# Mock registry Addison disease

## Input CSV

Identifier,Birthdate,Gender,GenLabel,Diagnosis,Cortisol,ACTH,Na,K

D0001,19/01/1990,http://purl.bioontology.org/ontology/SNOMEDCT/703118005,Female,Addison disease,20.50,19.70,137.00,4.00

D0002,31/12/1974,http://purl.bioontology.org/ontology/SNOMEDCT/703117000,Male,Addison disease,17.30,32.10,139.00,4.50

D0003,09/09/1990,http://purl.bioontology.org/ontology/SNOMEDCT/703117000,Male,Addison disease,16.00,11.30,137.00,4.30

D0004,11/03/1998,http://purl.bioontology.org/ontology/SNOMEDCT/703117000,Male,Addison disease,20.00,33.50,141.00,4.10

D0005,18/06/1983,http://purl.bioontology.org/ontology/SNOMEDCT/703118005,Female,Addison disease,5.10,38.10,142.00,4.00

D0006,06/07/1981,http://purl.bioontology.org/ontology/SNOMEDCT/703118005,Female,Addison disease,7.00,24.20,141.00,3.90

D0007,23/05/1985,http://purl.bioontology.org/ontology/SNOMEDCT/703117000,Male,Addison disease,18.60,16.80,142.00,3.70

D0008,03/11/1999,http://purl.bioontology.org/ontology/SNOMEDCT/703118005,Female,Addison disease,5.00,14.90,136.00,4.50

D0009,04/09/1982,http://purl.bioontology.org/ontology/SNOMEDCT/703117000,Male,Addison disease,17.20,25.80,137.00,4.30

D0010,21/10/1989,http://purl.bioontology.org/ontology/SNOMEDCT/703117000,Male,Addison disease,18.10,10.00,138.00,3.8

**Notes about the transformation:**

* The original dataset had Male and Female (words) as the Gender. there is no way to put a conditional into YARRRML, so the extra SNOMED column needed to be added
* The date is not in ISO format. It was not possible to do this transformation in YARRRML
* In my transformation, I used the URI <http://whatever.whatever/D0010> as the base URI for the record, and then everything else (person, Identifier, role, process, etc.) became a document fragment of that (<http://whatever.whatever/D0010#identifier> )
  + This design pattern works particularly well with LDP servers, since they are document servers, and will therefore return the entire record (<http://whatever.whatever/D0010>) if you call any of the URIs in the model
  + Need to be careful about duplication, though! A patient with many roles can’t just be represented as (<http://whatever.whatever/D0010#Role> )
* Is it possible to “export” a openRefine macro that can be used outside of the browser (Rajaram?)
* Would it be possible to use that macro as a proxy between e.g. a database and an RML Mapping tool? (Rajaram)

## Module of focus

MODELLING **PATIENT PERSONAL INFORMATION (**<https://github.com/ejp-rd-vp/ERN-common-data-elements/wiki/Personal-information-SIO>) (Mark)

## Input YARRRML

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| prefixes:  rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns>#  rdfs: <http://www.w3.org/2000/01/rdf-schema>#  ex: <http://ejp-rd.eu/ids/>  obo: <http://purl.obolibrary.org/obo/>  this: <http://our-data.org/data/>  sio: <https://semanticscience.org/resource/>      mappings:  identifier\_has\_value:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#ID  po:  - [sio:has-value, $(Identifier)]    identifier\_denotes:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#ID  po:  - predicates: a  objects:  value: <https://ejp-rd.eu/vocab/identifier>  type: iri  - predicates: sio:denotes  objects:  value: this:individual\_$(Identifier)#bdRole  type: iri        person\_has\_role:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#Person  po:  - predicates: a  objects:  value: [<https://ejp-rd.eu/vocab/Person>]  type: iri  - predicates: sio:has-role  objects:  value: [this:individual\_$(Identifier)#bdRole]  type: iri    bdrole\_annotation:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#bdRole  po:  - [a, obo:OBI\_0000093]  - [rdfs:label, "Patient"]        role\_realized\_proces:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#bdRole  po:  - predicates: sio:is-realized-in  objects:  value: this:individual\_$(Identifier)#bdProcess  type: iri    person\_has\_quality:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#Person  po:  - predicates: sio:has-quality  objects:  value: this:individual\_$(Identifier)#bdQuality  type: iri    quality\_annotation:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#bdQuality  po:  - [a, obo:NCIT\_C68615]  - [rdfs:label, "Birth Date"]    process\_has\_output:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#bdProcess  po:  - predicates: sio:has-output  objects:  value: this:individual\_$(Identifier)#bdMeasVal  type: iri    quality\_basis\_for\_meas:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#bdQuality  po:  - predicates: sio:is-basis-for  objects:  value: this:individual\_$(Identifier)#bdMeasVal  type: iri      measval\_value:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#bdMeasVal  po:  - [a, sio:measurement-value]  - [sio:has-value, $(Birthdate), xsd:string]  - [rdfs:label, "Date $(Birthdate) should be in ISO format"]        # begin gender    person\_has\_genderrole:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#Person  po:  - predicates: a  objects:  value: [<https://ejp-rd.eu/vocab/Person>]  type: iri  - predicates: sio:has-role  objects:  value: [this:individual\_$(Identifier)#genderRole]  type: iri    genderrole\_annotation:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#genderRole  po:  - [a, obo:OBI\_0000093]  - [rdfs:label, "Patient"]      identifier\_denotes\_gender:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#ID  po:  - predicates: a  objects:  value: <https://ejp-rd.eu/vocab/identifier>  type: iri  - predicates: sio:denotes  objects:  value: this:individual\_$(Identifier)#genderRole  type: iri    genderrole\_realized\_proces:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#genderRole  po:  - predicates: sio:is-realized-in  objects:  value: this:individual\_$(Identifier)#genderProcess  type: iri    person\_has\_genderquality:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#Person  po:  - predicates: sio:has-quality  objects:  value: this:individual\_$(Identifier)#genderQuality  type: iri    genderquality\_annotation:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#genderQuality  po:  - [a, obo:NCIT\_C17357]  - [rdfs:label, "Gender"]      genderquality\_basis\_for\_meas:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#genderQuality  po:  - predicates: sio:is-basis-for  objects:  value: this:individual\_$(Identifier)#genderMeasVal  type: iri    genderprocess\_has\_output:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#genderProcess  po:  - predicates: sio:has-output  objects:  value: this:individual\_$(Identifier)#genderMeasVal  type: iri      gendermeasval\_value:  sources:  - ['test.csv~csv']  s: this:individual\_$(Identifier)#genderMeasVal  po:  - [a, $(Gender)]  - [rdfs:label, $(GenLabel)] |

