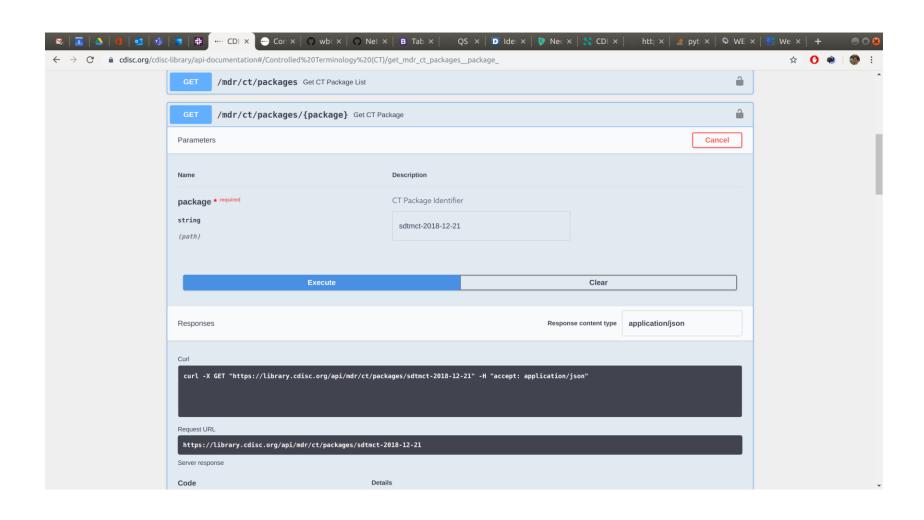


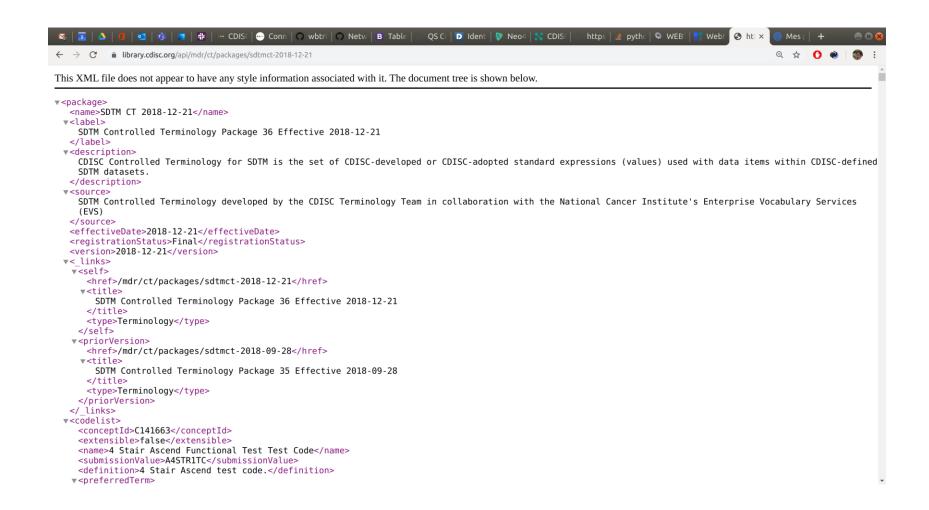
https://www.cdisc.org/cdisc-library/api-documentation#/

