

# queryMed

Linking pharmacological and medical knowledge using semantic Web technologies

<https://github.com/yannrivault/queryMed>

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with :

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Health Services Research team (REPERES)**

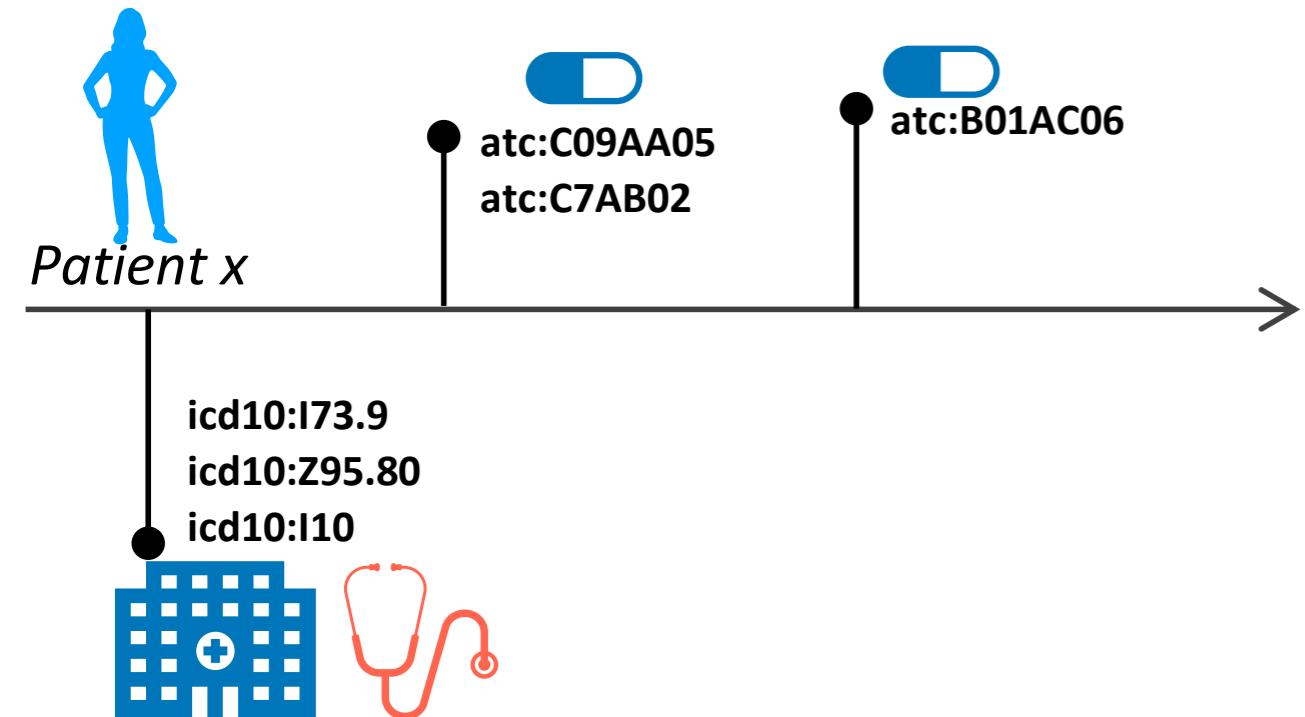
EHESP, REPERES, IRISA Dyliss

Rennes University, IRISA Dyliss Research team



