.3

visualAcuityRight^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/visualAcuityRight>

Visual Acuity Test on the right eye.

has domain

Visual Acuity ^c

has range

integer

visualEDSS^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/visualEDSS>

Expanded Disability Status Score (EDSS) score for visual (optic) functions.

has characteristics: **functional**

has domain

Expanded Disability Status Scale (EDSS) ^c

has range

integer

visualEvokedPotentialAmplitude^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/visualEvokedPotentialAmplitude>

The amplitude for the Visual Evoked Potential (VEP) wave. [Source: Wikipedia - consulted on November 25th, 2022] Unit of Measure: [uV].

has characteristics: **functional**

has domain

Evoked Potentials ^c

has range

float

visualEvokedPotentialLatency^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/visualEvokedPotentialLatency>

The average peak latency for the Visual Evoked Potential (VEP) wave at approximately 100 ms following stimulus onset. [Source: Wikipedia - consulted on November 25th, 2022] Unit of Measure: [microsec].

has characteristics: **functional**

has domain

Evoked Potentials ^c

has range

integer

BRAINTEASER – D9.3

visualRelapse^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/visualRelapse>

Whether the relapse involved visual functions.

has characteristics: **functional**

has domain

Relapse ^c

has range

boolean

walkAssistiveDevice^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/walkAssistiveDevice>

Whether the patient uses an assistive device for walking.

has domain

Walk Test ^c

has range

boolean

walkAssistiveDeviceUsed^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/walkAssistiveDeviceUsed>

The type of assistive device used for walking.

has domain

Walk Test ^c

has range

plain literal

walkingTime10Meters^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/walkingTime10Meters>

Time to walk 10 meters.

has domain

Walk Test ALS ^c

has range

float

walkingTime25Steps^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/walkingTime25Steps>

Time to take 25 steps.

has domain

Walk Test MS ^c

BRAINTEASER – D9.3

has range

float

walkTestNotCompleted^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/walkTestNotCompleted>

Whether the walk test was completed.

has domain

Walk Test^c

has range

boolean

wearableDataMeasurementDuration^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/wdmDuration>

The duration of the measurement.

has domain

Wearable Data Measurement^c

has range

integer

wearableDataMeasurementStartTime^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/wdmStartTime>

The timestamp in which the measurement started.

has domain

Wearable Data Measurement^c

has range

date time

weeklyFrequency^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/weeklyFrequency>

The number of hours per week physical activity takes place.

has domain

Physical Activity^c

has range

float

weight^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/weight>

Measurement of quantity by means of weighing; quantity (in the abstract) as determined in this way. [Definition Source: Oxford English Dictionary]

BRAINTEASER – D9.3

has characteristics: **functional**

has domain

Clinical Evaluation ^c

has range

float

WEIGHT_Q1^{dp}

IRI: https://w3id.org/brainteaser/ontology/schema/WEIGHT_Q1

Please, enter your weight

has domain

Weight ^c

has range

float

zipCode^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/zipCode>

A group of letters or numbers, or both, added to a postal address to facilitate the sorting and delivery of mail. Later also: the area designated by such a code. [Definition Source: Oxford English Dictionary]

has characteristics: **functional**

has domain

Place ^c

has range

plain literal

zipHashed^{dp}

IRI: <https://w3id.org/brainteaser/ontology/schema/zipHashed>

The zip code hashed for privacy reasons.

has characteristics: **functional**

has domain

Place ^c

has range

plain literal

Named Individuals

- **Abdomen**
- **Abdominal Pain**
- **Abdominoplasty**
- **ACE Inhibitors, Plain**

BRAINTEASER – D9.3

- Acetylcarnitine
- Acetylsalicylic Acid
- Acetylsalicylic Acid, Combinations excl. Psycholeptics
- Aciclovir
- Acquired Hypothyroidism
- Acquired Immunodeficiency Syndrome (AIDS)
- Acute Cystitis
- Acute Myeloid Leukemia
- Acute Myocardial Infarction
- Acute Pyelonephritis
- Acute Respiratory Failure
- Acute Tonsillitis
- Ademetonine
- Adenocarcinoma
- Administration of Ineffective Drug
- Administrative and commercial managers
- Adverse Drug Event
- Agents Acting on the Renin-Angiotensin System
- Ageusia
- Agricultural, forestry and fishery labourers
- Alanine Aminotransferase Increased
- Alcohol Dependence
- Alectinib
- Alemtuzumab
- Alfuzosin
- Alimentary Tract and Metabolism
- All Other Non-Therapeutic Products
- All Other Therapeutic Products
- Allergens
- Allergic Asthma
- Allergic Rhinitis
- Alpha-Lipoic Acid
- Alprazolam
- Alzheimer's Disease
- Amantadine
- Ambrisentan

BRAINTEASER – D9.3

- Amenorrhea
- Amenorrhea due to Pituitary Dysfunction
- Amiodarone
- Amitriptyline
- Amitriptyline and Psycholeptics
- Amlodipine
- Amoxicillin and Beta-Lactamase Inhibitor
- Amyotrophic Lateral Sclerosis
- Anabolic Agents for Systemic Use
- Analgesics
- Anemia
- Anesthetics
- Angioedema
- Ankle Fracture
- Ann Arbor Stage IV Mantle Cell Lymphoma
- Ann Arbor Stage IV T-Cell Non-Hodgkin Lymphoma
- Anorectal Fistula
- Anorexia
- Anosmia
- Anthelmintics
- Anti-Acne Preparations
- Anti-Parkinson Drugs
- Antianemic Preparations
- Antibacterials for Systemic Use
- Antibiotics and Chemotherapeutics for Dermatological Use
- Anticonvulsant Agent
- Antidepressants
- Antidiarrheals, Intestinal Antiinflammatory/Anti-infective Agents
- Antiemetics and Antinauseants
- Antiepileptics
- Antifungals for Dermatological Use
- Antigout Preparations
- Antihemorrhagics
- Antihistamines for Systemic Use
- Antihypertensives
- Anti-infectives for Systemic Use

BRAINTEASER – D9.3

- Antiinflammatory and Antirheumatic Products
- Antiinflammatory and Antirheumatic Products, Non-Steroids
- Antimycobacterials
- Antimycotics for Systemic Use
- Antineoplastic Agents
- Antineoplastic and Immunomodulating Agents
- Antiobesity Preparations, excl. Diet Products
- Antiparasitic Products, Insecticides and Replents
- Antiprotozoals
- Antipruritics, incl. Antihistamines, Anesthetics, etc.
- Antipsoriatics
- Antisepetic and Disinfectants
- Antithrombotic Agents
- Antivirals for Systemic Use
- Anxiety Disorder
- Anxiolytics
- Apixaban
- Appendectomy
- Appetite Stimulants
- AR Gene
- Aripiprazole
- Armed forces occupations
- Armed forces occupations, other ranks
- Arrhythmia
- Arthritis
- Asian (ethnic group)
- Aspiration Pneumonitis
- Assemblers
- Asthma
- Atenolol
- Atenolol and Other Diuretics
- Atopic Dermatitis
- Atrial Fibrillation
- Atrial Flutter
- Atrovastatin
- Aunt

BRAINTEASER – D9.3

- Autoimmune Disease
- Autoimmune Nervous System Disorder
- Autoimmune Pancytopenia
- Azathioprine
- B-Cell Non-Hodgkin Lymphoma
- Baclofen
- Bacterial Pneumonia
- Baker Cyst
- Barbexalone
- Barnidipine
- Basal Cell Carcinoma
- BCG Vaccine
- Behavioral Impairment
- Bell's Palsy
- Benign Prostatic Hyperplasia
- Beta Blocking Agents
- Betahistine
- Betamethasone
- BG-12
- Bile and Liver Therapy Drugs
- Bile Therapy
- Biotin
- Bipolar Disorder
- Bisoprolol
- Black (ethnic group)
- Black African
- Blepharitis
- Blepharospasm
- Blood and Blood Forming Organs
- Blood Substitutes and Perfusion Solutions
- Bone Marrow
- Botulinum Toxin
- Bowel Obstruction
- Bradycardia
- Brain
- Brain Stem

BRAINTEASER – D9.3

- Breast Carcinoma
- Breast Ductal Carcinoma
- Bromazepam
- Brother
- Brotizolam
- Brown-Sequard Syndrome
- Building and related trades workers, excluding electricians
- Business and administration associate professionals
- Business and administration professionals
- C9orf72 Gene
- Cabergoline
- Calcifediol
- Calcium Channel Blockers
- Calcium Folate
- Calcium Homeostasis
- Calcium, Combinations with Vitamin D and/or Other Drugs
- Candesartan and Diuretics
- Cannabidiol
- Cannabinoids
- Carbamazepine
- Carcinoma
- Cardiac Therapy
- Cardiovascular Disorder
- Cardiovascular System
- Cardioversion
- Caucasian
- Cavernous Hemangioma
- Ceftriaxone
- Celiac Disease
- Central Nervous System Degenerative Disorder
- Cerebellum
- Cervical Carcinoma
- Cervical Intraepithelial Neoplasia Grade 2/3
- Cervical Spinal Cord
- Cervical Spine
- Cetirizine

BRAINTEASER – D9.3

- Chalazion
- Chicken Pox
- Chief executives, senior officials and legislators
- Chlorphenamine
- Cholecystectomy
- Cholelithiasis
- Chronic Atropic Gastritis
- Chronic Lung Disorder
- Chronic Obstructive Pulmonary Disease
- Cinnarizine
- Cinnarizine, Combinations
- Citalopram
- Cladribine
- Cladribine
- Cleaners and helpers
- Cleft Palate
- Clerical support workers
- Clobazam
- Clonazepam
- Clopidogrel
- Closed Dislocation of Shoulder
- Closed Fracture of Rib
- Closed Fracture of Tibia
- Codeine, Combinations excl. Psycholeptics
- Cognitive Impairment
- Cold Sore
- Colecalciferol
- Colon Adenocarcinoma
- Colon Dysplasia
- Colorectal Carcinoma
- Commissioned armed forces officers
- Common Bile Duct Stone
- Cone Biopsy
- Congenital Adrenal Hyperplasia
- Conization
- Contrast Media

BRAINTEASER – D9.3

- Coronary Artery Bypass Graft
- Corticosteroids for Systemic Use
- Corticosteroids, Dermatological Preparations
- Corticotropin
- Cortisone Therapy for Relapse
- Cough and Cold Preparations
- Cousin
- COVID-19 Infection
- Covid-19 Vaccines
- Craft and related trades workers
- Cranial Nerve VII Palsy
- Customer services clerks
- Cutaneous Melanoma
- Cyanocobalamin
- Cyclophosphamide
- Cyst
- Dabigatran Etexilate
- Daclizumab
- Dantrolene
- Daughter
- DCTN1 Gene
- Deep Vein Thrombosis
- Deflazacort
- Dementia
- Denosumab
- Depression
- Dermatologicals
- Desogestrel
- Desogestrel and Ethinylestradiol
- Desvenlafaxine
- Dexamethasone
- Diabetes Mellitus
- Diabetic Ketoacidosis
- Diagnostic Agents
- Diagnostic Radiopharmaceuticals
- Diazepam

BRAINTEASER – D9.3

- Dienogest and Estradiol
- Dietary Supplement
- Digestives, incl. Enzymes
- Dimethyl Fumarate
- Diphtheria Vaccines
- Discectomy
- Disease or Disorder
- Diuretics
- Dog Bite
- Domperidone
- Drainage of Bartholin's Abscess
- Drivers and mobile plant operators
- Drospirenone and Ethinylestradiol
- Drug Hypersensitivity AE
- Drug Hypersensitivity Syndrome
- Drug Intolerance AE
- Drugs for Acid Related Disorders
- Drugs for Bile Therapy and Lipotropics in Combination
- Drugs for Constipation
- Drugs for Functional Gastrointestinal Disorders
- Drugs for MS Symptomatic Therapy
- Drugs for MS Therapy Side Effects
- Drugs for Obstructive Airway Diseases
- Drugs for Other Diseases
- Drugs for Treatment of Bone Diseases
- Drugs Used in Diabetes
- Duloxetine
- Dustasteride
- Dyslipidemia
- Ectoparasiticides, incl. Scabicides, Insecticides and Repellents
- Ecunerv
- Eczema
- Electrical and electronic trades workers
- Elementary occupations
- Emergency Tracheostomy
- Emollients and Protectives

BRAINTEASER – D9.3

- Enalapril
- Endocrine Therapy
- Endometriosis
- Epidermal Inclusion Cyst
- Escitalopram
- Esomeprazole
- Essential Hypertension
- Etizolam
- Etonogestrel
- Etoricoxib
- Excision of Basal Cell Carcinoma
- Excision of Benign Neoplasm
- Excision of Cyst
- Excision of dermatofibroma
- Excision of Neoplasm
- Extrapyrmidal Disorder
- Eye
- Ezetimibe
- Fampridine
- Father
- Favism
- Female Reproductive System Disorder
- Femur Fracture
- Fever Chills
- Fibroma
- Fibromyalgia
- Finding
- Fingolimod
- First Cousin
- First Degree Relative
- Flu-Like Symptoms
- Flunarizine
- Fluoxetine
- Flurazepam
- Fluticasone
- Food preparation assistants

BRAINTEASER – D9.3

- Food processing, wood working, garment and other craft and related trades workers
- Formoterol and Budesonide
- Frontotemporal Dementia
- Fungal Infection
- Furosemide
- FUS Gene
- Gabapentin
- Gastritis
- Gastroenteritis
- Gastroesophageal Reflux
- Gastroesophageal Reflux Disease
- Gastroplasty
- Gastric Bypass
- General and keyboard clerks
- General Nutrients
- Generalized Epilepsy
- Genito Urinary System and Sex Hormones
- Gianmaria Silvello
- Giorgio Maria Di Nunzio
- Glatiramer Acetate
- Glaucoma
- Gliclazide
- Glimepiride
- Glucocorticoids, Systemic
- Granddaughter
- Grandfather
- Grandmother
- Grandson
- Guglielmo Faggioli
- Gynecological Antiinfectives and Antiseptics
- Handicraft and printing workers
- Hashimoto Thyroiditis
- Head
- Head and Neck Approaches
- Head and Neck Finding

BRAINTEASER – D9.3

- Head and Neck Surgery
- Head Trauma
- Headache
- Health associate professionals
- Health professionals
- Heart Disorder
- Heart Failure
- Hematoma
- Hepatic Toxicity
- Hepatitis
- Hepatitis A Infection
- Hepatitis B, Purified Antigen
- Hepatitis C Infection
- Hereditary Factor XI Deficiency
- Hereditary Hemolytic Anemia
- Hernia
- Herpes Simplex Keratitis
- Herpes Simplex Virus Infection
- Herpes Zoster
- High Grade Cervical Squamous Intraepithelial Neoplasia
- Hip Osteoarthritis
- Hispanic
- HMG CoA Reductase Inhibitors
- Hospital General Universitario Gregorio Marañón
- Hospitality, retail and other services managers
- Hydrochlorothiazide
- Hydrocortisone
- Hydrocortisone
- Hydroxychloroquine
- Hypercholesterolemia
- Hyperhomocysteinemia
- Hypersensitivity
- Hypertension
- Hypertensive Crisis
- Hyperthyroidism
- Hypertriglyceridaemia

BRAINTEASER – D9.3

- Hypertrophy
- Hypnotics and Sedatives
- Hypothyroidism
- Hysterectomy
- Ibuprofen
- Ichthyosis
- Immune Sera and Immunoglobulins
- Immunoactive Drugs
- Immunoglobulins, Normal Human, for Intravascular Adm.
- Immunostimulants
- Immunosuppressants
- Indometacin
- Infectious Mononucleosis
- Information and communications technicians
- Information and communications technology professionals
- Inguinal Hernia
- Injury
- Insertion of Implantable Intrathecal Access System
- Insomnia
- Institute of Molecular Medicine Joao Lobo Antunes
- Insulin Glargine
- Insulin Lispro
- Insulins and Analogues
- Interferon Beta Natural
- Interferon Beta-1a
- Interferon Beta-1b
- Interstitial Pneumonia
- Intervertebral Disc Prolapse
- Intestinal Pseudo-Obstruction
- Intraepithelial Neoplasia
- Iridocyclitis
- Iron-Deficiency Anemia
- Keratitis
- Keratoconus
- Ketorolac
- Kidney Carcinoma

BRAINTEASER – D9.3

- Klippel-Feil Syndrome
- Knee Injury
- L4-L5 Intervertebral Space
- Labourers in mining, construction, manufacturing and transport
- Lactulose
- Laminectomy
- Lamotrigine
- Langerhans Cell Histiocytosis
- Laura Menotti
- Legal, social and cultural professionals
- Legal, social, cultural and related associate professionals
- Lercanidipine
- Leukoaraiosis
- Leukopenia
- Levetiracetam
- Levocetirizine
- Levodopa and Decarboxylase Inhibitor
- Levothyroxine Sodium
- Limb
- Lipid Modifying Agents
- Liver Therapy, Lipotropics
- Long QT Syndrome
- Lorazepam
- Losartan
- Lower Extremity
- Lumbar Hernia
- Lumbar Puncture Headache
- Lumbar Spinal Fusion
- Lumbar Spine
- Lumbosacral Region
- Lymphopenia
- Macular Degeneration
- Malgrate
- Malignant Colon Neoplasm
- Malignant Neoplasm
- Malignant Skin Neoplasm

BRAINTEASER – D9.3

- Malignant Thyroid Gland Neoplasm
- Managers
- Market-oriented skilled agricultural workers
- Market-oriented skilled forestry, fishery and hunting workers
- Maternal Aunt
- Maternal Uncle
- Medicated Dressings
- Melanocytic Nevus
- Melatonin
- Menopausal Symptom
- Mesalazine
- Metal, machinery and related trades workers
- Metformin
- Methotrexate
- Methotrexate
- Methylprednisolone
- Migraine
- Migraine With Aura
- Mineral Supplements
- Mitoxantrone
- Mitrazapine
- Modafinil
- Molluscum Contagiosum Virus
- Mondino Foundation
- Monoclonal B_Cell Lymphocytosis
- Monoclonal Gammopathy
- Montelukast
- Mood Disorder
- Mother
- Motor Neuron Disease
- MTHFR Gene Mutation
- Multiple Sclerosis
- Mumps
- Muscle Relaxants
- Musculo-Skeletal System
- Myasthenia Gravis

BRAINTEASER – D9.3

- Myeloproliferative Neoplasm
- Myocardial Infarction
- Naltrexone
- Nasal Preparations
- Natalizumab
- Nebivolol
- Neck
- Neck Trauma
- Neonatal Hearing Impairment
- Neoplasm
- Nephew
- Nervous System
- Nervous System Disorder
- Neurofibromatosis
- Neutropenic Disorder
- Nicergoline
- Nicola Ferro
- Niece
- Non-commissioned armed forces officers
- Non-Hodgkin Lymphoma
- Non-Invasive Mechanical Ventilation (NIV)
- Non-Neoplastic Central Nervous System Disorder
- Numerical and material recording clerks
- Obesity
- Obstructive Sleep Apnea Syndrome
- Ocrelizumab
- Ofatumumab
- Olanzapine
- Olmesartan Medoxomil
- Olmesartan Medoxomil and Amlodipine
- Omeprazole
- Operation on Abdominal Region
- Operative Procedure on Lumbosacral Spinal Structure
- Operative Procedure on Thoracic Spinal Structure
- Operative Procedure on Upper Extremity
- Ophthalmologicals

BRAINTEASER – D9.3

- Ophthalmologicals and Otologicals Products
- Opioid Use Disorder
- Optic Neuritis
- OPTN Gene
- Osteoporosis
- Other Alimentary Tract and Metabolism
- Other clerical support workers
- Other Dermatological Preparations
- Other Drugs for Disorders of the Musculo-Skeletal System
- Other Gynecologicals
- Other Hematological Agents
- Other Nervous System Drugs
- Other Respiratory System Products
- Other Vaccines
- Otologicals
- Oxcarbazepine
- Oxybutynin
- Ozanimod
- Paliperidone
- Palmar Fibromatosis
- Pancreatic Hormones
- Pancytopenia
- Panic Disorder
- Pantoprazole
- Paracetamol
- Parkinson's Disease
- Paroxetine
- Partial Cystectomy
- Paternal Aunt
- Paternal Uncle
- Peginterferon Alfa-2b
- Peginterferon Beta-1a
- Pelvis
- Penicillin Allergy
- Percutaneous Endoscopic Gastrostomy (PEG)
- Perindopril and Amlodipine

BRAINTEASER – D9.3

- Peripheral Vasodilators
- Personal care workers
- Personal service workers
- Personality Disorder
- Phenobarbital
- Phenytoin
- Pituitary and Hypothalamic Hormones and Analogues
- Pituitary Neuroendocrine Tumor
- Pityriasis Rosea
- Plant and machine operators and assemblers
- Plasmapheresis
- Pleural Effusion
- Pneumococcal Pneumonia
- Pneumonia
- Pneumonia Caused By SARS-CoV-2
- Poliomyelitis, Trivalent, Inactivated, Whole Virus
- Post-Herpetic Neuralgia
- Pramipexole
- Prasugrel
- Prazepam
- Prednisolone
- Prednisone
- Pregabalin
- Preparations for Treatment of Wounds and Ulcers
- Primary Lateral Sclerosis
- Primary Neoplasm
- Primary Progressive Aphasia
- Procedure on Pelvic Region of Trunk
- Production and specialised services managers
- Professionals
- Progestogens and Estrogens Systemic Contraceptives, Sequential Preparations
- Proglumide
- Progressive Bulbar Palsy
- Progressive Multifocal Leukoencephalopathy
- Progressive Muscular Atrophy
- Prolapsed Lumbar Intervertebral Disc

BRAINTEASER – D9.3

- Propanolol
- Protective services workers
- Proteinuria
- Psoriasis
- Psoriatic Arthritis
- Psychiatric Disorder
- Psychoanaleptics
- Psycholeptics
- Psychosis
- Pulmonary Embolism
- Pulmonary Insufficiency
- Pulmonary Sarcoidosis
- Pulmonary Thromboembolism
- Quetiapine
- Radius Fracture
- Ramipril
- Reboxetine
- Recurrent Acute Myeloid Leukemia
- Refuse workers and other elementary workers
- Removal of Acoustic Neuroma
- Renal Colic
- Repaglinide
- Repair of Bladder
- Repair of Knee Cruciate Ligaments
- Replacement of Aortic Valve
- Respiratory System
- Retinal Detachment
- Rheumatoid Arthritis
- Rheumatologic Disorder
- Rhinoseptoplasty
- Rifampicin
- Riluzole
- Rituximab
- Rivaroxaban
- Rivastigmine
- Ropinirole

BRAINTEASER – D9.3

- Rosuvastatin
- Salbutamol
- Sales workers
- Salpingectomy
- Sarcoidosis
- Scarlet Fever
- Sciatica
- Science and engineering associate professionals
- Science and engineering professionals
- Second Degree Relative
- Secukinumab
- Seizure Disorder
- Semaglutide
- Sensory Organs
- Septicemia
- Serositis
- Sertraline
- Serum Glutamic Pyruvic Transaminase, CTCAE
- Service and sales workers
- Sex Hormones and Modulators of the Genital System
- Shoulder Dislocation
- Sign
- Sign or Symptom
- Sildenafil
- Simvastatin
- Sinusitis
- Siponimod
- Sister
- Sitagliptin
- Sjogren Syndrome
- Skilled agricultural, forestry and fishery workers
- Skin Basal Cell Carcinoma
- Skin Basosquamous Cell Carcinoma
- Skin Carcinoma
- Skin Cyst
- SOD1 Gene

