Exploring HeTOP,

Exploring ICPC-2 on HeTOP

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Lesson 1 Exploring HeTOP Slide 3

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HeTOP allows you

- To consult numerous interactive terminologies
- To understand the mappings between them
- To find and browse concepts
- To consult selected databases
- To find documents
- To make links with external knowledge bases such as PubMed, LiSSa, LILACS, Doc'CISMeF, Bioportal

The content of HeTOP

- Is exportable in the OWL2 language and opens to the semantic web
- Is a resource for numerous applications (acts like a terminology/ ontology platform)
- Natural Language Processing source
- Automatic indexing
- Automatic concept retrieval

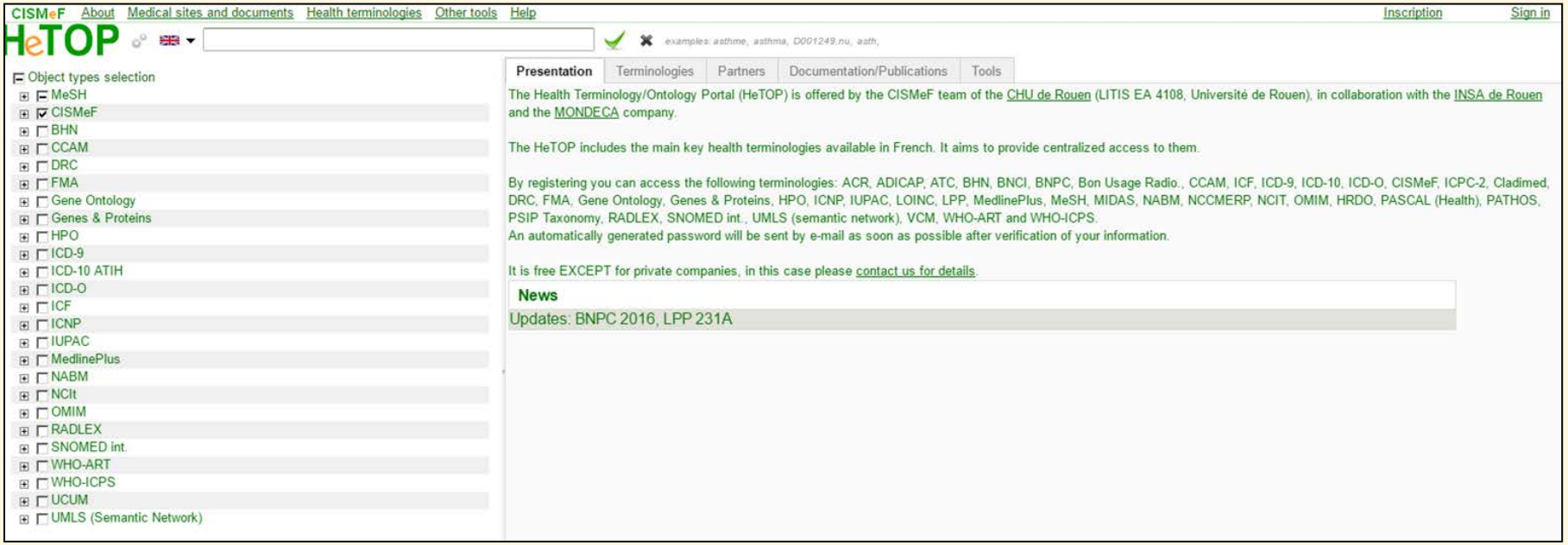
www.hetop.eu

Sign in

xxxx

xxxxxxx

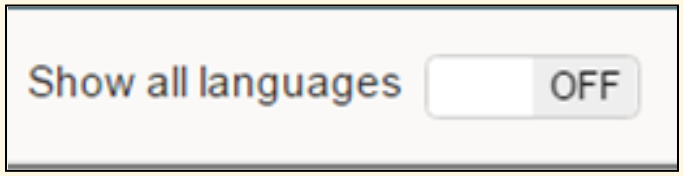
HeTOP public Home page



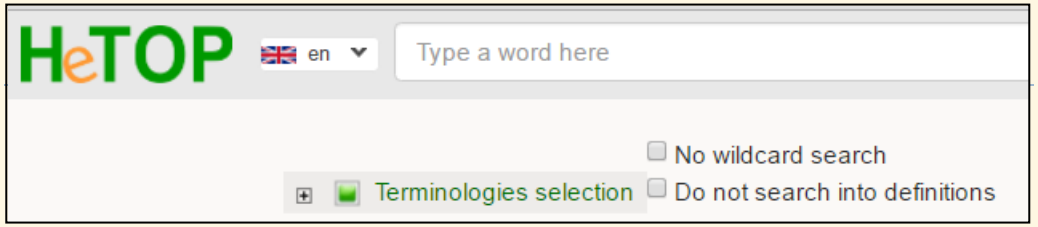
Choose your language

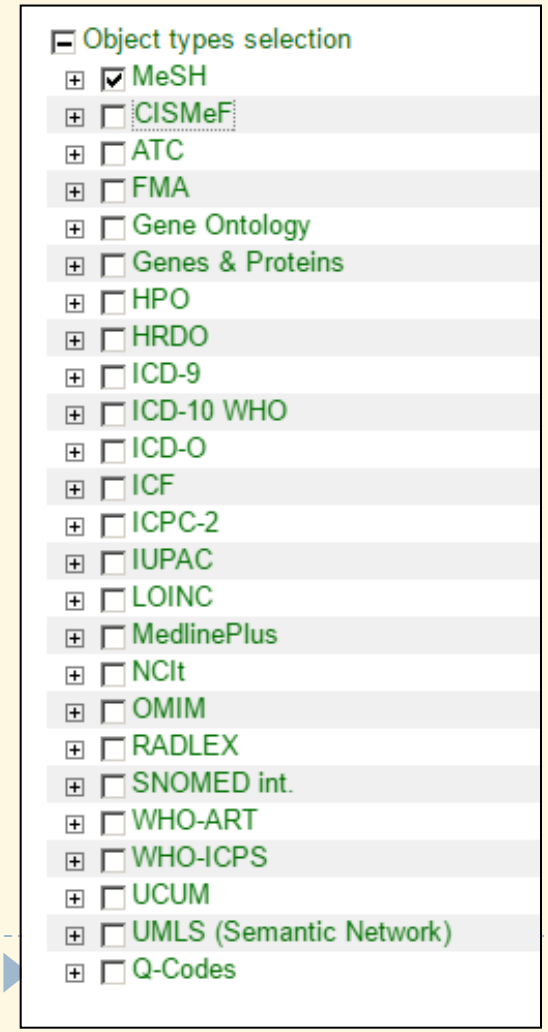
HeTOP is multilingual (search in several languages) and crosslingual (navigate through languages) but it is not a dictionary

You could see all available languages (just glide the button, it's a bipolar system…)