Funded by ANSM PEPS platform 2015-2019

# Why queryMed?

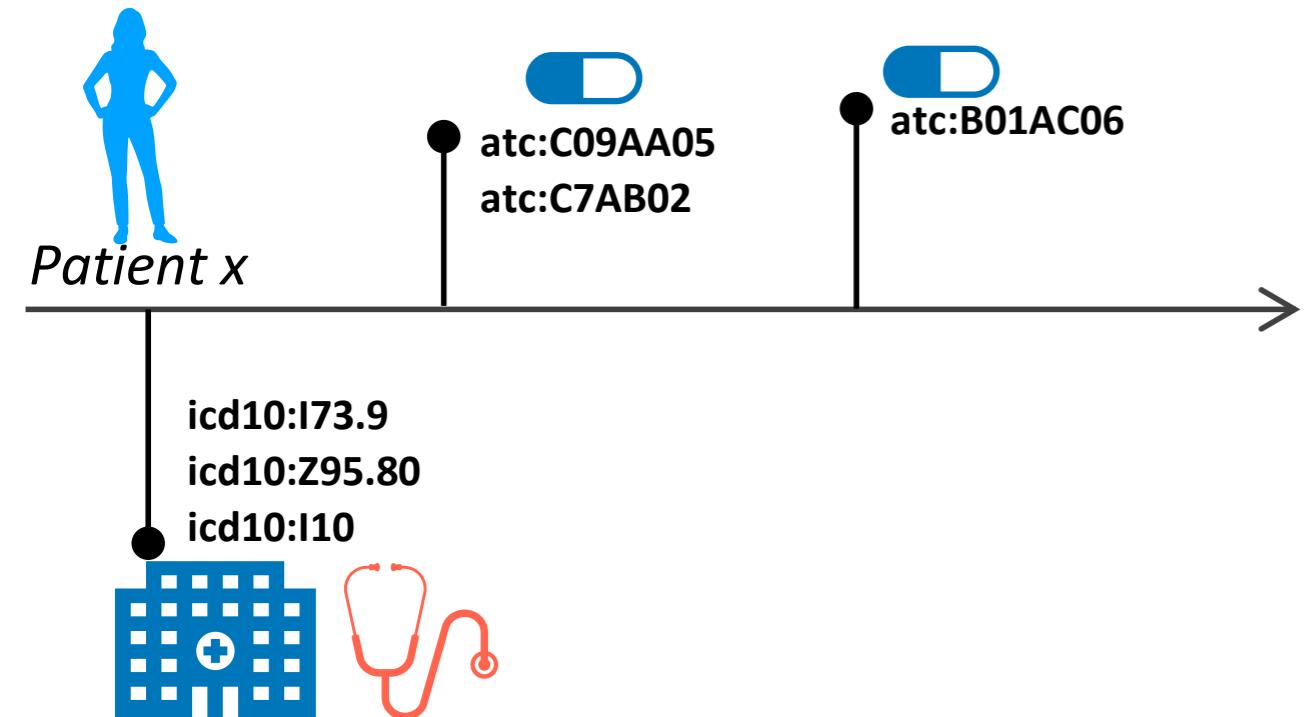


## Analyse Care Pathways

- French Health Insurance data (SNDS)
- Hospital discharge data
- Ambulatory care data
- Cohorte

Field	Nomenclature	Number of Codes
Disease	icd-10	>12000
Drug	atc	>6000
Medical act (French)	ccam	>9000

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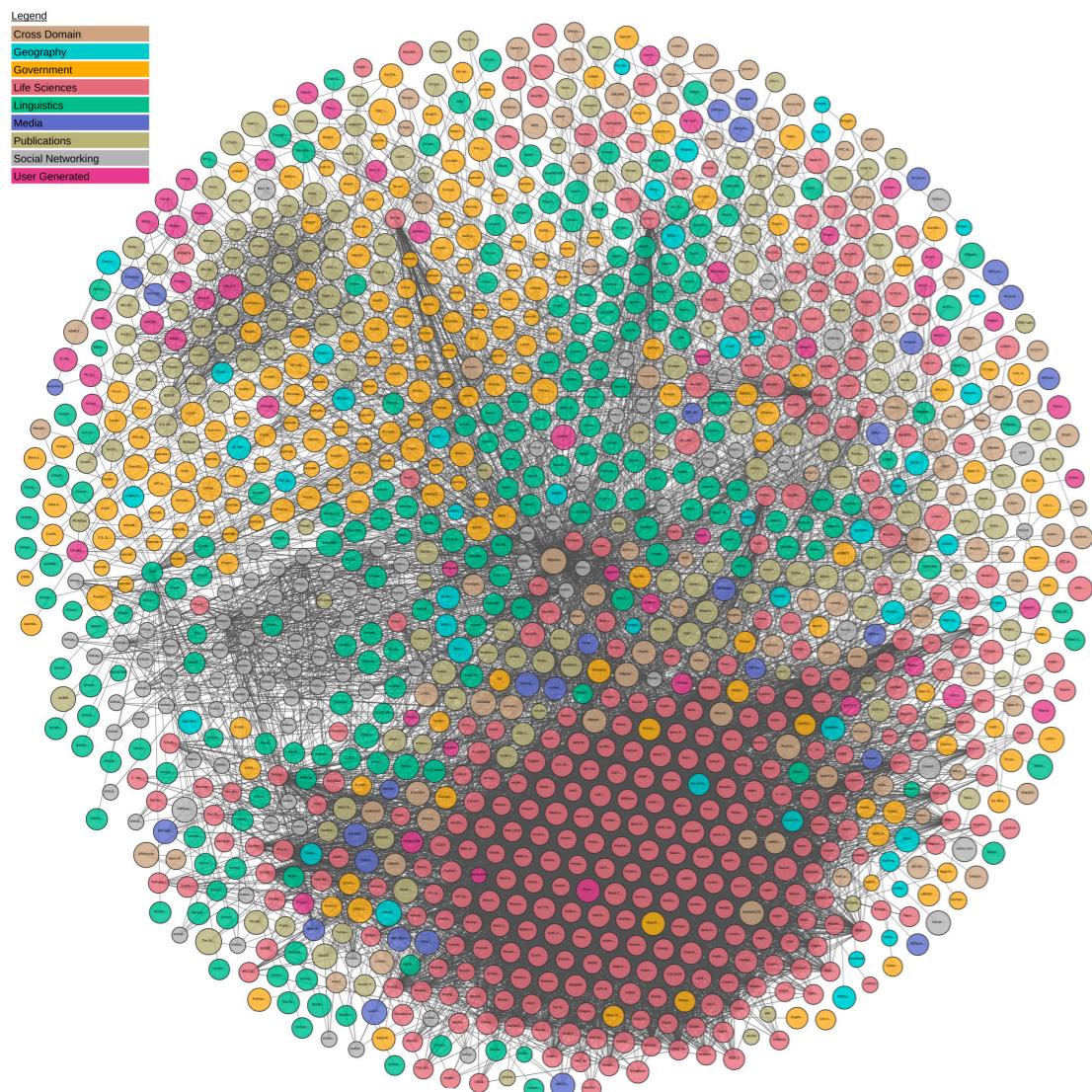