BRAINTEASER – D9.3

- Son
- Sphincter
- Spina Bifida
- Spinal and Bulbar Muscular Atrophy, X-linked 1
- Spinal Cord
- SQSTM1 Gene
- Staphylococcal Infection
- Stationary plant and machine operators
- Stefano Marchesin
- Stomatological Preparations
- Street and related sales and service workers
- Stroke
- Subdural Hematoma
- Subsistence farmers, fishers, hunters and gatherers
- Sulfasalazine
- Sumatriptan
- Supratentorial Brain
- Surgical Dressings
- Surgical Procedure on Cervical Spine
- Surgical Procedure on Lower Extremity
- Surgical Procedure on Thorax
- Symptom
- Syncope
- Systemic Hormonal Preparations, excl. Sex Hormones and Insulins
- Tadalafil
- Tafluprost
- Tamoxifen
- Tamsulosin
- TARDBP Gene
- TBK1 Gene
- Teaching professionals
- Technicians and associate professionals
- Telmisartan
- Terbutaline
- Teriflunomide
- Tetanus Immunoglobulin

BRAINTEASER – D9.3

- Tetracosactide
- Tetralogy of Fallot
- Thalassemia
- Therapeutic Radiopharmaceuticals
- Thiamazole
- Thiethylperazine
- Third Degree Relative
- Thoracic Spinal Cord
- Thoracic Spine
- Thoracic Trauma
- Thorax
- Throat Preparations
- Thrombocytopenia
- Thromboembolism
- Thyroid Gland Disorder
- Thyroid Gland Excision
- Thyroid Therapy
- Thyroiditis
- Tibia Fracture
- Tibolone
- Ticlopidine
- Tinea Versicolor
- Tiotropium Bromide
- Tizanidine
- Tocilizumab
- Tolterodine
- Tonics
- Tooth Abscess
- Topical Products for Joint and Muscular Pain
- Topiramate
- Toxoplasmosis
- Transient Ischemic Attack
- Transplantation
- Transurethral Prostatectomy
- Trastuzumab
- Trazodone

BRAINTEASER – D9.3

- Triazolam
- Trigeminal Nerve Disorder
- Trospium
- Turbinectomy
- Two Vessel Coronary Disease
- Type 1 Diabetes Mellitus
- Type 2 Diabetes Mellitus
- Uncle
- University of Padua
- University of Turin
- Upper Extremity
- Ureteral Stenosis
- Urinary Stone
- Urologicals
- Ursodeoxycholic Acid
- Urticaria
- Ustekinumab
- Uterine Corpus Leiomyoma
- Vaccines
- Valaciclovir
- Valproic Acid
- Valsartan
- Various
- Vasoprotectives
- Venlafaxine
- Verapamil
- Vertebral Column
- Vertigo
- Vertioxetine
- Vigabatrin
- Viral Pericarditis
- Viral Respiratory Tract Infection
- Vitamin D Deficiency
- Vitamins
- Vitiligo
- Vulvovaginal Candidiasis

BRAINTEASER – D9.3

- Vulvovaginitis
- Warfarin
- Zolmitriptan
- Zolpidem
- Zuclopenthixol

Abdomenⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12664

The cavity located between the lungs and pelvis. It contains the lower esophagus, stomach, pancreas, intestines, liver, gallbladder and spleen. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Abdominal Painⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26682

Painful sensation in the abdominal region. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Abdominoplastyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/177250006>

Surgical removal of excess abdominal skin and fat and tightening of the ABDOMINAL WALL. Abdominoplasty may include LIPECTOMY of INTRA-ABDOMINAL FAT, tightening of the ABDOMINAL MUSCLES, and re-creation of the UMBILICUS. [Definition Source: MSH]

belongs to

concept ^c

Surgical Procedure Type ^c

ACE Inhibitors, Plainⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09AA>

belongs to

concept ^c

Pharmacologic Substance ^c

Acetylcarnitineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06BX12>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Acetylsalicylic Acid*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N02BA01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Acetylsalicylic Acid, Combinations excl. Psycholeptics*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N02BA51>

belongs to

concept ^c

Pharmacologic Substance ^c

*Aciclovir*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J05AB01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Acquired Hypothyroidism*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C129644

Hypothyroidism, the cause of which is not present at birth. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Acquired Immunodeficiency Syndrome (AIDS)*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2851

A syndrome resulting from the acquired deficiency of cellular immunity caused by the human immunodeficiency virus (HIV). It is characterized by the reduction of the Helper T-lymphocytes in the peripheral blood and the lymph nodes. Symptoms include generalized lymphadenopathy, fever, weight loss, and chronic diarrhea. Patients with AIDS are especially susceptible to opportunistic infections, tuberculosis, candida infections, and cryptococcosis), and the development of malignant neoplasms (usually non-Hodgkin lymphoma and Kaposi sarcoma). The human immunodeficiency virus is transmitted through sexual contact, sharing of contaminated needles, or transfusion of contaminated blood. [Definition Source: NCI]

BRAINTEASER – D9.3

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Acute Cystitis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26934

An acute infection of the bladder. It is usually caused by bacteria. Signs and symptoms include increased frequency of urination, pain or burning during urination, fever, cloudy or bloody urine, and suprapubic pain. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Acute Myeloid Leukemia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3171

A clonal expansion of myeloid blasts in the bone marrow, blood or other tissues. The classification of acute myeloid leukemias (AMLs) encompasses four major categories: 1) AML with recurrent genetic abnormalities; 2) AML with multilineage dysplasia; 3) Therapy-related AML; 4) AML not otherwise specified. The required bone marrow or peripheral blood blast percentage for the diagnosis of AML is 20% (WHO classification). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Acute Myocardial Infarction*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35204

Necrosis of the myocardium, as a result of interruption of the blood supply to the area. It is characterized by a severe and rapid onset of symptoms that may include chest pain, often radiating to the left arm and left side of the neck, dyspnea, sweating, and palpitations. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Acute Pyelonephritis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C123215

Sudden onset pyelonephritis. [Definition Source: NCI][attribution: NICHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Acute Respiratory Failureⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27043

Life-threatening respiratory failure that develops rapidly. Causes include injury, sepsis, drug overdose, and pancreatitis. It manifests with dyspnea and cyanosis and may lead to cardiovascular shock. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Acute Tonsillitisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C97142

An acute inflammation of the tonsils caused by viruses or bacteria. Signs and symptoms include fever, enlargement of the tonsils, difficulty swallowing, and enlargement of the regional lymph nodes. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Ademetionineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A16AA02>

belongs to

concept ^c

Pharmacologic Substance ^c

Adenocarcinomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2852

A common cancer characterized by the presence of malignant glandular cells. Morphologically, adenocarcinomas are classified according to the growth pattern (e.g., papillary, alveolar) or according to the secreting product (e.g., mucinous, serous). Representative examples of adenocarcinoma are ductal and lobular breast carcinoma, lung adenocarcinoma, renal cell carcinoma, hepatocellular carcinoma (hepatoma), colon adenocarcinoma, and prostate adenocarcinoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Administration of Ineffective Drugⁿⁱ

IRI: http://purl.obolibrary.org/obo/OAE_0000220

An errored drug administration where a patient is administered with an ineffective drug. [Definition Source: OAE]

BRAINTEASER – D9.3

belongs to

concept ^c

Adverse Drug Reaction ^c

Administrative and commercial managersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C12>

Administrative and commercial managers plan, organize, direct, control and coordinate the financial, administrative, human resource, policy, planning, research and development, advertising, public relations, and sales and marketing activities of enterprises and organizations, or of enterprises that provide such services to other enterprises and organizations. Competent performance in most occupations in this sub-major group requires skills at the fourth ISCO skill level Tasks performed by workers in this sub-major group usually include: formulating and administering policy advice and strategic and financial planning; establishing and directing operational and administrative procedures; implementing, monitoring and evaluating strategies and policies; providing advice to senior managers; directing the development of initiatives for new products, marketing, public relations and advertising campaigns; determining and directing sales activities, product mix and customer service standards; setting prices and credit arrangements; ensuring compliance with relevant legislation, regulations and standards; controlling selection, training and performance of staff; preparing budgets and overseeing financial operations; consulting with the chief executive and with managers of other departments or sections; controlling expenditure and ensuring the efficient use of resources; representing the enterprise or organization in negotiations, and at conventions, seminars, public hearings and forums. Occupations in this sub-major group are classified into the following minor groups: 121 Business Services and Administration Managers 122 Sales, Marketing and Development Managers

belongs to

concept ^c

Occupation ^c

Adverse Drug Eventⁿⁱ

IRI: http://purl.obolibrary.org/obo/OAE_0000005

An adverse event that occurs after a drug administration. [Definition Source: OAE]

belongs to

concept ^c

Adverse Drug Reaction ^c

Agents Acting on the Renin-Angiotensin Systemⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Ageusiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C116374

Inability to taste. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Agricultural, forestry and fishery labourersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C92>

Agricultural, forestry and fishery labourers perform simple and routine tasks in the production of crops and livestock, cultivation and maintenance of gardens and parks, exploitation and conservation of forests, and conduct of aquaculture and fisheries operations. Most occupations in this sub-major group require skills at the first ISCO skill level. Tasks performed by workers in this sub-major group usually include: digging, raking and shovelling using hand tools; loading, unloading and stacking supplies, produce and other materials; watering, thinning, weeding and tending crops by hand or using hand tools; planting, harvesting, picking and collecting produce by hand; feeding, watering and cleaning animals and keeping their quarters clean; monitoring livestock and reporting on their condition; preparing and operating nets, lines and other fishing tackle and deck equipment; grading, sorting, bunching and packing produce into containers; performing minor repairs on fixtures, buildings, equipment, vessels and fences. Occupations in this sub-major group are classified into the following minor group: 921 Agricultural, Forestry and Fishery Labourers

belongs to

concept ^c

Occupation ^c

Alanine Aminotransferase Increasedⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26948

An increase in the level of alanine aminotransferase in the blood. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Alcohol Dependenceⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C93040

Physical and psychological dependence on alcohol. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Alectinibⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/L01ED03>

belongs to

concept ^cPharmacologic Substance ^c*Alemtuzumabⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/L04AA34>

belongs to

concept ^cPharmacologic Substance ^c*Alfuzosinⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/G04CA01>

belongs to

concept ^cPharmacologic Substance ^c*Alimentary Tract and Metabolismⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/A>

belongs to

concept ^cPharmacologic Substance ^c*All Other Non-Therapeutic Productsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/V07>

belongs to

concept ^cPharmacologic Substance ^c*All Other Therapeutic Productsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/V03>

belongs to

concept ^cPharmacologic Substance ^c*Allergensⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/V01>

belongs to

concept ^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

Allergic Asthmaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/389145006>

Allergic Asthma

belongs to

concept ^c

Disease, Disorder or Finding ^c

Allergic Rhinitisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C79532

Inflammation of the nasal mucous membranes caused by an IgE-mediated response to external allergens. The inflammation may also involve the mucous membranes of the sinuses, eyes, middle ear, and pharynx. Symptoms include sneezing, nasal congestion, rhinorrhea, and itching. It may lead to fatigue, drowsiness, and malaise thus causing impairment of the quality of life. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Alpha-Lipoic Acidⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C61595

A naturally occurring micronutrient, synthesized in small amounts by plants and animals (including humans), with antioxidant and potential chemopreventive activities. Alpha-lipoic acid acts as a free radical scavenger and assists in repairing oxidative damage and regenerates endogenous antioxidants, including vitamins C and E and glutathione. This agent also promotes glutathione synthesis. In addition, alpha-lipoic acid exerts metal chelating capacities and functions as a cofactor in various mitochondrial enzyme complexes involved in the decarboxylation of alpha-keto acids. [Definition Source: NCI]

belongs to

concept ^c

Pharmacologic Substance ^c

Alprazolamⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05BA12>

belongs to

concept ^c

Pharmacologic Substance ^c

Alzheimer's Diseaseⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2866

BRAINTEASER – D9.3

A progressive, neurodegenerative disease characterized by loss of function and death of nerve cells in several areas of the brain leading to loss of cognitive function such as memory and language. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Amantadine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N04BB01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Ambrisentan*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C02KX02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Amenorrhea*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C61443

The absence of menses in a woman who has achieved reproductive age. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Amenorrhea due to Pituitary Dysfunction*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/1144987003>

The absence of menses in a woman who has achieved reproductive age due to disorder of pituitary gland. [Partial Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Amiodarone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C01BD01>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Amitriptylineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AA09>

belongs to

concept ^c

Pharmacologic Substance ^c

Amitriptyline and Psycholepticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06CA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Amlodipineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C08CA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Amoxicillin and Beta-Lactamase Inhibitorⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J01CR02>

belongs to

concept ^c

Pharmacologic Substance ^c

Amyotrophic Lateral Sclerosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34373

A neurodegenerative disorder characterized by progressive degeneration of the motor neurons of the central nervous system. It results in weakness and atrophy of the muscles which leads to an inability to initiate and control voluntary movements.
[Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Anabolic Agents for Systemic Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A14>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Analgesicsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N02>

belongs to

concept ^c

Pharmacologic Substance ^c

Anemiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2869

A reduction in the number of red blood cells, the amount of hemoglobin, and/or the volume of packed red blood cells. Clinically, anemia represents a reduction in the oxygen-transporting capacity of a designated volume of blood, resulting from an imbalance between blood loss (through hemorrhage or hemolysis) and blood production. Signs and symptoms of anemia may include pallor of the skin and mucous membranes, shortness of breath, palpitations of the heart, soft systolic murmurs, lethargy, and fatigability. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Anestheticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N01>

belongs to

concept ^c

Pharmacologic Substance ^c

Angioedemaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C112175

Rapid swelling of the deep layers of the skin due to transient vascular leakage of serous fluid. [Definition Source: NCI][attribution: NICHHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Ankle Fractureⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26989

Traumatic or pathological injury to the ankle joint in which the continuity of an ankle bone is broken. Symptoms include pain, swelling, and difficulty moving the affected leg and foot. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Ann Arbor Stage IV Mantle Cell Lymphomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C8486

Ann Arbor Classification: Stage IV: Diffuse or disseminated involvement of one or more extralymphatic organs, with or without associated lymph node involvement; or isolated extralymphatic organ involvement in the absence of adjacent regional lymph node involvement, but in conjunction with disease in distant site(s); or any involvement of the liver or bone marrow, lungs (other than by direct extension from another site), or cerebrospinal fluid. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Ann Arbor Stage IV T-Cell Non-Hodgkin Lymphomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C8668

Ann Arbor Classification: Stage IV: Diffuse or disseminated involvement of one or more extralymphatic organs, with or without associated lymph node involvement; or isolated extralymphatic organ involvement in the absence of adjacent regional lymph node involvement, but in conjunction with disease in distant site(s); or any involvement of the liver or bone marrow, lungs (other than by direct extension from another site), or cerebrospinal fluid. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Anorectal Fistulaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C60785

A pathologic tract that connects an opening in the anal canal to the perianal skin. In the vast majority of cases there is a history of perianal abscess. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Anorexiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2875

Loss of appetite. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Anosmiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C116369

BRAINTEASER – D9.3

Inability to smell. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Anthelminticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/P02>

belongs to

concept ^c

Pharmacologic Substance ^c

Anti-Acne Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D10>

belongs to

concept ^c

Pharmacologic Substance ^c

Anti-Parkinson Drugsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N04>

belongs to

concept ^c

Pharmacologic Substance ^c

Antianemic Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B03>

belongs to

concept ^c

Pharmacologic Substance ^c

Antibacterials for Systemic Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J01>

belongs to

concept ^c

Pharmacologic Substance ^c

Antibiotics and Chemotherapeutics for Dermatological Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D06>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Anticonvulsant Agentⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C264

Medicine to stop, prevent, or control seizures (convulsions). [Definition Source: NCI]

belongs to

concept ^c

Therapeutic Procedure Type ^c

Antidepressantsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06A>

belongs to

concept ^c

Pharmacologic Substance ^c

Antidiarrheals, Intestinal Antiinflammatory/Anti-infective Agentsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A07>

belongs to

concept ^c

Pharmacologic Substance ^c

Antiemetics and Antinauseantsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A04>

belongs to

concept ^c

Pharmacologic Substance ^c

Antiepilepticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03>

belongs to

concept ^c

Pharmacologic Substance ^c

Antifungals for Dermatological Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D01>

belongs to

concept ^c

Pharmacologic Substance ^c

Antigout Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M04>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

Antihemorrhagicsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B02>

belongs to

concept ^c

Pharmacologic Substance ^c

Antihistamines for Systemic Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R06>

belongs to

concept ^c

Pharmacologic Substance ^c

Antihypertensivesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C02>

belongs to

concept ^c

Pharmacologic Substance ^c

Antiinfectives for Systemic Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J>

belongs to

concept ^c

Pharmacologic Substance ^c

Antiinflammatory and Antirheumatic Productsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M01>

belongs to

concept ^c

Pharmacologic Substance ^c

Antiinflammatory and Antirheumatic Products, Non-Steroidsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M01A>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

*Antimycobacterialsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/J04>

belongs to

concept ^cPharmacologic Substance ^c*Antimycotics for Systemic Useⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/J02>

belongs to

concept ^cPharmacologic Substance ^c*Antineoplastic Agentsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/L01>

belongs to

concept ^cPharmacologic Substance ^c*Antineoplastic and Immunomodulating Agentsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/L>

belongs to

concept ^cPharmacologic Substance ^c*Antiobesity Preparations, excl. Diet Productsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/A08>

belongs to

concept ^cPharmacologic Substance ^c*Antiparasitic Products, Insecticides and Replentsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/P>

belongs to

concept ^cPharmacologic Substance ^c*Antiprotozoalsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/P01>

belongs to

concept ^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

Antipruritics, incl. Antihistamines, Anesthetics, etc.ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D04>

belongs to

concept ^c

Pharmacologic Substance ^c

Antipsoriaticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D05>

belongs to

concept ^c

Pharmacologic Substance ^c

Antisepetic and Disinfectantsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D08>

belongs to

concept ^c

Pharmacologic Substance ^c

Antithrombotic Agentsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01>

belongs to

concept ^c

Pharmacologic Substance ^c

Antivirals for Systemic Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J05>

belongs to

concept ^c

Pharmacologic Substance ^c

Anxiety Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2878

A category of psychiatric disorders which are characterized by anxious feelings or fear often accompanied by physical symptoms associated with anxiety. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Anxiolytics*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05B>

belongs to

concept^c

Pharmacologic Substance^c

*Apixaban*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01AF02>

belongs to

concept^c

Pharmacologic Substance^c

*Appendectomy*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/80146002>

Surgical removal of the vermiform appendix. [Definition Source: NCI]

belongs to

concept^c

Surgical Procedure Type^c

*Appetite Stimulants*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A15>

belongs to

concept^c

Pharmacologic Substance^c

*AR Gene*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C28539

This gene plays a role in the transcriptional activation of androgen responsive genes. [Definition Source: NCI]

belongs to

concept^c

Gene^c

*Aripiprazole*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05AX12>

belongs to

concept^c

Pharmacologic Substance^c

BRAINTEASER – D9.3

Armed forces occupationsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/CO>

Armed forces occupations include all jobs held by members of the armed forces. Members of the armed forces are those personnel who are currently serving in the armed forces, including auxiliary services, whether on a voluntary or compulsory basis, and who are not free to accept civilian employment and are subject to military discipline. Included are regular members of the army, navy, air force and other military services, as well as conscripts enrolled for military training or other service for a specified period. Occupations in this major group are classified into the following sub-major groups: 01 Commissioned Armed Forces Officers 02 Non-commissioned Armed Forces Officers 03 Armed Forces Occupations, Other Ranks Excluded from this group are: - jobs held by persons in civilian employment of government establishments concerned with defence issues; - police (other than military police); - customs inspectors and members of border or other armed civilian services.

belongs to

concept ^c

Occupation ^c

Armed forces occupations, other ranksⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C03>

Armed forces occupations, other ranks include all conscripted and non-conscripted members of the armed forces except commissioned and non-commissioned officers. They perform specific military tasks and/or perform similar tasks to those performed in a variety of civilian occupations outside the armed forces. Most occupations in this sub-major group require skills at the first ISCO skill level. Occupations in this sub-major group are classified into the following minor group: 031 Armed Forces Occupations, Other Ranks Excluded from this group are: - jobs held by persons in civilian employment of government establishments concerned with defence issues; - police (other than military police); - customs inspectors and members of border or other armed civilian services.

belongs to

concept ^c

Occupation ^c

Arrhythmiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2881

Any variation from the normal rate or rhythm (which may include the origin of the impulse and/or its subsequent propagation) in the heart. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Arthritisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2883

BRAINTEASER – D9.3

An inflammatory process affecting a joint. Causes include infection, autoimmune processes, degenerative processes, and trauma. Signs and symptoms may include swelling around the affected joint and pain. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Asian (ethnic group)ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/315280000>

A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. (OMB) [Definition Source: NCI]

belongs to

concept ^c

Group (social concept) ^c

Aspiration Pneumonitisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34932

Inflammation of the lungs due to the inhalation of solid or liquid material. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Assemblersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C82>

Assemblers assemble prefabricated parts or components to form subassemblies, products and equipment, according to procedures strictly laid down. The products worked on may be moved from one worker to the next along assembly lines. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: assembling components into various types of product and equipment, according to strictly laid down procedures; reviewing work orders, specifications, diagrams and drawings to determine materials needed and assembly instructions; recording production and operational data on specified forms; inspecting and testing completed components and assemblies, wiring installations and circuits; rejecting faulty assemblies and components. Occupations in this sub-major group are classified into the following minor group: 821 Assemblers

belongs to

concept ^c

Occupation ^c

BRAINTEASER – D9.3

Asthmaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C28397

A chronic respiratory disease manifested as difficulty breathing due to the narrowing of bronchial passageways. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Atenololⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C07AB03>

belongs to

concept ^c

Pharmacologic Substance ^c

Atenolol and Other Diureticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C07CB03>

belongs to

concept ^c

Pharmacologic Substance ^c

Atopic Dermatitisⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/24079001>

A chronic inflammatory genetically determined disease of the skin marked by increased ability to form reagin (IgE), with increased susceptibility to allergic rhinitis and asthma, and hereditary disposition to a lowered threshold for pruritus. It is manifested by lichenification, excoriation, and crusting, mainly on the flexural surfaces of the elbow and knee. In infants it is known as infantile eczema. [Definition Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Atrial Fibrillationⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50466

A disorder characterized by an electrocardiographic finding of a supraventricular arrhythmia characterized by the replacement of consistent P waves by rapid oscillations or fibrillatory waves that vary in size, shape and timing and are accompanied by an irregular ventricular response. (CDISC) [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Atrial Flutter*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C51224

A disorder characterized by an electrocardiographic finding of an organized, regular atrial rhythm with atrial rate of 240-340 beats per minute. Multiple P waves typically appear in the inferior leads in a saw tooth-like pattern between the QRS complexes. (CDISC) [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Atrovastatin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C10AA05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Aunt*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96569

A female relative who is a sibling of either of the biological parents, and who share a common ancestor. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

*Autoimmune Disease*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2889

A disorder resulting from loss of function or tissue destruction of an organ or multiple organs, arising from humoral or cellular immune responses of the individual to his own tissue constituents. It may be systemic (e.g., systemic lupus erythematosus), or organ specific, (e.g., thyroiditis). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Autoimmune Nervous System Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C99383

A disorder characterized by the degeneration of the nervous system due to autoimmunity. Representative examples include multiple sclerosis, Guillain-Barre syndrome, and myasthenia gravis. [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

Autoimmune Pancytopeniaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/183005>

The autoimmune inability of the bone marrow to produce hematopoietic elements. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Azathioprineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AX01>

belongs to

concept ^c

Pharmacologic Substance ^c

B-Cell Non-Hodgkin Lymphomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3457

The most common type of non-Hodgkin lymphoma. It includes the most frequently seen morphologic variants which are: diffuse large B-cell lymphoma, follicular lymphoma, small lymphocytic lymphoma and marginal zone B-cell lymphoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Baclofenⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M03BX01>

belongs to

concept ^c

Pharmacologic Substance ^c

Bacterial Pneumoniaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26704

Acute infection of the lung parenchyma caused by bacteria (e.g., *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Chlamydia pneumoniae*, *Mycoplasma pneumoniae*, and *Legionella pneumophila*). Signs and symptoms include productive cough, fever, chills, shortness of breath, and chest pain. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Baker Cyst*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34935

Swelling and protrusion of the gastrocnemius-semimembranosus bursa due to an accumulation of synovial fluid. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Barbexaclone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AA04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Barnidipine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C08CA12>

belongs to

concept ^c

Pharmacologic Substance ^c

*Basal Cell Carcinoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C156767

A carcinoma involving the basal cells. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*BCG Vaccine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03AX03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Behavioral Impairment*ⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/BehavioralImpairment>

Diminished psychological function.