Select your terminology



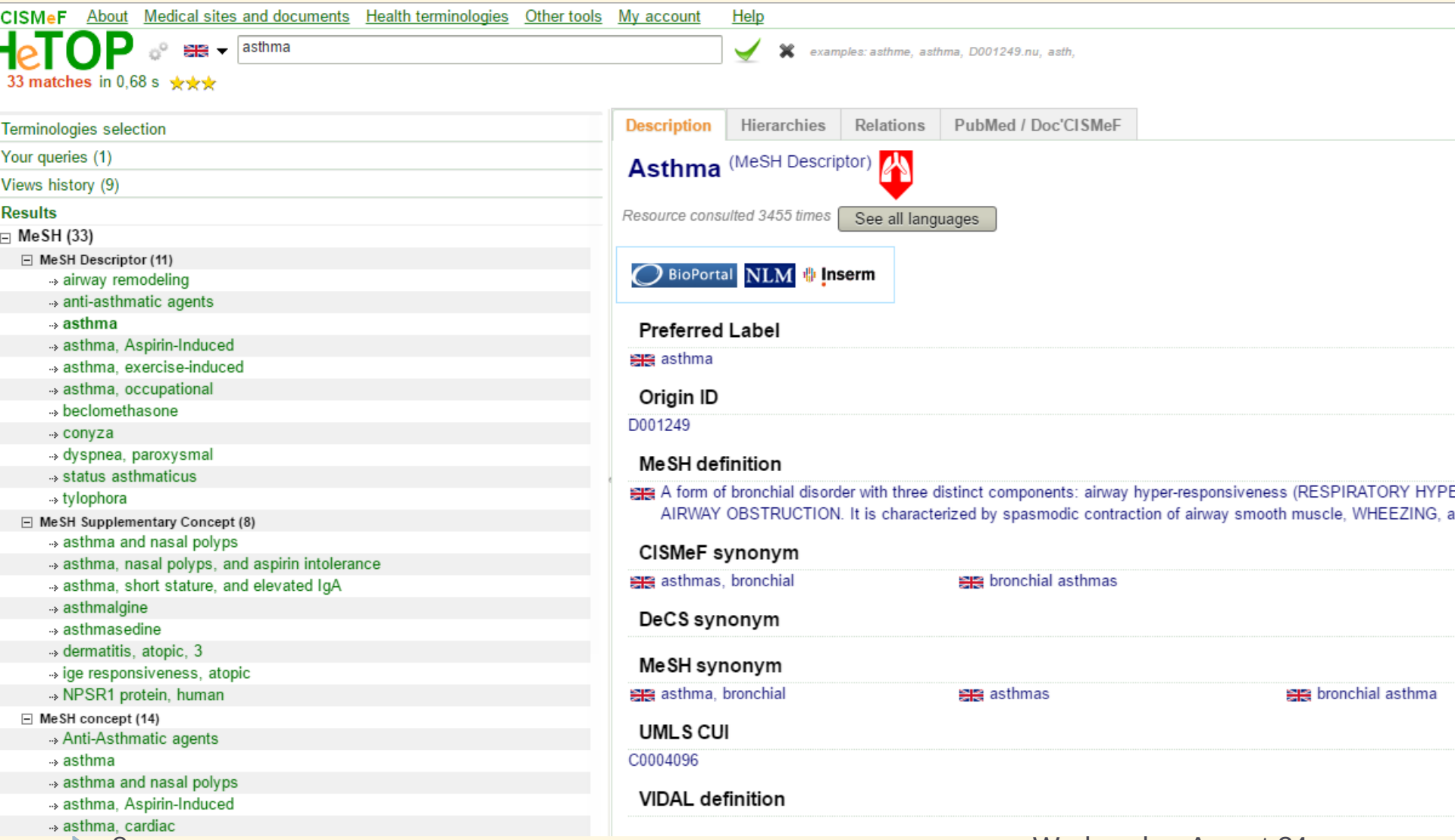


Try first
MesH

Type a term in the entry field, i.e. *asthma*

And click on the green arrow

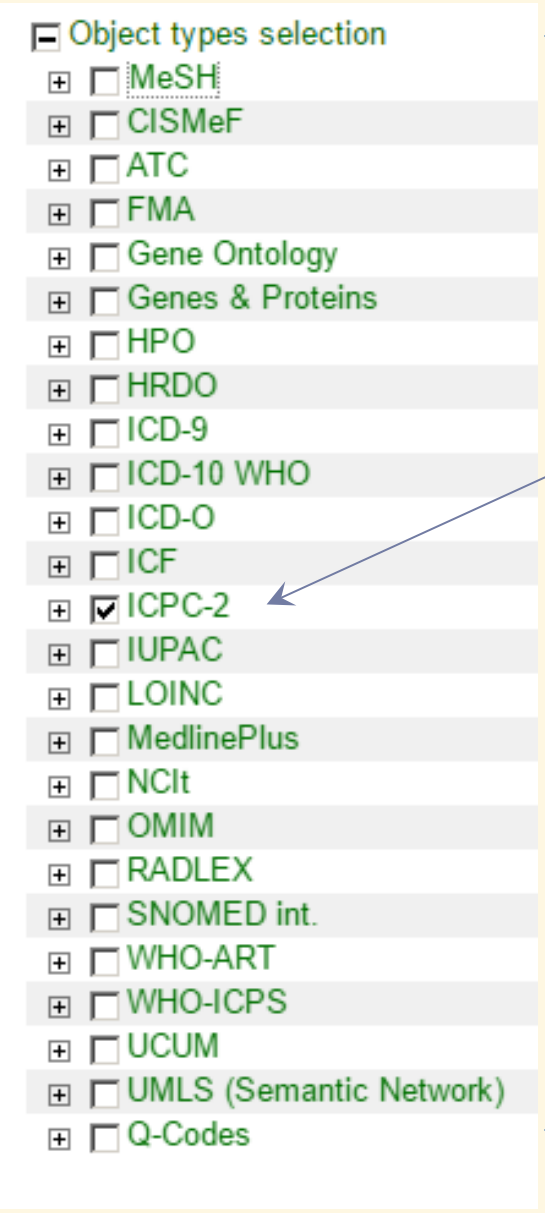
You get the Description tab. Just try to explore the links Then explore the tabs Hierarchies and Relations



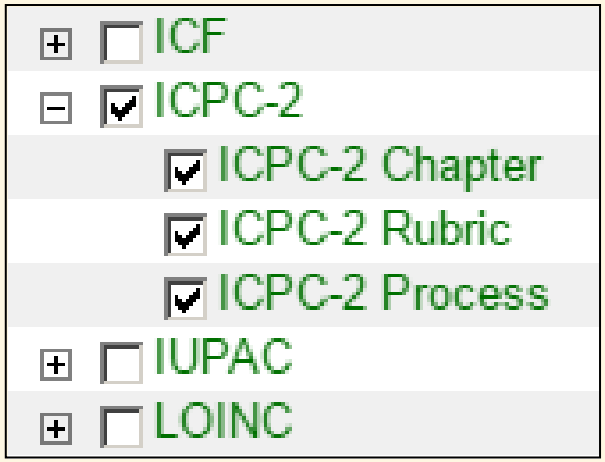
On the tabs Relations
Explore the terminological mappings