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# What is queryMed?



source: <https://lod-cloud.net/>

## Query biomedical Linked Data

- Ontologies
- Thesauri
- Taxonomies
- Nomenclatures



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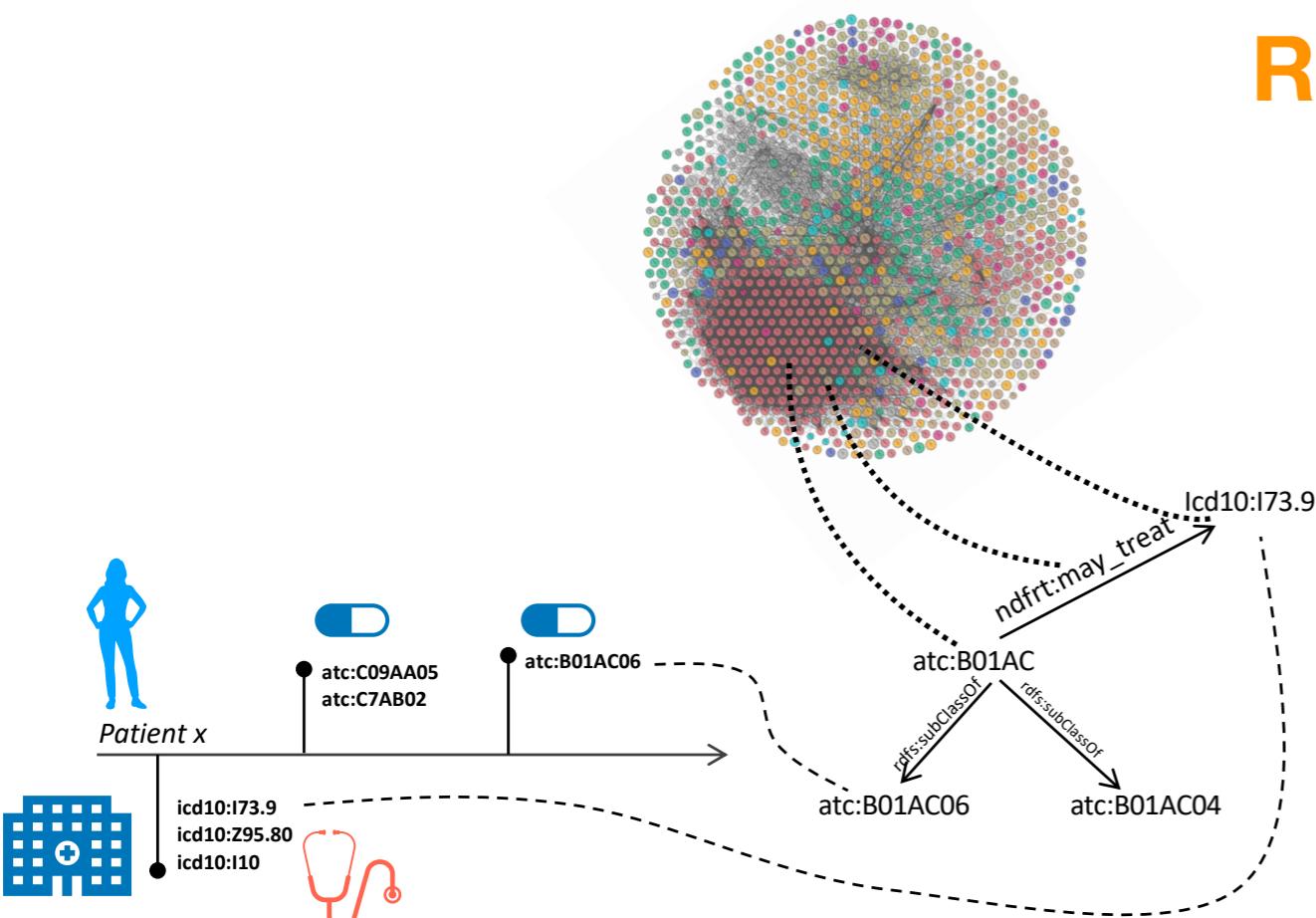