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Bell's Palsyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/193093009>

A syndrome characterized by the acute onset of unilateral FACIAL PARALYSIS which progresses over a 2-5 day period. Weakness of the orbicularis oculi muscle and resulting incomplete eye closure may be associated with corneal injury. Pain behind the ear often precedes the onset of paralysis. This condition may be associated with HERPESVIRUS 1, HUMAN infection of the facial nerve. (Adams et al., Principles of Neurology, 6th ed, p1376) [Defintion Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Benign Prostatic Hyperplasiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2897

A non-cancerous nodular enlargement of the prostate gland. It is characterized by the presence of epithelial cell nodules, and stromal nodules containing fibrous and smooth muscle elements. It is the most common urologic disorder in men, causing blockage of urine flow. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Beta Blocking Agentsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C07>

belongs to

concept ^c

Pharmacologic Substance ^c

Betahistineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07CA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Betamethasoneⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB01>

belongs to

concept ^c

Pharmacologic Substance ^c

BG-12ⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/N07XX09>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Bile and Liver Therapy Drugs*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Bile Therapy*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A05A>

belongs to

concept ^c

Pharmacologic Substance ^c

*Biotin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A11HA05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Bipolar Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34423

A disorder of the brain that causes unusual shifts in mood, energy, activity levels and the ability to carry out day-to-day tasks. Often these moods range and shift from periods of elation and energized behavior to those of hopelessness and depression. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Bisoprolol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C07AB07>

belongs to

concept ^c

Pharmacologic Substance ^c

*Black (ethnic group)*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/315240009>

A person having origins in the original peoples of sub-Saharan Africa or the Caribbean.

BRAINTEASER – D9.3

belongs to

concept ^c

Group (social concept) ^c

*Black African*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/18167009>

Denotes a person with ancestral origins are in any of the countries of Africa. [Definition Source: NCI]

belongs to

concept ^c

*Blepharitis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C112183

Inflammation of the eyelids near the eyelashes. [Definition Source: NCI][attribution: NICHDI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Blepharospasm*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C118723

Involuntary twitching of the eyelid. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Blood and Blood Forming Organs*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B>

belongs to

concept ^c

Pharmacologic Substance ^c

*Blood Substitutes and Perfusion Solutions*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Bone Marrow*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12431

BRAINTEASER – D9.3

The tissue occupying the spaces of bone. It consists of blood vessel sinuses and a network of hematopoietic cells which give rise to the red cells, white cells, and megakaryocytes. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Botulinum Toxin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M03AX01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Bowel Obstruction*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C9175

Blockage of the normal flow of the intestinal contents within the bowel. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Bradycardia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C37920

An abnormally slow heart rate. Thresholds for different age, gender, and patient populations exist. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Brain*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12439

An organ composed of grey and white matter containing billions of neurons that is the center for intelligence and reasoning. It is protected by the bony cranium. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Brain Stem*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12441

BRAINTEASER – D9.3

Three sections, the midbrain, pons and medulla oblongata, that are located at the base of the brain. The brain stem regulates the central nervous system, and is vital as a conduit for motor and sensory innervations. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Breast Carcinoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4872

A carcinoma arising from the breast, most commonly the terminal ductal-lobular unit. It is the most common malignant tumor in females. Risk factors include country of birth, family history, menstrual and reproductive history, fibrocystic disease and epithelial hyperplasia, exogenous estrogens, contraceptive agents, and ionizing radiation. The vast majority of breast carcinomas are adenocarcinomas (ductal or lobular). Breast carcinoma spreads by direct invasion, by the lymphatic route, and by the blood vessel route. The most common site of lymph node involvement is the axilla. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Breast Ductal Carcinoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4017

A breast carcinoma arising from the ducts. While ductal carcinomas can arise at other sites, this term is universally used to refer to carcinomas of the breast. Ductal carcinomas account for about two thirds of all breast cancers. Two types of ductal carcinomas have been described: ductal carcinoma in situ (DCIS) and invasive breast carcinoma of no special type. The latter often spreads to the axillary lymph nodes and other anatomic sites. The two forms of ductal carcinoma often coexist. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Bromazepam*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05BA08>

belongs to

concept ^c

Pharmacologic Substance ^c

*Brother*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C111201

BRAINTEASER – D9.3

A male who shares with his sibling the genetic makeup inherited from both of the biological parents. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

*Brotizolam*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05CD09>

belongs to

concept ^c

Pharmacologic Substance ^c

*Brown-Sequard Syndrome*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84601

A disorder caused by a spinal injury leading to an incomplete spinal lesion. Patients develop paralysis, ataxia and loss of sensation. Causes include spinal cord tumors, spinal traumas, ischemia, and inflammatory processes affecting the spine. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Building and related trades workers, excluding electricians*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C71>

Building and related trades workers construct, maintain and repair buildings; erect and repair foundations, walls and structures of brick, stone and similar materials; shape and finish stone for building and other purposes. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of the work organization, the materials and tools used, and the nature and purpose of the final product. Tasks performed by workers in this sub-major group usually include: constructing, maintaining and repairing buildings and other structures, using traditional and/or modern building techniques; constructing and repairing foundations, walls and structures of brick, stone and similar materials; breaking quarried stone into slabs or blocks; cutting, shaping and finishing stone for building, ornamental, monumental and other purposes; erecting reinforced concrete frameworks and structures as well as finishing and repairing cement surfaces; cutting, shaping, assembling and maintaining wooden structures and fittings; performing miscellaneous construction and building maintenance tasks. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 711 Building Frame and Related Trades Workers 712 Building Finishers and Related Trades Workers 713 Painters, Building Structure Cleaners and Related Trades Workers

BRAINTEASER – D9.3

belongs to

concept ^c

Occupation ^c

Business and administration associate professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C33>

Business and administration associate professionals perform mostly technical tasks connected with the practical application of knowledge relating to financial accounting and transaction matters, mathematical calculations, human resource development, selling and buying financial instruments, specialized secretarial tasks, and enforcing or applying government rules. Also included are workers who provide business services such as customs clearance, conference planning, job placements, buying and selling real estate or bulk commodities, and serving as agents for performers such as athletes and artists. Competent performance in most occupations in this sub-major group requires skills at the third ISCO skill level. Tasks performed by workers in this sub-major group usually include recording and transmitting buy and sell orders for securities, stocks, bonds or other financial instruments and for foreign exchange for future or immediate delivery; submitting credit and loan applications to management with recommendations for approval or rejection; approving or rejecting applications within authorized limits ensuring that credit standards of the institution are respected; maintaining complete records of all financial transactions of an undertaking according to general bookkeeping principles, with guidance from accountants; assisting in planning and performing mathematical, statistical, actuarial, accounting and related calculations; selling and buying financial instruments. Occupations in this sub-major group are classified into the following minor groups: 331 Financial and Mathematical Associate Professionals 332 Sales and Purchasing Agents and Brokers 333 Business Services Agents 334 Administrative and Specialized Secretaries 335 Government Regulatory Associate Professionals

belongs to

concept ^c

Occupation ^c

Business and administration professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C24>

Business and administration professionals perform analytical, conceptual and practical tasks to provide services in financial matters, human resource development, public relations, marketing and sales in the technical, medical, information and communications technology areas; and conduct reviews of organizational structures, methods and systems as well as quantitative analyses of information affecting investment programmes. Competent performance in most occupations in this sub-major group requires skills at the fourth ISCO skill level. Tasks performed by workers in this sub-major group usually include: collecting, analysing and interpreting information on the financial viability, cost structures and trading effectiveness of organizations; conducting audits, preparing financial statements and controlling treasury systems for organizations; developing and reviewing financial plans and strategies, executing buy and sell orders, and negotiating the purchase and sale of commodities; developing, implementing and evaluating staff recruitment, training and development

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programmes; researching, developing and implementing marketing and public relations campaigns; studying and developing methods and policies to improve and promote government and business operations and effectiveness; acquiring and updating knowledge of employers' and competitors' goods and services, and of market conditions; assessing customers' needs and explaining and demonstrating goods and services to them. Occupations in this sub-major group are classified into the following minor group: 241 Finance Professionals 242 Administration Professionals 243 Sales, Marketing and Public Relations Professionals

belongs to

concept ^c

Occupation ^c

*C9orf72 Gene*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C101398

This gene may play a role in cell death. [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

*Cabergoline*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N04BC06>

belongs to

concept ^c

Pharmacologic Substance ^c

*Calcifediol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A11CC06>

belongs to

concept ^c

Pharmacologic Substance ^c

*Calcium Channel Blockers*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C08>

belongs to

concept ^c

Pharmacologic Substance ^c

*Calcium Folate*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V03AF03>

belongs to

concept ^c

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Pharmacologic Substance^c*Calcium Homeostasisⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/H05>

belongs to

concept^cPharmacologic Substance^c*Calcium, Combinations with Vitamin D and/or Other Drugsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/A12AX>

belongs to

concept^cPharmacologic Substance^c*Candesartan and Diureticsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/C09DA06>

belongs to

concept^cPharmacologic Substance^c*Cannabidiolⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/N03AX24>

belongs to

concept^cPharmacologic Substance^c*Cannabinoidsⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/N02BG10>

belongs to

concept^cPharmacologic Substance^c*Carbamazepineⁿⁱ*IRI: <http://purl.bioontology.org/ontology/ATC/N03AF01>

belongs to

concept^cPharmacologic Substance^c*Carcinomaⁿⁱ*IRI: http://purl.obolibrary.org/obo/NCIT_C2916

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A malignant tumor arising from epithelial cells. Carcinomas that arise from glandular epithelium are called adenocarcinomas, those that arise from squamous epithelium are called squamous cell carcinomas, and those that arise from transitional epithelium are called transitional cell carcinomas. Morphologically, the malignant epithelial cells may display abnormal mitotic figures, anaplasia, and necrosis. Carcinomas are graded by the degree of cellular differentiation as well, moderately, or poorly differentiated. Carcinomas invade the surrounding tissues and tend to metastasize to other anatomic sites. Lung carcinoma, skin carcinoma, breast carcinoma, colon carcinoma, and prostate carcinoma are the most frequently seen carcinomas. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Cardiac Therapy*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Cardiovascular Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2931

A non-neoplastic or neoplastic disorder affecting the heart or the vessels (arteries, veins and lymph vessels). Representative examples of non-neoplastic cardiovascular disorders are endocarditis and hypertension. Representative examples of neoplastic cardiovascular disorders are endocardial myxoma and angiosarcoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Cardiovascular System*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C>

belongs to

concept ^c

Pharmacologic Substance ^c

*Cardioversion*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/250980009>

The conversion of one cardiac rhythm or electrical pattern to another, almost always from an abnormal to a normal one, by pharmacologic means using medications or by electrical cardioversion using a defibrillator. [Definition Source: NCI]

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belongs to

concept ^c

Surgical Procedure Type ^c

*Caucasian*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/14045001>

A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. (OMB) [Definition Source: NCI]

belongs to

concept ^c

Group (social concept) ^c

*Cavernous Hemangioma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3086

A hemangioma characterized by the presence of cavernous vascular spaces. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Ceftriaxone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J01DD04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Celiac Disease*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26714

An autoimmune genetic disorder with an unknown pattern of inheritance that primarily affects the digestive tract. It is caused by intolerance to dietary gluten. Consumption of gluten protein triggers an immune response which damages small intestinal villi and prevents adequate absorption of nutrients. Clinical signs include abdominal cramping, diarrhea or constipation and weight loss. If untreated, the clinical course may progress to malnutrition, anemia, osteoporosis and an increased risk of intestinal malignancies. However, the prognosis is favorable with successful avoidance of gluten in the diet. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Central Nervous System Degenerative Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4802

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A disorder of the central nervous system characterized by gradual and progressive loss of neural tissue and neurologic function. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Cerebellumⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12445

The portion of the brain located at the base of the skull that is responsible for balance, equilibrium and movement. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Cervical Carcinomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C9039

A carcinoma arising from either the exocervical squamous epithelium or the endocervical glandular epithelium. The major histologic types of cervical carcinoma are squamous cell carcinoma and adenocarcinoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Cervical Intraepithelial Neoplasia Grade 2/3ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C94676

A neoplastic process in the cervix characterized by morphologic features of both moderate and severe intraepithelial neoplasia. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Cervical Spinal Cordⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12892

The portion of the spinal cord located in the cervical region. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Cervical Spineⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C69313

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The set of vertebrae immediately caudal to the skull. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Cetirizineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R06AE07>

belongs to

concept ^c

Pharmacologic Substance ^c

Chalazionⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26717

An eyelid cyst caused by the blockage of a meibomian gland. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Chicken Poxⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C97132

A contagious childhood disorder caused by the varicella zoster virus. It is transmitted via respiratory secretions and contact with chickenpox blister contents. It presents with a vesicular skin rash, usually associated with fever, headache, and myalgias. The pruritic fluid-filled vesicles occur 10-21 days after exposure and last for 3-4 days. An additional 3-4 days of malaise follows before the affected individual feels better. An individual is contagious 1-2 days prior to the appearance of the blisters until all blisters are crusted over. Generally, healthy individuals recover without complications. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Chief executives, senior officials and legislatorsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C11>

Chief executives, senior officials and legislators formulate and review the policies, and plan, direct, coordinate and evaluate the overall activities of enterprises, governments and other organizations with the support of other managers. Competent performance in most occupations in this sub-major group requires skills at the fourth ISCO skill level. Tasks performed by workers in this sub-major group usually include: presiding over or participating in the proceedings of legislative bodies, boards of directors and committees; formulating and advising on the policy budgets, laws and regulations of enterprises, governments and other organizations; establishing objectives for enterprises, government departments or agencies and other organizations; formulating

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or approving and evaluating programmes and policies and procedures for their implementation; ensuring appropriate systems and procedures are developed and implemented to provide budgetary control; authorizing material, human and financial resources to implement policies and programmes; monitoring and evaluating performance of the organization or enterprise; selecting or approving the selection of senior staff; performing ceremonial duties and representing the enterprise, government, organization or community at official occasions and in meetings, negotiations, conventions and public hearings. Occupations in this sub-major group are classified into the following minor groups: 111 Legislators and Senior Officials 112 Managing Directors and Chief Executives

belongs to

concept ^c

Occupation ^c

Chlorphenamineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R06AB04>

belongs to

concept ^c

Pharmacologic Substance ^c

Cholecystectomyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/38102005>

Surgical removal of the gallbladder. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

Cholelithiasisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C122822

The presence of calculi in the gallbladder. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Chronic Atrophic Gastritisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C7405

Atrophic gastritis that is persistent and long-standing. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

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Chronic Lung Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C98541

A persistent non-neoplastic disorder of the lungs. Representative examples include: chronic obstructive pulmonary disease, chronic bronchitis, emphysema, pulmonary fibrosis, pneumoconiosis, asbestosis, atelectasis, radiation induced pneumonitis, and radiation fibrosis. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Chronic Obstructive Pulmonary Diseaseⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3199

A chronic and progressive lung disorder characterized by the loss of elasticity of the bronchial tree and the air sacs, destruction of the air sacs wall, thickening of the bronchial wall, and mucous accumulation in the bronchial tree. The pathologic changes result in the disruption of the air flow in the bronchial airways. Signs and symptoms include shortness of breath, wheezing, productive cough, and chest tightness. The two main types of chronic obstructive pulmonary disease are chronic obstructive bronchitis and emphysema. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Cinnarizineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07CA02>

belongs to

concept ^c

Pharmacologic Substance ^c

Cinnarizine, Combinationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07CA52>

belongs to

concept ^c

Pharmacologic Substance ^c

Citalopramⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AB04>

belongs to

concept ^c

Pharmacologic Substance ^c

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Cladribineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L01BB04>

belongs to

concept ^c

Pharmacologic Substance ^c

Cladribineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AA40>

belongs to

concept ^c

Pharmacologic Substance ^c

Cleaners and helpersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C91>

Cleaners and helpers perform various tasks in private households, hotels, offices, hospitals and other establishments, as well as in aircraft, trains, coaches, trams and similar vehicles, in order to keep the interiors and fixtures clean, and launder and press garments and textiles by hand. Most occupations in this sub-major group require skills at the first ISCO skill level. Tasks performed by workers in this sub-major group usually include: sweeping or vacuum cleaning; washing and polishing floors, furniture and other objects; taking care of linen and bedmaking; helping with preparation of meals and cleaning in kitchens; washing and cleaning cars and windows; pressing or laundering garments and textiles by hand. Occupations in this sub-major group are classified into the following minor groups: 911 Domestic, Hotel and Office Cleaners and Helpers 912 Vehicle, Window, Laundry and Other Hand Cleaning Workers

belongs to

concept ^c

Occupation ^c

Cleft Palateⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C87069

A congenital abnormality consisting of a fissure in the midline of the hard and/or soft palate; it is the result of the failure of the two sides of the palate to fuse during embryonic development. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Clerical support workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C4>

Clerical support workers record, organize, store, compute and retrieve information, and perform a number of clerical duties in connection with money-handling operations,

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travel arrangements, requests for information, and appointments. Competent performance in most occupations in this major group requires skills at the second ISCO skill level. Tasks performed by clerical support workers usually include: stenography, typing, and operating word processors and other office machines; entering data into computers; carrying out secretarial duties; recording and computing numerical data; keeping records relating to stocks, production and transport; keeping records relating to passenger and freight transport; carrying out clerical duties in libraries; filing documents; carrying out duties in connection with mail services; preparing and checking material for printing; assisting persons who cannot read or write with correspondence; performing money-handling operations; dealing with travel arrangements; supplying information requested by clients and making appointments; operating a telephone switchboard. Supervision of other workers may be included. Occupations in this major group are classified into the following sub-major groups: 41 General and Keyboard Clerks 42 Customer Services Clerks 43 Numerical and Material Recording Clerks 44 Other Clerical Support Workers

belongs to

concept ^c

Occupation ^c

*Clobazam*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05BA09>

belongs to

concept ^c

Pharmacologic Substance ^c

*Clonazepam*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AE01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Clopidogrel*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01AC04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Closed Dislocation of Shoulder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34486

A closed dislocation of the shoulder [Definition Source: NCI]

belongs to

concept ^c

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Disease, Disorder or Finding ^c

Closed Fracture of Ribⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35350

A traumatic break in one of the bones in the rib cage that does not involve a break in the adjacent skin. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Closed Fracture of Tibiaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/447139008>

A closed fracture of the tibia.

belongs to

concept ^c

Disease, Disorder or Finding ^c

Codeine, Combinations excl. Psycholepticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N02AA59>

belongs to

concept ^c

Pharmacologic Substance ^c

Cognitive Impairmentⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C116921

Diminished mental function. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Cold Soreⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34695

A lesion caused by type 1 or type 2 herpes simplex virus, involving the oralfacial region. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Colecalciferolⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A11CC05>

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belongs to

concept ^c

Pharmacologic Substance ^c

*Colon Adenocarcinoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4349

An adenocarcinoma arising from the colon. It is more frequently seen in populations with a Western type diet and in patients with a history of chronic inflammatory bowel disease. Signs and symptoms include intestinal bleeding, anemia, and change in bowel habits. According to the degree of cellular differentiation, colonic adenocarcinomas are divided into well, moderately, and poorly differentiated. Histologic variants include mucinous adenocarcinoma, signet ring cell carcinoma, medullary carcinoma, serrated adenocarcinoma, cribriform comedo-type adenocarcinoma, and micropapillary adenocarcinoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Colon Dysplasia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4847

A morphologic finding indicating the presence of dysplastic glandular epithelial cells in the colonic mucosa. There is no evidence of invasion. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Colorectal Carcinoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2955

A malignant epithelial neoplasm that arises from the colon or rectum and invades through the muscularis mucosa into the submucosa. The vast majority are adenocarcinomas. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Commissioned armed forces officers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C01>

Commissioned armed forces officers provide leadership and management to organizational units in the armed forces and/or perform similar tasks to those performed in a variety of civilian occupations outside the armed forces. This group includes all members of the armed forces holding the rank of second lieutenant (or equivalent) or higher. Competent performance in most occupations in this sub-major group requires skills at the fourth ISCO skill level. Occupations in this sub-major group

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are classified into the following minor group: 011 Commissioned Armed Forces Officers
Excluded from this group are: - jobs held by persons in civilian employment of government establishments concerned with defence issues; - police (other than military police); - customs inspectors and members of border or other armed civilian services.

belongs to

concept ^c

Occupation ^c

*Common Bile Duct Stone*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34499

The presence of one or more stones in the common bile duct. They are composed either of cholesterol or, less commonly, calcium salts and bilirubin. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Cone Biopsy*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/I10469002>

The excision of a cone of tissue, especially of the CERVIX UTERI. [Definition Source: MSH]

belongs to

concept ^c

Surgical Procedure Type ^c

*Congenital Adrenal Hyperplasia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34360

A genetic disorder characterized by defects in the synthesis of cortisol and/or aldosterone, resulting in hyperplasia of the adrenal cortical cells. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Conization*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C15402

Surgical removal of a cone-shaped portion of tissue from the uterine cervix. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

*Contrast Media*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V08>

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belongs to

concept ^c

Pharmacologic Substance ^c

Coronary Artery Bypass Graftⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/232717009>

Surgery performed to bypass partially or completely occluded coronary arteries, thereby increasing the blood supply of the heart. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

Corticosteroids for Systemic Useⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02>

belongs to

concept ^c

Pharmacologic Substance ^c

Corticosteroids, Dermatological Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D07>

belongs to

concept ^c

Pharmacologic Substance ^c

Corticotropinⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H01AA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Cortisone Therapy for Relapseⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/CortisoneTherapyForRelapse>