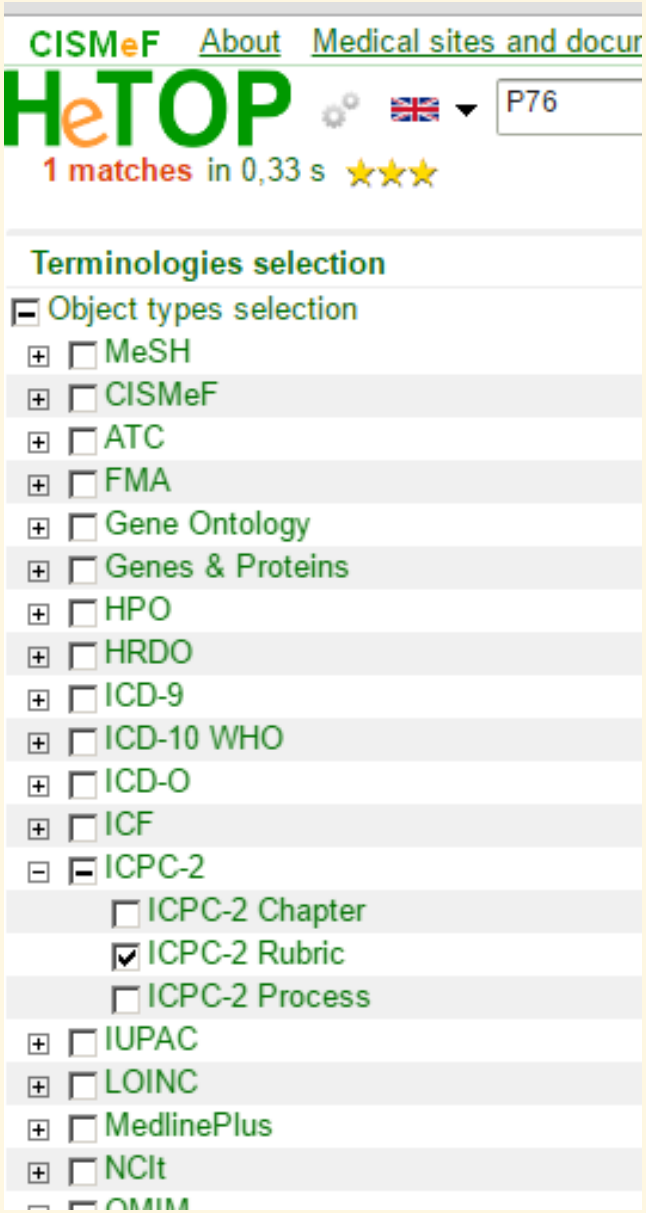
Lesson 2 Exploring ICPC-2 on HeTOP

Deselect all



Select ICPC-2
Then click on the +
And chose the component



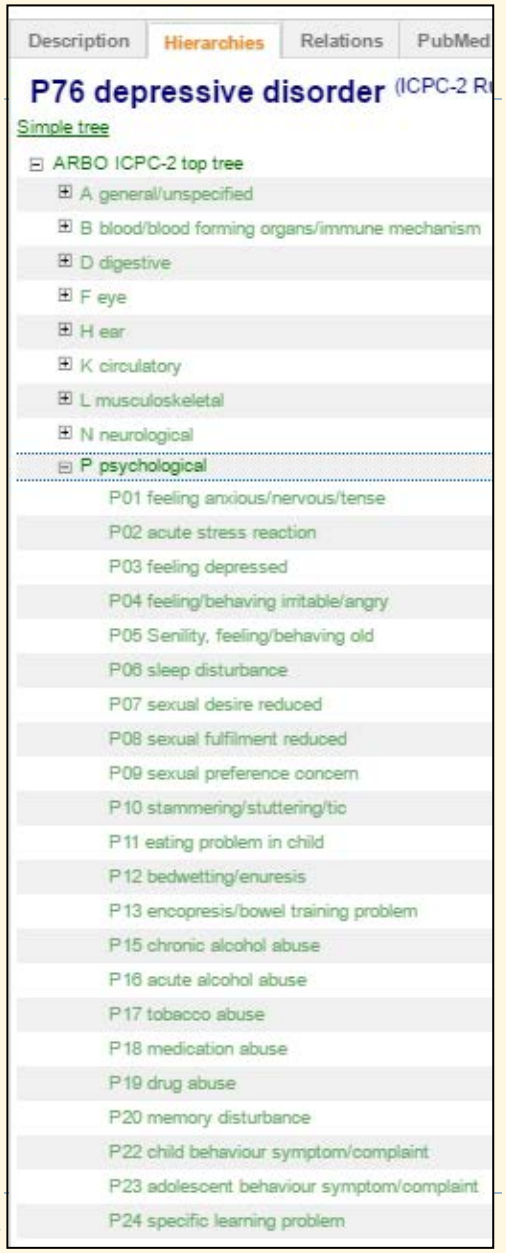