source: Tim Berners-Lee  
<https://www.w3.org/DesignIssues/LinkedData.html>

## Use Web semantic tools

- RDF
- SPARQL

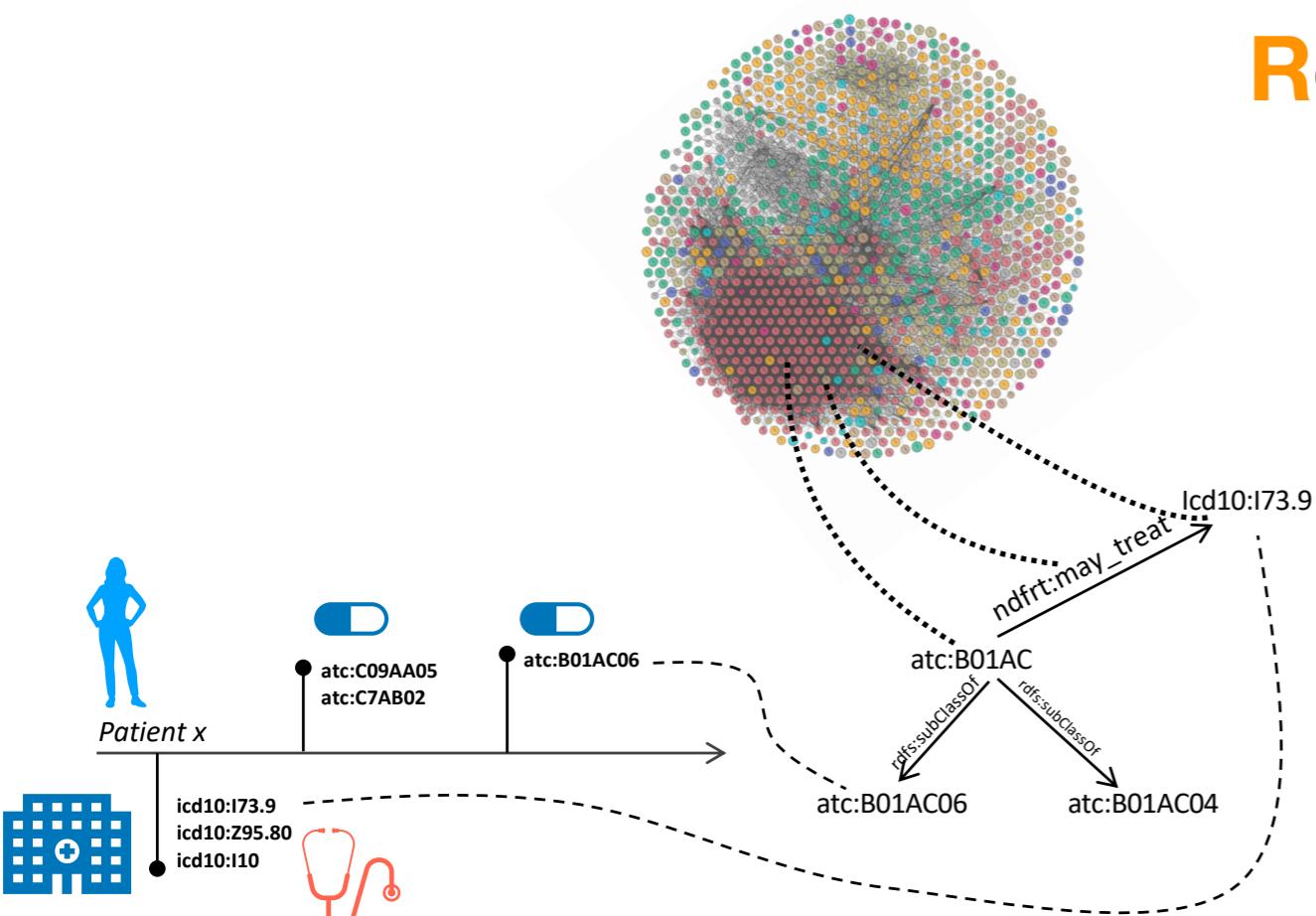
# What is queryMed?



**Examine biomedical Linked Data**  
**Retrieve biomedical knowledge**

- SPARQL endpoints and REST API
  - DBpedia
  - Ontobee
  - Bioportal
  - SIFR
- Datasets
  - Drug nomenclature (ATC)
  - Drug-Drug interactions (DIKB)
  - Drug-Disease indications (DID)