Therapy based on cortisone used for treating relapses.

belongs to

concept ^c

Therapeutic Procedure Type ^c

Cough and Cold Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R05>

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belongs to

concept ^c

Pharmacologic Substance ^c

Cousinⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C71410

A child of your aunt or uncle or their descendents. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

COVID-19 Infectionⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C171133

An acute infection of the respiratory tract that is caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Based on currently available information, SARS-CoV-2 is thought to mainly spread from person to person through respiratory droplets. Typically, there is a two- to 14-day incubation period and infected persons can present with no symptoms or mild to severe fever, dry cough, fatigue, and difficulty breathing. Dysgeusia, anosmia, and gastrointestinal and flu-like symptoms have also been reported. Older adults and persons of any age who have serious underlying medical conditions may be of higher risk for severe illness, including secondary infections, respiratory failure, and multi-organ dysfunction. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Covid-19 Vaccinesⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/J07BX03>

belongs to

concept ^c

Pharmacologic Substance ^c

Craft and related trades workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C7>

Craft and related trades workers apply specific technical and practical knowledge and skills to construct and maintain buildings; form metal; erect metal structures; set machine tools or make, fit, maintain and repair machinery, equipment or tools; carry out printing work; and produce or process foodstuffs, textiles, wooden, metal and other articles, including handicraft goods. Competent performance in most occupations in this major group requires skills at the second ISCO skill level. The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of all stages of the production process,

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the materials and tools used, and the nature and purpose of the final product. Tasks performed by craft and related trades workers usually include: constructing, maintaining and repairing buildings and other structures; casting, welding and shaping metal; installing and erecting heavy metal structures, tackle and related equipment; making machinery, tools, equipment and other metal articles; setting for operators, or setting and operating various machine tools; fitting, maintaining and repairing industrial machinery, engines, vehicles, electrical and electronic instruments and other equipment; making precision instruments, jewellery, household and other precious metal articles, pottery, glass and related products; producing handicrafts; executing printing work; producing and processing foodstuffs and various articles made of wood, textiles, leather and related materials. Supervision of other workers may be included. Self-employed craft and related trades workers, who operate their own businesses either independently or with assistance from a small number of others, may also perform a range of tasks associated with management of the business, account and record keeping and client service, although such tasks would not normally comprise the major component of the work. Occupations in this major group are classified into the following sub-major groups: 71 Building and Related Trades Workers (excluding electricians) 72 Metal, Machinery and Related Trades Workers 73 Handicraft and Printing Workers 74 Electrical and Electronics Trades Workers 75 Food Processing, Woodworking, Garment and Other Craft and Related Trades Workers

belongs to

concept ^c

Occupation ^c

Cranial Nerve VII Palsyⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26769

Partial or complete paralysis of the facial muscles of one side of a person's face. It is caused by damage to the seventh cranial nerve. It is usually temporary but it may recur. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Customer services clerksⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C42>

Customer services clerks deal with clients in connection with money-handling operations, travel arrangements, requests for information, making appointments, operating telephone switchboards, and interviewing for surveys or to complete applications for eligibility for services. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: performing money-handling operations in banks, post offices, betting and gambling establishments, or dealing with travel arrangements; supplying information requested by clients and making appointments; operating telephone switchboards; greeting and receiving visitors; interviewing survey respondents; interviewing applicants for services. Occupations in

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this sub-major group are classified into the following minor groups: 421 Tellers, Money Collectors and Related Clerks 422 Client Information Workers

belongs to

concept ^c

Occupation ^c

*Cutaneous Melanoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3510

A primary melanoma arising from atypical melanocytes in the skin. Precursor lesions include acquired and congenital melanocytic nevi, and dysplastic nevi. Several histologic variants have been recognized, including superficial spreading melanoma, acral lentiginous melanoma, nodular melanoma, and lentigo maligna melanoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Cyanocobalamin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B03BA01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Cyclophosphamide*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L01AA01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Cyst*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2978

A sac-like closed membranous structure that may be empty or contain fluid or amorphous material. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Dabigatran Etexilate*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01AE07>

belongs to

concept ^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

Daclizumabⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AC01>

belongs to

concept ^c

Pharmacologic Substance ^c

Dantroleneⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M03CA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Daughterⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C25165

A female human offspring. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

DCTN1 Geneⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C122875

This gene is involved in the modulation of retrograde transport of cytoplasmic organelles and vesicles. [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

Deep Vein Thrombosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C49343

A blood clot in a deep vein, predominantly in the lower extremity, but may include the pelvis or upper extremity. [Definition Source: NCI][attribution: NICHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Deflazacortⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB13>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Dementia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4786

Loss of intellectual abilities interfering with an individual's social and occupational functions. Causes include Alzheimer's disease, brain injuries, brain tumors, and vascular disorders. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Denosumab*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M05BX04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Depression*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2982

A melancholy feeling of sadness and despair. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Dermatologicals*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D>

belongs to

concept ^c

Pharmacologic Substance ^c

*Desogestrel*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03AC09>

belongs to

concept ^c

Pharmacologic Substance ^c

*Desogestrel and Ethinylestradiol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03AA09>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Desvenlafaxine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AX23>

belongs to

concept ^c

Pharmacologic Substance ^c

*Dexamethasone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Diabetes Mellitus*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2985

A metabolic disorder characterized by abnormally high blood sugar levels due to diminished production of insulin or insulin resistance/desensitization. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Diabetic Ketoacidosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50530

The metabolic condition resulted from uncontrolled diabetes mellitus, in which the shift of acid-base status of the body toward the acid side because of loss of base or retention of acids other than carbonic acid is accompanied by the accumulation of ketone bodies in body tissues and fluids. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Diagnostic Agents*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V04>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Diagnostic Radiopharmaceuticalsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V09>

belongs to

concept ^c

Pharmacologic Substance ^c

Diazepamⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05BA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Dienogest and Estradiolⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03AB08>

belongs to

concept ^c

Pharmacologic Substance ^c

Dietary Supplementⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C1505

Oral preparations containing dietary ingredient(s) intended to supplement the diet. Dietary ingredients include vitamins, minerals, herbs, amino acids, extracts and metabolites. [Definition Source: NCI]

belongs to

concept ^c

Pharmacologic Substance ^c

Digestives, incl. Enzymesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A09>

belongs to

concept ^c

Pharmacologic Substance ^c

Dimethyl Fumarateⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AX07>

belongs to

concept ^c

Pharmacologic Substance ^c

Diphtheria Vaccinesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J07AF>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Discectomy*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C21009

Surgical excision of an intervertebral disc. Often performed for pain relief. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

*Disease or Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2991

Any abnormal condition of the body or mind that causes discomfort, dysfunction, or distress to the person affected or those in contact with the person. The term is often used broadly to include injuries, disabilities, syndromes, symptoms, deviant behaviors, and atypical variations of structure and function. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Diuretics*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Dog Bite*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C122419

A wound received from the teeth of a dog. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Domperidone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A03FA03>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Drainage of Bartholin's Abscessⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/236825001>

Drainage of abscess of Bartholin's gland.

belongs to

concept ^c

Surgical Procedure Type ^c

Drivers and mobile plant operatorsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C83>

Drivers and mobile plant operators drive and tend trains and motor vehicles, or drive, operate and monitor industrial and agricultural machinery and equipment, or execute deck duties on board ship and other water-borne craft. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: driving and tending trains and motor vehicles; driving, operating and monitoring mobile industrial and agricultural machinery and equipment; carrying out deck duties on board ship and other water-borne craft. Occupations in this sub-major group are classified into the following minor groups: 831 Locomotive Engine Drivers and Related Workers 832 Car, Van and Motorcycle Drivers 833 Heavy Truck and Bus Drivers 834 Mobile Plant Operators 835 Ships' Deck Crews and Related Workers

belongs to

concept ^c

Occupation ^c

Drospirenone and Ethinylestradiolⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03AA12>

belongs to

concept ^c

Pharmacologic Substance ^c

Drug Hypersensitivity AEⁿⁱ

IRI: http://purl.obolibrary.org/obo/OAE_0000890

A hypersensitivity AE that has an outcome of allergic reactions to certain drugs.
[Definition Source: OAE]

belongs to

concept ^c

Adverse Drug Reaction ^c

Drug Hypersensitivity Syndromeⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C112208

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A potentially life-threatening hypersensitivity reaction to a pharmacologic substance that is characterized by rash, lymphadenopathy, fever, hematologic abnormalities and involvement of one or more internal organs. [Definition Source: NCI][attribution: NICHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Drug Intolerance AEⁿⁱ

IRI: http://purl.obolibrary.org/obo/OAE_0000891

A drug AE that has an outcome of lower threshold to the normal pharmacologic action of a drug. [Definition Source: OAE]

belongs to

concept ^c

Adverse Drug Reaction ^c

Drugs for Acid Related Disordersⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A02>

belongs to

concept ^c

Pharmacologic Substance ^c

Drugs for Bile Therapy and Lipotropics in Combinationⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A05C>

belongs to

concept ^c

Pharmacologic Substance ^c

Drugs for Constipationⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A06>

belongs to

concept ^c

Pharmacologic Substance ^c

Drugs for Functional Gastrointestinal Disordersⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A03>

belongs to

concept ^c

Pharmacologic Substance ^c

Drugs for MS Symptomatic Therapyⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/DrugsForMSSymptomaticTherapy>

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Symptomatic therapy for Multiple Sclerosis (MS).

belongs to

concept ^c

Therapeutic Procedure Type ^c

Drugs for MS Therapy Side Effectsⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/DrugsForMSTherapySideEffects>

Therapy for managing side effects of MS therapy.

belongs to

concept ^c

Therapeutic Procedure Type ^c

Drugs for Obstructive Airway Diseasesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R03>

belongs to

concept ^c

Pharmacologic Substance ^c

Drugs for Other Diseasesⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/DrugsForOtherDiseases>

Any drugs used to treat other diseases.

belongs to

concept ^c

Therapeutic Procedure Type ^c

Drugs for Treatment of Bone Diseasesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M05>

belongs to

concept ^c

Pharmacologic Substance ^c

Drugs Used in Diabetesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10>

belongs to

concept ^c

Pharmacologic Substance ^c

Duloxetineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AX21>

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belongs to

concept ^c

Pharmacologic Substance ^c

*Dustasteride*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04CB02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Dyslipidemia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C80385

A lipoprotein metabolism disorder characterized by decreased levels of high-density lipoproteins, or elevated levels of plasma cholesterol, low-density lipoproteins and/or triglycerides. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Ectoparasiticides, incl. Scabicides, Insecticides and Repellents*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/P03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Ecunerv*ⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/ecunerv>

Ecunerv is recommended to help maintain normal functions of the nervous system under abnormal conditions such as neuropathy (due to mechanical, metabolic, toxic, ischemic, optical, alcoholic, diabetic or post-herpetic causes), canicular syndrome, radiculopathy. B-vitamins (B1, B6 and B12) work in synergy with magnesium and help maintain normal functions of the nervous system. Vitamin E helps protect cells from oxidative stress. [Definition Source: <https://www.ecupharma.it/en/ecunerv> - visited on November 28th, 2022]

belongs to

concept ^c

Pharmacologic Substance ^c

*Eczema*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3001

A form of dermatitis characterized by red, itchy, scaly, or crusty patches that can be chronic or intermittent. [Definition Source: NCI][attribution: NICHD]

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belongs to

concept ^c

Disease, Disorder or Finding ^c

Electrical and electronic trades workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C74>

Electrical and electronics trades workers install, fit and maintain electrical wiring systems and machinery and other electrical apparatus, electrical transmission and supply lines and cables, and electronic and telecommunications equipment and systems. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of the work organization, materials and tools used, and the nature and purpose of the final product. Tasks performed by workers in this sub-major group usually include: installing, maintaining, fitting and adjusting electrical and electronic wiring systems, machinery and equipment; examining blueprints, wiring diagrams and specifications to determine sequences and methods of operation; inspecting and testing electrical and electronic systems, equipment, cables and machinery to identify hazards, defects and the need for adjustment or repair; installing, maintaining and repairing electrical and telecommunications transmission lines; joining electrical, telecommunications and data cables; maintaining, troubleshooting, fitting, adjusting, testing and repairing electronic equipment such as commercial and office machines, electronic instruments and control systems, computers, and telecommunications and data transmission equipment. Occupations in this sub-major group are classified into the following minor groups: 741 Electrical Equipment Installers and Repairers 742 Electronics and Telecommunications Installers and Repairers

belongs to

concept ^c

Occupation ^c

Elementary occupationsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C9>

Elementary occupations involve the performance of simple and routine tasks which may require the use of hand-held tools and considerable physical effort. Most occupations in this major group require skills at the first ISCO skill level. Tasks performed by workers in elementary occupations usually include: cleaning, restocking supplies and performing basic maintenance in apartments, houses, kitchens, hotels, offices and other buildings; washing cars and windows; helping in kitchens and performing simple tasks in food preparation; delivering messages or goods; carrying luggage and handling baggage and freight; stocking vending-machines or reading and emptying meters; collecting and sorting refuse; sweeping streets and similar places; performing various simple farming, fishing, hunting or trapping tasks; performing simple tasks connected with mining, construction and manufacturing including product-sorting; packing and unpacking produce by hand, and filling shelves; providing various street services; pedalling or hand-guiding vehicles to transport passengers and goods; driving animal-drawn vehicles or machinery. Supervision of other workers may be included.

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Occupations in this major group are classified into the following sub-major groups: 91 Cleaners and Helpers 92 Agricultural, Forestry and Fishery Labourers 93 Labourers in Mining, Construction, Manufacturing and Transport 94 Food Preparation Assistants 95 Street and Related Sales and Services Workers 96 Refuse Workers and Other Elementary Workers

belongs to

concept ^c

Occupation ^c

Emergency Tracheostomyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/55622001>

Surgical formation of an opening into the trachea through the neck, or the opening so created. [Definition Source: MSH]

belongs to

concept ^c

Surgical Procedure Type ^c

Emollients and Protectivesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D02>

belongs to

concept ^c

Pharmacologic Substance ^c

Enalaprilⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09AA02>

belongs to

concept ^c

Pharmacologic Substance ^c

Endocrine Therapyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L02>

belongs to

concept ^c

Pharmacologic Substance ^c

Endometriosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3014

The growth of functional endometrial tissue in anatomic sites outside the uterine body. It most often occurs in the pelvic organs. [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

*Epidermal Inclusion Cyst*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3134

The most common type of cutaneous cyst. It results from the proliferation of epidermal cells in a circumscribed space within the dermis. It is usually asymptomatic and presents as a firm, round nodule. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Escitalopram*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AB10>

belongs to

concept ^c

Pharmacologic Substance ^c

*Esomeprazole*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A02BC05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Essential Hypertension*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3478

Hypertension that presents without an identifiable cause. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Etizolam*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05BA19>

belongs to

concept ^c

Pharmacologic Substance ^c

*Etonogestrel*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03AC08>

belongs to

concept ^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

Etoricoxibⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M01AH05>

belongs to

concept ^c

Pharmacologic Substance ^c

Excision of Basal Cell Carcinomaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/300025007>

Surgical removal of basal cell carcinoma.

belongs to

concept ^c

Surgical Procedure Type ^c

Excision of Benign Neoplasmⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/118445002>

Surgical removal of benign neoplasm.

belongs to

concept ^c

Surgical Procedure Type ^c

Excision of Cystⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/428297005>

Surgical removal of a cyst.

belongs to

concept ^c

Surgical Procedure Type ^c

Excision of dermatofibromaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/700074001>

Surgical removal of dermatofibroma.

belongs to

concept ^c

Surgical Procedure Type ^c

Excision of Neoplasmⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/370612006>

The surgical removal of a neoplasm.

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belongs to

concept ^c

Surgical Procedure Type ^c

*Extrapyramidal Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C79593

A movement disorder caused by defects in the basal ganglia. The clinical manifestations include changes in the muscle tone, dyskinesia, and akinesia. Causes include vascular disorders, degenerative disorders, and antipsychotic drugs. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Eye*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12401

The organ of sight or vision. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Ezetimibe*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C10AX09>

belongs to

concept ^c

Pharmacologic Substance ^c

*Fampridine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07XX07>

belongs to

concept ^c

Pharmacologic Substance ^c

*Father*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C25174

A male parent. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

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Favismⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34607

A condition associated with glucose-6-phosphate dehydrogenase deficiency, which is characterized by hemolysis. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Female Reproductive System Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27020

A non-neoplastic or neoplastic disorder that affects the female genital system. Representative examples of non-neoplastic disorders include infection, endometriosis, and adenomyosis. Representative examples of neoplastic disorders include germ cell tumors, carcinoma, lymphoma, and sarcoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Femur Fractureⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26774

A traumatic or pathologic injury to the femur in which the continuity of the femur is broken. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Fever Chillsⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26921

Shivering secondary to a febrile process. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Fibromaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3041

A non-metastasizing neoplasm arising from the fibrous tissue. It is characterized by the presence of spindle-shaped fibroblasts. [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

Fibromyalgiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C87497

A chronic disorder of unknown etiology characterized by pain, stiffness, and tenderness in the muscles of neck, shoulders, back, hips, arms, and legs. Other signs and symptoms include headaches, fatigue, sleep disturbances, and painful menstruation. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Findingⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3367

Clinical, laboratory or molecular evidence, or absence of evidence of disease. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Fingolimodⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AA27>

belongs to

concept ^c

Pharmacologic Substance ^c

First Cousinⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C71411

A child of your aunt or uncle. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

First Degree Relativeⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C21481

Any relative who is one meiosis away from a particular individual in a family; a relative with whom one half of an individual's genes is shared (i.e., parent, sibling, offspring) (from Genetics Home Reference glossary) [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

BRAINTEASER – D9.3

Flu-Like Symptomsⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C78302

Complaints describing a pattern similar to influenza, which may include one or more of the following symptoms: fever, chills, muscle or body aches, cough, sore throat, rhinitis, or fatigue. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Flunarizineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07CA03>

belongs to

concept ^c

Pharmacologic Substance ^c

Fluoxetineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AB03>

belongs to

concept ^c

Pharmacologic Substance ^c

Flurazepamⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05CD01>

belongs to

concept ^c

Pharmacologic Substance ^c

Fluticasoneⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R03BA05>

belongs to

concept ^c

Pharmacologic Substance ^c

Food preparation assistantsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C94>

Food preparation assistants prepare and cook to order a small variety of pre-cooked food or beverages, clear tables, clean kitchen areas and wash dishes. Most occupations in this sub-major group require skills at the first ISCO skill level. Tasks performed by workers in this sub-major group usually include: preparing simple or pre-prepared foods and beverages such as sandwiches, pizzas, fish and chips, salads and coffee; washing, cutting, measuring and mixing foods for cooking; operating cooking equipment such as grills, microwaves and deep-fat fryers; cleaning kitchens, food preparation areas and

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service areas; cleaning cooking and general utensils used in kitchens and restaurants. Occupations in this sub-major group are classified into the following minor group: 941 Food Preparation Assistants

belongs to

concept ^c

Occupation ^c

Food processing, wood working, garment and other craft and related trades workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C75>

Food processing, woodworking, garment and other craft and related trades workers treat and process agricultural and fisheries raw materials into food and other products, and produce and repair goods made of wood, textiles, fur, leather or other materials. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of the work organization, materials and tools used, and the nature and purpose of the final product. Tasks performed by workers in this sub-major group usually include: treating and processing meat, fish, grain, fruit, vegetables and related materials into food stuffs, and tobacco into tobacco products; tasting and grading food products and beverages; treating and processing natural fibres, skins and hides; making and repairing furniture and other goods made of wood; preparing hides, skins and pelts for further use; making and repairing textiles, garments, hats, shoes and related products. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 751 Food Processing and Related Trades Workers 752 Wood Treathers, Cabinet-makers and Related Trades Workers 753 Garment and Related Trades Workers 754 Other Craft and Related Workers

belongs to

concept ^c

Occupation ^c

Formoterol and Budesonideⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R03AK07>

belongs to

concept ^c

Pharmacologic Substance ^c

Frontotemporal Dementiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84719

A syndrome caused by progressive degeneration of the frontal or temporal lobes of the brain. It is manifested with personality changes and deterioration of the language skills. [Definition Source: NCI]

belongs to

concept ^c

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Disease, Disorder or Finding ^c

*Fungal Infection*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3245

An infection caused by a fungus. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Furosemide*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C03CA01>

belongs to

concept ^c

Pharmacologic Substance ^c

*FUS Gene*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C91852

This gene is involved in gene expression, genomic integrity and RNA processing. [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

*Gabapentin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AX12>

belongs to

concept ^c

Pharmacologic Substance ^c

*Gastritis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26780

Inflammation of the stomach. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Gastroenteritis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34632

An inflammatory disorder that affects the upper and lower gastrointestinal tract. Most commonly, this is attributed to viruses; however bacteria, parasites or adverse reactions

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can also be the culprit. Symptoms include acute diarrhea and vomiting. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Gastroesophageal Reflux*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C92560

The backward flow of stomach acid contents into the esophagus (the tube that connects the mouth to the stomach). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Gastroesophageal Reflux Disease*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26781

A chronic disorder characterized by reflux of the gastric and/or duodenal contents into the distal esophagus. It is usually caused by incompetence of the lower esophageal sphincter. Symptoms include heartburn and acid indigestion. It may cause injury to the esophageal mucosa. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Gastroplasty*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/9429009>

Surgical procedures involving the STOMACH and sometimes the lower ESOPHAGUS to correct anatomical defects, or to treat MORBID OBESITY by reducing the size of the stomach. There are several subtypes of bariatric gastroplasty, such as vertical banded gastroplasty, silicone ring vertical gastroplasty, and horizontal banded gastroplasty. [Definition Source: MSH]

belongs to

concept ^c

Surgical Procedure Type ^c

*Gastric Bypass*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/442338001>

Surgical procedure in which the STOMACH is transected high on the body. The resulting small proximal gastric pouch is joined to any parts of the SMALL INTESTINE by an end-to-side SURGICAL ANASTOMOSIS, depending on the amounts of intestinal surface being bypasses. This procedure is used frequently in the treatment of MORBID OBESITY

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by limiting the size of functional STOMACH, food intake, and food absorption. [Definition Source: MSH]

belongs to

concept ^c

Surgical Procedure Type ^c

General and keyboard clerksⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C41>

General and keyboard clerks record, organize, store and retrieve information and perform a wide range of clerical and administrative tasks according to established procedures. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: recording, preparing, sorting, classifying and filing information; sorting, opening and sending mail; preparing reports and correspondence of a routine nature; photocopying and faxing documents; operating personal computers, word processors or typewriters to record, input and process text and data; proofreading and correcting copy; preparing invoices and checking figures. Occupations in this sub-major group are classified into the following minor groups: 411 General Office Clerks 412 Secretaries (general) 413 Keyboard Operators

belongs to

concept ^c

Occupation ^c

General Nutrientsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V06>

belongs to

concept ^c

Pharmacologic Substance ^c

Generalized Epilepsyⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3021

A chronic condition characterised by recurrent generalised seizures. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Genito Urinary System and Sex Hormonesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G>

belongs to

concept ^c

Pharmacologic Substance ^c

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Gianmaria Silvelloniⁿⁱ

IRI: <https://orcid.org/0000-0003-4970-4554>

belongs to

Person ^c

Giorgio Maria Di Nunzioⁿⁱ

IRI: <https://orcid.org/0000-0001-9709-6392>

belongs to

Person ^c

Glatiramer Acetateⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03AX13>

belongs to

concept ^c

Pharmacologic Substance ^c

Glaucomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26782

Increased pressure in the eyeball due to obstruction of the outflow of aqueous humor.
[Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Gliclazideⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10BB09>

belongs to

concept ^c

Pharmacologic Substance ^c

Glimepirideⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10BB12>

belongs to

concept ^c

Pharmacologic Substance ^c

Glucocorticoids, Systemicⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB>

belongs to

concept ^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

Granddaughterⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C71399

A female grandchild. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

Grandfatherⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96573

A male relative who is the biological father of either the biological mother or the biological father. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

Grandmotherⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96574

A female relative who is the biological mother of either the biological mother or the biological father. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

Grandsonⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C71398

A male grandchild. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

Guglielmo Faggioliⁿⁱ

IRI: <https://orcid.org/0000-0002-5070-2049>

belongs to

Person ^c

Gynecological Antiinfectives and Antisepticsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G01>

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belongs to

concept ^c

Pharmacologic Substance ^c

Handicraft and printing workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C73>

Handicraft and printing workers combine artistic and manual skills to design, produce, maintain and decorate precision instruments, musical instruments, jewellery and other precious metals, pottery, porcelain and glassware, items made of wood or textile, leather or related materials, and printed products such as books, newspapers and magazines. They apply traditional and/or recently developed techniques to carve, mould, assemble, weave and decorate various articles; to compose and set type prior to printing; to set up and operate printing presses; to bind and finish printed products; and to prepare stencils and operate screen printing equipment. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. The work may be carried out by hand or involve the use of hand tools and hand-held power tools, and in some cases the set-up and operation of machinery and machine tools. The tasks call for an understanding of the work organization, materials and tools used, and the nature and purpose of the final product. Tasks performed by workers in this sub-major group usually include: making and repairing nautical, meteorological, optical and other precision instruments and equipment; making and repairing musical instruments; making jewellery and precious metalware; making pottery, porcelain ware, ceramics and glassware; painting and decorating various articles; producing handicraft articles in wood or textile, leather and related materials; performing printing or book-binding tasks. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 731 Handicraft Workers 732 Printing Trades Workers

belongs to

concept ^c

Occupation ^c

Hashimoto Thyroiditisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27191

An autoimmune disorder caused by the production of autoantibodies against thyroid tissue. There is progressive destruction of the thyroid follicles leading to hypothyroidism. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Headⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12419

The anterior and superior part of a human bearing the mouth, the brain and sensory organs. [Definition Source: NCI]

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belongs to

concept ^c

Anatomic Site ^c

Head and Neck Approachesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/311801003>

Any approach involving the head and neck region.

belongs to

concept ^c

Surgical Procedure Type ^c

Head and Neck Findingⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C36282

Symptoms, physical examination results, and/or laboratory test results related to the head and neck. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Head and Neck Surgeryⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C15454

Any surgery involving a structure in the head and neck region. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

Head Traumaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34660

A traumatic injury to the head. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Headacheⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34661

Pain in various parts of the head, not confined to the area of distribution of any nerve. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Health associate professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C32>

Health associate professionals perform technical and practical tasks to support diagnosis and treatment of illness, disease, injuries and impairments in humans and animals, and to support implementation of health care, treatment and referral plans usually established by medical, veterinary, nursing and other health professionals. Competent performance in most occupations in this sub-major group requires skills at the third ISCO skill level. Tasks performed by workers in the sub-major group usually include: testing and operating medical imaging equipment and administering radiation therapy; performing clinical tests on specimens of bodily fluids and tissues; preparing medications and other pharmaceutical compounds under the guidance of pharmacists; designing, fitting, servicing and repairing medical and dental devices and appliances; providing nursing and personal care and midwifery support services; using herbal and other therapies based on theories, beliefs and experiences originating in specific cultures. Occupations in this sub-major group are classified into the following minor groups: 321 Medical and Pharmaceutical Technicians 322 Nursing and Midwifery Associate Professionals 323 Traditional and Complementary Medicine Associate Professionals 324 Veterinary Technicians and Assistants 325 Other Health Associate Professionals

belongs to

concept ^c

Occupation ^c

Health professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C22>

Health professionals conduct research,; improve or develop concepts, theories and operational methods; and apply scientific knowledge relating to medicine, nursing, dentistry, veterinary medicine, pharmacy, and promotion of health. Competent performance in most occupations in this sub-major group requires skills at the fourth ISCO skill level. Tasks performed by workers in this sub-major group usually include: conducting research and obtaining scientific knowledge through the study of human and animal disorders and illnesses and ways of treating them; advising on or applying preventive and curative measures, or promoting health; preparing scientific papers and reports. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 221 Medical Doctors 222 Nursing and Midwifery Professionals 223 Traditional and Complementary Medicine Professionals 224 Paramedical Practitioners 225 Veterinarians 226 Other Health Professionals

belongs to

concept ^c

Occupation ^c

Heart Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3079

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A non-neoplastic or neoplastic disorder that affects the heart and/or the pericardium. Representative examples include endocarditis, pericarditis, atrial myxoma, cardiac myeloid sarcoma, and pericardial malignant mesothelioma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Heart Failure*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50577

Inability of the heart to pump blood at an adequate rate to meet tissue metabolic requirements. Clinical symptoms of heart failure include: unusual dyspnea on light exertion, recurrent dyspnea occurring in the supine position, fluid retention or rales, jugular venous distension, pulmonary edema on physical exam, or pulmonary edema on chest x-ray presumed to be cardiac dysfunction. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Hematoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50579

A localized collection of blood, usually clotted, in an organ, space, or tissue, due to a break in the wall of a blood vessel. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Hepatic Toxicity*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C185645

Toxicity that impairs or damages the liver. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Hepatitis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3095

Inflammation of the liver; usually from a viral infection, but sometimes from toxic agents. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

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*Hepatitis A Infection*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3096

Acute inflammation of the liver caused by the hepatitis A virus. It is highly contagious and usually contracted through close contact with an infected individual or their feces, contaminated food or water. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Hepatitis B, Purified Antigen*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J07BC01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Hepatitis C Infection*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3098

A viral infection caused by the hepatitis C virus. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Hereditary Factor XI Deficiency*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84705

A rare inherited bleeding disorder caused by deficiency of coagulation factor XI. It may be asymptomatic or manifest with bleeding. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Hereditary Hemolytic Anemia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34379

A congenital hemolytic anemia caused by defects of the erythrocyte membrane, enzyme deficiencies, or hemoglobinopathies. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Hernia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34685

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The protrusion of part of an organ or fibroadipose tissue through an abnormal opening. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Herpes Simplex Keratitis*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/9389005>

A superficial, epithelial Herpesvirus hominis infection of the cornea, characterized by the presence of small vesicles which may break down and coalesce to form dendritic ulcers (KERATITIS, DENDRITIC). (Dictionary of Visual Science, 3d ed) [Defintion Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Herpes Simplex Virus Infection*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C155871

An infection that is caused by herpes simplex virus. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Herpes Zoster*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C71079

A common dermal and neurologic disorder caused by reactivation of the varicella-zoster virus that has remained dormant within dorsal root ganglia, often for decades, after the patient's initial exposure to the virus in the form of varicella (chickenpox). It is characterized by severe neuralgic pain along the distribution of the affected nerve and crops of clustered vesicles over the area. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*High Grade Cervical Squamous Intraepithelial Neoplasia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C40197

A precancerous neoplastic process that affects the cervical squamous epithelium. It is usually associated with human papillomavirus infection. It is classified as cervical squamous intraepithelial neoplasia 2 when there is nuclear atypia in both the upper and lower epithelial layers, mitotic figures are confined to the basal two-thirds of the epithelium, and maturation is present in the upper half of the epithelium. It is classified as cervical squamous intraepithelial neoplasia 3 when there is nuclear atypia and

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mitotic figures throughout the entire thickness of the epithelium, and maturation is absent or confined to the upper third of the epithelium. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hip Osteoarthritisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34876

Osteoarthritis of the hip joint. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hispanicⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/414408004>

A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race. The term, "Spanish origin" can be used in addition to "Hispanic or Latino". (OMB) [Definition Source: NCI]

belongs to

concept ^c

Group (social concept) ^c

HMG CoA Reductase Inhibitorsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C10AA>

belongs to

concept ^c

Pharmacologic Substance ^c

Hospital General Universitario Gregorio Marañónⁿⁱ

IRI: <https://www.comunidad.madrid/hospital/gregoriomaranon/>

belongs to

Clinics and Hospitals ^c

Hospitality, retail and other services managersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C14>

Hospitality, retail and other services managers plan, organize and direct the operations of establishments which provide accommodation, hospitality, retail and other services. Competent performance in most occupations in this sub-major group requires skills at the third ISCO skill level. Tasks performed by workers in this sub-major group usually include: planning and organizing special functions, sporting, gaming and entertainment activities and the range and mix of products, stock levels and service standards; promoting and selling goods and services; observing liquor, gaming, health and other

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laws and regulations; developing and reviewing policies, programmes and procedures concerning customer relations and goods and services provided; promoting facilities for conferences, conventions and trade shows to potential customers; organizing the purchase and maintenance of transport vehicles, equipment and fuel, and transporting goods; controlling the selection, training and supervision of staff; ensuring compliance with occupational health and safety regulations. Occupations in this sub-major group are classified into the following minor groups: 141 Hotel and Restaurant Managers 142 Retail and Wholesale Trade Managers 143 Other Services Managers

belongs to

concept ^c

Occupation ^c

*Hydrochlorothiazide*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C03AA03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Hydrocortisone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D07AA02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Hydrocortisone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB09>

belongs to

concept ^c

Pharmacologic Substance ^c

*Hydroxychloroquine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/P01BA02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Hypercholesterolemia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C37967

A laboratory test result indicating an increased amount of cholesterol in the blood.
[Definition Source: NCI]

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belongs to

concept ^c

Disease, Disorder or Finding ^c

Hyperhomocysteinemiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84770

A serious metabolic condition caused by mutations in the MTHFR gene, medications, or nutritional deficiency. It results in increased levels of homocysteine in the blood. Patients with this condition are at an increased risk for recurrent blood clots formation and cardiovascular accidents. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hypersensitivityⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3114

An immune response that occurs following exposure to an innocuous antigen, but that does not require the presence of preformed antibodies to the antigen. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hypertensionⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3117

Blood pressure that is abnormally high. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hypertensive Crisisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3122

A severe, acute increase in blood pressure that may result in stroke or myocardial ischemia. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hyperthyroidismⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3123

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Overactivity of the thyroid gland resulting in overproduction of thyroid hormone and increased metabolic rate. Causes include diffuse hyperplasia of the thyroid gland (Graves' disease), single nodule in the thyroid gland, and thyroiditis. The symptoms are related to the increased metabolic rate and include weight loss, fatigue, heat intolerance, excessive sweating, diarrhea, tachycardia, insomnia, muscle weakness, and tremor. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hypertriglyceridaemiaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/302870006>

A condition of elevated levels of TRIGLYCERIDES in the blood. [Definition Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hypertrophyⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3124

Abnormal enlargement of a body part or organ. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hypnotics and Sedativesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05C>

belongs to

concept ^c

Pharmacologic Substance ^c

Hypothyroidismⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26800

Abnormally low levels of thyroid hormone. [Definition Source: NCI][attribution: NICHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Hysterectomyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/236886002>

A surgical procedure to remove the uterine body (partial hysterectomy) or the uterine body and cervix (total hysterectomy). [Definition source: NCI]

BRAINTEASER – D9.3

belongs to

concept ^c

Surgical Procedure Type ^c

*Ibuprofen*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M01AE01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Ichthyosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84776

A group of inherited or acquired skin disorders characterized by a dry, thickened, and scaly skin. The skin changes range from mild to severe. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Immune Sera and Immunoglobulins*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J06>

belongs to

concept ^c

Pharmacologic Substance ^c

*Immunoactive Drugs*ⁿⁱ

IRI: <https://w3id.org/brainteaser/ontology/schema/ImmunoactiveDrugs>

Therapy employed to slow the progression of the disease.

belongs to

concept ^c

Therapeutic Procedure Type ^c

*Immunoglobulins, Normal Human, for Intravascular Adm.*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J06BA02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Immunostimulants*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03>

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belongs to

concept ^c

Pharmacologic Substance ^c

Immunosuppressantsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04>

belongs to

concept ^c

Pharmacologic Substance ^c

Indometacinⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M01AB01>

belongs to

concept ^c

Pharmacologic Substance ^c

Infectious Mononucleosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34726

A clinical syndrome of fever, sore throat, fatigue, and lymphadenopathy caused by infection with the Epstein-Barr virus. Subsequent physical findings may include hepatomegaly, palatal petechiae, jaundice, uvular edema, and splenomegaly. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Information and communications techniciansⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C35>

Information and communications technicians provide support for the day-to-day running of computer systems, communications systems and networks, and perform technical tasks related to telecommunications, broadcast image and sound as well as other types of telecommunications signals on land, sea or in aircraft. Competent performance in most occupations in this sub-major group requires skills at the third ISCO skill level. Tasks performed by workers in this sub-major group usually include: providing assistance to information and communications systems users; installing new programs and equipment; establishing, operating and maintaining network and other data communications systems; installing, monitoring and supporting Internet and Intranet websites or web server hardware or software; modifying web pages; and performing web server backup and recovery operations; controlling equipment to record sound, edit and mix image and sound recordings; controlling and maintaining transmitting and broadcast systems and satellite systems for radio and television programmes; controlling and maintaining radio communications systems, satellite services and multiplex systems on land, sea or in aircraft; providing technical assistance connected with research and development of computer systems and

BRAINTEASER – D9.3

telecommunications equipment, or testing prototypes; designing and preparing blueprints of circuitry according to the specifications given; providing technical supervision of the manufacture, utilization, maintenance and repair of telecommunications systems. Occupations in this sub-major group are classified into the following minor groups: 351 Information and Communications Technology Operations and User Support Technicians 352 Telecommunications and Broadcasting Technicians

belongs to

concept ^c

Occupation ^c

Information and communications technology professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C25>

Information and communications technology professionals conduct research; plan, design, write, test, provide advice and improve information technology systems, hardware, software and related concepts for specific applications; develop associated documentation including principles, policies and procedures; and design, develop, control, maintain and support databases and other information systems to ensure optimal performance and data integrity and security. Tasks performed by workers in this sub-major group usually include: researching information technology use in business functions; identifying areas for improvement and researching the theoretical aspects and operational methods for the use of computers; evaluating, planning and designing hardware or software configurations for specific applications including for Internet, Intranet and multimedia systems; designing, writing, testing and maintaining computer programs; designing and developing database architecture and database management systems; developing and implementing security plans and data administration policy, and administering computer networks and related computing environments; analysing, developing, interpreting and evaluating complex system design and architecture specifications, data models and diagrams in the development, configuration and integration of computer systems. Occupations in this sub-major group are classified into the following minor groups: 251 Software and Applications Developers and Analysts 252 Database and Network Professionals

belongs to

concept ^c

Occupation ^c

Inguinal Herniaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34690

The protrusion of a sac-like structure containing fibroadipose tissue through an abnormal opening in the inguinal region. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Injuryⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3671

Damage inflicted on the body as the direct or indirect result of an external force, with or without disruption of structural continuity. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Insertion of Implantable Intrathecal Access Systemⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/445968009>

Surgical insertion of intrathecal access system for drug delivery.

belongs to

concept ^c

Surgical Procedure Type ^c

Insomniaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C28286

A sleep disorder characterized by difficulty in falling asleep and/or remaining asleep. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Institute of Molecular Medicine Joao Lobo Antunesⁿⁱ

IRI: <https://imm.medicina.ulisboa.pt/>

belongs to

Clinics and Hospitals ^c

Insulin Glargineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10AE04>

belongs to

concept ^c

Pharmacologic Substance ^c

Insulin Lisproⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10AB04>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

*Insulins and Analogues*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10A>

belongs to

concept^c

Pharmacologic Substance^c

*Interferon Beta Natural*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03AB02>

belongs to

concept^c

Pharmacologic Substance^c

*Interferon Beta-1a*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03AB07>

belongs to

concept^c

Pharmacologic Substance^c

*Interferon Beta-1b*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03AB08>

belongs to

concept^c

Pharmacologic Substance^c

*Interstitial Pneumonia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27006

Inflammation of interstitial lung tissue, usually associated with infection. [Definition Source: NCI]

belongs to

concept^c

Disease, Disorder or Finding^c

*Intervertebral Disc Prolapse*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/73589001>

Herniated Disc [Definition Source: MedDRA]

belongs to

concept^c

Disease, Disorder or Finding^c

BRAINTEASER – D9.3

Intestinal Pseudo-Obstructionⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34733

Ileus of the intestine in which there is no mechanical obstruction. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Intraepithelial Neoplasiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C8366

A precancerous neoplastic process that affects the squamous, glandular, or transitional cell epithelium without evidence of invasion. According to the degree of nuclear atypia, number of mitotic figures, and presence of architectural distortion, it is classified as low grade (mild dysplasia) or high grade (moderate or severe dysplasia). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Iridocyclitisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34736

Inflammation of the iris and the ciliary body. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Iron-Deficiency Anemiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84484

Anemia caused by low iron intake, inefficient iron absorption in the gastrointestinal tract, or chronic blood loss. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Keratitisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26805

Inflammation of the cornea. [Definition Source: NCI]

belongs to

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Keratoconus*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26806

A degenerative, structural disorder of the eye, characterized by a cone-shaped protrusion of the cornea. It may lead to visual disturbances. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Ketorolac*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M01AB15>

belongs to

concept ^c

Pharmacologic Substance ^c

*Kidney Carcinoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C9384

A carcinoma arising from the epithelium of the renal parenchyma or the renal pelvis. The majority are renal cell carcinomas. Kidney carcinomas usually affect middle aged and elderly adults. Hematuria, abdominal pain, and a palpable mass are common symptoms. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Klippel-Feil Syndrome*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C98967

A rare congenital syndrome characterized by the fusion of the vertebrae in the cervical spine. Patients present with a short neck and restricted mobility of the upper spine. Other signs and symptoms include scoliosis, spina bifida, cleft palate, and rib malformations. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Knee Injury*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34753

Trauma to the knee. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

L4-L5 Intervertebral Spaceⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C142296

The space between the L4 and L5 vertebrae. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Labourers in mining, construction, manufacturing and transportⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C93>

Labourers in mining, construction, manufacturing and transport perform simple and routine manual tasks in mining, quarrying, civil engineering, building, manufacturing, transport and storage operations, and operate human-powered and animal-drawn vehicles and machinery. Most occupations in this sub-major group require skills at the first ISCO skill level. Task performed by workers in this sub-major group usually include: digging holes and spreading excavated materials, sand, soil and gravel using hand-held tools; sorting, loading, unloading, moving, stacking and storing materials, equipment, products, supplies, baggage and cargo by hand; cleaning machinery, equipment, tools and work sites; packing and unpacking material and products and filling containers and shelves with products by hand; operating human-powered and animal-drawn vehicles and machinery. Occupations in this sub-major group are classified into the following minor groups: 931 Mining and Construction Labourers 932 Manufacturing Labourers 933 Transport and Storage Labourers

belongs to

concept ^c

Occupation ^c

Lactuloseⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A06AD11>

belongs to

concept ^c

Pharmacologic Substance ^c

Laminectomyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/387731002>

A surgical procedure that entails removing all (laminectomy) or part (laminotomy) of selected vertebral lamina to relieve pressure on the SPINAL CORD and/or SPINAL NERVE ROOTS. Vertebral lamina is the thin flattened posterior wall of vertebral arch that forms the vertebral foramen through which pass the spinal cord and nerve roots. [Defintion Source: MSH]

belongs to

concept ^c

Surgical Procedure Type ^c

BRAINTEASER – D9.3

*Lamotrigine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AX09>

belongs to

concept^c

Pharmacologic Substance^c

*Langerhans Cell Histiocytosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3107

A neoplastic proliferation of Langerhans cells which contain Birbeck granules by ultrastructural examination. Three major overlapping syndromes are recognized: eosinophilic granuloma, Letterer-Siwe disease, and Hand-Schuller-Christian disease. The clinical course is generally related to the number of organs affected at presentation. (WHO, 2001) [Definition Source: NCI]

belongs to

concept^c

Disease, Disorder or Finding^c

*Laura Menotti*ⁿⁱ

IRI: <https://orcid.org/0000-0002-0676-682X>

belongs to

Person^c

*Legal, social and cultural professionals*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C26>

Legal, social and cultural professionals conduct research; improve or develop concepts, theories and operational methods; or apply knowledge relating to the law, storage and retrieval of information and artefacts, psychology, social welfare, politics, economics, history, religion, languages, sociology, other social sciences, and arts and entertainment. Competent performance in most occupations in this sub-major group requires skills at the fourth ISCO skill level. Tasks performed by workers in this sub-major group usually include: conducting research on legal problems; drafting laws and regulations; advising clients on legal cases; pleading and conducting cases in a court of law; presiding over judicial proceedings in a court of law; developing and maintaining library and gallery collections of archives; conducting research, improving or developing concepts, theories and operational methods or applying knowledge relating to the field of social sciences; conceiving, creating and performing in literary and artistic works; interpreting and communicating news, ideas, impressions and facts. Occupations in this sub-major group are classified into the following minor groups: 261 Legal Professionals 262 Librarians, Archivists and Curators 263 Social and Religious Professionals 264 Authors, Journalists and Linguists 265 Creative and Performing Artists

belongs to

concept^c

Occupation^c

BRAINTEASER – D9.3

Legal, social, cultural and related associate professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C34>

Legal, social, cultural and related associate professionals perform technical tasks connected with the practical application of knowledge relating to legal services, social work, culture, food preparation, sport and religion. Competent performance in most occupations in this sub-major group requires skills at the third ISCO skill level. Tasks performed by workers in this sub-major group usually include: providing technical and practical services and support functions in legal processes and investigations, social and community assistance programmes, and religious and cultural activities; participating and adjudicating in sporting events; developing and delivering sports coaching, fitness and recreational programmes; combining creative and technical skills in a variety of artistic, cultural and culinary activities; creating dishes and menus and overseeing the preparation of meals. Occupations in this sub-major group are classified into the following minor groups: 341 Legal, Social and Religious Associate Professionals 342 Sports and Fitness Workers 343 Artistic, Cultural and Culinary Associate Professionals

belongs to

concept ^c

Occupation ^c

Lercanidipineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C08CA13>

belongs to

concept ^c

Pharmacologic Substance ^c

Leukoaraiosisⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/89743005>

Non-specific white matter changes in the BRAIN, often seen after age 65. Changes include loss of AXONS; MYELIN pallor, GLIOSIS, loss of ependymal cells, and enlarged perivascular spaces. Leukoaraiosis is a risk factor for DEMENTIA and CEREBROVASCULAR DISORDERS. [Definition Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Leukopeniaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26816

A laboratory test result indicating a decreased number of white blood cells in the peripheral blood. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Levetiracetamⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AX14>

belongs to

concept ^c

Pharmacologic Substance ^c

Levocetirizineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R06AE09>

belongs to

concept ^c

Pharmacologic Substance ^c

Levodopa and Decarboxylase Inhibitorⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N04BA02>

belongs to

concept ^c

Pharmacologic Substance ^c

Levothyroxine Sodiumⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H03AA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Limbⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12429