**RML**

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| @prefix rr: <http://www.w3.org/ns/r2rml#>.  @prefix rml: <http://semweb.mmlab.be/ns/rml#>.  @prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.  @prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.  @prefix ql: <http://semweb.mmlab.be/ns/ql#>.  @prefix map: <http://mapping.example.com/>.    map:map\_bdrole\_annotation\_0 rml:logicalSource map:source\_3;  a rr:TriplesMap;  rdfs:label "bdrole\_annotation";  rr:subjectMap map:s\_3;  rr:predicateObjectMap map:pom\_5, map:pom\_6.  map:map\_gendermeasval\_value\_0 rml:logicalSource map:source\_18;  a rr:TriplesMap;  rdfs:label "gendermeasval\_value";  rr:subjectMap map:s\_18;  rr:predicateObjectMap map:pom\_28, map:pom\_29.  map:map\_genderprocess\_has\_output\_0 rml:logicalSource map:source\_17;  a rr:TriplesMap;  rdfs:label "genderprocess\_has\_output";  rr:subjectMap map:s\_17;  rr:predicateObjectMap map:pom\_27.  map:map\_genderquality\_annotation\_0 rml:logicalSource map:source\_15;  a rr:TriplesMap;  rdfs:label "genderquality\_annotation";  rr:subjectMap map:s\_15;  rr:predicateObjectMap map:pom\_24, map:pom\_25.  map:map\_genderquality\_basis\_for\_meas\_0 rml:logicalSource map:source\_16;  a rr:TriplesMap;  rdfs:label "genderquality\_basis\_for\_meas";  rr:subjectMap map:s\_16;  rr:predicateObjectMap map:pom\_26.  map:map\_genderrole\_annotation\_0 rml:logicalSource map:source\_11;  a rr:TriplesMap;  rdfs:label "genderrole\_annotation";  rr:subjectMap map:s\_11;  rr:predicateObjectMap map:pom\_18, map:pom\_19.  map:map\_genderrole\_realized\_proces\_0 rml:logicalSource map:source\_13;  a rr:TriplesMap;  rdfs:label "genderrole\_realized\_proces";  rr:subjectMap map:s\_13;  rr:predicateObjectMap map:pom\_22.  map:map\_identifier\_denotes\_0 rml:logicalSource map:source\_1;  a rr:TriplesMap;  rdfs:label "identifier\_denotes";  rr:subjectMap map:s\_1;  rr:predicateObjectMap map:pom\_1, map:pom\_2.  map:map\_identifier\_denotes\_gender\_0 rml:logicalSource map:source\_12;  a rr:TriplesMap;  rdfs:label "identifier\_denotes\_gender";  rr:subjectMap map:s\_12;  rr:predicateObjectMap map:pom\_20, map:pom\_21.  map:map\_identifier\_has\_value\_0 rml:logicalSource map:source\_0;  a rr:TriplesMap;  rdfs:label "identifier\_has\_value";  rr:subjectMap map:s\_0;  rr:predicateObjectMap map:pom\_0.  map:map\_measval\_value\_0 rml:logicalSource map:source\_9;  a rr:TriplesMap;  rdfs:label "measval\_value";  rr:subjectMap map:s\_9;  rr:predicateObjectMap map:pom\_13, map:pom\_14, map:pom\_15.  map:map\_person\_has\_genderquality\_0 rml:logicalSource map:source\_14;  a rr:TriplesMap;  rdfs:label "person\_has\_genderquality";  rr:subjectMap map:s\_14;  rr:predicateObjectMap map:pom\_23.  map:map\_person\_has\_genderrole\_0 rml:logicalSource map:source\_10;  a rr:TriplesMap;  rdfs:label "person\_has\_genderrole";  rr:subjectMap map:s\_10;  rr:predicateObjectMap map:pom\_16, map:pom\_17.  map:map\_person\_has\_quality\_0 rml:logicalSource map:source\_5;  a rr:TriplesMap;  rdfs:label "person\_has\_quality";  rr:subjectMap map:s\_5;  rr:predicateObjectMap map:pom\_8.  map:map\_person\_has\_role\_0 rml:logicalSource map:source\_2;  a rr:TriplesMap;  rdfs:label "person\_has\_role";  rr:subjectMap map:s\_2;  rr:predicateObjectMap map:pom\_3, map:pom\_4.  map:map\_process\_has\_output\_0 rml:logicalSource map:source\_7;  a rr:TriplesMap;  rdfs:label "process\_has\_output";  rr:subjectMap map:s\_7;  rr:predicateObjectMap map:pom\_11.  map:map\_quality\_annotation\_0 rml:logicalSource map:source\_6;  a rr:TriplesMap;  rdfs:label "quality\_annotation";  rr:subjectMap map:s\_6;  rr:predicateObjectMap map:pom\_9, map:pom\_10.  map:map\_quality\_basis\_for\_meas\_0 rml:logicalSource map:source\_8;  a rr:TriplesMap;  rdfs:label "quality\_basis\_for\_meas";  rr:subjectMap map:s\_8;  rr:predicateObjectMap map:pom\_12.  map:map\_role\_realized\_proces\_0 rml:logicalSource map:source\_4;  a rr:TriplesMap;  rdfs:label "role\_realized\_proces";  rr:subjectMap map:s\_4;  rr:predicateObjectMap map:pom\_7.  map:om\_0 a rr:ObjectMap;  rml:reference "Identifier";  rr:termType rr:Literal.  map:om\_1 a rr:ObjectMap;  rr:constant "<https://ejp-rd.eu/vocab/identifier>";  rr:termType rr:IRI.  map:om\_10 a rr:ObjectMap;  rr:constant "Birth Date";  rr:termType rr:Literal.  map:om\_11 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdMeasVal>";  rr:termType rr:IRI.  map:om\_12 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdMeasVal>";  rr:termType rr:IRI.  map:om\_13 a rr:ObjectMap;  rr:constant "<https://semanticscience.org/resource/measurement-value>";  rr:termType rr:IRI.  map:om\_14 a rr:ObjectMap;  rml:reference "Birthdate";  rr:termType rr:Literal;  rr:datatype <http://www.w3.org/2001/XMLSchema#string>.  map:om\_15 a rr:ObjectMap;  rr:template "Date {Birthdate} should be in ISO format";  rr:termType rr:Literal.  map:om\_16 a rr:ObjectMap;  rr:constant "<https://ejp-rd.eu/vocab/Person>";  rr:termType rr:IRI.  map:om\_17 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderRole>";  rr:termType rr:IRI.  map:om\_18 a rr:ObjectMap;  rr:constant "<http://purl.obolibrary.org/obo/OBI_0000093>";  rr:termType rr:IRI.  map:om\_19 a rr:ObjectMap;  rr:constant "Patient";  rr:termType rr:Literal.  map:om\_2 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdRole>";  rr:termType rr:IRI.  map:om\_20 a rr:ObjectMap;  rr:constant "<https://ejp-rd.eu/vocab/identifier>";  rr:termType rr:IRI.  map:om\_21 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderRole>";  rr:termType rr:IRI.  map:om\_22 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderProcess>";  rr:termType rr:IRI.  map:om\_23 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderQuality>";  rr:termType rr:IRI.  map:om\_24 a rr:ObjectMap;  rr:constant "<http://purl.obolibrary.org/obo/NCIT_C17357>";  rr:termType rr:IRI.  map:om\_25 a rr:ObjectMap;  rr:constant "Gender";  rr:termType rr:Literal.  map:om\_26 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderMeasVal>";  rr:termType rr:IRI.  map:om\_27 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderMeasVal>";  rr:termType rr:IRI.  map:om\_28 a rr:ObjectMap;  rml:reference "Gender";  rr:termType rr:IRI.  map:om\_29 a rr:ObjectMap;  rml:reference "GenLabel";  rr:termType rr:Literal.  map:om\_3 a rr:ObjectMap;  rr:constant "<https://ejp-rd.eu/vocab/Person>";  rr:termType rr:IRI.  map:om\_4 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdRole>";  rr:termType rr:IRI.  map:om\_5 a rr:ObjectMap;  rr:constant "<http://purl.obolibrary.org/obo/OBI_0000093>";  rr:termType rr:IRI.  map:om\_6 a rr:ObjectMap;  rr:constant "Patient";  rr:termType rr:Literal.  map:om\_7 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdProcess>";  rr:termType rr:IRI.  map:om\_8 a rr:ObjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdQuality>";  rr:termType rr:IRI.  map:om\_9 a rr:ObjectMap;  rr:constant "<http://purl.obolibrary.org/obo/NCIT_C68615>";  rr:termType rr:IRI.  map:pm\_0 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-value>.  map:pm\_1 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_10 a rr:PredicateMap;  rr:constant rdfs:label.  map:pm\_11 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-output>.  map:pm\_12 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/is-basis-for>.  map:pm\_13 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_14 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-value>.  map:pm\_15 a rr:PredicateMap;  rr:constant rdfs:label.  map:pm\_16 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_17 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-role>.  map:pm\_18 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_19 a rr:PredicateMap;  rr:constant rdfs:label.  map:pm\_2 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/denotes>.  map:pm\_20 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_21 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/denotes>.  map:pm\_22 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/is-realized-in>.  map:pm\_23 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-quality>.  map:pm\_24 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_25 a rr:PredicateMap;  rr:constant rdfs:label.  map:pm\_26 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/is-basis-for>.  map:pm\_27 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-output>.  map:pm\_28 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_29 a rr:PredicateMap;  rr:constant rdfs:label.  map:pm\_3 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_4 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-role>.  map:pm\_5 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_6 a rr:PredicateMap;  rr:constant rdfs:label.  map:pm\_7 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/is-realized-in>.  map:pm\_8 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-quality>.  map:pm\_9 a rr:PredicateMap;  rr:constant rdf:type.  map:pom\_0 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_0;  rr:objectMap map:om\_0.  map:pom\_1 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_1;  rr:objectMap map:om\_1.  map:pom\_10 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_10;  rr:objectMap map:om\_10.  map:pom\_11 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_11;  rr:objectMap map:om\_11.  map:pom\_12 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_12;  rr:objectMap map:om\_12.  map:pom\_13 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_13;  rr:objectMap map:om\_13.  map:pom\_14 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_14;  rr:objectMap map:om\_14.  map:pom\_15 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_15;  rr:objectMap map:om\_15.  map:pom\_16 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_16;  rr:objectMap map:om\_16.  map:pom\_17 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_17;  rr:objectMap map:om\_17.  map:pom\_18 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_18;  rr:objectMap map:om\_18.  map:pom\_19 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_19;  rr:objectMap map:om\_19.  map:pom\_2 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_2;  rr:objectMap map:om\_2.  map:pom\_20 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_20;  rr:objectMap map:om\_20.  map:pom\_21 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_21;  rr:objectMap map:om\_21.  map:pom\_22 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_22;  rr:objectMap map:om\_22.  map:pom\_23 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_23;  rr:objectMap map:om\_23.  map:pom\_24 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_24;  rr:objectMap map:om\_24.  map:pom\_25 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_25;  rr:objectMap map:om\_25.  map:pom\_26 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_26;  rr:objectMap map:om\_26.  map:pom\_27 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_27;  rr:objectMap map:om\_27.  map:pom\_28 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_28;  rr:objectMap map:om\_28.  map:pom\_29 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_29;  rr:objectMap map:om\_29.  map:pom\_3 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_3;  rr:objectMap map:om\_3.  map:pom\_4 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_4;  rr:objectMap map:om\_4.  map:pom\_5 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_5;  rr:objectMap map:om\_5.  map:pom\_6 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_6;  rr:objectMap map:om\_6.  map:pom\_7 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_7;  rr:objectMap map:om\_7.  map:pom\_8 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_8;  rr:objectMap map:om\_8.  map:pom\_9 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_9;  rr:objectMap map:om\_9.  map:s\_0 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#ID>".  map:s\_1 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#ID>".  map:s\_10 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#Person>".  map:s\_11 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderRole>".  map:s\_12 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#ID>".  map:s\_13 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderRole>".  map:s\_14 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#Person>".  map:s\_15 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderQuality>".  map:s\_16 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderQuality>".  map:s\_17 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderProcess>".  map:s\_18 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#genderMeasVal>".  map:s\_2 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#Person>".  map:s\_3 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdRole>".  map:s\_4 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdRole>".  map:s\_5 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#Person>".  map:s\_6 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdQuality>".  map:s\_7 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdProcess>".  map:s\_8 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdQuality>".  map:s\_9 a rr:SubjectMap;  rr:template "<http://our-data.org/data/individual_{Identifier}#bdMeasVal>".  map:source\_0 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_1 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_10 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_11 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_12 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_13 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_14 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_15 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_16 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_17 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_18 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_2 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_3 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_4 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_5 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_6 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_7 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_8 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV.  map:source\_9 a rml:LogicalSource;  rml:source "test.csv";  rml:referenceFormulation ql:CSV. |

## SPARQL:

Endpoint: <https://ronaldcornet.nl/virtuoso/>

|  |
| --- |
| PREFIX sio: <https://semanticscience.org/resource/>  PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>  PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>    select distinct ?pid ?roletype ?qualitytype ?label ?output ?measurement\_label ?measurementvalue ?measurementtype  FROM <https://ronaldcornet.nl/addison\_test2>  WHERE {  ?pid a <https://ejp-rd.eu/vocab/identifier> .  ?pid sio:has-value ?o .  ?pid sio:denotes ?role .  ?patient sio:has-role ?role .  ?patient sio:has-quality ?quality .  ?quality rdf:type ?qualitytype .  ?quality rdfs:label ?label .  ?quality sio:is-basis-for ?output .    ?role rdfs:label ?roletype .    ?role sio:is-realized-in ?measuring .  ?measuring sio:has-output ?output .  ?output rdf:type ?measurementtype .  OPTIONAL{?output rdfs:label ?measurement\_label }  OPTIONAL{?output sio:has-value ?measurementvalue }    } order by ?pid |