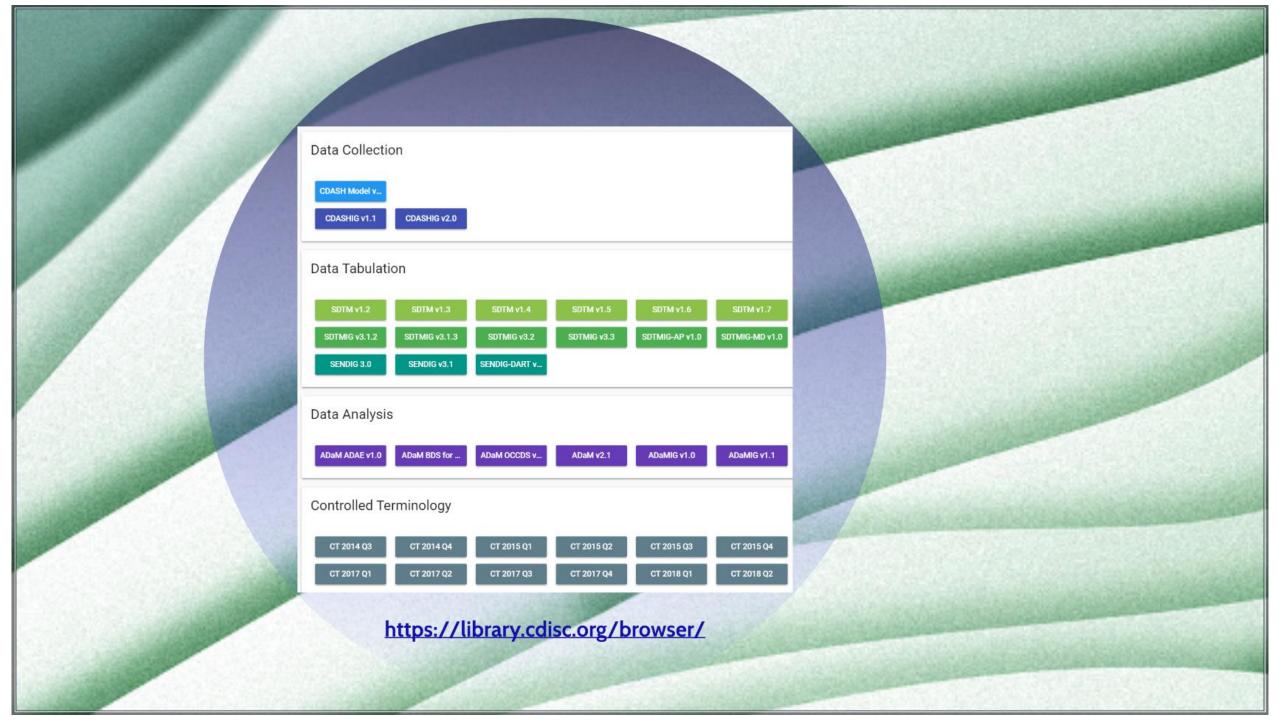
Only for CDISC Members... \$\$\$\$\$

The Cdisc Lib API — How to see the SDTMCT 2018-12-21

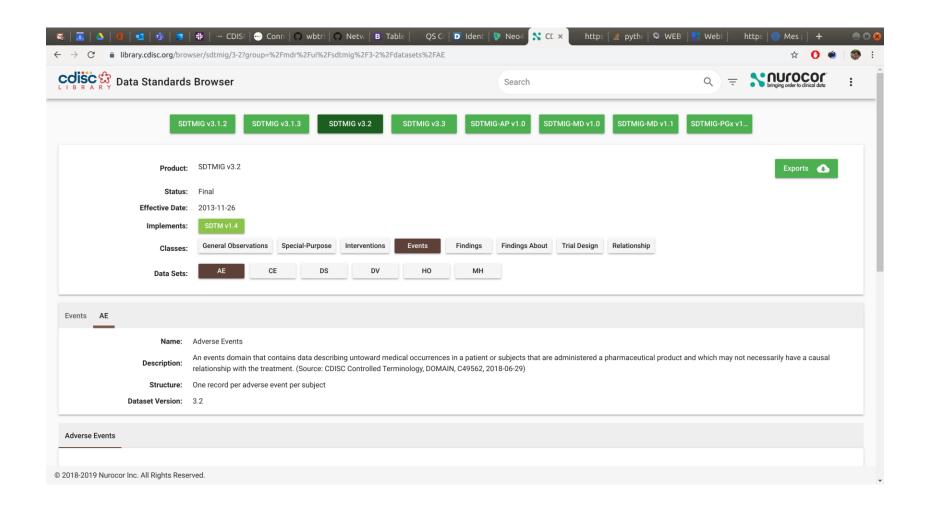


And here is the result in a Web Browser!

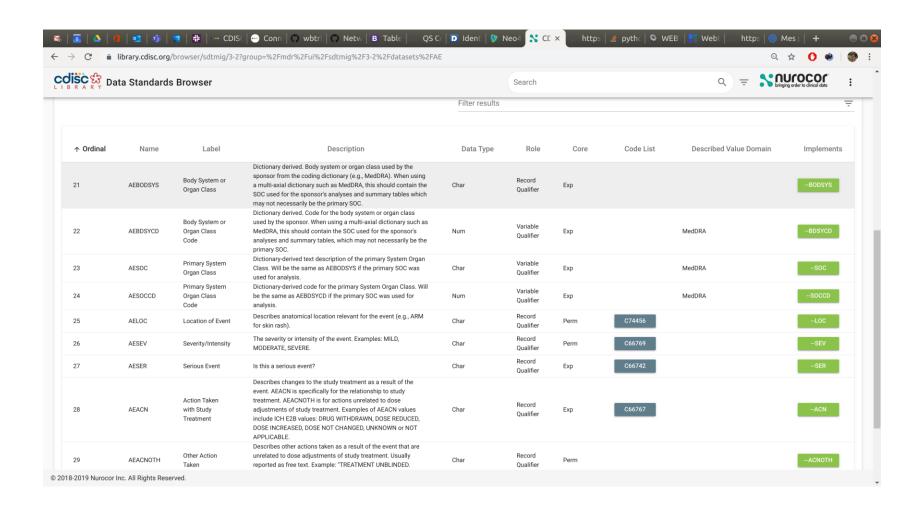




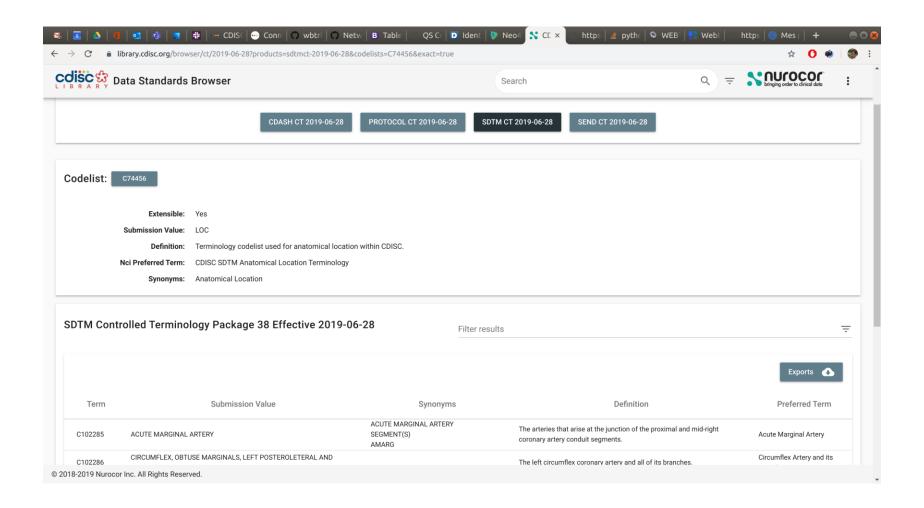
Better display in the Nurocor Browser...