Type a code or a term
Then click the green arrow

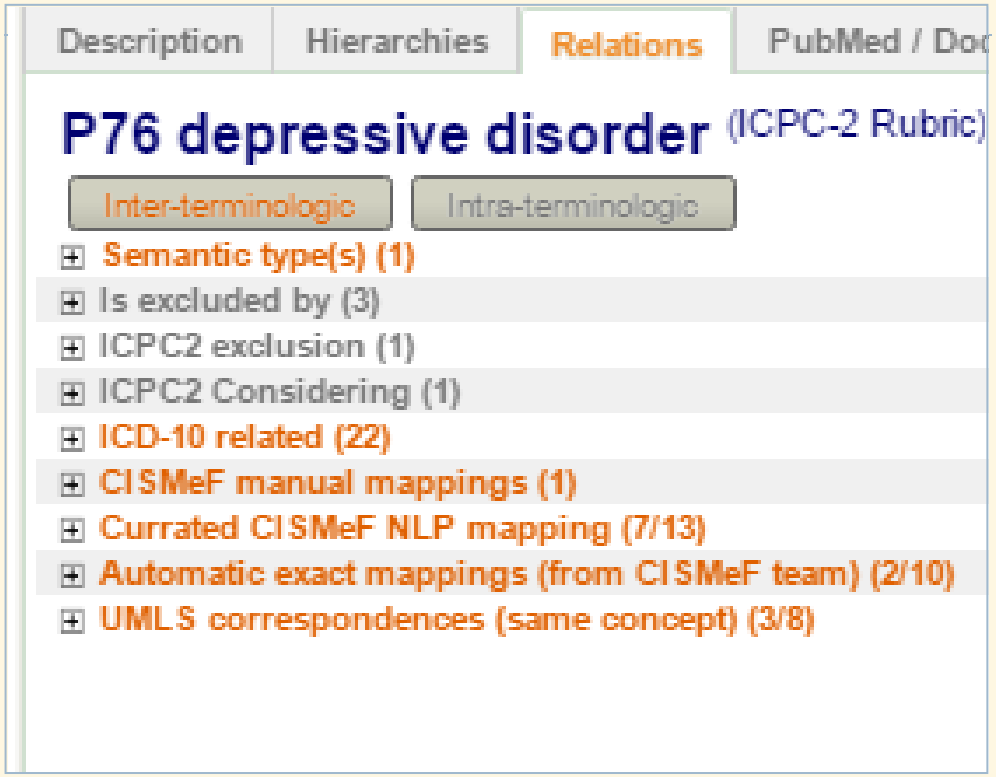
You get the P76 record

Try see all languages

Explore hierarchy