## Module of focus

Measurements on blood

## Input YARRRML

prefixes:

ex: http://ejp-rd.eu/ids/

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

this: http://our-data.org/data/

sio: https://semanticscience.org/resource/

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

efo: http://www.ebi.ac.uk/efo/

mappings:

person\_has\_quality:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: a

objects:

value: [https://ejp-rd.eu/vocab/Person]

type: iri

- predicates: sio:has-quality

objects:

value: [this:individual\_$(Identifier)#measurementQuality]

type: iri

cortisol\_measurement\_quality:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#cortisolMeasurementQuality

po:

- predicates: a

objects:

value: obo:NCIT\_C74781

type: iri

- predicates: sio:has-measurement-value

objects:

value: this:individual\_$(Identifier)#cortisolMeasurement

type: iri

cortisol\_measurement:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#cortisolMeasurementValue

po:

- [a, sio:measurement-value]

- [sio:has-value, $(Cortisol)]

acth\_measurement\_quality:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#acthMeasurementQuality

po:

- predicates: a

objects:

value: obo:NCIT\_C74780

type: iri

- predicates: sio:has-measurement-value

objects:

value: this:individual\_$(Identifier)#acthMeasurement

type: iri

acth\_measurement:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#acthMeasurementValue

po:

- [a, sio:measurement-value]

- [sio:has-value, $(ACTH)]

na\_measurement\_quality:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#naMeasurementQuality

po:

- predicates: a

objects:

value: efo:EFO\_0009282

type: iri

- predicates: sio:has-measurement-value

objects:

value: this:individual\_$(Identifier)#naMeasurement

type: iri

na\_measurement:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#naMeasurementValue

po:

- [a, sio:measurement-value]

- [sio:has-value, $(Na)]

k\_measurement\_quality:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#kMeasurementQuality

po:

- predicates: a

objects:

value: efo:EFO\_0009283

type: iri

- predicates: sio:has-measurement-value

objects:

value: this:individual\_$(Identifier)#kMeasurement

type: iri

k\_measurement:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#kMeasurementValue

po:

- [a, sio:measurement-value]

- [sio:has-value, $(K)]

# Mock registry Adiposis dolorosa

(Pablo)

## Input CSV

Identifier,Birthdate,Gender,Diagnosis,Phenotype 1,Phenotype 2,Phenotype 3,Phenotype 4,Drug1,Drug2,Drug3

B0001,09/01/1999,Male,Adiposis dolorosa,Intellectual disability,Obesity,,Apathy,prednisone,infliximab,

B0002,11/11/1987,Male,Adiposis dolorosa,,,,,prednisone,acetaminophen,opioid analgesic

B0003,28/03/2000,Male,Adiposis dolorosa,,,,Apathy,infliximab,,

B0004,26/08/1974,Female,Adiposis dolorosa,Intellectual disability,Obesity,,Apathy,prednisone,,

B0005,14/02/1981,Female,Adiposis dolorosa,Intellectual disability,,,,acetaminophen,opioid analgesic,

B0006,02/03/1995,Male,Adiposis dolorosa,Intellectual disability,Obesity,,,prednisone,,

B0007,22/10/1968,Female,Adiposis dolorosa,,,,Apathy,prednisone,acetaminophen,opioid analgesic

B0008,01/06/1992,Female,Adiposis dolorosa,,,Depression,Apathy,acetaminophen,opioid analgesic,infliximab

B0009,11/09/1989,Male,Adiposis dolorosa,Intellectual disability,Obesity,Depression,,prednisone,,

B0010,23/06/1970,Female,Adiposis dolorosa,,Obesity,Depression,Apathy,acetaminophen,opioid analgesic,

## Module of focus

## Input YARRRML

# Mock registry Duchenne muscular dystrophy

(Nuria)

## Input CSV

Identifier,Birthdate,Gender,Diagnosis,Ontology,Wheelchair use,Able to walk,Able to sit without support

C0001,10/10/1990,Male,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,No,Yes,Yes

C0002,1/20/1981,Female,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,Yes,Yes,Yes

C0003,12/21/2000,Male,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,Yes,No,No

C0004,4/7/2002,Female,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,No,Yes,Yes

C0005,10/2/1996,Male,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,Yes,No,No

C0006,1/20/2003,Male,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,Yes,No,Yes

C0007,9/9/2003,Female,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,Yes,No,No

C0008,1/11/1991,Male,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,No,No,Yes

C0009,1/15/2005,Male,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,No,Yes,Yes

C0010,12/23/2003,Female,Duchenne muscular dystrophy,http://www.orpha.net/ORDO/Orphanet\_98896,No,Yes,Yes

## Module of focus

MODELLING **DIAGNOSIS** (https://github.com/ejp-rd-vp/ERN-common-data-elements/wiki/Disease-history-and-diagnosis)

## Input YARRRML

|  |
| --- |
| prefixes:  ex: <http://ejp-rd.eu/ids/>  obo: <http://purl.obolibrary.org/obo/>  this: <http://our-data.org/data/>  sio: <https://semanticscience.org/resource/>  rdf: <https://www.w3.org/1999/02/22-rdf-syntax-ns>#  efo: <http://www.ebi.ac.uk/efo/>  snomedct: <http://purl.bioontology.org/ontology/SNOMEDCT/>    mappings:  identifier\_has\_value:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#ID  po:  - [sio:has-value, $(Identifier)]    identifier\_denotes:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#ID  po:  - predicates: a  objects:  value: <https://ejp-rd.eu/vocab/identifier>  type: iri  - predicates: sio:denotes  objects:  value: this:individual\_$(Identifier)#Role  type: iri    person\_has\_role:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#Person  po:  - predicates: a  objects:  value: [<https://ejp-rd.eu/vocab/Person>]  type: iri  - predicates: sio:has-role  objects:  value: [this:individual\_$(Identifier)#Role]  type: iri    role\_realized\_proces:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#Role  po:  - predicates: sio:is-realized-in  objects:  value: this:individual\_$(Identifier)#Process  type: iri    person\_hasDiagnosis:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#Person  po:  - predicates: obo:ERO\_0002100  objects:  value: this:individual\_$(Identifier)#Diagnosis  type: iri    diagnosis\_value:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#Diagnosis  po:  - predicates: a  objects:  value: sio:Diagnosis  type: iri  - predicates: rdf:value  objects:  value: this:individual\_$(Identifier)#DiagnosisCode  type: iri  - predicates: sio:has\_attribute  objects:  value: this:individual\_$(Identifier)#DiagnosisAge  type: iri    diagnosisCode\_type:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#DiagnosisCode  po:  - predicates: a  objects:  value: [$(Ontology)]  type: iri    diagnosisAge\_value:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#DiagnosisAge  po:  - predicates: a  objects:  value: efo:EFO\_0004918  type: iri  - predicates: sio:has\_value  objects:  value: this:individual\_$(Identifier)#DiagnosisAgeValue  type: iri    diagnosisAgeValue\_type:  sources:  - ['duchenne\_source\_1.csv~csv']  s: this:individual\_$(Identifier)#DiagnosisAgeValue  po:  - predicates: a  objects:  value: snomedct:Undetermined  type: iri |

**Output Turtle/TriG**

|  |
| --- |
| @prefix rdf: <https://www.w3.org/1999/02/22-rdf-syntax-ns#>.  @prefix ex: <http://ejp-rd.eu/ids/>.  @prefix obo: <http://purl.obolibrary.org/obo/>.  @prefix this: <http://our-data.org/data/>.  @prefix sio: <https://semanticscience.org/resource/>.  @prefix efo: <http://www.ebi.ac.uk/efo/>.  @prefix snomedct: <http://purl.bioontology.org/ontology/SNOMEDCT/>.    <http://our-data.org/data/individual\_C0001#ID> sio:has-value "C0001".  <http://our-data.org/data/individual\_C0002#ID> sio:has-value "C0002".  <http://our-data.org/data/individual\_C0003#ID> sio:has-value "C0003".  <http://our-data.org/data/individual\_C0004#ID> sio:has-value "C0004".  <http://our-data.org/data/individual\_C0005#ID> sio:has-value "C0005".  <http://our-data.org/data/individual\_C0006#ID> sio:has-value "C0006".  <http://our-data.org/data/individual\_C0007#ID> sio:has-value "C0007".  <http://our-data.org/data/individual\_C0008#ID> sio:has-value "C0008".  <http://our-data.org/data/individual\_C0009#ID> sio:has-value "C0009".  <http://our-data.org/data/individual\_C0010#ID> sio:has-value "C0010".  <http://our-data.org/data/individual\_C0001#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0001#Role>.  <http://our-data.org/data/individual\_C0002#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0002#Role>.  <http://our-data.org/data/individual\_C0003#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0003#Role>.  <http://our-data.org/data/individual\_C0004#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0004#Role>.  <http://our-data.org/data/individual\_C0005#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0005#Role>.  <http://our-data.org/data/individual\_C0006#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0006#Role>.  <http://our-data.org/data/individual\_C0007#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0007#Role>.  <http://our-data.org/data/individual\_C0008#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0008#Role>.  <http://our-data.org/data/individual\_C0009#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0009#Role>.  <http://our-data.org/data/individual\_C0010#ID> a <https://ejp-rd.eu/vocab/identifier>;  sio:denotes <http://our-data.org/data/individual\_C0010#Role>.  <http://our-data.org/data/individual\_C0001#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0001#Role>.  <http://our-data.org/data/individual\_C0002#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0002#Role>.  <http://our-data.org/data/individual\_C0003#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0003#Role>.  <http://our-data.org/data/individual\_C0004#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0004#Role>.  <http://our-data.org/data/individual\_C0005#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0005#Role>.  <http://our-data.org/data/individual\_C0006#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0006#Role>.  <http://our-data.org/data/individual\_C0007#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0007#Role>.  <http://our-data.org/data/individual\_C0008#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0008#Role>.  <http://our-data.org/data/individual\_C0009#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0009#Role>.  <http://our-data.org/data/individual\_C0010#Person> a <https://ejp-rd.eu/vocab/Person>;  sio:has-role <http://our-data.org/data/individual\_C0010#Role>.  <http://our-data.org/data/individual\_C0001#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0001#Process>.  <http://our-data.org/data/individual\_C0002#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0002#Process>.  <http://our-data.org/data/individual\_C0003#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0003#Process>.  <http://our-data.org/data/individual\_C0004#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0004#Process>.  <http://our-data.org/data/individual\_C0005#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0005#Process>.  <http://our-data.org/data/individual\_C0006#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0006#Process>.  <http://our-data.org/data/individual\_C0007#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0007#Process>.  <http://our-data.org/data/individual\_C0008#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0008#Process>.  <http://our-data.org/data/individual\_C0009#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0009#Process>.  <http://our-data.org/data/individual\_C0010#Role> sio:is-realized-in <http://our-data.org/data/individual\_C0010#Process>.  <http://our-data.org/data/individual\_C0001#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0001#Diagnosis>.  <http://our-data.org/data/individual\_C0002#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0002#Diagnosis>.  <http://our-data.org/data/individual\_C0003#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0003#Diagnosis>.  <http://our-data.org/data/individual\_C0004#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0004#Diagnosis>.  <http://our-data.org/data/individual\_C0005#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0005#Diagnosis>.  <http://our-data.org/data/individual\_C0006#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0006#Diagnosis>.  <http://our-data.org/data/individual\_C0007#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0007#Diagnosis>.  <http://our-data.org/data/individual\_C0008#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0008#Diagnosis>.  <http://our-data.org/data/individual\_C0009#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0009#Diagnosis>.  <http://our-data.org/data/individual\_C0010#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_C0010#Diagnosis>.  <http://our-data.org/data/individual\_C0001#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0001#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0001#DiagnosisAge>.  <http://our-data.org/data/individual\_C0002#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0002#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0002#DiagnosisAge>.  <http://our-data.org/data/individual\_C0003#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0003#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0003#DiagnosisAge>.  <http://our-data.org/data/individual\_C0004#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0004#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0004#DiagnosisAge>.  <http://our-data.org/data/individual\_C0005#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0005#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0005#DiagnosisAge>.  <http://our-data.org/data/individual\_C0006#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0006#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0006#DiagnosisAge>.  <http://our-data.org/data/individual\_C0007#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0007#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0007#DiagnosisAge>.  <http://our-data.org/data/individual\_C0008#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0008#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0008#DiagnosisAge>.  <http://our-data.org/data/individual\_C0009#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0009#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0009#DiagnosisAge>.  <http://our-data.org/data/individual\_C0010#Diagnosis> a sio:Diagnosis;  rdf:value <http://our-data.org/data/individual\_C0010#DiagnosisCode>;  sio:has\_attribute <http://our-data.org/data/individual\_C0010#DiagnosisAge>.  <http://our-data.org/data/individual\_C0001#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0002#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0003#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0004#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0005#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0006#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0007#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0008#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0009#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0010#DiagnosisCode> a <http://www.orpha.net/ORDO/Orphanet\_98896>.  <http://our-data.org/data/individual\_C0001#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0001#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0002#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0002#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0003#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0003#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0004#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0004#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0005#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0005#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0006#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0006#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0007#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0007#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0008#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0008#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0009#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0009#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0010#DiagnosisAge> a efo:EFO\_0004918;  sio:has\_value <http://our-data.org/data/individual\_C0010#DiagnosisAgeValue>.  <http://our-data.org/data/individual\_C0001#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0002#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0003#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0004#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0005#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0006#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0007#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0008#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0009#DiagnosisAgeValue> a snomedct:Undetermined.  <http://our-data.org/data/individual\_C0010#DiagnosisAgeValue> a snomedct:Undetermined. |