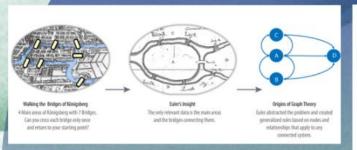
The browser provide links between metadata

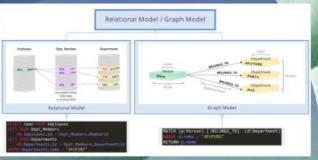


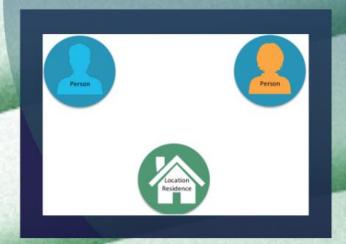
SDTM CT example

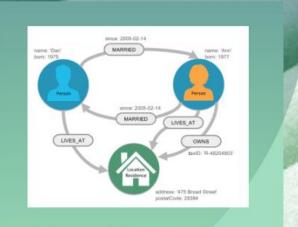


What are Graphs?

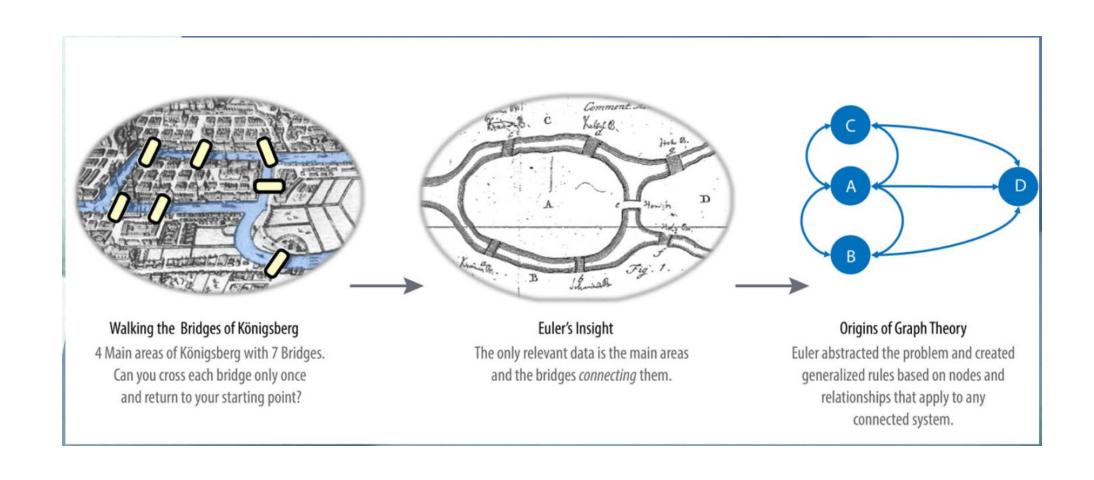




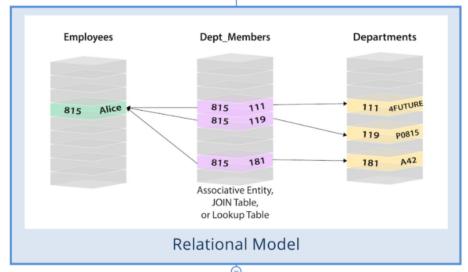


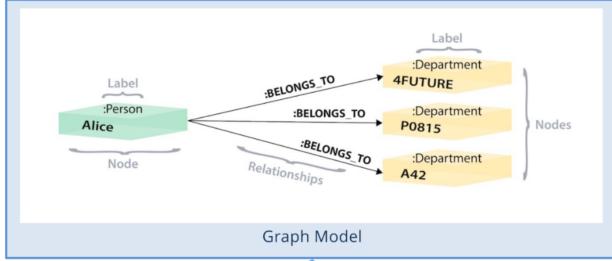


What is a Graph?