A body region referring to an upper or lower extremity. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Lipid Modifying Agentsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C10>

belongs to

concept ^c

Pharmacologic Substance ^c

Liver Therapy, Lipotropicsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A05B>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

Long QT Syndromeⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34786

A ventricular arrhythmia characterized by a long QT interval, and accompanied by syncopal episodes sometimes leading to sudden death due to paroxysmal ventricular arrhythmia. This arrhythmia is associated with a prolongation of repolarization following depolarization of the cardiac ventricles. The prolongation of the Q-T interval combined with torsades de pointes manifests as several different forms; some may be acquired or congenital; some may lead to serious arrhythmia and sudden cardiac death. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Lorazepamⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05BA06>

belongs to

concept ^c

Pharmacologic Substance ^c

Losartanⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09CA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Lower Extremityⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12742

The limb that is composed of the hip, thigh, leg and foot. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Lumbar Herniaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/23344004>

Lumbar Hernia [Definition Source: SNOMEDCT]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

Lumbar Puncture Headacheⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50643

Headache in erect position, after lumbar puncture; due to lowering of intracranial pressure by leakage of cerebrospinal fluid through the needle tract. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Lumbar Spinal Fusionⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/50172003>

Lumbar spinal fusion is surgery to join, or fuse, two or more vertebrae in the low back. The surgery is also called arthrodesis. [Defintion Source: myhealth.alberta.ca]

belongs to

concept ^c

Surgical Procedure Type ^c

Lumbar Spineⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C69314

Those vertebrae between the ribs and the pelvis, L1-L5 in man. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Lumbosacral Regionⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C48824

The part of the spine in the lower back that consists of the lumbar region and the sacrum. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Lymphopeniaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26823

An abnormally small number of lymphocytes in the circulating blood. [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

Macular Degenerationⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C123330

Loss of vision in the central portion of the retina (macula), secondary to retinal degeneration. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Malgragateⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A02AD02>

belongs to

concept ^c

Pharmacologic Substance ^c

Malignant Colon Neoplasmⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C9242

A primary or metastatic malignant neoplasm that affects the colon. Representative examples include carcinoma, lymphoma, and sarcoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Malignant Neoplasmⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C9305

A tumor composed of atypical neoplastic, often pleomorphic cells that invade other tissues. Malignant neoplasms often metastasize to distant anatomic sites and may recur after excision. The most common malignant neoplasms are carcinomas, Hodgkin and non-Hodgkin lymphomas, leukemias, melanomas, and sarcomas. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Malignant Skin Neoplasmⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2920

A primary or metastatic malignant neoplasm involving the skin. Primary malignant skin neoplasms most often are carcinomas (either basal cell or squamous cell carcinomas) or melanomas. Metastatic malignant neoplasms to the skin include carcinomas and lymphomas. [Definition Source: NCI]

BRAINTEASER – D9.3

belongs to

concept ^c

Disease, Disorder or Finding ^c

Malignant Thyroid Gland Neoplasmⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C7510

A primary or metastatic malignant neoplasm affecting the thyroid gland. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Managersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C1>

Managers plan, direct, coordinate and evaluate the overall activities of enterprises, governments and other organizations, or of organizational units within them, and formulate and review their policies, laws, rules and regulations. Competent performance in most occupations in this major group requires skills at the fourth ISCO skill level, except for Sub-major Group 14: Hospitality, Retail and Other Services Managers, for which skills at the third ISCO skill level are generally required. Tasks performed by managers usually include: formulating and advising on the policy, budgets, laws and regulations of enterprises, governments and other organizational units; establishing objectives and standards and formulating and evaluating programmes and policies and procedures for their implementation; ensuring appropriate systems and procedures are developed and implemented to provide budgetary control; authorizing material, human and financial resources to implement policies and programmes; monitoring and evaluating performance of the organization or enterprise and of its staff; selecting or approving the selection of staff; ensuring compliance with health and safety requirements; planning and directing daily operations; representing and negotiating on behalf of the government, enterprise or organizational unit managed in meetings and other forums. Occupations in this major group are classified into the following sub-major groups: 11 Chief Executives, Senior Officials and Legislators 12 Administrative and Commercial Managers 13 Production and Specialized Services Managers 14 Hospitality, Retail and Other Services Managers

belongs to

concept ^c

Occupation ^c

Market-oriented skilled agricultural workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C61>

Market-oriented skilled agricultural workers plan, organize and perform farming operations to grow and harvest field or tree and shrub crops; and to produce a variety of animals and animal products for sale or delivery on a regular basis to wholesale buyers, marketing organizations or at markets. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by

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workers in this sub-major group usually include: preparing the soil; sowing, planting, spraying, fertilizing and harvesting field crops; growing fruit and other tree and shrub crops; growing garden vegetables and horticultural products; raising, breeding and tending animals mainly to obtain meat, milk, hair, fur, skin, or sericultural, apiarian or other products; storing and carrying out some processing of produce; selling their products to purchasers, marketing organizations or at markets. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 611 Market Gardeners and Crop growers 612 Animal Producers 613 Mixed Crop and Animal Producers

belongs to

concept ^c

Occupation ^c

Market-oriented skilled forestry, fishery and hunting workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C62>

Market-oriented skilled forestry, fishery and hunting workers plan, organize and perform operations to cultivate, conserve and exploit natural and plantation forests; breed and raise fish; harvest and catch fish; and hunt and trap animals, for sale or delivery on a regular basis to wholesale buyers, marketing organizations or at markets. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: renting or investing in equipment and machinery and purchasing supplies; planning and undertaking forestry, aquaculture, fishery and hunting operations; maintaining buildings, tanks, machinery and other equipment; delivering or marketing products; supervising and training other workers. Occupations in this sub-major group are classified into the following minor groups: 621 Forestry and Related Workers 622 Fishery Workers, Hunters and Trappers

belongs to

concept ^c

Occupation ^c

Maternal Auntⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96575

A female relative who is a sibling of the biological mother, and who both share a common ancestor. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

Maternal Uncleⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96579

A male relative who is a sibling of the biological mother, and who both share a common ancestor. [Definition Source: NCI]

BRAINTEASER – D9.3

belongs to

concept ^c

KinshipType ^c

*Medicated Dressings*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D09>

belongs to

concept ^c

Pharmacologic Substance ^c

*Melanocytic Nevus*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C7570

A neoplasm composed of melanocytes that usually appears as a dark spot on the skin.
[Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Melatonin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05CH01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Menopausal Symptom*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3852

Any of the mental or physical manifestations that accompany perimenopause and menopause. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Mesalazine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A07EC02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Metal, machinery and related trades workers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C72>

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Metal, machinery and related trades workers cast, weld, forge and, by other methods, form metal; erect, maintain and repair heavy metal structures; engage in machine-tool setting as well as in fitting, maintaining and repairing machinery including engines and vehicles; or they produce tools and various non-precious metal articles. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. The work is carried out by hand and by hand-powered and other tools which are used to reduce the amount of physical effort and time required for specific tasks, as well as to improve the quality of the products. The tasks call for an understanding of the work organization, materials and tools used, and the nature and purpose of the final product. Tasks performed by workers in this sub-major group usually include: making moulds and cores for casting metal; casting, welding and shaping metal; installing, erecting, maintaining and repairing heavy metal structures, tackle and related equipment; forging and forming steel and other non-precious metals to make and repair machinery, tools, equipment and other articles; setting for operators or setting and operating various machine tools; fitting, maintaining and repairing industrial machinery, including engines and vehicles. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 721 Sheet and Structural Metal Workers, Moulders and Welders, and Related Workers 722 Blacksmiths, Toolmakers and Related Trades Workers 723 Machinery Mechanics and Repairers

belongs to

concept ^c

Occupation ^c

*Metformin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10BA02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Methotrexate*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L01BA01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Methotrexate*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AX03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Methylprednisolone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB04>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

Migraineⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C89715

A common, severe type of vascular headache often associated with increased sympathetic activity, resulting in nausea, vomiting, and light sensitivity. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Migraine With Auraⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C117005

A migraine disorder characterized by episodes that are preceded by focal neurological symptoms. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Mineral Supplementsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A12>

belongs to

concept ^c

Pharmacologic Substance ^c

Mitoxantroneⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L01DB07>

belongs to

concept ^c

Pharmacologic Substance ^c

Mitrazapineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AX11>

belongs to

concept ^c

Pharmacologic Substance ^c

Modafinilⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06BA07>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Molluscum Contagiosum Virus*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C112357

A species of enveloped and brick-shaped viruses in the Poxviridae family and Molluscipoxvirus genus. The genome is composed of non-segmented, linear double-stranded DNA. Molluscum contagiosum viruses are found in humans and can cause the disease Molluscum contagiosum. Molluscum contagiosum viruses are transmitted via direct person-to-person contact and contact with infected fomites. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Mondino Foundation*ⁿⁱ

IRI: <https://www.mondino.it/>

belongs to

Clinics and Hospitals ^c

*Monoclonal B_Cell Lymphocytosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C80310

A monoclonal expansion of B-lymphocytes with or without the characteristic immunophenotype of chronic lymphocytic leukemia. It precedes virtually all cases of chronic lymphocytic leukemia/small lymphocytic lymphoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Monoclonal Gammopathy*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35548

An abnormal laboratory test result indicating the presence of monoclonal immunoglobulins in the blood or urine. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Montelukast*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R03DC03>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

Mood Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C92200

A category of psychiatric disorders which have as their most predominant feature a disturbance in mood. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Motherⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C25189

A female parent. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

Motor Neuron Diseaseⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/37340000>

Diseases characterized by a selective degeneration of the motor neurons of the spinal cord, brainstem, or motor cortex. Clinical subtypes are distinguished by the major site of degeneration. In AMYOTROPHIC LATERAL SCLEROSIS there is involvement of upper, lower, and brainstem motor neurons. In progressive muscular atrophy and related syndromes (see MUSCULAR ATROPHY, SPINAL) the motor neurons in the spinal cord are primarily affected. With progressive bulbar palsy (BULBAR PALSY, PROGRESSIVE), the initial degeneration occurs in the brainstem. In primary lateral sclerosis, the cortical neurons are affected in isolation. (Adams et al., Principles of Neurology, 6th ed, p1089) [Definition Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

MTHFR Gene Mutationⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C180747

A change in the nucleotide sequence of the MTHFR gene. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Multiple Sclerosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3243

A progressive autoimmune disorder affecting the central nervous system resulting in demyelination. Patients develop physical and cognitive impairments that correspond with the affected nerve fibers. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Mumps*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C29888

A contagious viral infection caused by the mumps virus. Symptoms include swollen and tender parotid glands, fever, muscle aches and fatigue. Due to vaccination programs, mumps has become a rare disease. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Muscle Relaxants*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Musculo-Skeletal System*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M>

belongs to

concept ^c

Pharmacologic Substance ^c

*Myasthenia Gravis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C60989

A chronic autoimmune neuromuscular disorder characterized by skeletal muscle weakness. It is caused by the blockage of the acetylcholine receptors at the neuromuscular junction. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Myeloproliferative Neoplasm*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4345

BRAINTEASER – D9.3

A clonal hematopoietic stem cell disorder, characterized by proliferation in the bone marrow of one or more of the myeloid (i.e., granulocytic, erythroid, megakaryocytic, and mast cell) lineages. It is primarily a neoplasm of adults. (WHO 2008) [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Myocardial Infarction*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27996

Gross necrosis of the myocardium, as a result of interruption of the blood supply to the area, as in coronary thrombosis. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Naltrexone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07BB04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Nasal Preparations*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Natalizumab*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AA23>

belongs to

concept ^c

Pharmacologic Substance ^c

*Nebivolol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C07AB12>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Neckⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C13063

The region that connects the head to the rest of the body. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Neck Traumaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/90460009>

General or unspecified injuries to the neck. It includes injuries to the skin, muscles, and other soft tissues of the neck. [Defintion Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Neonatal Hearing Impairmentⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50667

An abnormality that affects hearing within the first month after birth. It may or may not result in hearing loss. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Neoplasmⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3262

A benign or malignant tissue growth resulting from uncontrolled cell proliferation. Benign neoplastic cells resemble normal cells without exhibiting significant cytologic atypia, while malignant cells exhibit overt signs such as dysplastic features, atypical mitotic figures, necrosis, nuclear pleomorphism, and anaplasia. Representative examples of benign neoplasms include papillomas, cystadenomas, and lipomas; malignant neoplasms include carcinomas, sarcomas, lymphomas, and leukemias. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Nephewⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C71409

A son of your brother or sister. [Definition Source: NCI]

BRAINTEASER – D9.3

belongs to

concept ^c

KinshipType ^c

*Nervous System*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N>

belongs to

concept ^c

Pharmacologic Substance ^c

*Nervous System Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26835

A non-neoplastic or neoplastic disorder that affects the brain, spinal cord, or peripheral nerves. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Neurofibromatosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C6727

An autosomal dominant hereditary neoplastic syndrome. Two distinct clinicopathological entities are recognized: neurofibromatosis type 1 and neurofibromatosis type 2. Neurofibromatosis type 1 is associated with the presence of cafe-au-lait cutaneous lesions, multiple neurofibromas, malignant peripheral nerve sheath tumors, optic nerve gliomas, and bone lesions. Neurofibromatosis type 2 is associated with the presence of schwannomas, meningiomas, and gliomas. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Neutropenic Disorder*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/303011007>

A decrease in the number of NEUTROPHILS found in the blood. [Definition Source: MSH]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Nicergoline*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C04AE02>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Nicola Ferro*ⁿⁱ

IRI: <https://orcid.org/0000-0001-9219-6239>

belongs to

Person ^c

*Niece*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C71408

A daughter of your brother or sister. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

*Non-commissioned armed forces officers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C02>

Non-commissioned armed forces officers enforce military discipline and supervise the activities of those employed in Sub-major Group 03: Armed Forces Occupations, Other Ranks, and/or perform similar tasks to those performed in a variety of civilian occupations outside the armed forces. This group includes members of the armed forces holding ranks such as sergeant, warrant officer and sergeant major. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Occupations in this sub-major group are classified into the following minor group: 021 Non-commissioned Armed Forces Officers Excluded from this group are: - jobs held by persons in civilian employment of government establishments concerned with defence issues; - police (other than military police); - customs inspectors and members of border or other armed civilian services.

belongs to

concept ^c

Occupation ^c

*Non-Hodgkin Lymphoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3211

Distinct from Hodgkin lymphoma both morphologically and biologically, non-Hodgkin lymphoma (NHL) is characterized by the absence of Reed-Sternberg cells, can occur at any age, and usually presents as a localized or generalized lymphadenopathy associated with fever and weight loss. The clinical course varies according to the morphologic type. NHL is clinically classified as indolent, aggressive, or having a variable clinical course. NHL can be of B-or T-/NK-cell lineage. [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

Non-Invasive Mechanical Ventilation (NIV)ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C171457

A type of mechanical ventilation procedure that uses a non-invasive means, such as a face mask or nasal mask, to deliver oxygenated air into the lungs. [Definition Source: NCI]

belongs to

concept ^c

Therapeutic Procedure Type ^c

Non-Neoplastic Central Nervous System Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27586

Any disorder other than abnormal tissue growth resulting from uncontrolled cell proliferation affecting the nervous system.

belongs to

concept ^c

Disease, Disorder or Finding ^c

Numerical and material recording clerksⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C43>

Numerical and material recording clerks obtain, compile and compute accounting, bookkeeping, statistical, financial and other numerical data, and take charge of cash transactions incidental to business matters. Some occupations classified here keep records of goods produced, purchased, stocked and dispatched, and of materials needed at specified production dates, or keep records of operational aspects and coordinate the timing of passenger and freight transport. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: helping with accounting and bookkeeping records and computations; calculating unit production costs; calculating wages and in some cases preparing wage packets and paying wages; taking charge of cash transactions incidental to the business; obtaining, compiling and computing statistical or actuarial data; performing clerical tasks relating to the financial transactions of an insurance establishment, bank or similar establishment; recording produced, stocked, ordered and dispatched goods; recording production materials received, put into stock or issued; computing quantities of the production materials required at specified dates and helping with preparation and checking of production operation schedules; keeping records of operational aspects and coordinating the timing of passenger and freight transport. Occupations in this sub-major group are classified into the following minor groups: 431 Numerical Clerks 432 Material Recording and Transport Clerks

belongs to

concept ^c

Occupation ^c

BRAINTEASER – D9.3

Obesityⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3283

Having a high amount of body fat (body mass index [BMI] of 30 or more). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Obstructive Sleep Apnea Syndromeⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27168

A disorder characterized by recurrent episodic disruptions of breathing during sleep. It is caused by the intermittent relaxation of pharyngeal muscles leading to the narrowing or complete blockage of the upper airway. This results in compensatory arousal from sleep to breathe again. An anatomically narrow airway from body habitus or enlarged pharyngeal structures may also predispose to obstruction. Clinical presentation usually includes snoring, daytime sleepiness, difficulty concentrating and fatigue. Clinical course may progress to chronic hypoxemia with cardiovascular and cerebrovascular sequelae. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Ocrelizumabⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AA36>

belongs to

concept ^c

Pharmacologic Substance ^c

Ofatumumabⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L01FA02>

belongs to

concept ^c

Pharmacologic Substance ^c

Olanzapineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05AH03>

belongs to

concept ^c

Pharmacologic Substance ^c

Olmesartan Medoxomilⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09CA08>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

Olmesartan Medoxomil and Amlodipineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09DB02>

belongs to

concept ^c

Pharmacologic Substance ^c

Omeprazoleⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A02BC01>

belongs to

concept ^c

Pharmacologic Substance ^c

Operation on Abdominal Regionⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/21371007>

A surgical procedure located in the abdominal region.

belongs to

concept ^c

Surgical Procedure Type ^c

Operative Procedure on Lumbosacral Spinal Structureⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/428402007>

Lumbo-sacral spine surgery

belongs to

concept ^c

Surgical Procedure Type ^c

Operative Procedure on Thoracic Spinal Structureⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/428614005>

Thoracic spine surgery.

belongs to

concept ^c

Surgical Procedure Type ^c

Operative Procedure on Upper Extremityⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/107769006>

Surgical procedure involving an upper extremity.

BRAINTEASER – D9.3

belongs to

concept ^c

Surgical Procedure Type ^c

*Ophthalmologicals*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/S01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Ophthalmologicals and Otologicals Products*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/S03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Opioid Use Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C157942

The use of opioids that results in the development of a dependency that adversely affects an individual's life. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Optic Neuritis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84950

A disorder characterized by inflammation of the optic nerve. Causes include autoimmune disorders, infections, toxins, drugs, and multiple sclerosis. It may manifest with acute loss of vision and pain. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*OPTN Gene*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C119640

This gene plays a role in both neuroprotection and Golgi maintenance [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

BRAINTEASER – D9.3

Osteoporosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3298

A condition of reduced bone mass, with decreased cortical thickness and a decrease in the number and size of the trabeculae of cancellous bone (but normal chemical composition), resulting in increased fracture incidence. Osteoporosis is classified as primary (Type 1, postmenopausal osteoporosis; Type 2, age-associated osteoporosis; and idiopathic, which can affect juveniles, premenopausal women, and middle-aged men) and secondary osteoporosis (which results from an identifiable cause of bone mass loss). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Other Alimentary Tract and Metabolismⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A16>

belongs to

concept ^c

Pharmacologic Substance ^c

Other clerical support workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C44>

Other clerical support workers sort and deliver mail, file documents, prepare information for processing, maintain personnel records, check material for consistency with original source material, assist persons who cannot read or write, and perform various other specialized clerical duties. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: recording information regarding acquisition, issue and return of library books; classifying and filing various documents and other records; maintaining personnel records; sorting, recording and delivering mail from post offices, as well as from or within an enterprise; coding; correcting proofs; performing a range of miscellaneous clerical duties; writing on behalf of persons who are unable to read or write. Occupations in this sub-major group are classified into the following minor group: 441 Other Clerical Support Workers

belongs to

concept ^c

Occupation ^c

Other Dermatological Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D11>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Other Drugs for Disorders of the Musculo-Skeletal Systemⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M09>

belongs to

concept ^c

Pharmacologic Substance ^c

Other Gynecologicalsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G02>

belongs to

concept ^c

Pharmacologic Substance ^c

Other Hematological Agentsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B06>

belongs to

concept ^c

Pharmacologic Substance ^c

Other Nervous System Drugsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07>

belongs to

concept ^c

Pharmacologic Substance ^c

Other Respiratory System Productsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R07>

belongs to

concept ^c

Pharmacologic Substance ^c

Other Vaccinesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J07BX>

belongs to

concept ^c

Pharmacologic Substance ^c

Otologicalsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/S02>

belongs to

concept ^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

*Oxcarbazepine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AF02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Oxybutynin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04BD04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Ozanimod*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AA38>

belongs to

concept ^c

Pharmacologic Substance ^c

*Paliperidone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05AX13>

belongs to

concept ^c

Pharmacologic Substance ^c

*Palmar Fibromatosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3469

A superficial fibromatosis arising from the soft tissue of the palm. It is characterized by the presence of spindle-shaped fibroblasts, and an infiltrative growth pattern. It predominantly affects adult males. [Definition Source: NCI] It has exact synonym: Dupuytren Contracture; Palmar Fibromatosis; Dupuytren's Contracture.

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pancreatic Hormones*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H04>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

*Pancytopenia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34889

A finding of low numbers of red and white blood cells and platelets in the peripheral blood. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Panic Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34890

An anxiety disorder characterized by multiple unexpected panic attacks with persistent concern of recurring attacks. Panic disorder may or may not be accompanied by agoraphobia. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pantoprazole*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A02BC02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Paracetamol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N02BE01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Parkinson's Disease*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26845

A progressive degenerative disorder of the central nervous system characterized by loss of dopamine producing neurons in the substantia nigra and the presence of Lewy bodies in the substantia nigra and locus coeruleus. Signs and symptoms include tremor which is most pronounced during rest, muscle rigidity, slowing of the voluntary movements, a tendency to fall back, and a mask-like facial expression. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Paroxetineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AB05>

belongs to

concept^c

Pharmacologic Substance^c

Partial Cystectomyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/112902005>

The surgical removal of part of bladder.

belongs to

concept^c

Surgical Procedure Type^c

Paternal Auntⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96581

A female relative who is a sibling of the biological father, and who both share a common ancestor. [Definition Source: NCI]

belongs to

concept^c

KinshipType^c

Paternal Uncleⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96585

A male relative who is a sibling of the biological father, and who both share a common ancestor. [Definition Source: NCI]

belongs to

concept^c

KinshipType^c

Peginterferon Alfa-2bⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03AB10>

belongs to

concept^c

Pharmacologic Substance^c

Peginterferon Beta-1aⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L03AB13>

belongs to

concept^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

*Pelvis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12767

The bony, basin-shaped structure formed by the hipbones and the base of the backbone supporting the lower limbs in humans. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Penicillin Allergy*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34911

An allergy to Penicillin. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Percutaneous Endoscopic Gastrostomy (PEG)*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/235159007>

The placement of a feeding tube through the abdominal wall into the stomach using an endoscope. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

*Perindopril and Amlodipine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09BB04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Peripheral Vasodilators*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C04>

belongs to

concept ^c

Pharmacologic Substance ^c

*Personal care workers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C53>

Personal care workers provide care, supervision and assistance for children, patients and elderly, convalescent or disabled persons in institutional and residential settings.