**Output RML**

|  |
| --- |
| @prefix rr: <http://www.w3.org/ns/r2rml#>.  @prefix rml: <http://semweb.mmlab.be/ns/rml#>.  @prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.  @prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.  @prefix ql: <http://semweb.mmlab.be/ns/ql#>.  @prefix map: <http://mapping.example.com/>.    map:map\_diagnosis\_value\_0 rml:logicalSource map:source\_5;  a rr:TriplesMap;  rdfs:label "diagnosis\_value";  rr:subjectMap map:s\_5;  rr:predicateObjectMap map:pom\_7, map:pom\_8, map:pom\_9.  map:map\_diagnosisAge\_value\_0 rml:logicalSource map:source\_7;  a rr:TriplesMap;  rdfs:label "diagnosisAge\_value";  rr:subjectMap map:s\_7;  rr:predicateObjectMap map:pom\_11, map:pom\_12.  map:map\_diagnosisAgeValue\_type\_0 rml:logicalSource map:source\_8;  a rr:TriplesMap;  rdfs:label "diagnosisAgeValue\_type";  rr:subjectMap map:s\_8;  rr:predicateObjectMap map:pom\_13.  map:map\_diagnosisCode\_type\_0 rml:logicalSource map:source\_6;  a rr:TriplesMap;  rdfs:label "diagnosisCode\_type";  rr:subjectMap map:s\_6;  rr:predicateObjectMap map:pom\_10.  map:map\_identifier\_denotes\_0 rml:logicalSource map:source\_1;  a rr:TriplesMap;  rdfs:label "identifier\_denotes";  rr:subjectMap map:s\_1;  rr:predicateObjectMap map:pom\_1, map:pom\_2.  map:map\_identifier\_has\_value\_0 rml:logicalSource map:source\_0;  a rr:TriplesMap;  rdfs:label "identifier\_has\_value";  rr:subjectMap map:s\_0;  rr:predicateObjectMap map:pom\_0.  map:map\_person\_has\_role\_0 rml:logicalSource map:source\_2;  a rr:TriplesMap;  rdfs:label "person\_has\_role";  rr:subjectMap map:s\_2;  rr:predicateObjectMap map:pom\_3, map:pom\_4.  map:map\_person\_hasDiagnosis\_0 rml:logicalSource map:source\_4;  a rr:TriplesMap;  rdfs:label "person\_hasDiagnosis";  rr:subjectMap map:s\_4;  rr:predicateObjectMap map:pom\_6.  map:map\_role\_realized\_proces\_0 rml:logicalSource map:source\_3;  a rr:TriplesMap;  rdfs:label "role\_realized\_proces";  rr:subjectMap map:s\_3;  rr:predicateObjectMap map:pom\_5.  map:om\_0 a rr:ObjectMap;  rml:reference "Identifier";  rr:termType rr:Literal.  map:om\_1 a rr:ObjectMap;  rr:constant "<https://ejp-rd.eu/vocab/identifier>";  rr:termType rr:IRI.  map:om\_10 a rr:ObjectMap;  rml:reference "Ontology";  rr:termType rr:IRI.  map:om\_11 a rr:ObjectMap;  rr:constant "<http://www.ebi.ac.uk/efo/EFO_0004918>";  rr:termType rr:IRI.  map:om\_12 a rr:ObjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#DiagnosisAgeValue](http://our-data.org/data/individual_%7bIdentifier%7d#DiagnosisAgeValue)";  rr:termType rr:IRI.  map:om\_13 a rr:ObjectMap;  rr:constant "<http://purl.bioontology.org/ontology/SNOMEDCT/Undetermined>";  rr:termType rr:IRI.  map:om\_2 a rr:ObjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Role](http://our-data.org/data/individual_%7bIdentifier%7d#Role)";  rr:termType rr:IRI.  map:om\_3 a rr:ObjectMap;  rr:constant "<https://ejp-rd.eu/vocab/Person>";  rr:termType rr:IRI.  map:om\_4 a rr:ObjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Role](http://our-data.org/data/individual_%7bIdentifier%7d#Role)";  rr:termType rr:IRI.  map:om\_5 a rr:ObjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Process](http://our-data.org/data/individual_%7bIdentifier%7d#Process)";  rr:termType rr:IRI.  map:om\_6 a rr:ObjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Diagnosis](http://our-data.org/data/individual_%7bIdentifier%7d#Diagnosis)";  rr:termType rr:IRI.  map:om\_7 a rr:ObjectMap;  rr:constant "<https://semanticscience.org/resource/Diagnosis>";  rr:termType rr:IRI.  map:om\_8 a rr:ObjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#DiagnosisCode](http://our-data.org/data/individual_%7bIdentifier%7d#DiagnosisCode)";  rr:termType rr:IRI.  map:om\_9 a rr:ObjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#DiagnosisAge](http://our-data.org/data/individual_%7bIdentifier%7d#DiagnosisAge)";  rr:termType rr:IRI.  map:pm\_0 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-value>.  map:pm\_1 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_10 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_11 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_12 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has\_value>.  map:pm\_13 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_2 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/denotes>.  map:pm\_3 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_4 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has-role>.  map:pm\_5 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/is-realized-in>.  map:pm\_6 a rr:PredicateMap;  rr:constant <http://purl.obolibrary.org/obo/ERO\_0002100>.  map:pm\_7 a rr:PredicateMap;  rr:constant rdf:type.  map:pm\_8 a rr:PredicateMap;  rr:constant <https://www.w3.org/1999/02/22-rdf-syntax-ns#value>.  map:pm\_9 a rr:PredicateMap;  rr:constant <https://semanticscience.org/resource/has\_attribute>.  map:pom\_0 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_0;  rr:objectMap map:om\_0.  map:pom\_1 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_1;  rr:objectMap map:om\_1.  map:pom\_10 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_10;  rr:objectMap map:om\_10.  map:pom\_11 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_11;  rr:objectMap map:om\_11.  map:pom\_12 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_12;  rr:objectMap map:om\_12.  map:pom\_13 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_13;  rr:objectMap map:om\_13.  map:pom\_2 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_2;  rr:objectMap map:om\_2.  map:pom\_3 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_3;  rr:objectMap map:om\_3.  map:pom\_4 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_4;  rr:objectMap map:om\_4.  map:pom\_5 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_5;  rr:objectMap map:om\_5.  map:pom\_6 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_6;  rr:objectMap map:om\_6.  map:pom\_7 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_7;  rr:objectMap map:om\_7.  map:pom\_8 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_8;  rr:objectMap map:om\_8.  map:pom\_9 a rr:PredicateObjectMap;  rr:predicateMap map:pm\_9;  rr:objectMap map:om\_9.  map:s\_0 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#ID](http://our-data.org/data/individual_%7bIdentifier%7d#ID)".  map:s\_1 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#ID](http://our-data.org/data/individual_%7bIdentifier%7d#ID)".  map:s\_2 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Person](http://our-data.org/data/individual_%7bIdentifier%7d#Person)".  map:s\_3 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Role](http://our-data.org/data/individual_%7bIdentifier%7d#Role)".  map:s\_4 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Person](http://our-data.org/data/individual_%7bIdentifier%7d#Person)".  map:s\_5 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#Diagnosis](http://our-data.org/data/individual_%7bIdentifier%7d#Diagnosis)".  map:s\_6 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#DiagnosisCode](http://our-data.org/data/individual_%7bIdentifier%7d#DiagnosisCode)".  map:s\_7 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#DiagnosisAge](http://our-data.org/data/individual_%7bIdentifier%7d#DiagnosisAge)".  map:s\_8 a rr:SubjectMap;  rr:template "[http://our-data.org/data/individual\_{Identifier}#DiagnosisAgeValue](http://our-data.org/data/individual_%7bIdentifier%7d#DiagnosisAgeValue)".  map:source\_0 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_1 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_2 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_3 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_4 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_5 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_6 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_7 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV.  map:source\_8 a rml:LogicalSource;  rml:source "duchenne\_source\_1.csv";  rml:referenceFormulation ql:CSV. |

# Mock registry Genturis

## Input CSV

Only highlighted elements are being converted.