Relational Model / Graph Model

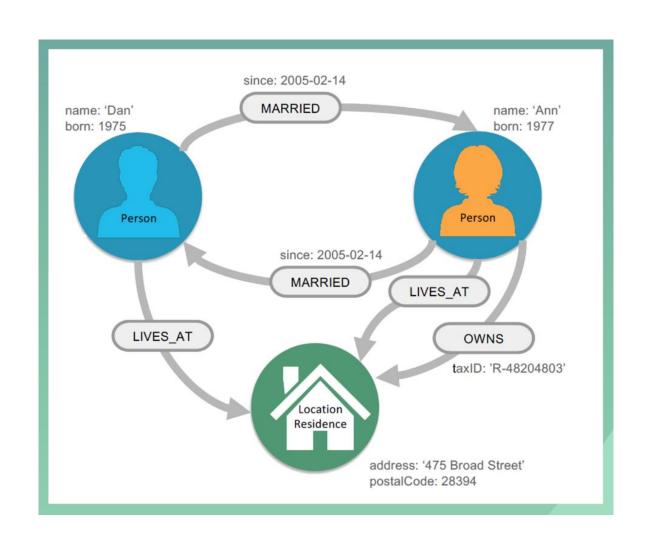


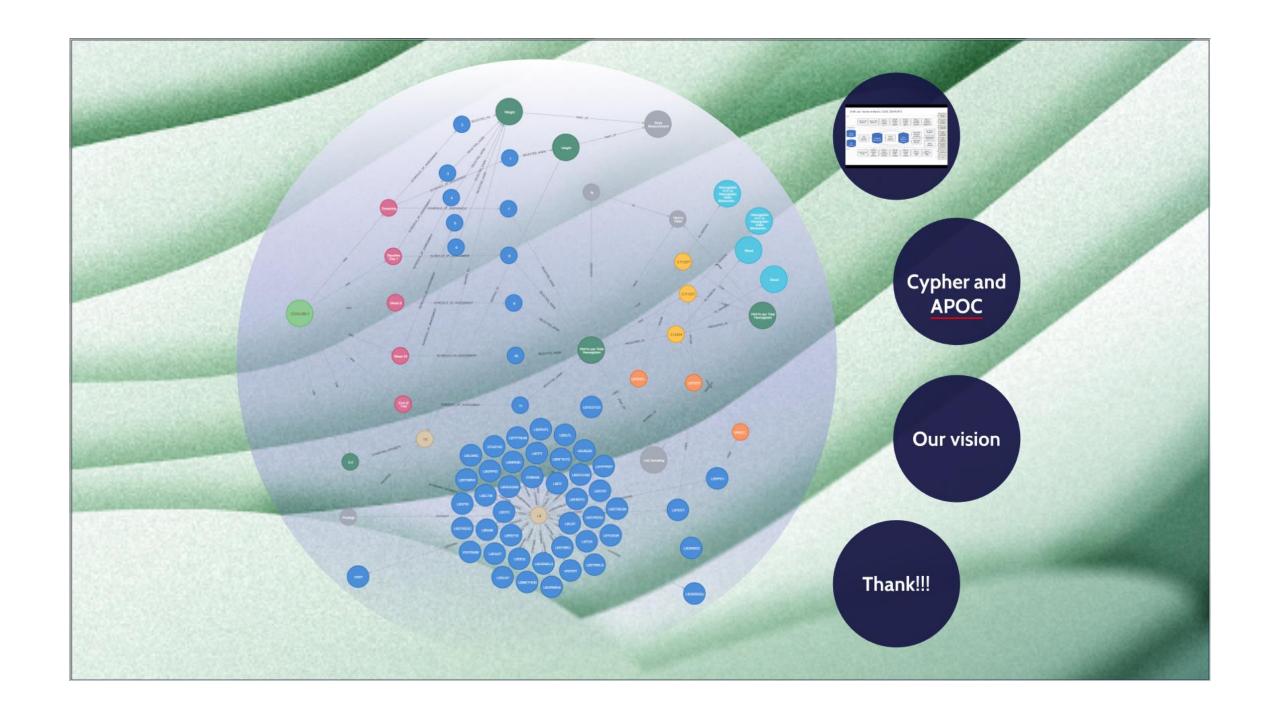


```
SELECT name FROM Employees
LEFT JOIN Dept_Members
    ON Employees.Id = Dept_Members.MemberId
LEFT JOIN Departments
    ON Departments.Id = Dept_Members.DepartmentsId
WHERE Departments.name = "4FUTURE"
```

```
MATCH (p:Person)-[:BELONGS_TO]->(d:Department)
WHERE d.name = "4FUTURE"
RETURN p.name
```

Graphs are Nodes and Relations!!





How is working Neo4j (http://www.neo4j.com)