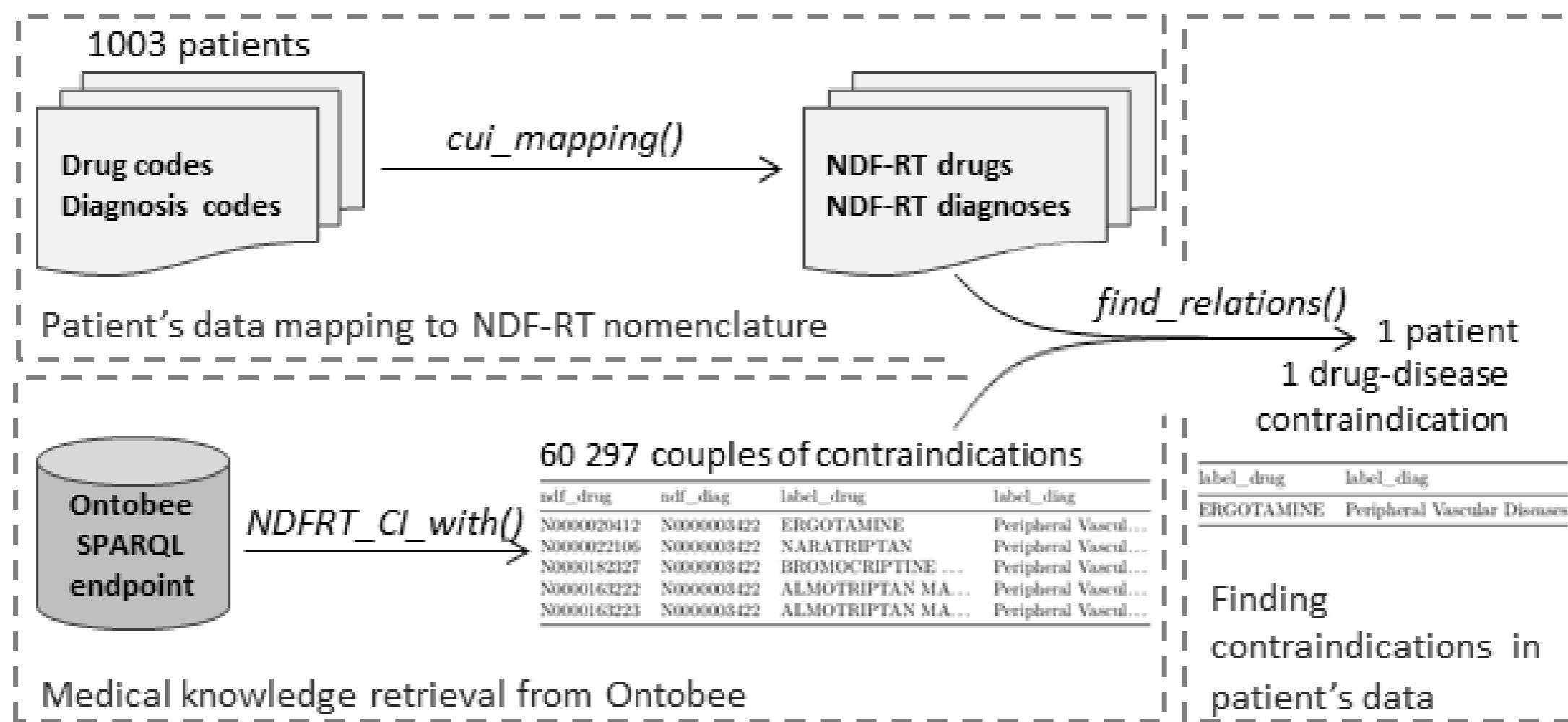
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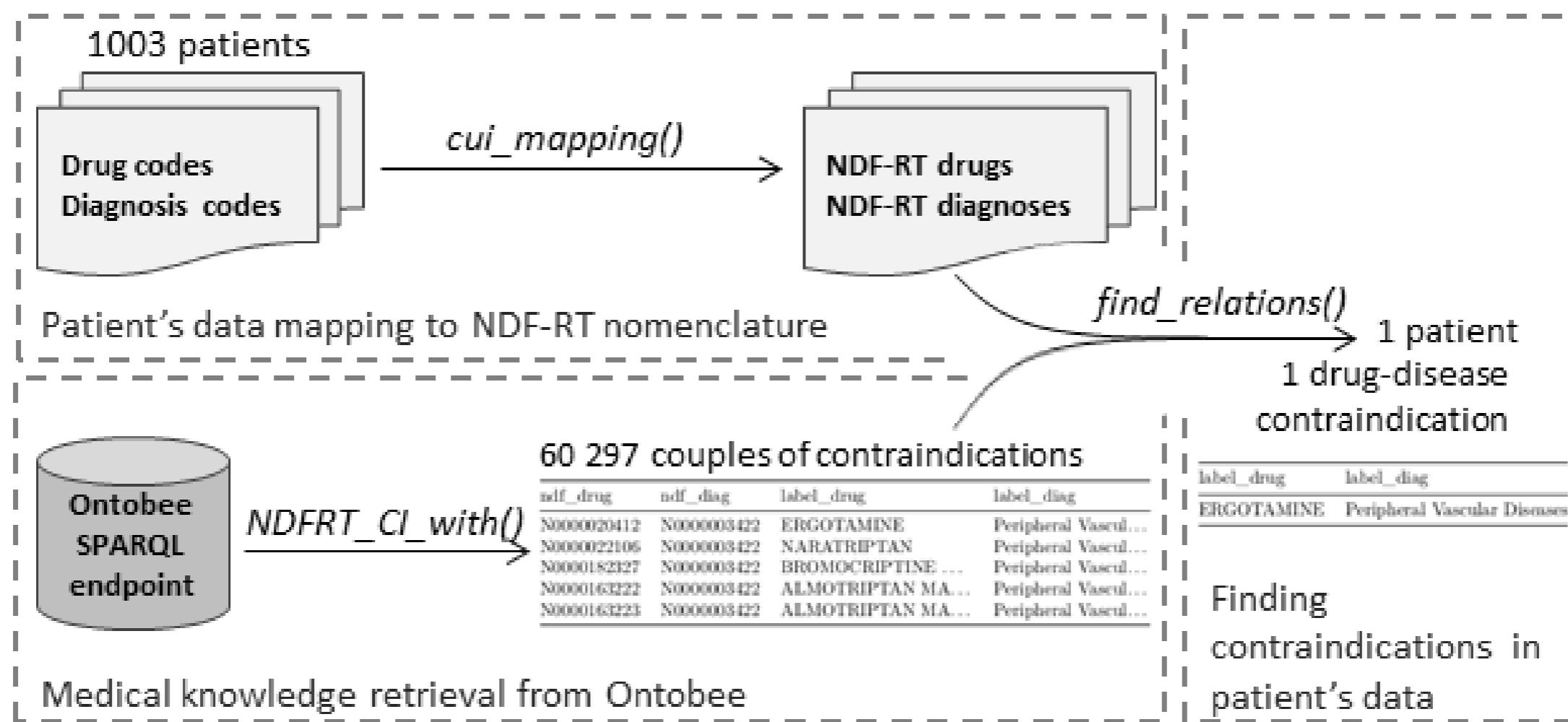
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# Drug-Disease contraindication surveillance