EUPID/Person ID,Vital status,statusLabel,Year of death  
A0001,http://purl.obolibrary.org/obo/PATO\_0001421,Alive,  
A0002,http://purl.obolibrary.org/obo/PATO\_0001422,Dead,2000/09/08  
A0003,http://purl.obolibrary.org/obo/PATO\_0001421,Alive,

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| EUPID/ Person ID | Year of birth | Sex at birth | Vital status | Year of death | Date of data entry | Orpha-code(s) |
| A0001 | 1989 | F | Alive |  | 2013/04/20 |  |
| A0002 | 1992 | M | Dead | 2014 | 2000/09/08 | Orphanet\_10 |
| A0003 | 1889 | U | Alive |  | 2014/05/13 |  |

Please note that:

* Change “Vital status” into “Vital status” (IRIs for terms) and “statusLabel” (“Alive” or “Dead”);
* Terms is represented as labelled, for example, “sio:has-value" is used instead of “sio:SIO\_00300” for better understandability.

## Module of focus

Personal Information: birth date, gender;

Care pathway: status, death date, date on first visit;

Disease history and diagnosis: diagnosis

Patient Status: status, death date.

## Input YARRRML (Only Patient Status)

prefixes:  
 ex: "http://ejp-rd.eu/ids/"  
 obo: "http://purl.obolibrary.org/obo/"  
 this: "http://our-data.org/data/"  
 sio: "https://semanticscience.org/resource/"  
  
mappings:  
 identifier\_has\_value:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#ID  
 po:  
 - [sio:has-value, $(EUPID/Person ID)]  
  
# For patient status  
 person\_has\_statusRole:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#Person  
 po:  
 - predicates: sio:has-role  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#statusRole  
 type: iri  
  
 person\_has\_statusQuality:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#Person  
 po:  
 - predicates: sio:has-quality  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#statusQuality  
 type: iri  
  
 statusQuality\_base\_statusMeasVal:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#statusQuality  
 po:  
 - predicates: a  
 objects:  
 value: obo:NCIT\_C70810  
 type: iri  
  
 - predicates: sio:is-basis-for  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#statusMeasVal  
 type: iri  
  
 identifier\_denotes\_statusRole:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#ID  
 po:  
 - predicates: sio:denotes  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#statusRole  
 type: iri  
  
 statusRole\_realized\_proces:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#statusRole  
 po:  
  
 - predicates: sio:is-realized-in  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#statusProcess  
 type: iri  
  
 statusProcess\_has\_output:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#statusProcess  
 po:  
 - predicates: sio:has-output  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#statusMeasVal  
 type: iri  
  
 status\_output\_value:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#statusMeasVal  
 po:  
 - [a, $(Vital status)]  
 - [rdfs:label, $(statusLabel)]  
  
  
# For death date  
 person\_has\_statusRole:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#person  
 po:  
 - predicates: sio:has-role  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#deathDateRole  
 type: iri  
  
  
 person\_has\_deathDateQuality:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#Person  
 po:  
 - predicates: sio:has-quality  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#deathDateQuality  
 type: iri  
  
 deathDateQuality\_base\_statusMeasVal:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#deathDateQuality  
 po:  
 - predicates: a  
 objects:  
 value: obo:NCIT\_C70810  
 type: iri  
  
 - predicates: sio:is-basis-for  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#deathDateMeasVal  
 type: iri  
  
  
 identifier\_denotes\_deathDateRole:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#ID  
 po:  
 - predicates: sio:denotes  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#deathDateRole  
 type: iri  
  
 deathDateRole\_realized\_proces:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#deathDateRole  
 po:  
  
 - predicates: sio:is-realized-in  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#deathDateProcess  
 type: iri  
  
 deathDateProcess\_has\_output:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#deathDateProcess  
 po:  
 - predicates: sio:has-output  
 objects:  
 value: this:individual\_$(EUPID/Person ID)#deathDateMeasVal  
 type: iri  
  
 deathDate\_value:  
 sources:  
 - ['test.csv~csv']  
 s: this:individual\_$(EUPID/Person ID)#deathDateMeasVal  
 po:  
 - [a sio:realizable-entity]  
 - [sio:has-value, $(Year of death)]

## Input YARRRML

* **Mock Adiposis Dolorosa (Pablo)**

**Input data**: Mock Adiposis dolorosa registry (Gender and Drug1 modified for an easy access to ontologies):

CSV file:

Identifier,Birthdate,Gender,Gender snomed,Diagnosis,Phenotype 1,Phenotype 2,Phenotype 3,Phenotype 4,Drug1,Drug1\_RXNORM,Drug2,Drug3

B0001,09/01/1999,Male,masculine-gender,Adiposis dolorosa,Intellectual disability,Obesity,,Apathy,prednisone,8640,infliximab,

B0002,11/11/1987,Male,masculine-gender,Adiposis dolorosa,,,,,prednisone,8640,acetaminophen,opioid analgesic

B0003,28/03/2000,Male,masculine-gender,Adiposis dolorosa,,,,Apathy,infliximab,191831,,

B0004,26/08/1974,Female,feminine-gender,Adiposis dolorosa,Intellectual disability,Obesity,,Apathy,prednisone,8640,,

B0005,14/02/1981,Female,feminine-gender,Adiposis dolorosa,Intellectual disability,,,,acetaminophen,161,opioid analgesic,

B0006,02/03/1995,Male,masculine-gender,Adiposis dolorosa,Intellectual disability,Obesity,,,prednisone,8640,,

B0007,22/10/1968,Female,feminine-gender,Adiposis dolorosa,,,,Apathy,prednisone,8640,acetaminophen,opioid analgesic

B0008,01/06/1992,Female,feminine-gender,Adiposis dolorosa,,,Depression,Apathy,acetaminophen,161,opioid analgesic,infliximab

B0009,11/09/1989,Male,masculine-gender,Adiposis dolorosa,Intellectual disability,Obesity,Depression,,prednisone,8640,,

B0010,23/06/1970,Female,feminine-gender,Adiposis dolorosa,,Obesity,Depression,Apathy,acetaminophen,161,opioid analgesic,

**Module to focus on**:

* Personal information (Birthdate and Gender with SIO): <https://github.com/ejp-rd-vp/ERN-common-data-elements/wiki/Personal-information-SIO>
* Diagnosis
* Talking drugs processes

**YARRRML (Pablo):**

prefixes:

ex: <http://ejp-rd.eu/ids/>

obo: <http://purl.obolibrary.org/obo/>

this: <http://our-data.org/data/>

sio: <https://semanticscience.org/resource/>

rdc-meta: <http://rdf.biosemantics.org/ontologies/rd-connect/>

dct: <http://purl.org/dc/terms/>

ordo: <http://www.orpha.net/ORDO/>

rxnorm: <http://purl.bioontology.org/ontology/RXNORM/>

mappings:

*# Birthdate*

identifier\_role\_birthdate:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ID

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/identifier>

type: iri

- predicates: sio:denotes

objects:

value: this:individual\_$(Identifier)#RoleBirthdate

type: iri

- predicates: sio:has-value

objects:

value: $(Identifier)

type: xsd:string

person\_role\_birthdate:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/Person>

*#value: obo:NCBITaxon\_9606*

type: iri

- predicates: sio:has-role

objects:

value: this:individual\_$(Identifier)#RoleBirthdate

type: iri

role\_process\_birthdate:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#RoleBirthdate

po:

- predicates: a

objects:

value: obo:OBI\_0000093

type: iri

- predicates: sio:is-realized-in

objects:

value: this:individual\_$(Identifier)#ProcessBirthdate

type: iri

process\_mv\_birthdate:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Process

po:

- predicates: a

objects:

value: [sio:process]

type: iri

- predicates: sio:has-output

objects:

value: this:individual\_$(Identifier)#MVBirthdate

type: iri

person\_quality\_birthdate:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: sio:has-quality

objects:

value: this:individual\_$(Identifier)#QualityBirthdate

type: iri

quality\_mv\_birthdate:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#QualityBirthdate

po:

- predicates: a

objects:

value: ncit:NCIT\_C68615

type: iri

- predicates: sio:is-basis-for

objects:

value: this:individual\_$(Identifier)#MVBirthdate

type: iri

mv\_value\_birthdate:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#MVBirthdate

po:

- predicates: a

objects:

*#value: sio:realizable-entity*

value: sio:measurement-value

type: iri

- predicates: sio:has-value

objects:

value: $(Birthdate)

type: xsd:string

*# Gender*

person\_role\_gender:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/Person>

type: iri

- predicates: sio:has-role

objects:

value: this:individual\_$(Identifier)#RoleGender

type: iri

identifier\_role\_gender:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ID

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/identifier>

type: iri

- predicates: sio:denotes

objects:

value: this:individual\_$(Identifier)#RoleGender

type: iri

role\_process\_gender:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#RoleGender

po:

- predicates: a

objects:

value: obo:OBI\_0000093

type: iri

- predicates: sio:is-realized-in

objects:

value: this:individual\_$(Identifier)#ProcessGender

type: iri

process\_mv\_gender:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ProcessGender

po:

- predicates: a

objects:

value: sio:process

type: iri

- predicates: sio:has-output

objects:

value: this:individual\_$(Identifier)#MVGender

type: iri

person\_quality\_gender:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: sio:has-quality

objects:

value: this:individual\_$(Identifier)#QualityBirthdate

type: iri

quality\_mv\_gender:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#QualityGender

po:

- predicates: a

objects:

value: obo:NCIT\_C17357 *#Gender*

type: iri

- predicates: sio:is-basis-for

objects:

value: this:individual\_$(Identifier)#MVGender

type: iri

mv\_value\_gender:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#MVGender

po:

- predicates: a

objects:

*#value: sio:realizable-entity*

value: sio:measurement-value

type: iri

- predicates: a

objects:

value: snomed:$(Gender snomed)

type: iri

*# Diagnosis:*

person\_role\_diag:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/Person>

type: iri

- predicates: sio:has-role

objects:

value: this:individual\_$(Identifier)#RoleDiagnosis

type: iri

identifier\_role\_diagnosis:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ID

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/identifier>

type: iri

- predicates: sio:denotes

objects:

value: this:individual\_$(Identifier)#RoleDiagnosis

type: iri

role\_process\_diagnosis:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#RoleDiagnosis

po:

- predicates: a

objects:

value: obo:OBI\_0000093

type: iri

- predicates: sio:is-realized-in

objects:

value: this:individual\_$(Identifier)#ProcessDiagnosis

type: iri

process\_mv\_diagnosis:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ProcessDiagnosis

po:

- predicates: a

objects:

value: dct:Date

type: xsd:datetime

- predicates: a

objects:

value: sio:process

type: iri

- predicates: a

objects:

value: sio:medical-diagnosis

type: iri

- predicates: sio:has-output

objects:

value: this:individual\_$(Identifier)#MVDiagnosis

type: iri

mv\_value\_diagnosis:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#MVDiagnosis

po:

- predicates: a

objects:

value: sio:measurement-value

type: iri

- predicates: a

objects:

value: sio:realizable-entity

type: iri

- predicates: a

objects:

value: ordo:Orphanet\_36397

type: iri

*#Drug1:*

identifier\_role\_drug:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Drug1\_RXNORM)#ID

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/identifier>

type: iri

- predicates: sio:denotes

objects:

value: this:individual\_$(Drug1\_RXNORM)#RoleDrug

type: iri

- predicates: sio:has-value

objects:

value: $(Drug1\_RXNORM)

type: xsd:string

- predicates: rdfs:label

objects:

value: $(Drug1)

type: xsd:string

person\_role\_drug:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Drug1\_RXNORM)#Entity

po:

- predicates: a

objects:

value: sio:SIO\_010038 *#drug*

type: iri

- predicates: sio:has-role

objects:

value: this:individual\_$(Drug1\_RXNORM)#RoleDrug

type: iri

role\_process\_drug:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Drug1\_RXNORM)#RoleDrug

po:

- predicates: a

objects:

value: obo:OBI\_0000040

type: iri

- predicates: sio:is-realized-in

objects:

value: this:individual\_$(Drug1\_RXNORM)#Talking\_drug\_process

type: iri

identifier\_role\_drugconsume:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ID

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/identifier>

type: iri

- predicates: sio:denotes

objects:

value: this:individual\_$(Identifier)#RoleDrugconsume

type: iri

- predicates: sio:has-value

objects:

value: $(Identifier)

type: xsd:string

person\_role\_drugconsume:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#PersonDrugconsume

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/Person>

type: iri

- predicates: sio:has-role

objects:

value: this:individual\_$(Identifier)#RoleDrugconsume

type: iri

role\_process\_drugconsume:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#RoleDrugconsume

po:

- predicates: a

objects:

value: obo:OBI\_0000093

type: iri

- predicates: sio:is-realized-in

objects:

value: this:individual\_$(Drug1\_RXNORM)#Talking\_drug\_process

type: iri

*#Phenotype:*

identifier\_role\_phenotype:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ID

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/identifier>

type: iri

- predicates: sio:denotes

objects:

value: this:individual\_$(Identifier)#Rolephenotype

type: iri

- predicates: sio:has-value

objects:

value: $(Identifier)

type: xsd:string

person\_role\_phenotype:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: a

objects:

value: <https://ejp-rd.eu/vocab/Person>

*#value: obo:NCBITaxon\_9606*

type: iri

- predicates: sio:has-role

objects:

value: this:individual\_$(Identifier)#Rolephenotype

type: iri

role\_process\_phenotype:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Rolephenotype

po:

- predicates: a

objects:

value: obo:OBI\_0000093

type: iri

- predicates: sio:is-realized-in

objects:

value: this:individual\_$(Identifier)#Processphenotype

type: iri

process\_mv\_phenotype:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Processphenotype

po:

- predicates: a

objects:

value: [sio:process]

type: iri

- predicates: sio:has-output

objects:

value: this:individual\_$(Identifier)#MVphenotype

type: iri

person\_quality\_phenotype:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: sio:has-quality

objects:

value: this:individual\_$(Identifier)#Qualityphenotype

type: iri

quality\_mv\_phenotype:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Qualityphenotype

po:

- predicates: a

objects:

value: sio:quality

type: iri

- predicates: sio:is-basis-for

objects:

value: this:individual\_$(Identifier)#MVphenotype

type: iri

mv\_value\_phenotype:

source:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#MVphenotype

po:

- predicates: a

objects:

*#value: sio:realizable-entity*

value: sio:object-quality

type: iri

- predicates: a

objects:

value: obo:NCIT\_C3283

type: iri

- predicates: rdfs:label

objects:

value: $(Phenotype 2)

type: xsd:string

**RML mapping file (Pablo):**

@prefix rr: <http://www.w3.org/ns/r2rml#>.

@prefix rml: <http://semweb.mmlab.be/ns/rml#>.

@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.

@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.

@prefix ql: <http://semweb.mmlab.be/ns/ql#>.

@prefix map: <http://mapping.example.com/>.

map:map\_identifier\_role\_birthdate\_0 rml:logicalSource map:source\_0;

a rr:TriplesMap;

rdfs:label "identifier\_role\_birthdate";

rr:subjectMap map:s\_0;

rr:predicateObjectMap map:pom\_0, map:pom\_1, map:pom\_2.

map:map\_identifier\_role\_diagnosis\_0 rml:logicalSource map:source\_15;

a rr:TriplesMap;

rdfs:label "identifier\_role\_diagnosis";

rr:subjectMap map:s\_15;

rr:predicateObjectMap map:pom\_29, map:pom\_30.

map:map\_identifier\_role\_drug\_0 rml:logicalSource map:source\_19;

a rr:TriplesMap;

rdfs:label "identifier\_role\_drug";

rr:subjectMap map:s\_19;

rr:predicateObjectMap map:pom\_40, map:pom\_41, map:pom\_42, map:pom\_43.

map:map\_identifier\_role\_drugconsume\_0 rml:logicalSource map:source\_22;

a rr:TriplesMap;

rdfs:label "identifier\_role\_drugconsume";

rr:subjectMap map:s\_22;

rr:predicateObjectMap map:pom\_48, map:pom\_49, map:pom\_50.

map:map\_identifier\_role\_gender\_0 rml:logicalSource map:source\_8;

a rr:TriplesMap;

rdfs:label "identifier\_role\_gender";

rr:subjectMap map:s\_8;

rr:predicateObjectMap map:pom\_16, map:pom\_17.

map:map\_identifier\_role\_phenotype\_0 rml:logicalSource map:source\_25;

a rr:TriplesMap;

rdfs:label "identifier\_role\_phenotype";

rr:subjectMap map:s\_25;

rr:predicateObjectMap map:pom\_55, map:pom\_56, map:pom\_57.

map:map\_mv\_value\_birthdate\_0 rml:logicalSource map:source\_6;

a rr:TriplesMap;

rdfs:label "mv\_value\_birthdate";

rr:subjectMap map:s\_6;

rr:predicateObjectMap map:pom\_12, map:pom\_13.

map:map\_mv\_value\_diagnosis\_0 rml:logicalSource map:source\_18;

a rr:TriplesMap;

rdfs:label "mv\_value\_diagnosis";

rr:subjectMap map:s\_18;

rr:predicateObjectMap map:pom\_37, map:pom\_38, map:pom\_39.

map:map\_mv\_value\_gender\_0 rml:logicalSource map:source\_13;

a rr:TriplesMap;

rdfs:label "mv\_value\_gender";

rr:subjectMap map:s\_13;

rr:predicateObjectMap map:pom\_25, map:pom\_26.

map:map\_mv\_value\_phenotype\_0 rml:logicalSource map:source\_31;

a rr:TriplesMap;

rdfs:label "mv\_value\_phenotype";

rr:subjectMap map:s\_31;

rr:predicateObjectMap map:pom\_67, map:pom\_68, map:pom\_69.

map:map\_person\_quality\_birthdate\_0 rml:logicalSource map:source\_4;

a rr:TriplesMap;

rdfs:label "person\_quality\_birthdate";

rr:subjectMap map:s\_4;

rr:predicateObjectMap map:pom\_9.

map:map\_person\_quality\_gender\_0 rml:logicalSource map:source\_11;

a rr:TriplesMap;

rdfs:label "person\_quality\_gender";

rr:subjectMap map:s\_11;

rr:predicateObjectMap map:pom\_22.

map:map\_person\_quality\_phenotype\_0 rml:logicalSource map:source\_29;

a rr:TriplesMap;

rdfs:label "person\_quality\_phenotype";

rr:subjectMap map:s\_29;

rr:predicateObjectMap map:pom\_64.

map:map\_person\_role\_birthdate\_0 rml:logicalSource map:source\_1;

a rr:TriplesMap;

rdfs:label "person\_role\_birthdate";

rr:subjectMap map:s\_1;

rr:predicateObjectMap map:pom\_3, map:pom\_4.

map:map\_person\_role\_diag\_0 rml:logicalSource map:source\_14;

a rr:TriplesMap;

rdfs:label "person\_role\_diag";

rr:subjectMap map:s\_14;

rr:predicateObjectMap map:pom\_27, map:pom\_28.

map:map\_person\_role\_drug\_0 rml:logicalSource map:source\_20;

a rr:TriplesMap;

rdfs:label "person\_role\_drug";

rr:subjectMap map:s\_20;

rr:predicateObjectMap map:pom\_44, map:pom\_45.

map:map\_person\_role\_drugconsume\_0 rml:logicalSource map:source\_23;

a rr:TriplesMap;

rdfs:label "person\_role\_drugconsume";

rr:subjectMap map:s\_23;

rr:predicateObjectMap map:pom\_51, map:pom\_52.