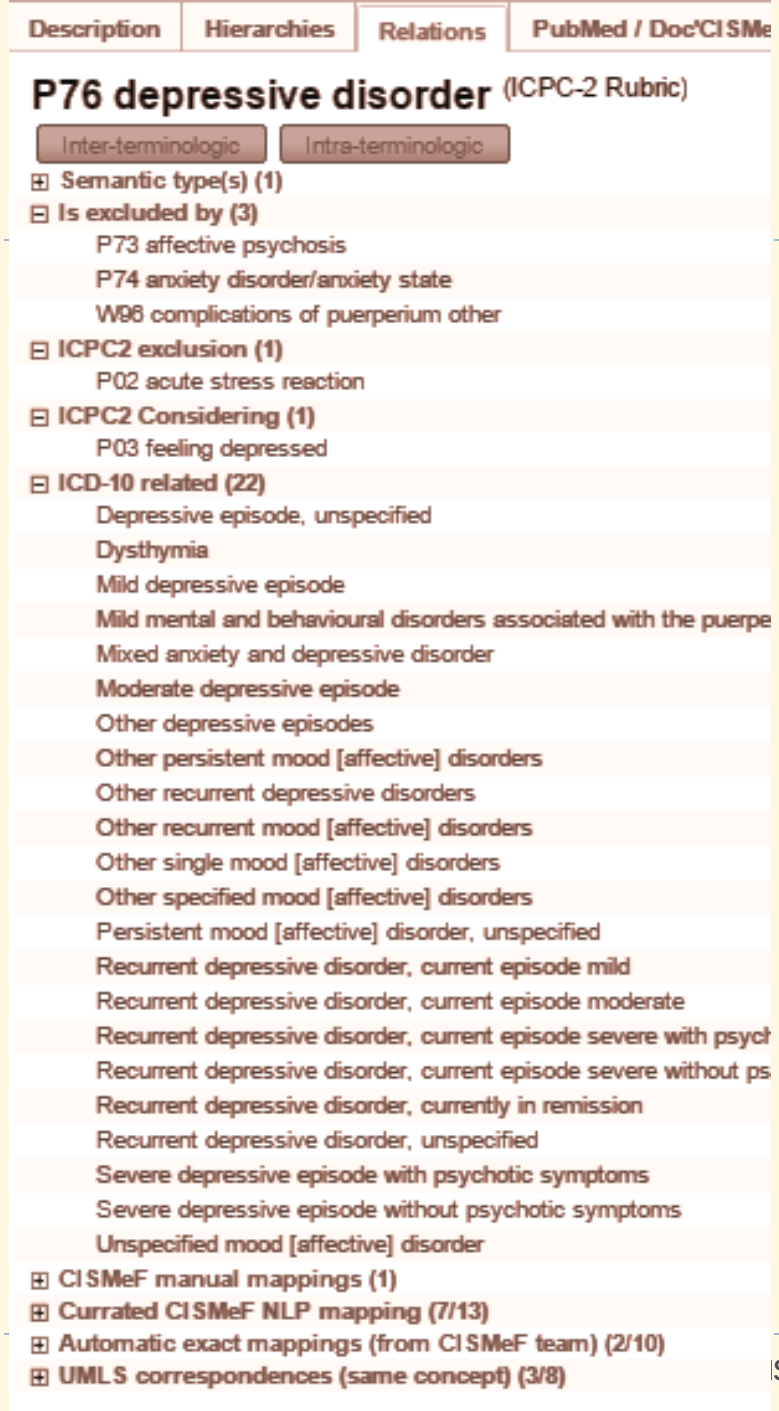
Explore Relations



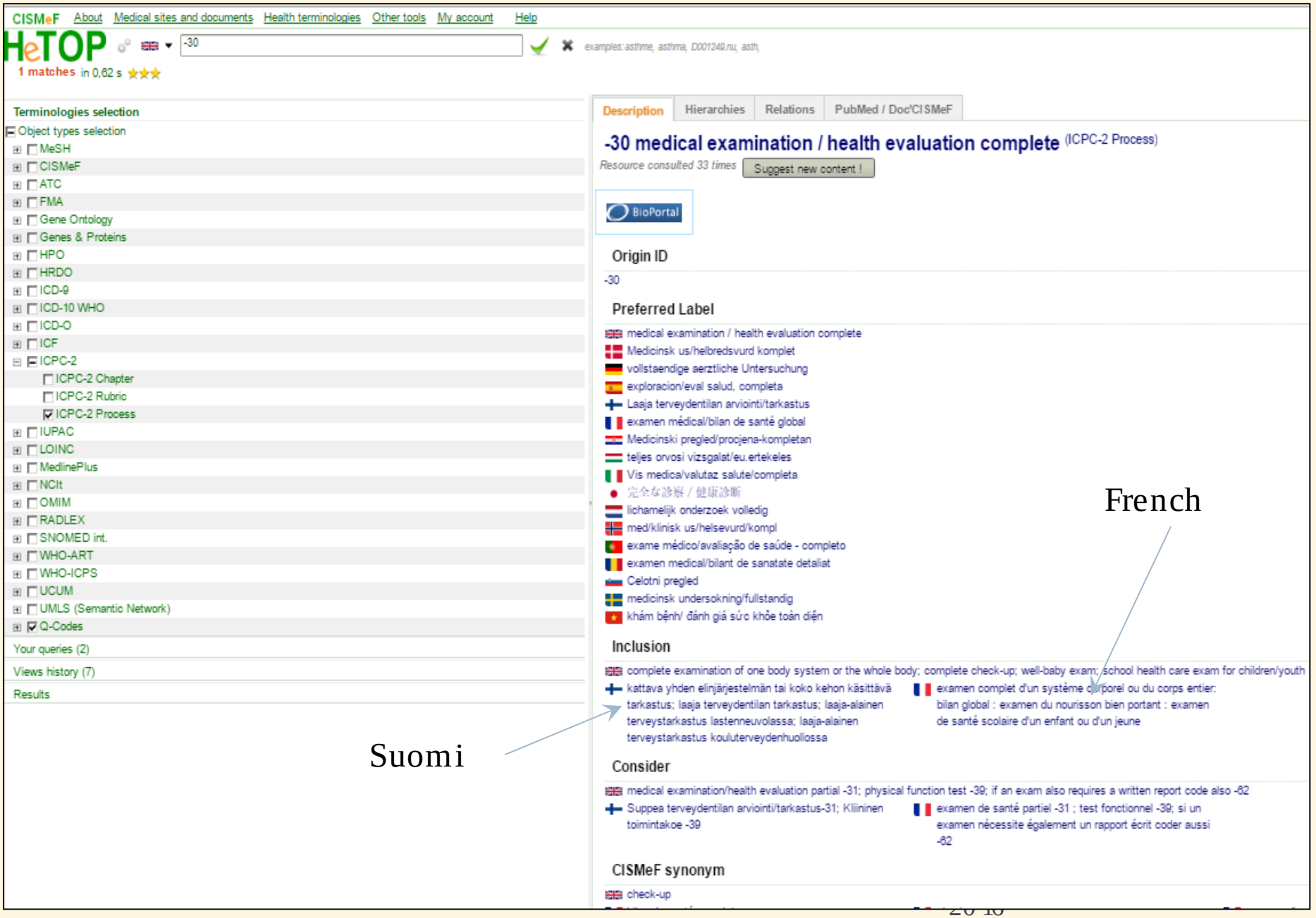
Intra terminologic relations

All the links retrieved from KITH web site