In Neo4j

```
MATCH (mdl:Model)
WHERE mdl.name = 'ADaM'
WITH mdl
CALL apoc.load.jsonParams("https://library.cdisc.org/api/mdr/ct/packages", {Authorization: "Basic", Accept:
"application/json"}, null) yield value as link
UNWIND link._links.packages AS package
WITH mdl, package
WHERE SPLIT(package.title,' ')[0] = mdl.name
MERGE (ctpckg:CTPackage {title : package.title, id : substring(package.href, 17)})
WITH mdl, ctpckg, package
MERGE (mdl)-[r:HAS_PACKAGE {href : package.href}]->(ctpckg)
```

```
MATCH (study:Study)-[]->(plannedvisit:PlannedVisit)-[]->(plannedmeasurement:PlannedMeasurement)-[]->(assessment:Assessment)-[]-> (rootsdtmdataset:RootSDTMDataset)

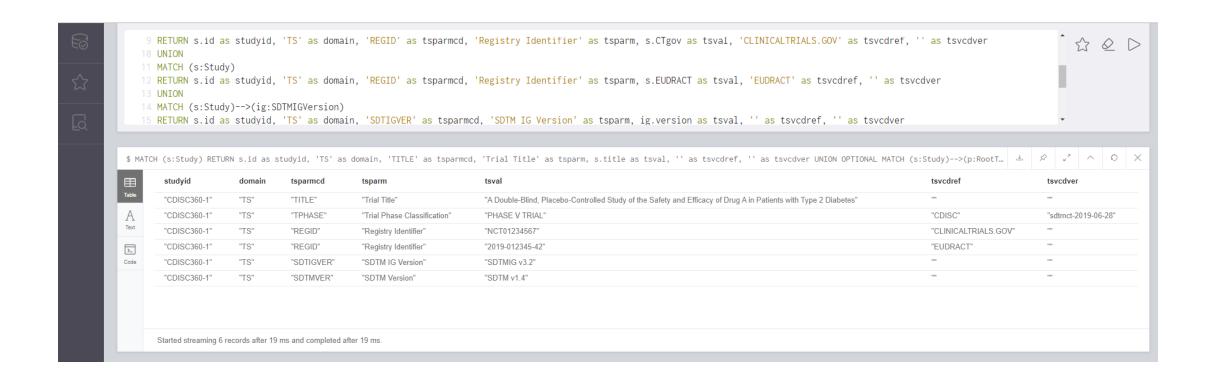
WHERE study.id = 'CDISC360-1' AND assessment.name = 'HbA1c per Total Hemoglobin'

WITH study, plannedvisit, plannedmeasurement, assessment, rootsdtmdataset

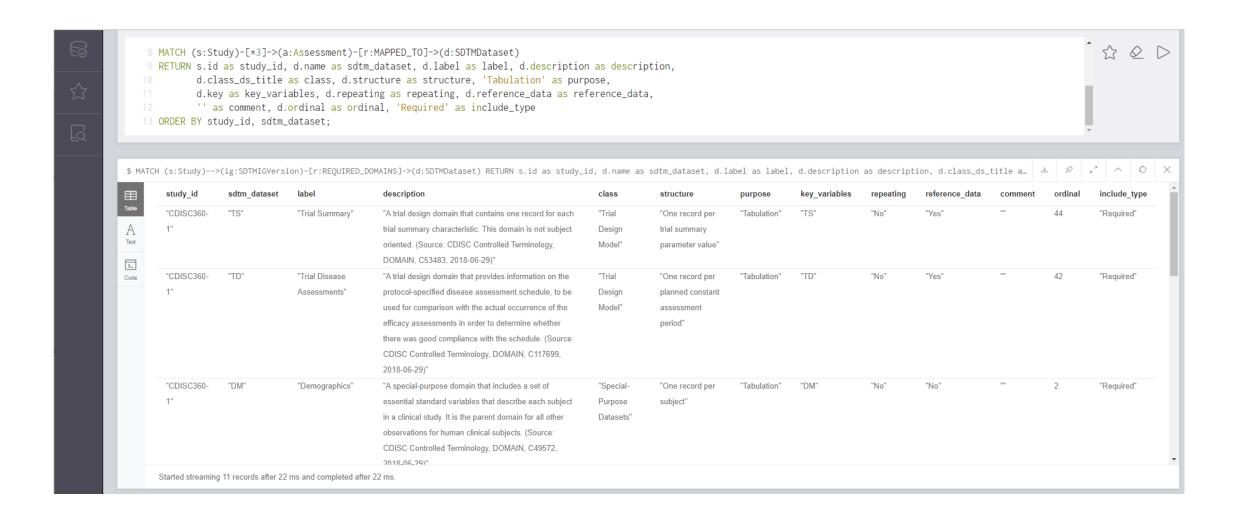
MATCH (assessment)-[]->(activity:Activity)<-[]-(param:Param), (assessment)-[]->(rootctterm:RootCTTerm), (assessment)-[]-> (unitdefinition:UnitDefinition), (assessment)-[]->(unitdimention:UnitDimension)

RETURN study, plannedvisit, plannedmeasurement, assessment, rootsdtmdataset, activity, rootctterm, unitdefinition, unitdimention, param
```

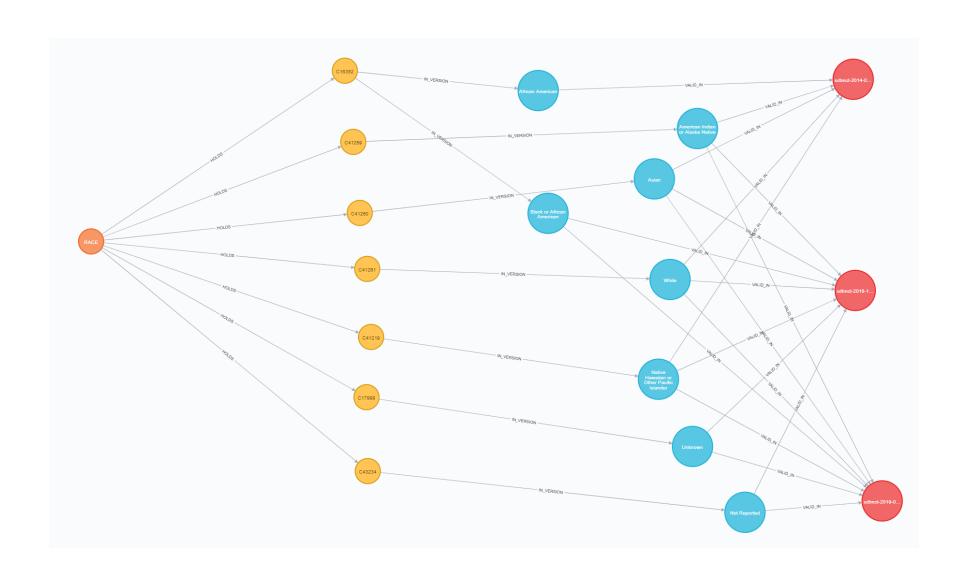
We can produce the TS domain from the available metadata loaded during the Cdisc 360 project!