map:map\_person\_role\_gender\_0 rml:logicalSource map:source\_7;

a rr:TriplesMap;

rdfs:label "person\_role\_gender";

rr:subjectMap map:s\_7;

rr:predicateObjectMap map:pom\_14, map:pom\_15.

map:map\_person\_role\_phenotype\_0 rml:logicalSource map:source\_26;

a rr:TriplesMap;

rdfs:label "person\_role\_phenotype";

rr:subjectMap map:s\_26;

rr:predicateObjectMap map:pom\_58, map:pom\_59.

map:map\_process\_mv\_birthdate\_0 rml:logicalSource map:source\_3;

a rr:TriplesMap;

rdfs:label "process\_mv\_birthdate";

rr:subjectMap map:s\_3;

rr:predicateObjectMap map:pom\_7, map:pom\_8.

map:map\_process\_mv\_diagnosis\_0 rml:logicalSource map:source\_17;

a rr:TriplesMap;

rdfs:label "process\_mv\_diagnosis";

rr:subjectMap map:s\_17;

rr:predicateObjectMap map:pom\_33, map:pom\_34, map:pom\_35, map:pom\_36.

map:map\_process\_mv\_gender\_0 rml:logicalSource map:source\_10;

a rr:TriplesMap;

rdfs:label "process\_mv\_gender";

rr:subjectMap map:s\_10;

rr:predicateObjectMap map:pom\_20, map:pom\_21.

map:map\_process\_mv\_phenotype\_0 rml:logicalSource map:source\_28;

a rr:TriplesMap;

rdfs:label "process\_mv\_phenotype";

rr:subjectMap map:s\_28;

rr:predicateObjectMap map:pom\_62, map:pom\_63.

map:map\_quality\_mv\_birthdate\_0 rml:logicalSource map:source\_5;

a rr:TriplesMap;

rdfs:label "quality\_mv\_birthdate";

rr:subjectMap map:s\_5;

rr:predicateObjectMap map:pom\_10, map:pom\_11.

map:map\_quality\_mv\_gender\_0 rml:logicalSource map:source\_12;

a rr:TriplesMap;

rdfs:label "quality\_mv\_gender";

rr:subjectMap map:s\_12;

rr:predicateObjectMap map:pom\_23, map:pom\_24.

map:map\_quality\_mv\_phenotype\_0 rml:logicalSource map:source\_30;

a rr:TriplesMap;

rdfs:label "quality\_mv\_phenotype";

rr:subjectMap map:s\_30;

rr:predicateObjectMap map:pom\_65, map:pom\_66.

map:map\_role\_process\_birthdate\_0 rml:logicalSource map:source\_2;

a rr:TriplesMap;

rdfs:label "role\_process\_birthdate";

rr:subjectMap map:s\_2;

rr:predicateObjectMap map:pom\_5, map:pom\_6.

map:map\_role\_process\_diagnosis\_0 rml:logicalSource map:source\_16;

a rr:TriplesMap;

rdfs:label "role\_process\_diagnosis";

rr:subjectMap map:s\_16;

rr:predicateObjectMap map:pom\_31, map:pom\_32.

map:map\_role\_process\_drug\_0 rml:logicalSource map:source\_21;

a rr:TriplesMap;

rdfs:label "role\_process\_drug";

rr:subjectMap map:s\_21;

rr:predicateObjectMap map:pom\_46, map:pom\_47.

map:map\_role\_process\_drugconsume\_0 rml:logicalSource map:source\_24;

a rr:TriplesMap;

rdfs:label "role\_process\_drugconsume";

rr:subjectMap map:s\_24;

rr:predicateObjectMap map:pom\_53, map:pom\_54.

map:map\_role\_process\_gender\_0 rml:logicalSource map:source\_9;

a rr:TriplesMap;

rdfs:label "role\_process\_gender";

rr:subjectMap map:s\_9;

rr:predicateObjectMap map:pom\_18, map:pom\_19.

map:map\_role\_process\_phenotype\_0 rml:logicalSource map:source\_27;

a rr:TriplesMap;

rdfs:label "role\_process\_phenotype";

rr:subjectMap map:s\_27;

rr:predicateObjectMap map:pom\_60, map:pom\_61.

map:om\_0 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/identifier";

rr:termType rr:IRI.

map:om\_1 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleBirthdate";

rr:termType rr:IRI.

map:om\_10 a rr:ObjectMap;

rr:constant "ncit:NCIT\_C68615";

rr:termType rr:IRI.

map:om\_11 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVBirthdate";

rr:termType rr:IRI.

map:om\_12 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/measurement-value";

rr:termType rr:IRI.

map:om\_13 a rr:ObjectMap;

rml:reference "Birthdate";

rr:termType rr:Literal.

map:om\_14 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/Person";

rr:termType rr:IRI.

map:om\_15 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleGender";

rr:termType rr:IRI.

map:om\_16 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/identifier";

rr:termType rr:IRI.

map:om\_17 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleGender";

rr:termType rr:IRI.

map:om\_18 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/OBI\_0000093";

rr:termType rr:IRI.

map:om\_19 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ProcessGender";

rr:termType rr:IRI.

map:om\_2 a rr:ObjectMap;

rml:reference "Identifier";

rr:termType rr:Literal.

map:om\_20 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/process";

rr:termType rr:IRI.

map:om\_21 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVGender";

rr:termType rr:IRI.

map:om\_22 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#QualityBirthdate";

rr:termType rr:IRI.

map:om\_23 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/NCIT\_C17357";

rr:termType rr:IRI.

map:om\_24 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVGender";

rr:termType rr:IRI.

map:om\_25 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/measurement-value";

rr:termType rr:IRI.

map:om\_26 a rr:ObjectMap;

rr:template "snomed:{Gender snomed}";

rr:termType rr:IRI.

map:om\_27 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/Person";

rr:termType rr:IRI.

map:om\_28 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleDiagnosis";

rr:termType rr:IRI.

map:om\_29 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/identifier";

rr:termType rr:IRI.

map:om\_3 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/Person";

rr:termType rr:IRI.

map:om\_30 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleDiagnosis";

rr:termType rr:IRI.

map:om\_31 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/OBI\_0000093";

rr:termType rr:IRI.

map:om\_32 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ProcessDiagnosis";

rr:termType rr:IRI.

map:om\_33 a rr:ObjectMap;

rr:constant "http://purl.org/dc/terms/Date";

rr:termType rr:Literal.

map:om\_34 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/process";

rr:termType rr:IRI.

map:om\_35 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/medical-diagnosis";

rr:termType rr:IRI.

map:om\_36 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVDiagnosis";

rr:termType rr:IRI.

map:om\_37 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/measurement-value";

rr:termType rr:IRI.

map:om\_38 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/realizable-entity";

rr:termType rr:IRI.

map:om\_39 a rr:ObjectMap;

rr:constant "http://www.orpha.net/ORDO/Orphanet\_36397";

rr:termType rr:IRI.

map:om\_4 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleBirthdate";

rr:termType rr:IRI.

map:om\_40 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/identifier";

rr:termType rr:IRI.

map:om\_41 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Drug1\_RXNORM}#RoleDrug";

rr:termType rr:IRI.

map:om\_42 a rr:ObjectMap;

rml:reference "Drug1\_RXNORM";

rr:termType rr:Literal.

map:om\_43 a rr:ObjectMap;

rml:reference "Drug1";

rr:termType rr:Literal.

map:om\_44 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/SIO\_010038";

rr:termType rr:IRI.

map:om\_45 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Drug1\_RXNORM}#RoleDrug";

rr:termType rr:IRI.

map:om\_46 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/OBI\_0000040";

rr:termType rr:IRI.

map:om\_47 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Drug1\_RXNORM}#Talking\_drug\_process";

rr:termType rr:IRI.

map:om\_48 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/identifier";

rr:termType rr:IRI.

map:om\_49 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleDrugconsume";

rr:termType rr:IRI.

map:om\_5 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/OBI\_0000093";

rr:termType rr:IRI.

map:om\_50 a rr:ObjectMap;

rml:reference "Identifier";

rr:termType rr:Literal.

map:om\_51 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/Person";

rr:termType rr:IRI.

map:om\_52 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleDrugconsume";

rr:termType rr:IRI.

map:om\_53 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/OBI\_0000093";

rr:termType rr:IRI.

map:om\_54 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Drug1\_RXNORM}#Talking\_drug\_process";

rr:termType rr:IRI.

map:om\_55 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/identifier";

rr:termType rr:IRI.

map:om\_56 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Rolephenotype";

rr:termType rr:IRI.

map:om\_57 a rr:ObjectMap;

rml:reference "Identifier";

rr:termType rr:Literal.

map:om\_58 a rr:ObjectMap;

rr:constant "https://ejp-rd.eu/vocab/Person";

rr:termType rr:IRI.

map:om\_59 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Rolephenotype";

rr:termType rr:IRI.

map:om\_6 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ProcessBirthdate";

rr:termType rr:IRI.

map:om\_60 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/OBI\_0000093";

rr:termType rr:IRI.

map:om\_61 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Processphenotype";

rr:termType rr:IRI.

map:om\_62 a rr:ObjectMap;

rr:constant "sio:process";

rr:termType rr:IRI.

map:om\_63 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVphenotype";

rr:termType rr:IRI.

map:om\_64 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Qualityphenotype";

rr:termType rr:IRI.

map:om\_65 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/quality";

rr:termType rr:IRI.

map:om\_66 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVphenotype";

rr:termType rr:IRI.

map:om\_67 a rr:ObjectMap;

rr:constant "https://semanticscience.org/resource/object-quality";

rr:termType rr:IRI.

map:om\_68 a rr:ObjectMap;

rr:constant "http://purl.obolibrary.org/obo/NCIT\_C3283";

rr:termType rr:IRI.

map:om\_69 a rr:ObjectMap;

rml:reference "Phenotype 2";

rr:termType rr:Literal.

map:om\_7 a rr:ObjectMap;

rr:constant "sio:process";

rr:termType rr:IRI.

map:om\_8 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVBirthdate";

rr:termType rr:IRI.

map:om\_9 a rr:ObjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#QualityBirthdate";

rr:termType rr:IRI.

map:pm\_0 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_1 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/denotes>.

map:pm\_10 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_11 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-basis-for>.

map:pm\_12 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_13 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-value>.

map:pm\_14 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_15 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-role>.