BRAINTEASER – D9.3

Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: assisting with mobility, washing and other personal needs; assisting children individually to learn social skills; supervising and participating in activities that enhance children's physical, social, emotional and intellectual development; observing and reporting concerns to appropriate health or social service workers. Occupations in this sub-major group are classified into the following minor groups: 531 Child Care Workers and Teachers' Aides 532 Personal Care Workers in Health Services

belongs to

concept ^c

Occupation ^c

Personal service workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C51>

Personal services workers provide personal services related to travel, housekeeping, catering and hospitality, hairdressing and beauty treatment, animal care grooming and training, companionship and other services of a personal nature. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: organizing and providing services in connection with travel and sightseeing; housekeeping; preparing and serving food and beverages; hairdressing and beauty treatment; telling fortunes; embalming and arranging funerals; grooming, caring for and training animals; teaching people to drive motor vehicles; providing companionship and other personal services. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 511 Travel Attendants, Conductors and Guides 512 Cooks 513 Waiters and Bartenders 514 Hairdressers, Beauticians and Related Workers 515 Building and Housekeeping Supervisors 516 Other Personal Services Workers

belongs to

concept ^c

Occupation ^c

Personality Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34922

A diverse category of psychiatric disorders characterized by behavior that deviates markedly from the expectations of the individual's culture; this pattern of deviation is pervasive and inflexible and is stable over time. The behavioral pattern negatively interferes with relationships and work. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Phenobarbitalⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AA02>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Phenytoin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AB02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Pituitary and Hypothalamic Hormones and Analogues*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Pituitary Neuroendocrine Tumor*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3329

A well-differentiated neuroendocrine neoplasm that arises from the adenohypophyseal cells of the anterior lobe of the pituitary gland. The tumor can be hormonally functioning or not. It has a low frequency of metastatic spread. When metastatic, the term metastatic pituitary neuroendocrine tumor is endorsed instead of pituitary carcinoma. (WHO) [Definition Source: NCI] It has exact synonym: Pituitary Gland Adenoma.

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pityriasis Rosea*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26855

A mild, self-limited skin disorder that is most commonly seen in children and young adults. It is characterized by an initial large round spot on the chest, abdomen, or back, often referred to as a herald patch, that is usually followed within a week by a distinctive pattern of similar but smaller papules on the torso, arms, and legs. There may also be itching, especially when overheated. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Plant and machine operators and assemblers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C8>

BRAINTEASER – D9.3

Plant and machine operators and assemblers operate and monitor industrial and agricultural machinery and equipment on the spot or by remote control; drive and operate trains, motor vehicles and mobile machinery and equipment; or assemble products from component parts according to strict specifications and procedures. Competent performance in most occupations in this major group requires skills at the second ISCO skill level. The work mainly calls for experience with and an understanding of industrial and agricultural machinery and equipment, as well as an ability to cope with machine-paced operations and to adapt to technological innovations. Tasks performed by plant and machine operators and assemblers usually include: operating and monitoring mining or other industrial machinery and equipment for processing metal, minerals, glass, ceramics, wood, paper or chemicals; operating and monitoring machinery and equipment used to produce articles made of metal, minerals, chemicals, rubber, plastics, wood, paper, textiles, fur or leather, and which process foodstuffs and related products; driving and operating trains and motor vehicles; driving, operating and monitoring mobile industrial and agricultural machinery and equipment; and assembling products from component parts according to strict specifications and procedures. Supervision of other workers may be included. Occupations in this major group are classified into the following sub-major groups: 81 Stationary Plant and Machine Operators 82 Assemblers 83 Drivers and Mobile Plant Operators

belongs to

concept ^c

Occupation ^c

Plasmapheresisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C15304

A procedure that collects plasma from the peripheral blood while returning the rest to the donor. [Definition Source: NCI]

belongs to

concept ^c

Therapeutic Procedure Type ^c

Pleural Effusionⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3331

Increased amounts of fluid within the pleural cavity. Symptoms include shortness of breath, cough, and chest pain. It is usually caused by lung infections, congestive heart failure, pleural and lung tumors, connective tissue disorders, and trauma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Pneumococcal Pneumoniaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C157959

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Pneumonia that is attributed to the bacteria *Streptococcus pneumoniae*. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pneumonia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3333

An acute, acute and chronic, or chronic inflammation focally or diffusely affecting the lung parenchyma, due to infections (viruses, fungi, mycoplasma, or bacteria), treatment (e.g. radiation), or exposure (inhalation) to chemicals. Symptoms include cough, shortness of breath, fevers, chills, chest pain, headache, sweating, and weakness. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pneumonia Caused By SARS-CoV-2*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/882784691000119100>

Pneumonia caused by severe acute respiratory syndrome coronavirus 2 [Definition Source: SNOMEDCT]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Poliomyelitis, Trivalent, Inactivated, Whole Virus*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J07BF03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Post-Herpetic Neuralgia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C117084

Pain that occurs after the disappearance of herpes zoster infection lesions. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pramipexole*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N04BC05>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Prasugrel*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01AC22>

belongs to

concept ^c

Pharmacologic Substance ^c

*Prazepam*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05BA11>

belongs to

concept ^c

Pharmacologic Substance ^c

*Prednisolone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB06>

belongs to

concept ^c

Pharmacologic Substance ^c

*Prednisone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H02AB07>

belongs to

concept ^c

Pharmacologic Substance ^c

*Pregabalin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AX16>

belongs to

concept ^c

Pharmacologic Substance ^c

*Preparations for Treatment of Wounds and Ulcers*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/D03>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Primary Lateral Sclerosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C129933

A progressive neurodegenerative disorder affecting upper motor neurons, characterized by progressive muscle weakness. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Primary Neoplasmⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C8509

A tumor at the original site of origin. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Primary Progressive Aphasiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C85024

A rare neurologic progressive disorder characterized by impairment of the language and speech abilities. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Procedure on Pelvic Region of Trunkⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/609637006>

Pelvic surgery.

belongs to

concept ^c

Surgical Procedure Type ^c

Production and specialised services managersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C13>

Production and specialized services managers plan, direct and coordinate the production of the goods and the provision of the specialized professional and technical services provided by an enterprise or organization, either as the manager of a department or as the general manager of an enterprise or organization that does not have a hierarchy of managers. They are responsible for manufacturing, mining, construction, logistics, information and communications technology operations for large-scale agricultural, forestry and fisheries operations, and for the provision of health, education, social welfare, banking, insurance and other professional and technical services. Competent performance in most occupations in this sub-major group requires

BRAINTEASER – D9.3

skills at the fourth ISCO skill level. Tasks performed by workers in this sub-major group usually include: planning details of activities in terms of output, services provided, quality, quantity, cost, timeliness and labour requirements; setting standards and objectives; controlling the operation of plant and of procedures; assuring quality of the goods produced and services provided; preparing tenders and contract bids; establishing and managing budgets, monitoring costs, and adjusting activities, procedures and resources to minimize costs; overseeing the acquisition and installation of new plant and equipment; coordinating the implementation of health and safety requirements; planning and directing daily operations; overseeing the selection, training and performance of staff; preparing, or arranging for the preparation of, reports, budgets and forecasts; representing the enterprise or organization in negotiations with other agencies, and at conventions, seminars, public hearings and forums. Occupations in this sub-major group are classified into the following minor groups: 131 Production Managers in Agriculture, Forestry and Fisheries 132 Manufacturing, Mining, Construction and Distribution Managers 133 Information and Communications Technology Services Managers 134 Professional Services Managers

belongs to

concept ^c

Occupation ^c

Professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C2>

Professionals increase the existing stock of knowledge; apply scientific or artistic concepts and theories; teach about the foregoing in a systematic manner; or engage in any combination of these activities. Competent performance in most occupations in this major group requires skills at the fourth ISCO skill level. Tasks performed by professionals usually include: conducting analysis and research, and developing concepts, theories and operational methods; advising on or applying existing knowledge related to physical sciences, mathematics, engineering and technology, life sciences, medical and health services, social sciences and humanities; teaching the theory and practice of one or more disciplines at different educational levels; teaching and educating persons with learning difficulties or special needs; providing various business, legal and social services; creating and performing works of art; providing spiritual guidance; preparing scientific papers and reports. Supervision of other workers may be included. Occupations in this major group are classified into the following sub-major groups: 21 Science and Engineering Professionals 22 Health Professionals 23 Teaching Professionals 24 Business and Administration Professionals 25 Information and Communications Technology Professionals 26 Legal, Social and Cultural Professionals

belongs to

concept ^c

Occupation ^c

Progestogens and Estrogens Systemic Contraceptives, Sequential Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03AB>

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belongs to

concept ^c

Pharmacologic Substance ^c

*Proglumide*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A02BX06>

belongs to

concept ^c

Pharmacologic Substance ^c

*Progressive Bulbar Palsy*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C85026

A progressive motor neuron disorder affecting the muscles which are innervated by cranial nerves of the lower brain stem. Signs and symptoms include difficulties in chewing and swallowing, dysarthria, and weakness of the facial muscles and tongue. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Progressive Multifocal Leukoencephalopathy*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26815

A progressive demyelination within the central nervous system associated with reactivation of a latent JC virus infection. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Progressive Muscular Atrophy*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C85027

A rare, milder form of amyotrophic lateral sclerosis. It is characterized by a slowly progressive clinical course. Signs and symptoms include muscle weakness, atrophy, and fasciculation. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Prolapsed Lumbar Intervertebral Disc*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/202708005>

Lumbar Hernia [Definition Source: MedDRA]

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belongs to

concept ^c

Disease, Disorder or Finding ^c

*Propanolol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C07AA05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Protective services workers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C54>

Protective services workers protect individuals and property against fire and other hazards, maintain law and order and enforce laws and regulations. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: preventing, fighting and extinguishing fires; rescuing people from burning buildings and accident sites and those trapped in dangerous situations; maintaining law and order, enforcing laws and regulations, patrolling public areas and arresting suspected offenders; directing traffic and assuming authority in the event of accidents; watching over and maintaining order among inmates of prisons, reformatories or penitentiaries; patrolling or monitoring premises to guard property against theft and vandalism, controlling access to establishments and maintaining order and enforcing regulations at public events and within establishments. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor group: 541 Protective Services Workers

belongs to

concept ^c

Occupation ^c

*Proteinuria*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C38012

The presence of abnormal amounts of protein in the urine. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Psoriasis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3346

An autoimmune condition characterized by red, well-delineated plaques with silvery scales that are usually on the extensor surfaces and scalp. They can occasionally present with these manifestations: pustules; erythema and scaling in intertriginous areas, and

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erythroderma, that are often distributed on extensor surfaces and scalp. [Definition Source: NCI][attribution: NICHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Psoriatic Arthritis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C61277

Joint inflammation associated with psoriasis. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Psychiatric Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2893

A disorder characterized by behavioral and/or psychological abnormalities, often accompanied by physical symptoms. The symptoms may cause clinically significant distress or impairment in social and occupational areas of functioning. Representative examples include anxiety disorders, cognitive disorders, mood disorders and schizophrenia. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Psychoanaleptics*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06>

belongs to

concept ^c

Pharmacologic Substance ^c

*Psycholeptics*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Psychosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C78576

A mental disorder characterized by personality change, impaired functioning, and loss of touch with reality. [Definition Source: NCI]

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belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pulmonary Embolism*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50713

The obstruction of the pulmonary artery or one of its branches by an embolus, sometimes associated with infarction of the lung. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pulmonary Insufficiency*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C51447

Impairment of gas exchange within the lungs secondary to a disease process, neoplasm, or trauma, possibly resulting in hypoxia, hypercarbia, or both, but not requiring intubation or mechanical ventilation. Patients are normally managed with pharmaceutical therapy, supplemental oxygen, or both. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pulmonary Sarcoidosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34997

Sarcoidosis affecting the lung parenchyma. It is characterized by the presence of non-necrotizing granulomas in the lung tissues. It is manifested with dyspnea, cough, fever, night sweats, fatigue, and weight loss. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Pulmonary Thromboembolism*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/233935004>

Pulmonary embolism is caused by emboli, which have originated from venous thrombi, travelling to and occluding the arteries of the lung. [PMID:29770793]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Quetiapine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05AH04>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

*Radius Fracture*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C99039

Traumatic or pathological injury to the radius bone in which the continuity of the bone is broken. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Ramipril*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09AA05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Reboxetine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AX18>

belongs to

concept ^c

Pharmacologic Substance ^c

*Recurrent Acute Myeloid Leukemia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C148427

The reemergence of acute myeloid leukemia after a period of remission. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Refuse workers and other elementary workers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C96>

Refuse workers and other elementary workers collect, process and recycle garbage from buildings, yards, streets and other public places. They keep streets and other public places clean and tidy, deliver and carry messages and packages and perform odd jobs for private households or establishments. Most occupations in this sub-major group require skills at the first ISCO skill level. Tasks performed by workers in this sub-major group usually include: collecting, loading and unloading garbage; sweeping streets, parks and other public places; chopping firewood; collecting and carrying firewood, water, packages, luggage and messages; beating dust out of carpets and performing

BRAINTEASER – D9.3

other odd-job tasks. Occupations in this sub-major group are classified into the following minor groups: 961 Refuse Workers 962 Other Elementary Workers

belongs to

concept ^c

Occupation ^c

Removal of Acoustic Neuromaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/300009002>

Surgical removal of acoustic neuroma.

belongs to

concept ^c

Surgical Procedure Type ^c

Renal Colicⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C78593

Paroxysmal and severe flank pain radiating to the inguinal area. It is caused by the passage of a kidney stone through the ureter. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Repaglinideⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10BX02>

belongs to

concept ^c

Pharmacologic Substance ^c

Repair of Bladderⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/74146001>

Surgical repair of bladder

belongs to

concept ^c

Surgical Procedure Type ^c

Repair of Knee Cruciate Ligamentsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/35926005>

belongs to

concept ^c

Surgical Procedure Type ^c

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Replacement of Aortic Valveⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/26212005>

belongs to

concept ^c

Surgical Procedure Type ^c

Respiratory Systemⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R>

belongs to

concept ^c

Pharmacologic Substance ^c

Retinal Detachmentⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26874

An eye emergency condition which may lead to blindness if left untreated. It is characterized by the separation of the inner retina layers from the underlying pigment epithelium. Causes include trauma, advanced diabetes mellitus, high myopia, and choroid tumors. Symptoms include sudden appearance of floaters, sudden light flushes, and blurred vision. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Rheumatoid Arthritisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2884

A chronic, systemic autoimmune disorder characterized by inflammation in the synovial membranes and articular surfaces. It manifests primarily as a symmetric, erosive polyarthritis that spares the axial skeleton and is typically associated with the presence in the serum of rheumatoid factor. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Rheumatologic Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27204

Inflammatory and degenerative diseases of connective tissue structures, such as arthritis. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Rhinoseptoplasty*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/20805001>

Rhinoseptoplasty, also known as rhino septoplasty or septorhinoplasty, is a nose job procedure that makes cosmetic changes while realigning a malformed nasal septum. [Defintion Source: themodernplasticsurgery]

belongs to

concept^c

Surgical Procedure Type^c

*Rifampicin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J04AB02>

belongs to

concept^c

Pharmacologic Substance^c

*Riluzole*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N07XX02>

belongs to

concept^c

Pharmacologic Substance^c

*Rituximab*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L01XC02>

belongs to

concept^c

Pharmacologic Substance^c

*Rivaroxaban*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01AF01>

belongs to

concept^c

Pharmacologic Substance^c

*Rivastigmine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06DA03>

belongs to

concept^c

Pharmacologic Substance^c

*Ropinirole*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N04BC04>

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belongs to

concept ^c

Pharmacologic Substance ^c

*Rosuvastatin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C10AA07>

belongs to

concept ^c

Pharmacologic Substance ^c

*Salbutamol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R03CC02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Sales workers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C52>

Sales workers sell and demonstrate goods in wholesale or retail shops, at stalls and markets, door-to-door, via telephone or customer contact centres. They may record and accept payment for goods and services purchased, and may operate small retail outlets. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: selling goods in wholesale or retail establishments, at street or market stalls, door-to-door, via telephone or customer contact centres; demonstrating and displaying goods to potential customers; selling and serving food for immediate consumption at counters and in the street; buying or contracting a regular supply of products to be sold; stacking and displaying goods for sale and wrapping or packing goods sold; determining product mix, stock and price levels for goods to be sold; operating cash registers, optical price scanners, computers or other equipment to record and accept payment for the purchase of goods and services. Supervision of other workers may be required in some occupations classified here. Occupations in this sub-major group are classified into the following minor groups: 521 Street and Market Salespersons 522 Shop Salespersons 523 Cashiers and Ticket Clerks 524 Other Sales Workers

belongs to

concept ^c

Occupation ^c

*Salpingectomy*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C51605

Surgery to remove part or all of the fallopian tube(s). [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Surgical Procedure Type ^c

Sarcoidosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C34995

An idiopathic inflammatory disorder characterized by the formation of non-necrotizing epithelioid granulomas which contain giant cells. It usually affects the lungs, lymph nodes, liver, and skin. Cardiac involvement is also possible. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Scarlet Feverⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C94575

A streptococcal infection, mainly occurring among children, that is characterized by a red skin rash, sore throat, and fever. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Sciaticaⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/23056005>

Pain in the lower back and hip radiating in the distribution of the sciatic nerve. [HPO:probinson, PMID:17872935] (HPO)

belongs to

concept ^c

Disease, Disorder or Finding ^c

Science and engineering associate professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C31>

Science and engineering associate professionals perform technical tasks connected with research and operational methods in science and engineering. They supervise and control technical and operational aspects of mining, manufacturing, construction and other engineering operations, and operate technical equipment including aircraft and ships. Competent performance in most occupations in this sub-major group requires skills at the third ISCO skill level. Tasks performed by workers in this sub-major group usually include: setting up, monitoring and operating instruments and equipment, conducting and monitoring experiments and tests of systems; collecting and testing samples; recording observations and analysing data; preparing, revising and interpreting technical drawings and diagrams; coordinating, supervising, controlling and scheduling the activities of other workers; operating and monitoring switchboards, computerized control systems, and multi-function process control machinery; performing technical functions to ensure safe and efficient movement and operations in ships, aircraft and other equipment. Occupations in this sub-major group are classified into the following minor groups: 311 Physical and Engineering Science

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Technicians 312 Mining, Manufacturing and Construction Supervisors 313 Process Control Technicians 314 Life Science Technicians and Related Associate Professionals 315 Ship and Aircraft Controllers and Technicians

belongs to

concept ^c

Occupation ^c

Science and engineering professionals^{nl}

IRI: <http://data.europa.eu/esco/isco/C21>

Science and engineering professionals conduct research; improve or develop concepts, theories and operational methods; or apply scientific knowledge relating to fields such as physics, astronomy, meteorology, chemistry, geophysics, geology, biology, ecology, pharmacology, medicine, mathematics, statistics, architecture, engineering, design and technology. Competent performance in most occupations in this sub-major group requires skills at the fourth ISCO skill level. Tasks performed by workers in this sub-major group usually include: conducting research, enlarging, advising on or applying scientific knowledge obtained through the study of structures and properties of physical matter and phenomena, chemical characteristics and processes of various substances, materials and products, all forms of human, animal and plant life and of mathematical and statistical concepts and methods; advising on, designing and directing construction of buildings, towns and traffic systems, or civil engineering and industrial structures, as well as machines and other equipment; advising on and applying mining methods and ensuring their optimum use; surveying land and sea and making maps; studying and advising on technological aspects of particular materials, products and processes, and on efficiency of production and work organization; preparing scientific papers and reports. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 211 Physical and Earth Science Professionals 212 Mathematicians, Actuaries and Statisticians 213 Life Science Professionals 214 Engineering Professionals (excluding Electrotechnology) 215 Electrotechnology Engineers 216 Architects, Planners, Surveyors and Designers

belongs to

concept ^c

Occupation ^c

Second Degree Relative^{nl}

IRI: http://purl.obolibrary.org/obo/NCIT_C19811

Any relative who is two meioses away from a particular individual in a family; a relative with whom one quarter of an individual's genes is shared (i.e., grandparent, grandchild, uncle, aunt, nephew, niece, half-sibling) (from Genetics Home Reference glossary) [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

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*Secukinumab*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AC10>

belongs to

concept^c

Pharmacologic Substance^c

*Seizure Disorder*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3020

A brain disorder characterized by episodes of abnormally increased neuronal discharge resulting in transient episodes of sensory or motor neurological dysfunction, or psychic dysfunction. These episodes may or may not be associated with loss of consciousness or convulsions. [Definition Source: NCI]

belongs to

concept^c

Disease, Disorder or Finding^c

*Semaglutide*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10BJ06>

belongs to

concept^c

Pharmacologic Substance^c

*Sensory Organs*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/S>

belongs to

concept^c

Pharmacologic Substance^c

*Septicemia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3364

The presence of pathogenic microorganisms in the blood stream causing a rapidly progressing systemic reaction that may lead to shock. Symptoms include fever, chills, tachycardia, and increased respiratory rate. It is a medical emergency that requires urgent medical attention. [Definition Source: NCI]

belongs to

concept^c

Disease, Disorder or Finding^c

*Serositis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C70428

Inflammation of a serous membrane. [Definition Source: NCI]

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belongs to

concept ^c

Disease, Disorder or Finding ^c

*Sertraline*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AB06>

belongs to

concept ^c

Pharmacologic Substance ^c

*Serum Glutamic Pyruvic Transaminase, CTCAE*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C55098

An enzyme that is normally present in liver and heart cells. SGPT is released into blood when the liver or heart is damaged. The blood SGPT levels are thus elevated with liver damage (for example, from viral hepatitis) or with an insult to the heart (for example, from a heart attack). Some medications can also raise SGPT levels. Also called alanine aminotransferase (ALT). [Definition Source: RxList] Common Terminology Criteria for Adverse Events (CTCAE) [Definition Source: U.S. Department of Health and Human Services]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Service and sales workers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C5>

Services and sales workers provide personal and protective services related to travel, housekeeping, catering, personal care, protection against fire and unlawful acts; or demonstrate and sell goods in wholesale or retail shops and similar establishments, as well as at stalls and on markets. Competent performance in most occupations in this major group requires skills at the second ISCO skill level. Tasks performed by services and sales workers usually include: organizing and providing services during travel; housekeeping; preparing and serving of food and beverages; caring for children; providing personal and basic health care at homes or in institutions, as well as hairdressing, beauty treatment and companionship; telling fortunes; embalming and arranging funerals; providing security services and protecting individuals and property against fire and unlawful acts; enforcing of law and order; posing as models for advertising, artistic creation and display of goods; selling goods in wholesale or retail establishments, as well as at stalls and on markets; and demonstrating goods to potential customers. Supervision of other workers may be included. Occupations in this major group are classified into the following sub-major groups: 51 Personal Services Workers 52 Sales Workers 53 Personal Care Workers 54 Protective Services Workers

belongs to

concept ^c

Occupation ^c

BRAINTEASER – D9.3

Sex Hormones and Modulators of the Genital Systemⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03>

belongs to

concept ^c

Pharmacologic Substance ^c

Shoulder Dislocationⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35020

A dislocation of the shoulder joint. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Signⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C53458