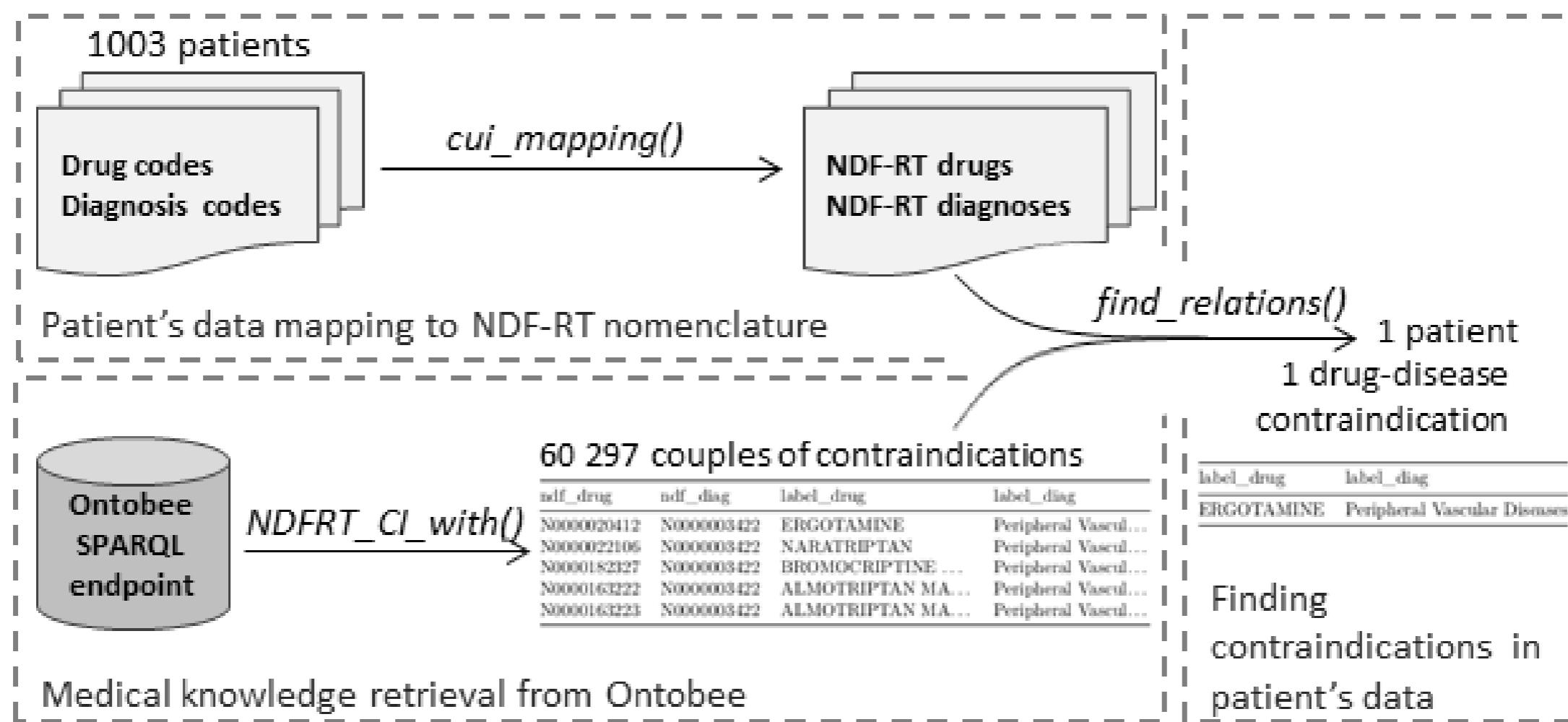
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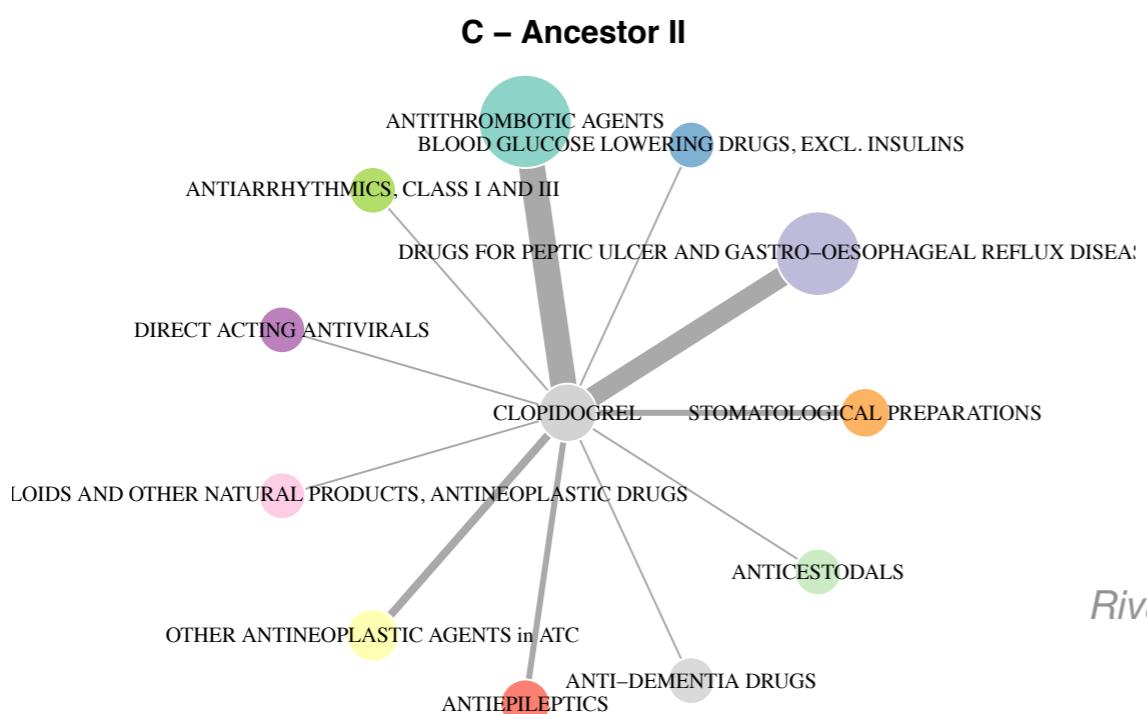
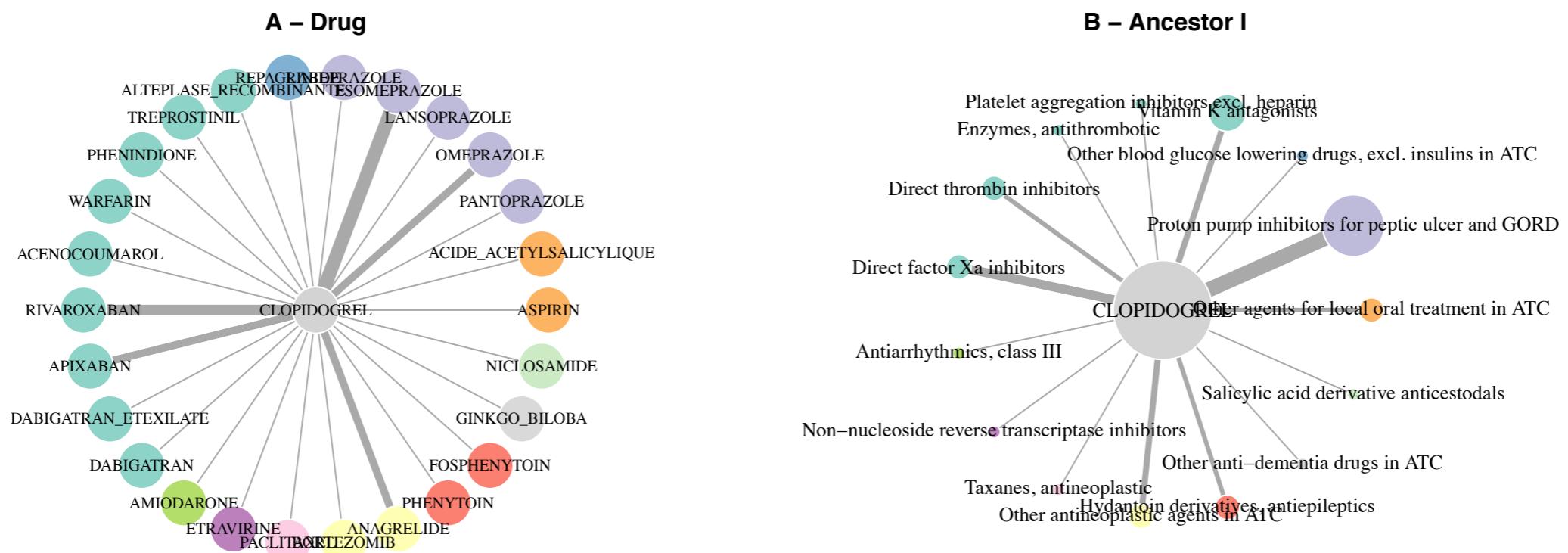
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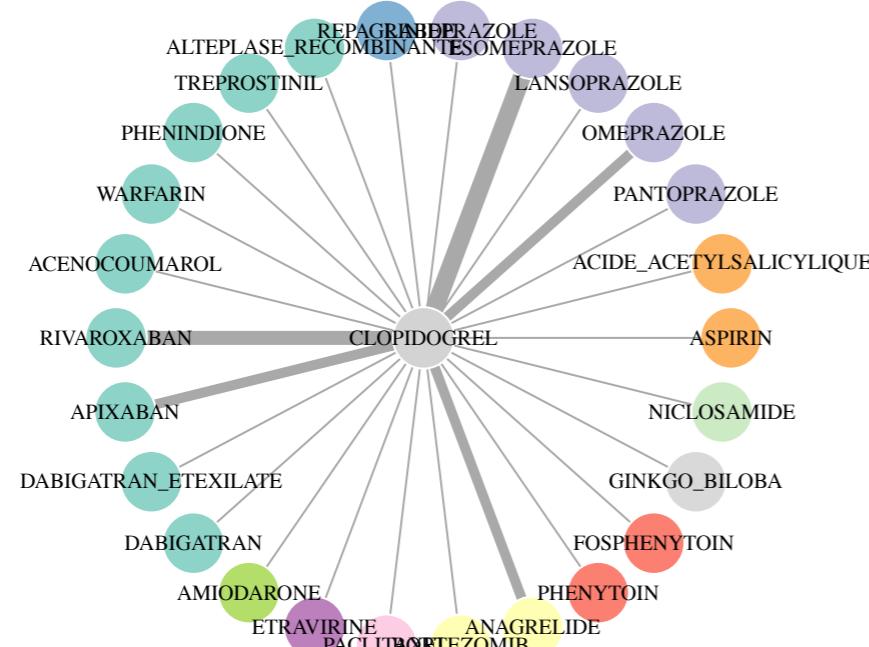