ICPC-2e-v.5.0 19. May 20 15



Chose ICPC-2 / Process and type -30



Explore inter-terminologic

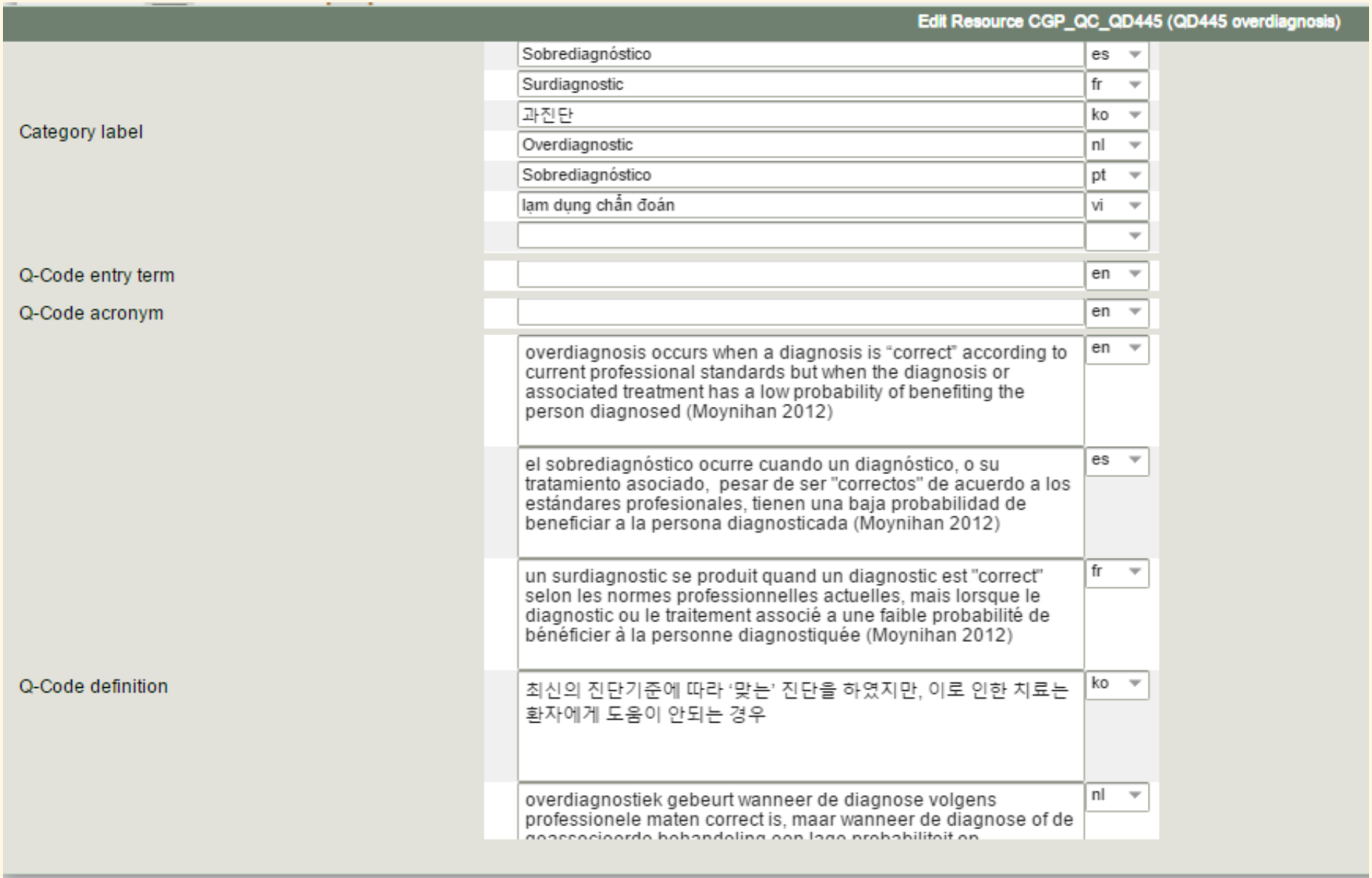
SNOMED-CT not present due to copyright issues