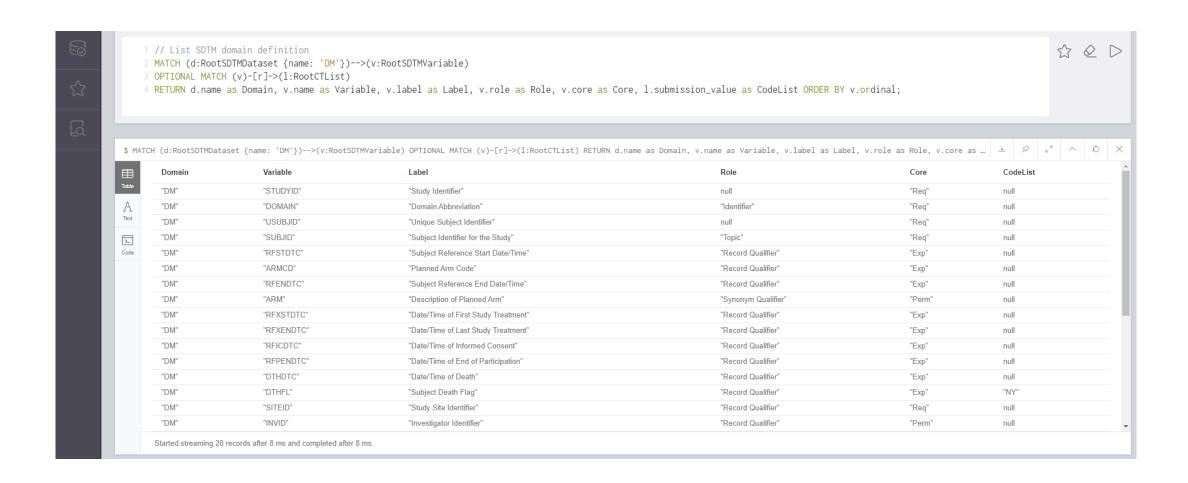
Produce the Define.xml Domain listing in Neo4j



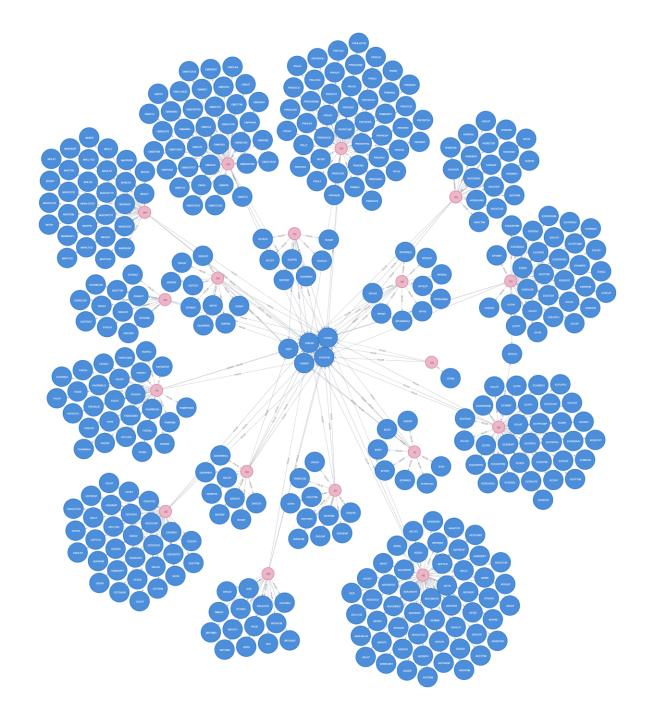
View evolution of the SDTM CT for RACE Codelist over time...