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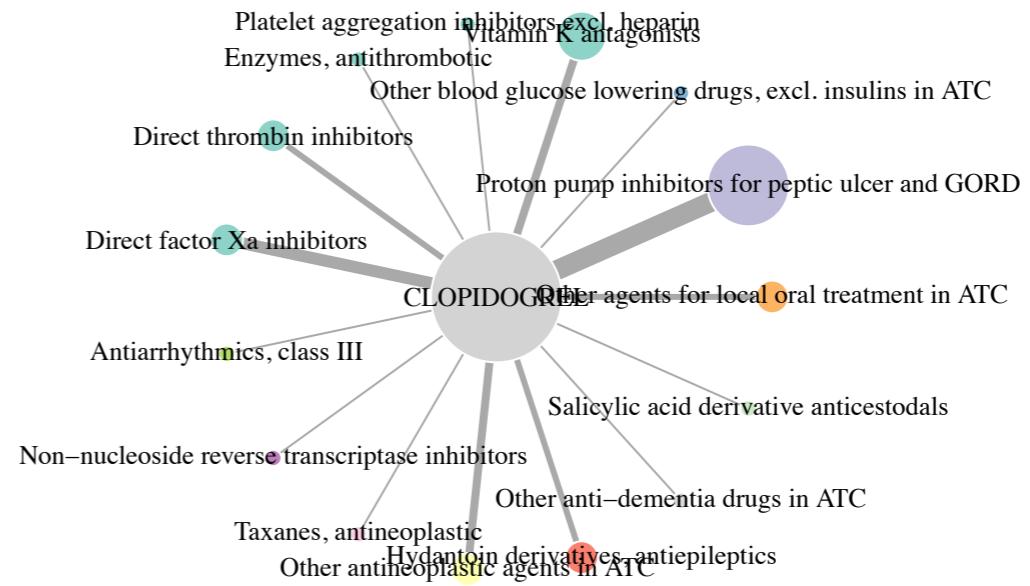
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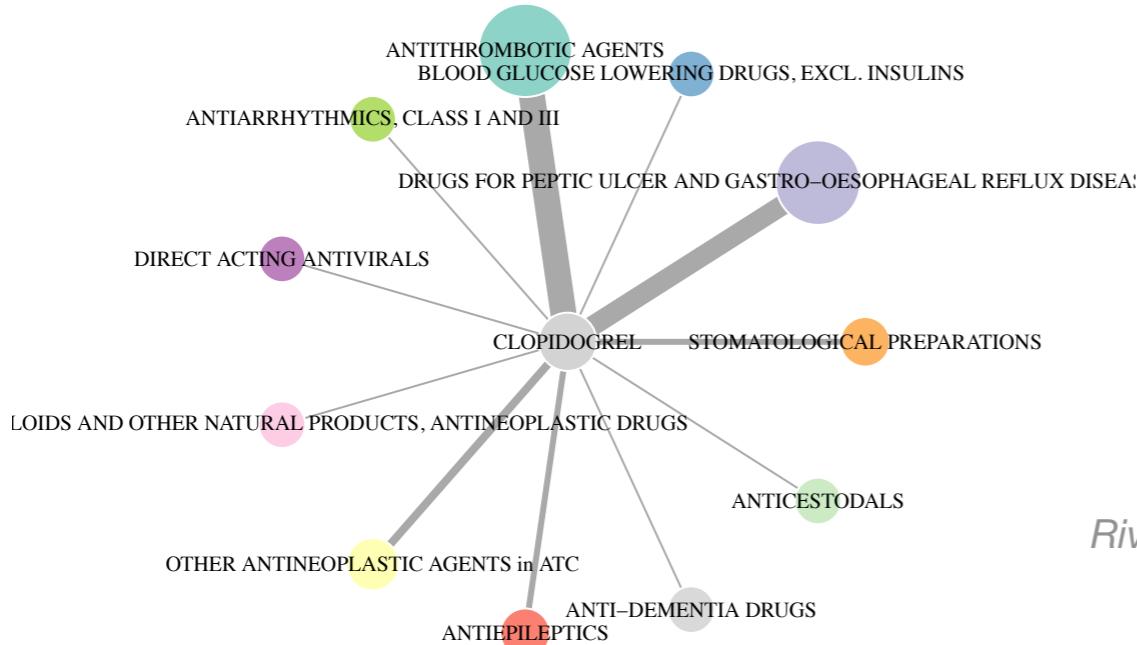
**A – Drug**



**B – Ancestor I**



**C – Ancestor II**



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**query biomedical Linked Data  
use Web semantic tools  
examine biomedical Linked Data  
retrieve biomedical knowledge  
your healthcare data  
Map and merge  
enrich data  
decipher care pathways**

source:<http://digitalhealthage.com>