Objective evidence of disease perceptible to the examining healthcare provider. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Sign or Symptomⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C100104

Objective evidence of disease perceptible to the examining practitioner (sign) and subjective evidence of disease perceived by the patient (symptom). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Sildenafilⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04BE03>

belongs to

concept ^c

Pharmacologic Substance ^c

Simvastatinⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C10AA01>

belongs to

concept ^c

BRAINTEASER – D9.3

Pharmacologic Substance ^c

Sinusitisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35024

An acute or chronic inflammatory process affecting the mucous membranes of any sinus cavity. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Siponimodⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AA42>

belongs to

concept ^c

Pharmacologic Substance ^c

Sisterⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C111202

A female who shares with her sibling the genetic makeup inherited from both of the biological parents. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

Sitagliptinⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A10BH01>

belongs to

concept ^c

Pharmacologic Substance ^c

Sjogren Syndromeⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26883

An autoimmune disorder affecting the salivary and lacrimal glands. Morphologically, it is characterized by the presence of lymphocytic and plasmacytic infiltrates which cause destruction of these glands. It results in dry mouth and dry eyes. It may be associated with the presence of other autoimmune disorders, including rheumatoid arthritis and lupus erythematosus. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

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Skilled agricultural, forestry and fishery workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C6>

Skilled agricultural, forestry and fishery workers grow and harvest field or tree and shrub crops; gather wild fruits and plants; breed, tend or hunt animals; produce a variety of animal husbandry products; cultivate, conserve and exploit forests; breed or catch fish; and cultivate or gather other forms of aquatic life in order to provide food, shelter and income for themselves and their households. Competent performance in most occupations in this major group requires skills at the second ISCO skill level. Tasks performed by skilled agricultural, forestry and fishery workers usually include: preparing the soil; sowing, planting, spraying, fertilizing and harvesting field crops; growing fruit and other tree and shrub crops; growing garden vegetables and horticultural products; gathering wild fruits and plants; breeding, raising, tending or hunting animals mainly to obtain meat, milk, hair, fur, skin, or sericultural, apiarian or other products; cultivating, conserving and exploiting forests; breeding or catching fish; cultivating or gathering other forms of aquatic life; storing and carrying out some basic processing of their produce; selling their products to purchasers, marketing organizations or at markets. Supervision of other workers may be included. Occupations in this major group are classified into the following sub-major groups: 61 Market-oriented Skilled Agricultural Workers 62 Market-oriented Skilled Forestry, Fishery and Hunting Workers 63 Subsistence Farmers, Fishers, Hunters and Gatherers

belongs to

concept ^c

Occupation ^c

Skin Basal Cell Carcinomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2921

The most frequently seen skin cancer. It arises from basal cells of the epidermis and pilosebaceous units. Clinically it is divided into the following types: nodular, ulcerative, superficial, multicentric, erythematous, and sclerosing or morphea-like. More than 95% of these carcinomas occur in patients over 40. They develop on hair-bearing skin, most commonly on sun-exposed areas. Approximately 85% are found on the head and neck and the remaining 15% on the trunk and extremities. Basal cell carcinoma usually grows in a slow and indolent fashion. However, if untreated, the tumor may invade the subcutaneous fat, skeletal muscle and bone. Distant metastases are rare. Excision, curettage and irradiation cure most basal cell carcinomas. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Skin Basosquamous Cell Carcinomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2922

A basal cell carcinoma which displays squamous differentiation. The neoplastic cells have more abundant cytoplasm with more marked keratinization than typical basal cell carcinomas. It usually has a more aggressive clinical course compared to typical basal

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cell carcinoma, and it may produce regional or widespread metastases. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Skin Carcinoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4914

A carcinoma that arises from the skin. Representative examples are basal cell carcinoma and squamous cell carcinoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Skin Cyst*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3884

A cystic lesion located in the skin. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*SOD1 Gene*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C54578

This gene plays a role in the detoxification of superoxide radicals in the cytosol. [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

*Son*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C25205

A male human offspring. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

*Sphincter*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C28381

A circular band of muscle that functions to regulate the size of an orifice in the body. [Definition Source: NCI]

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belongs to

concept ^c

Anatomic Site ^c

*Spina Bifida*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C101214

A congenital neural tube defect in which vertebrae are not fully formed. It results in the protrusion of the spinal cord through the opening of the vertebrae. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Spinal and Bulbar Muscular Atrophy, X-linked 1*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C85233

A rare, slowly progressive degenerative disorder affecting males. It is caused by mutations in the androgen receptor (AR) gene. It is characterized by bulbar and limb muscle weakness and atrophy, and gynecomastia. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Spinal Cord*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12464

The elongated, approximately cylindrical part of the central nervous system of vertebrates that lies in the vertebral canal and from which the spinal nerves emerge. [Definition Source: NCI][attribution: On-line Medical Dictionary]

belongs to

concept ^c

Anatomic Site ^c

*SQSTM1 Gene*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C101491

This gene is involved in signal transduction. [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

*Staphylococcal Infection*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35038

Infection by Staphylococcus. [Definition Source: NCI]

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belongs to

concept ^c

Disease, Disorder or Finding ^c

Stationary plant and machine operatorsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C81>

Stationary plant and machine operators monitor and operate stationary industrial plant, machinery and equipment, or for which mobility is not an integral part of operation. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. The work mainly calls for experience with and an understanding of the industrial plant, machinery or equipment being operated and monitored. Ability to cope with machine-paced operations and to adapt to innovations in machinery and equipment are often required. Tasks performed by workers in this sub-major group usually include: setting up, operating and monitoring a variety of stationary plant and machinery; detecting malfunctions and taking corrective action; examining outputs for defects and conformity with specifications and adjusting machine settings accordingly; performing maintenance, repairs and cleaning; recording data and maintaining production records. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor groups: 811 Mining and Mineral Processing Plant Operators 812 Metal Processing and Finishing Plant Operators 813 Chemical and Photographic Products Plant and Machine Operators 814 Rubber, Plastic and Paper Products Machine Operators 815 Textile, Fur and Leather Products Machine Operators 816 Food and Related Products Machine Operators 817 Wood Processing and Papermaking Plant Operators 818 Other Stationary Plant and Machine Operators

belongs to

concept ^c

Occupation ^c

Stefano Marchesinⁿⁱ

IRI: <https://orcid.org/0000-0003-0362-5893>

belongs to

Person ^c

Stomatological Preparationsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A01>

belongs to

concept ^c

Pharmacologic Substance ^c

Street and related sales and service workersⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C95>

Street and related sales and services workers sell goods (excluding food) for immediate consumption, and provide a variety of services on streets and in other public places such as stations. Most occupations in this sub-major group require skills at the first ISCO skill

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level. Tasks performed by workers in this sub-major group usually include: buying or making various items for sale; loading and unloading items for sale and transporting them; obtaining the materials necessary to perform services; approaching people on the street to offer goods or services; cleaning and polishing shoes; cleaning and polishing car windows; running errands; assisting car drivers to find a parking place and ensuring that the car is not damaged during the driver's absence; handing out leaflets and free newspapers; receiving immediate payment. Occupations in this sub-major group are classified into the following minor groups: 951 Street and Related Services Workers 952 Street Vendors (excluding Food)

belongs to

concept ^c

Occupation ^c

*Stroke*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3390

A sudden loss of neurological function secondary to hemorrhage or ischemia in the brain parenchyma due to a vascular event. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Subdural Hematoma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C116585

A collection of blood between the dura mater and the brain. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Subsistence farmers, fishers, hunters and gatherers*ⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C63>

Subsistence farmers, fishers, hunters and gatherers grow and harvest field or tree and shrub crops, vegetables and fruit; gather wild fruits, medicinal and other plants; tend or hunt animals; catch fish and gather various forms of aquatic life in order to provide food, shelter and, in some cases, a minimum of cash income for themselves and their households. Competent performance in most occupations in this sub-major group requires skills at the second ISCO skill level. Tasks performed by workers in this sub-major group usually include: preparing the soil; sowing, planting, tending and harvesting field crops; growing vegetables, fruit and other tree and shrub crops; gathering wild fruits, medicinal and other plants; breeding, tending and feeding animals and poultry mainly to obtain meat, eggs, milk, hair, skin or other products; hunting or trapping animals; catching fish and gathering other forms of aquatic life; fetching water and gathering firewood; storing produce for later use and carrying out some processing of produce; building and maintaining houses and other shelters; making tools, clothes and utensils for use by the household; selling or bartering some products at local

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markets. Occupations in this sub-major group are classified into the following minor groups: 631 Subsistence Crop Farmers 632 Subsistence Livestock Farmers 633 Subsistence Mixed Crop and Livestock Farmers 634 Subsistence Fishers, Hunters, Trappers and Gatherers

belongs to

concept ^c

Occupation ^c

Sulfasalazineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A07EC01>

belongs to

concept ^c

Pharmacologic Substance ^c

Sumatriptanⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N02CC01>

belongs to

concept ^c

Pharmacologic Substance ^c

Supratentorial Brainⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12512

The part of the brain that is located superior to the tentorium cerebelli. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

Surgical Dressingsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V20>

belongs to

concept ^c

Pharmacologic Substance ^c

Surgical Procedure on Cervical Spineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/428490009>

Surgical procedure on the cervical spine.

belongs to

concept ^c

Surgical Procedure Type ^c

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Surgical Procedure on Lower Extremityⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/107784002>

Surgical procedure involving a lower extremity.

belongs to

concept ^c

Surgical Procedure Type ^c

Surgical Procedure on Thoraxⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/385487005>

Any surgery performed inside the thoracic cavity. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

Symptomⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C4876

Subjective evidence of disease perceived by the patient. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Syncopeⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35053

A spontaneous loss of consciousness caused by insufficient blood supply to the brain. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Systemic Hormonal Preparations, excl. Sex Hormones and Insulinsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H>

belongs to

concept ^c

Pharmacologic Substance ^c

Tadalafilⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04BE08>

belongs to

concept ^c

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Pharmacologic Substance ^c

Tafluprostⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/S01EE05>

belongs to

concept ^c

Pharmacologic Substance ^c

Tamoxifenⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L02BA01>

belongs to

concept ^c

Pharmacologic Substance ^c

Tamsulosinⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04CA02>

belongs to

concept ^c

Pharmacologic Substance ^c

TARDBP Geneⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C80020

This gene is involved in transcription and mRNA splicing. [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

TBK1 Geneⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C24845

This gene plays a role in the immune response and signal transduction. [Definition Source: NCI]

belongs to

concept ^c

Gene ^c

Teaching professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C23>

Teaching professionals teach the theory and practice of one or more disciplines at different educational levels; conduct research; improve or develop concepts, theories and operational methods pertaining to their particular discipline; and prepare scholarly papers and books. Competent performance in most occupations in this sub-major

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group requires skills at the fourth ISCO skill level. Tasks performed by workers in this sub-major group usually include: conducting classes, courses, or tutorials at a particular educational level for educational and vocational purposes, including private lessons; conducting adult literacy programmes; teaching and educating persons with learning difficulties or special needs; designing and modifying curricula; inspecting and advising on teaching methods and aids; participating in decisions concerning the organization of teaching and related activities at schools and universities; conducting research in particular subjects to improve or develop concepts, theories or operational methods for application in industrial and other fields; preparing scholarly papers and books. Supervision of other workers may be included. Occupations in this sub-major group are classified into the following minor group: 231 University and Higher Education Teachers 232 Vocational Education Teachers 233 Secondary Education Teachers 234 Primary School and Early Childhood Teachers 235 Other Teaching Professionals

belongs to

concept ^c

Occupation ^c

Technicians and associate professionalsⁿⁱ

IRI: <http://data.europa.eu/esco/isco/C3>

Technicians and associate professionals perform technical and related tasks connected with research and the application of scientific or artistic concepts and operational methods, and government or business regulations. Competent performance in most occupations in this major group requires skills at the third ISCO skill level. Tasks performed by technicians and associate professionals usually include: undertaking and carrying out technical work connected with research and the application of concepts and operational methods in the fields of physical sciences including engineering and technology, life sciences including the medical profession, and social sciences and humanities; initiating and carrying out various technical services related to trade, finance and administration including administration of government laws and regulations, and to social work; providing technical support for the arts and entertainment; participating in sporting activities; executing some religious tasks. Supervision of other workers may be included. Occupations in this major group are classified into the following sub-major groups: 31 Science and Engineering Associate Professionals 32 Health Associate Professionals 33 Business and Administration Associate Professionals 34 Legal, Social, Cultural and Related Associate Professionals 35 Information and Communications Technicians

belongs to

concept ^c

Occupation ^c

Telmisartanⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09CA07>

belongs to

concept ^c

Pharmacologic Substance ^c

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Terbutalineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R03AC03>

belongs to

concept ^c

Pharmacologic Substance ^c

Teriflunomideⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AA31>

belongs to

concept ^c

Pharmacologic Substance ^c

Tetanus Immunoglobulinⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J06BB02>

belongs to

concept ^c

Pharmacologic Substance ^c

Tetracosactideⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H01AA02>

belongs to

concept ^c

Pharmacologic Substance ^c

Tetralogy of Fallotⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C84505

A congenital heart disorder characterized by the presence of the following four abnormalities: ventricular septal defect, pulmonary stenosis, overriding aorta, and right ventricular hypertrophy. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Thalassemiaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35069

An inherited blood disorder characterized by a decreased synthesis of one of the polypeptide chains that form hemoglobin. Anemia results from this abnormal hemoglobin formation. [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

*Therapeutic Radiopharmaceuticals*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V10>

belongs to

concept ^c

Pharmacologic Substance ^c

*Thiamazole*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H03BB02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Thiethylperazine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R06AD03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Third Degree Relative*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C100808

Any individual related biologically or legally to another individual and considered two degrees removed from the immediate family as in the case of cousins. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

*Thoracic Spinal Cord*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12894

The portion of the spinal cord located in the thoracic region. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Thoracic Spine*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C69315

The vertebrae of the thoracic spine, numbered one through twelve in man. [Definition Source: NCI]

BRAINTEASER – D9.3

belongs to

concept ^c

Anatomic Site ^c

*Thoracic Trauma*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C171204

Trauma to the chest. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Thorax*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12799

The division of the body lying between the neck and the abdomen. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Throat Preparations*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R02>

belongs to

concept ^c

Pharmacologic Substance ^c

*Thrombocytopenia*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3408

A laboratory test result indicating that there is an abnormally small number of platelets in the circulating blood. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Thromboembolism*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C28195

Occlusion of the lumen of a vessel by a thrombus that has migrated from a distal site via the blood stream. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Thyroid Gland Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26893

A non-neoplastic or neoplastic disorder that affects the thyroid gland. Representative examples include hyperthyroidism, hypothyroidism, thyroiditis, follicular adenoma, and carcinoma. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Thyroid Gland Excisionⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/13619001>

Surgery to remove part or all of the thyroid gland. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

Thyroid Therapyⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/H03>

belongs to

concept ^c

Pharmacologic Substance ^c

Thyroiditisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26894

Inflammation of the thyroid gland. This category includes Hashimoto thyroiditis, Riedel thyroiditis, acute thyroiditis, subacute thyroiditis, and radiation-induced thyroiditis. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Tibia Fractureⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C99083

Traumatic or pathological injury to the tibia in which the continuity of the bone is broken. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Tiboloneⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G03CX01>

belongs to

concept^c

Pharmacologic Substance^c

Ticlopidineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01AC05>

belongs to

concept^c

Pharmacologic Substance^c

Tinea Versicolorⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C112833

A skin condition characterized by hypopigmented, pink or tan, confetti-like, discrete and confluent scaly macules distributed on the chest, shoulders and upper back. [Definition Source: NCI]

belongs to

concept^c

Disease, Disorder or Finding^c

Tiotropium Bromideⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/R03BB04>

belongs to

concept^c

Pharmacologic Substance^c

Tizanidineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M03BX02>

belongs to

concept^c

Pharmacologic Substance^c

Tocilizumabⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AC07>

belongs to

concept^c

Pharmacologic Substance^c

Tolterodineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04BD07>

BRAINTEASER – D9.3

belongs to

concept ^c

Pharmacologic Substance ^c

Tonicsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A13>

belongs to

concept ^c

Pharmacologic Substance ^c

Tooth Abscessⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35475

An infectious process that affects a tooth. It is characterized by localized periapical or periodontal collection of pus. It presents with pain and swelling of the gums and/or cheek. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Topical Products for Joint and Muscular Painⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/M02>

belongs to

concept ^c

Pharmacologic Substance ^c

Topiramateⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AX11>

belongs to

concept ^c

Pharmacologic Substance ^c

Toxoplasmosisⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3418

A parasitic disease contracted by the ingestion or fetal transmission of toxoplasma gondii. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Transient Ischemic Attackⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C50781

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A brief attack (from a few minutes to an hour) of cerebral dysfunction of vascular origin, with no persistent neurological deficit. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Transplantation*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C15342

Transference of a tissue or organ within an individual, between individuals of the same species, or between individuals of different species. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

*Transurethral Prostatectomy*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/SNOMEDCT/90199006>

Prostate tissue removal via a cystoscope. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

*Trastuzumab*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L01XC03>

belongs to

concept ^c

Pharmacologic Substance ^c

*Trazodone*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AX05>

belongs to

concept ^c

Pharmacologic Substance ^c

*Triazolam*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05CD05>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

Trigeminal Nerve Disorderⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26952

A non-neoplastic or neoplastic disorder affecting the trigeminal nerve (fifth cranial nerve). [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Trospiumⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04BD09>

belongs to

concept ^c

Pharmacologic Substance ^c

Turbinectomyⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C51750

Total or partial excision of the turbinates. [Definition Source: NCI]

belongs to

concept ^c

Surgical Procedure Type ^c

Two Vessel Coronary Diseaseⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C100023

There was greater than or equal to 50% stenosis (reduction in cross-sectional area) in two coronary arteries (or greater than or equal to 50% stenosis in the left main coronary artery). (ACC) [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Type 1 Diabetes Mellitusⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2986

A chronic condition characterized by minimal or absent production of insulin by the pancreas. [Definition Source: NCI][attribution: NICHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Type 2 Diabetes Mellitusⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26747

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A type of diabetes mellitus that is characterized by insulin resistance or desensitization and increased blood glucose levels. This is a chronic disease that can develop gradually over the life of a patient and can be linked to both environmental factors and heredity. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Uncle*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C96587

A male relative who is a sibling of either of the biological parents, and who share a common ancestor. [Definition Source: NCI]

belongs to

concept ^c

KinshipType ^c

*University of Padua*ⁿⁱ

IRI: <https://www.unipd.it/>

belongs to

Clinics and Hospitals ^c

*University of Turin*ⁿⁱ

IRI: <https://www.unito.it/>

belongs to

Clinics and Hospitals ^c

*Upper Extremity*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12671

The region of the body that includes the arm, the forearm, and hand. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Ureteral Stenosis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C115958

Narrowing of the luminal diameter of one or both ureters due to intrinsic factors. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

Urinary Stoneⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26905

A concretion in the urinary tract. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Urologicalsⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/G04>

belongs to

concept ^c

Pharmacologic Substance ^c

Ursodeoxycholic Acidⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A05AA02>

belongs to

concept ^c

Pharmacologic Substance ^c

Urticariaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3432

A transient, itchy skin eruption characterized by wheals with pale interiors and red margins. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

Ustekinumabⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/L04AC05>

belongs to

concept ^c

Pharmacologic Substance ^c

Uterine Corpus Leiomyomaⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C3434

A benign smooth muscle neoplasm arising from the body of the uterus. It is characterized by the presence of spindle cells with cigar-shaped nuclei, interlacing fascicles, and a whorled pattern. [Definition Source: NCI]

belongs to

concept ^c

BRAINTEASER – D9.3

Disease, Disorder or Finding ^c

Vaccinesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J07>

belongs to

concept ^c

Pharmacologic Substance ^c

Valaciclovirⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/J05AB11>

belongs to

concept ^c

Pharmacologic Substance ^c

Valproic Acidⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AG01>

belongs to

concept ^c

Pharmacologic Substance ^c

Valsartanⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C09CA03>

belongs to

concept ^c

Pharmacologic Substance ^c

Variousⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/V>

belongs to

concept ^c

Pharmacologic Substance ^c

Vasoprotectivesⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C05>

belongs to

concept ^c

Pharmacologic Substance ^c

Venlafaxineⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AX16>

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belongs to

concept ^c

Pharmacologic Substance ^c

*Verapamil*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/C08DA01>

belongs to

concept ^c

Pharmacologic Substance ^c

*Vertebral Column*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C12998

A series of bones, muscles, tendons, and other tissues reaching from the base of the skull to the tailbone. The vertebral column forms the axis of the skeleton and encloses as well as protects the spinal cord and the fluid surrounding the spinal cord. [Definition Source: NCI]

belongs to

concept ^c

Anatomic Site ^c

*Vertigo*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C38057

A feeling of movement, a sensation as if the external world were revolving around the patient (objective vertigo) or as if he himself were revolving in space (subjective vertigo). Vertigo is medically distinct from dizziness, lightheadedness, and unsteadiness. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Vertioxetine*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N06AX26>

belongs to

concept ^c

Pharmacologic Substance ^c

*Vigabatrin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N03AG04>

belongs to

concept ^c

Pharmacologic Substance ^c

BRAINTEASER – D9.3

*Viral Pericarditis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C128405

Pericarditis that is caused by an infection with a viral agent. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Viral Respiratory Tract Infection*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C27219

A respiratory tract infection caused by a virus. Viruses represent the most common causes of upper and lower respiratory tract infections and include rhinoviruses, influenza viruses, parainfluenza viruses, and respiratory syncytial virus. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Vitamin D Deficiency*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C114830

Abnormally low level of 25-hydroxyvitamin D in the blood. [Definition Source: NCI]

belongs to

concept ^c

Disease, Disorder or Finding ^c

*Vitamins*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/A11>

belongs to

concept ^c

Pharmacologic Substance ^c

*Vitiligo*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C26915

Generalized well circumscribed patches of leukoderma that are generally distributed over symmetric body locations and is due to autoimmune destruction of melanocytes. [Definition Source: NCI][attribution: NICHD]

belongs to

concept ^c

Disease, Disorder or Finding ^c

BRAINTEASER – D9.3

*Vulvovaginal Candidiasis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C2914

Infection of the vulva and vagina with a fungus of the genus CANDIDA. It is a disease associated with HIV infection. [Definition Source: NCI]

belongs to

concept^c

Disease, Disorder or Finding^c

*Vulvovaginitis*ⁿⁱ

IRI: http://purl.obolibrary.org/obo/NCIT_C35131

An inflammatory pathologic process that affects the vulva and the vagina. [Definition Source: NCI]

belongs to

concept^c

Disease, Disorder or Finding^c

*Warfarin*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/B01AA03>

belongs to

concept^c

Pharmacologic Substance^c

*Zolmitriptan*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N02CC03>

belongs to

concept^c

Pharmacologic Substance^c

*Zolpidem*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05CF02>

belongs to

concept^c

Pharmacologic Substance^c

*Zuclopenthixol*ⁿⁱ

IRI: <http://purl.bioontology.org/ontology/ATC/N05AF05>

belongs to

concept^c

Pharmacologic Substance^c

Legend

^c: Classes

^{op}: Object Properties

^{dp}: Data Properties

ⁿⁱ: Named Individuals