Produce the DM Domain metadata

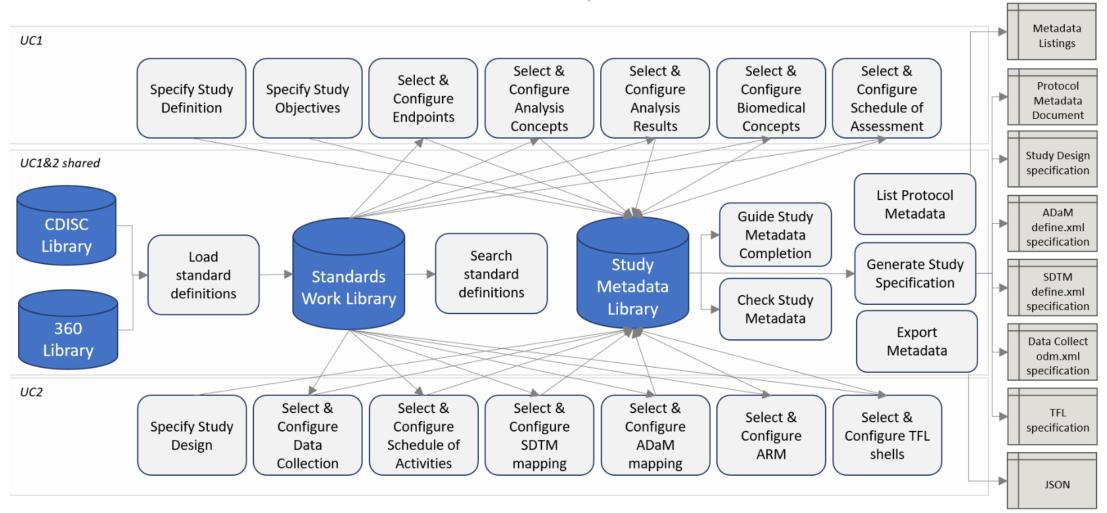


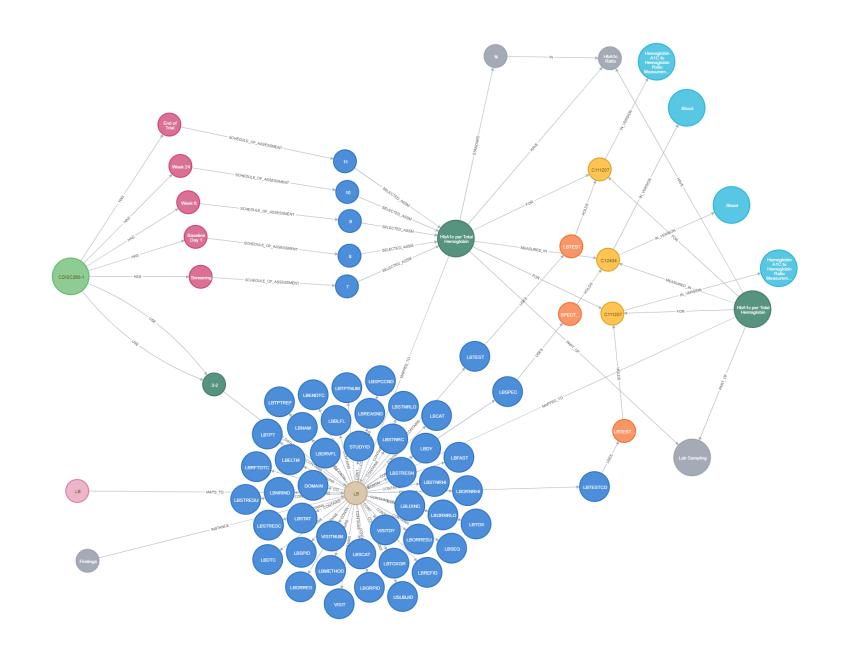
Display Domains and Variables with linked one in the middle!



Workflow of the metadata from the Cdisc Lib

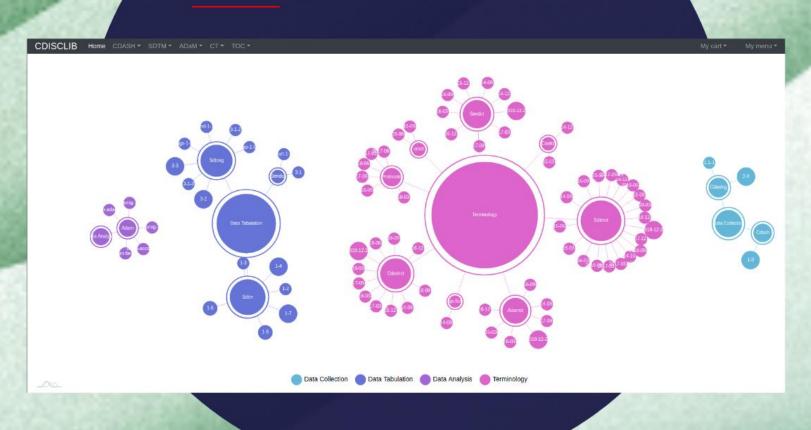
Draft user stories related to CDISC 360 WS4/5



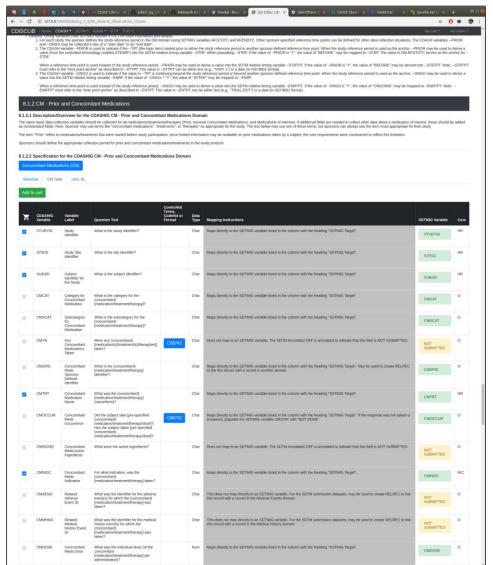


Study definition of the Cdisc 360 Trial with links to the LB **Domains**

A way to work with the Cdisc Lib...