Description | Hierarchies | Relations | PubMed / Doc'CISMeF

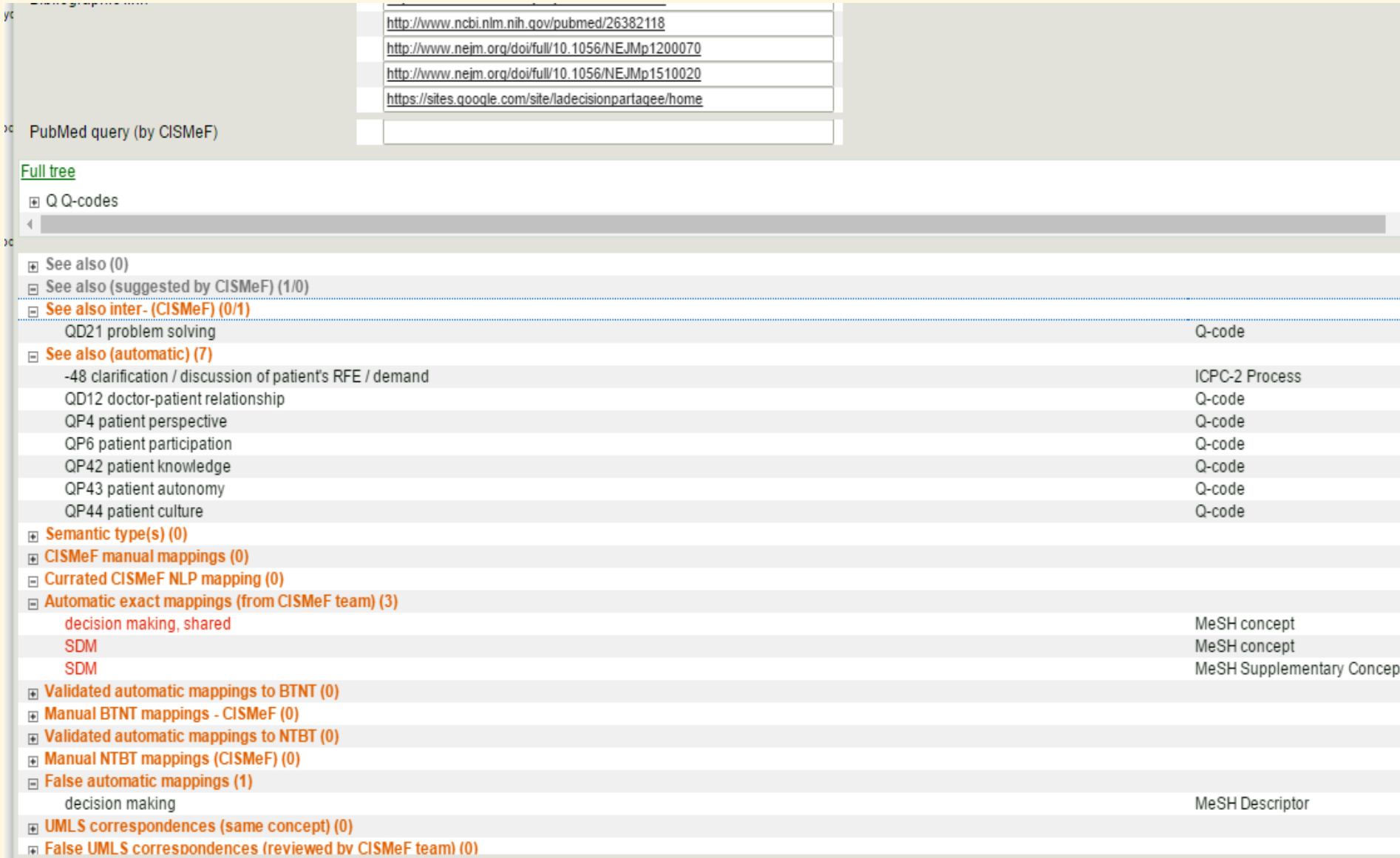
⊟ Semantic type(s) (1)		
Mental or Behavioral Dysfunction		Semantic type
⊞ Is excluded by (3)		
⊞ ICPC2 exclusion (1)		
⊞ ICPC2 Considering (1)		
⊟ ICD-10 related (22)		
Depressive episode, unspecified		ICD-10 Sub-category (who)
Dysthymia		ICD-10 Sub-category (who)
Mild depressive episode		ICD-10 Sub-category (who)
Mild mental and behavioural disorders associated with the puerperium, not elsewhere classified		ICD-10 Sub-category (who)
Mixed anxiety and depressive disorder		ICD-10 Sub-category (who)
Moderate depressive episode		ICD-10 Sub-category (who)
Other depressive episodes		ICD-10 Sub-category (who)
Other persistent mood [affective] disorders		ICD-10 Sub-category (who)
Other recurrent depressive disorders		ICD-10 Sub-category (who)
Other recurrent mood [affective] disorders		ICD-10 Sub-category (who)
Other single mood [affective] disorders		ICD-10 Sub-category (who)
Other specified mood [affective] disorders		ICD-10 Sub-category (who)
Persistent mood [affective] disorder, unspecified		ICD-10 Sub-category (who)
Recurrent depressive disorder, current episode mild		ICD-10 Sub-category (who)
Recurrent depressive disorder, current episode moderate		ICD-10 Sub-category (who)
Recurrent depressive disorder, current episode severe with psychotic symptoms		ICD-10 Sub-category (who)
Recurrent depressive disorder, current episode severe without psychotic symptoms		ICD-10 Sub-category (who)
Recurrent depressive disorder, currently in remission		ICD-10 Sub-category (who)
Recurrent depressive disorder, unspecified		ICD-10 Sub-category (who)
Severe depressive episode with psychotic symptoms		ICD-10 Sub-category (who)
Severe depressive episode without psychotic symptoms		ICD-10 Sub-category (who)
Unspecified mood [affective] disorder		ICD-10 category (who)
⊟ CISMeF manual mappings (1)		
depressive disorder		MeSH Descriptor
⊟ Currated CISMeF NLP mapping (7/13)		
Depression		NCIt concept
depression		MeSH Descriptor
depression		MeSH concept
DEPRESSION		WHO-ART High Level Term
Depression		LOINC component
depression, nos		SNOMED Notion
depressive disorder		MeSH concept
⊟ Automatic exact mappings (from CISMeF team) (2/10)		
Depressive episode, unspecified		ICD-10 Sub-category (who)
Special screening examination for mental and behavioural disorders		ICD-10 Sub-category (who)
⊟ UMLS correspondences (same concept) (3/8)		
C0011581	depressive disorder	MeSH Descriptor
C0011581	depressive disorder	MeSH concept
C0011581	depressive disorder, nos	SNOMED Notion

You can expore any link

The Q-Code database has been fulfilled in exactly in the same way, step by step, (a two years work). Korean and Vietnamese translations have been added by colleagues through DBGUI, as I was unable to manage those languages.



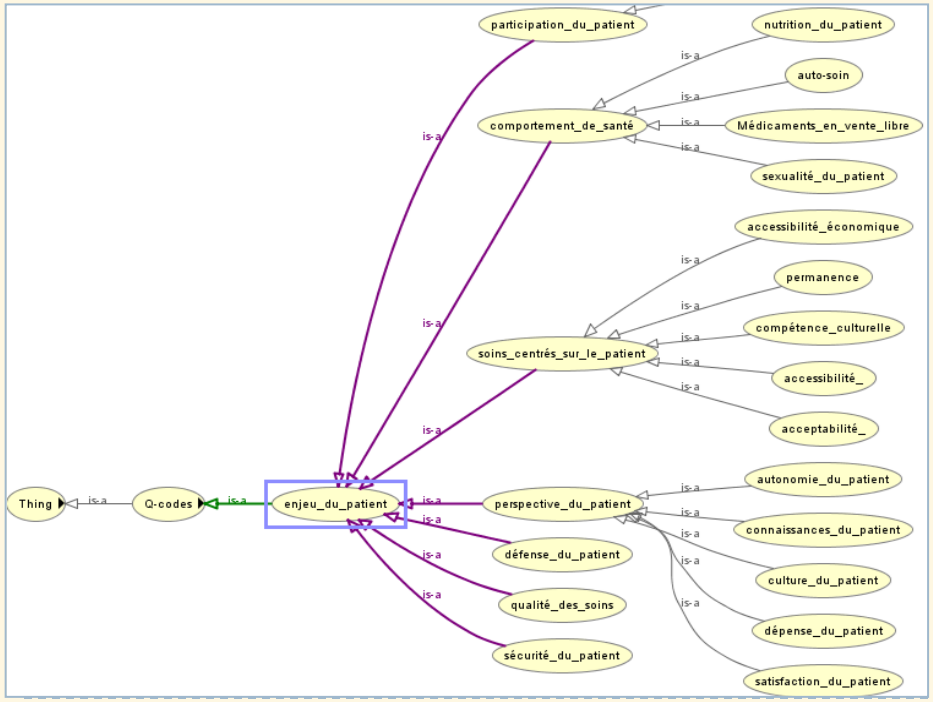
Building mappings to one Q-Codes ; here Shared Decision Making



Thinks that the underlying language is OWL-2, the Web Ontology Language allowing to develop ICPC-2 in any OWL editor, e.g. Protégé

Thus ICPC-2 could be linked to ICD-11, developed with the same technology by the team of Stanford (US)

This is a time consuming job
But it is language independent.
The work is the same as with the Excel filling
But the mapping is proposed (and sometimes automatically done).
Several participants can work together.
The system doesn't allow several participants working on the same issue.
All information can be extracted either in Excel format, either in OWL2.
OWL2 allows to use ontology editors like WebProtégé



A view of Q-Code in Protégé

This wonderful tool is the work of the team of Rouen medical informatics lab
and particularly of Julien Grosjean PhD prof of informatics

- Grosjean, Julien, Nicolas Griffon, Badisse Dahamna, and Stefan Darmoni. 20 11. "Multiterminology Cross-Lingual Model to Create the European Health Terminology / Ontology Portal." Pp. 119–22 in Proceedings of the 9th International Conference on Terminology and Artificial Intelligence.
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- Grosjean, Julien et al. 2011. “Health Multi-Terminology Portal: A Semantic Added-Value for Patient Safety.” Studies in health technology and informatics 166(February):129–38. Retrieved (http://www.ncbi.nlm.nih.gov/pubmed/21685618).
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- Jamoulle, Marc et al. 2015. “Semantic Web and the Future of Health Care Data in Family Practice.” Merit Research Journal of Medicine and Medical Sciences 3(12):586–94. Retrieved (http://orbi.ulg.ac.be/handle/2268/189292).