Beta version of a Cdisc Lib application



| SCLIB | Home CDASH | - SDTM - ADaM - CT - TC | C = | | | My cart * My menu |
|------------|---------------------------------------|---|--|---|--|---|
| יחוכי | CCon | trolled Termin | nology | for CDACH | | |
| | | trolled Termi | lology | IOF CDASH | | |
| anage by | the: Nationa | l Cancer Institute | | | | |
| ame L | abel | Description | | Source | | Effective Registration Date Status Versi |
| | CDASH Controlled Package 36 Effect | | d Terminology for ues) used with da | | developed by the CDISC Terminology Team in collaboration te's Enterprise Vocabulary Services (EVS) | 2018-12- Final 2018 21 12-2 |
| Concept Id | Extensible | Name | Submission Value | Definition | Preferred Term | Synonyms |
| C78418 | true | Concomitant Medication Dose Form | CMDOSFRM | A terminology subset of the CDISC SDTM Pharmaceutical Dosage Form codelist created for CDAS Concomitant Medication Dose Form codelist. (NCI) | H CDISC CDASH Concomitant Medication Dose Form Terminology | ['Concomitant Medication Dose Form'] |
| C78417 | true | Concomitant Medication Dose Units | CMDOSU | A terminology subset of the CDISC SDTM Unit codelist created for CDASH Concomitant Medication Dose Units codelist. (NCI) | CDISC CDASH Concomitant Medication Dose Units Terminology | ['Concomitant Medication Dose Units'] |
| C78419 | true | Concomitant Medication Dosing Frequency per Interval | CMDOSFRQ | A terminology subset of the CDISC SDTM Frequency codelist created for CDASH Concomitant Medication Dosing Frequency per Interval codelist. (NCI) | CDISC CDASH Concomitant Medication Dosing Frequency per Interval Terminology | ['Concomitant Medication Dosin Frequency per Interval'] |
| C78420 | true | Concomitant Medication Route of Administration | CMROUTE | A terminology subset of the CDISC SDTM Route codelist created for CDASH Concomitant Medical Route of Administration codelist. (NCI) | on CDISC CDASH Concomitant Medication Route of Administration Terminology | ['Concomitant Medication Route of Administration'] |
| C78422 | true | ECG Original Units | EGORRESU | A terminology subset of the CDISC SDTM Unit codelist created for CDASH ECG Original Units cod (NCI) | elist. CDISC CDASH ECG Original Units Terminology | ['ECG Original Units'] |
| C128690 | true | Ethnicity As Collected | ETHNICC | A terminology codelist relevant to the ethnicity of an individual as collected on the case report form. | CDISC SDTM Collected Ethnicity Terminology | ['Ethnicity As Collected'] |
| C78426 | true | Exposure Dose Form | EXDOSFRM | A terminology subset of the CDISC SDTM Pharmaceutical Dosage Form codelist created for CDAS Exposure Dose Form codelist. (NCI) | H CDISC CDASH Exposure Dose Form Terminology | ['Exposure Dose Form'] |
| C78745 | true | Exposure Dosing Frequency per Interval | EXDOSFRQ | A terminology subset of the CDISC SDTM Frequency codelist created for CDASH Exposure Dosing Frequency per Interval codelist. (NCI) | CDISC CDASH Exposure Dosing Frequency per Interval Terminology | ['Exposure Dosing Frequency per Interval'] |
| C78425 | true | Exposure Route of Administration | EXROUTE | A terminology subset of the CDISC SDTM Route codelist created for CDASH Exposure Route of Administration codelist. (NCI) | CDISC CDASH Exposure Route of Administration Terminology | ['Exposure Route of Administration'] |
| C128689 | true | Race As Collected | RACEC | A terminology codelist relevant to the race of an individual as collected on the case report form. | CDISC SDTM Collected Race Terminology | ['Race As Collected'] |
| C83004 | true | Substance Use Never/Current/Former Classification | SUNCF | A terminology subset of the CDISC SDTM Never/Current/Former Classification codelist created for CDASH Substance Use Never/Current/Former Classification codelist. (NCI) | CDISC CDASH Substance Use Never/Current/Former Classification Terminology | ['Substance Use Never/Current/Former Classification'] |
| C78428 | true | Total Volume Administration Unit | EXVOLTU | A terminology subset of the CDISC SDTM Unit codelist created for CDASH Total Volume Administration (NCI) | tion CDISC CDASH Total Volume Administration Unit Terminology | ['Total Volume Administration Unit'] |
| C78427 | true | Unit for the Duration of Treatment Interruption | EXINTPU | A terminology subset of the CDISC SDTM Unit codelist created for CDASH Unit for Duration of Treatment Interruption codelist. (NCI) | CDISC CDASH Unit for Duration of Treatment Interruption Terminology | ['Unit for the Duration of Treatment Interruption'] |
| C78421 | true | Unit of Drug Dispensed or Returned | DAORRESU | A terminology subset of the CDISC SDTM Unit codelist created for CDASH Unit of Drug Dispensed Returned codelist. (NCI) | or CDISC CDASH Unit of Drug Dispensed or Returned Terminology | ['Unit of Drug Dispensed or Returned'] |