map:pm\_16 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_17 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/denotes>.

map:pm\_18 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_19 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-realized-in>.

map:pm\_2 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-value>.

map:pm\_20 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_21 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-output>.

map:pm\_22 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-quality>.

map:pm\_23 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_24 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-basis-for>.

map:pm\_25 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_26 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_27 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_28 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-role>.

map:pm\_29 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_3 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_30 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/denotes>.

map:pm\_31 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_32 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-realized-in>.

map:pm\_33 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_34 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_35 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_36 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-output>.

map:pm\_37 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_38 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_39 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_4 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-role>.

map:pm\_40 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_41 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/denotes>.

map:pm\_42 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-value>.

map:pm\_43 a rr:PredicateMap;

rr:constant rdfs:label.

map:pm\_44 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_45 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-role>.

map:pm\_46 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_47 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-realized-in>.

map:pm\_48 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_49 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/denotes>.

map:pm\_5 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_50 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-value>.

map:pm\_51 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_52 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-role>.

map:pm\_53 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_54 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-realized-in>.

map:pm\_55 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_56 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/denotes>.

map:pm\_57 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-value>.

map:pm\_58 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_59 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-role>.

map:pm\_6 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-realized-in>.

map:pm\_60 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_61 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-realized-in>.

map:pm\_62 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_63 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-output>.

map:pm\_64 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-quality>.

map:pm\_65 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_66 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/is-basis-for>.

map:pm\_67 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_68 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_69 a rr:PredicateMap;

rr:constant rdfs:label.

map:pm\_7 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_8 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-output>.

map:pm\_9 a rr:PredicateMap;

rr:constant <https://semanticscience.org/resource/has-quality>.

map:pom\_0 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_0;

rr:objectMap map:om\_0.

map:pom\_1 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_1;

rr:objectMap map:om\_1.

map:pom\_10 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_10;

rr:objectMap map:om\_10.

map:pom\_11 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_11;

rr:objectMap map:om\_11.

map:pom\_12 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_12;

rr:objectMap map:om\_12.

map:pom\_13 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_13;

rr:objectMap map:om\_13.

map:pom\_14 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_14;

rr:objectMap map:om\_14.

map:pom\_15 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_15;

rr:objectMap map:om\_15.

map:pom\_16 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_16;

rr:objectMap map:om\_16.

map:pom\_17 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_17;

rr:objectMap map:om\_17.

map:pom\_18 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_18;

rr:objectMap map:om\_18.

map:pom\_19 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_19;

rr:objectMap map:om\_19.

map:pom\_2 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_2;

rr:objectMap map:om\_2.

map:pom\_20 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_20;

rr:objectMap map:om\_20.

map:pom\_21 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_21;

rr:objectMap map:om\_21.

map:pom\_22 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_22;

rr:objectMap map:om\_22.

map:pom\_23 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_23;

rr:objectMap map:om\_23.

map:pom\_24 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_24;

rr:objectMap map:om\_24.

map:pom\_25 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_25;

rr:objectMap map:om\_25.

map:pom\_26 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_26;

rr:objectMap map:om\_26.

map:pom\_27 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_27;

rr:objectMap map:om\_27.

map:pom\_28 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_28;

rr:objectMap map:om\_28.

map:pom\_29 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_29;

rr:objectMap map:om\_29.

map:pom\_3 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_3;

rr:objectMap map:om\_3.

map:pom\_30 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_30;

rr:objectMap map:om\_30.

map:pom\_31 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_31;

rr:objectMap map:om\_31.

map:pom\_32 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_32;

rr:objectMap map:om\_32.

map:pom\_33 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_33;

rr:objectMap map:om\_33.

map:pom\_34 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_34;

rr:objectMap map:om\_34.

map:pom\_35 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_35;

rr:objectMap map:om\_35.

map:pom\_36 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_36;

rr:objectMap map:om\_36.

map:pom\_37 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_37;

rr:objectMap map:om\_37.

map:pom\_38 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_38;

rr:objectMap map:om\_38.

map:pom\_39 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_39;

rr:objectMap map:om\_39.

map:pom\_4 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_4;

rr:objectMap map:om\_4.

map:pom\_40 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_40;

rr:objectMap map:om\_40.

map:pom\_41 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_41;

rr:objectMap map:om\_41.

map:pom\_42 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_42;

rr:objectMap map:om\_42.

map:pom\_43 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_43;

rr:objectMap map:om\_43.

map:pom\_44 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_44;

rr:objectMap map:om\_44.

map:pom\_45 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_45;

rr:objectMap map:om\_45.

map:pom\_46 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_46;

rr:objectMap map:om\_46.

map:pom\_47 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_47;

rr:objectMap map:om\_47.

map:pom\_48 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_48;

rr:objectMap map:om\_48.

map:pom\_49 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_49;

rr:objectMap map:om\_49.

map:pom\_5 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_5;

rr:objectMap map:om\_5.

map:pom\_50 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_50;

rr:objectMap map:om\_50.

map:pom\_51 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_51;

rr:objectMap map:om\_51.

map:pom\_52 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_52;

rr:objectMap map:om\_52.

map:pom\_53 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_53;

rr:objectMap map:om\_53.

map:pom\_54 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_54;

rr:objectMap map:om\_54.

map:pom\_55 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_55;

rr:objectMap map:om\_55.

map:pom\_56 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_56;

rr:objectMap map:om\_56.

map:pom\_57 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_57;

rr:objectMap map:om\_57.

map:pom\_58 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_58;

rr:objectMap map:om\_58.

map:pom\_59 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_59;

rr:objectMap map:om\_59.

map:pom\_6 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_6;

rr:objectMap map:om\_6.

map:pom\_60 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_60;

rr:objectMap map:om\_60.

map:pom\_61 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_61;

rr:objectMap map:om\_61.

map:pom\_62 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_62;

rr:objectMap map:om\_62.

map:pom\_63 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_63;

rr:objectMap map:om\_63.

map:pom\_64 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_64;

rr:objectMap map:om\_64.

map:pom\_65 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_65;

rr:objectMap map:om\_65.

map:pom\_66 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_66;

rr:objectMap map:om\_66.

map:pom\_67 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_67;

rr:objectMap map:om\_67.

map:pom\_68 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_68;

rr:objectMap map:om\_68.

map:pom\_69 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_69;

rr:objectMap map:om\_69.

map:pom\_7 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_7;

rr:objectMap map:om\_7.

map:pom\_8 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_8;

rr:objectMap map:om\_8.

map:pom\_9 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_9;

rr:objectMap map:om\_9.

map:s\_0 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ID".

map:s\_1 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Person".

map:s\_10 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ProcessGender".

map:s\_11 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Person".

map:s\_12 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#QualityGender".

map:s\_13 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVGender".

map:s\_14 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Person".

map:s\_15 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ID".

map:s\_16 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleDiagnosis".

map:s\_17 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ProcessDiagnosis".

map:s\_18 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVDiagnosis".

map:s\_19 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Drug1\_RXNORM}#ID".

map:s\_2 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleBirthdate".

map:s\_20 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Drug1\_RXNORM}#Entity".

map:s\_21 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Drug1\_RXNORM}#RoleDrug".

map:s\_22 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ID".

map:s\_23 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#PersonDrugconsume".

map:s\_24 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleDrugconsume".

map:s\_25 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ID".

map:s\_26 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Person".

map:s\_27 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Rolephenotype".

map:s\_28 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Processphenotype".

map:s\_29 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Person".

map:s\_3 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Process".

map:s\_30 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Qualityphenotype".

map:s\_31 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVphenotype".

map:s\_4 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Person".

map:s\_5 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#QualityBirthdate".

map:s\_6 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#MVBirthdate".

map:s\_7 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#Person".

map:s\_8 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#ID".

map:s\_9 a rr:SubjectMap;

rr:template "http://our-data.org/data/individual\_{Identifier}#RoleGender".

map:source\_0 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_1 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_10 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_11 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_12 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_13 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_14 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_15 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_16 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_17 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_18 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_19 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_2 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_20 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_21 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_22 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_23 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_24 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_25 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_26 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_27 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_28 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_29 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_3 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_30 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_31 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_4 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_5 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_6 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_7 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_8 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

map:source\_9 a rml:LogicalSource;

rml:source "source\_1.csv";

rml:referenceFormulation ql:CSV.

**RDF as Turtle (Pablo):**

@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.

@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.

@prefix xsd: <http://www.w3.org/2001/XMLSchema#>.

@prefix sd: <http://www.w3.org/ns/sparql-service-description#>.

@prefix ex: <http://ejp-rd.eu/ids/>.

@prefix obo: <http://purl.obolibrary.org/obo/>.

@prefix this: <http://our-data.org/data/>.

@prefix sio: <https://semanticscience.org/resource/>.

@prefix rdc-meta: <http://rdf.biosemantics.org/ontologies/rd-connect/>.

@prefix dct: <http://purl.org/dc/terms/>.

@prefix ordo: <http://www.orpha.net/ORDO/>.

@prefix rxnorm: <http://purl.bioontology.org/ontology/RXNORM/>.

<http://our-data.org/data/individual\_B0001#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0001#RoleBirthdate>;

sio:has-value "B0001".

<http://our-data.org/data/individual\_B0002#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0002#RoleBirthdate>;

sio:has-value "B0002".

<http://our-data.org/data/individual\_B0003#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0003#RoleBirthdate>;

sio:has-value "B0003".

<http://our-data.org/data/individual\_B0004#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0004#RoleBirthdate>;

sio:has-value "B0004".

<http://our-data.org/data/individual\_B0005#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0005#RoleBirthdate>;

sio:has-value "B0005".

<http://our-data.org/data/individual\_B0006#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0006#RoleBirthdate>;

sio:has-value "B0006".

<http://our-data.org/data/individual\_B0007#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0007#RoleBirthdate>;

sio:has-value "B0007".

<http://our-data.org/data/individual\_B0008#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0008#RoleBirthdate>;

sio:has-value "B0008".

<http://our-data.org/data/individual\_B0009#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0009#RoleBirthdate>;

sio:has-value "B0009".

<http://our-data.org/data/individual\_B0010#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0010#RoleBirthdate>;

sio:has-value "B0010".

<http://our-data.org/data/individual\_B0001#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0001#RoleBirthdate>.

<http://our-data.org/data/individual\_B0002#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0002#RoleBirthdate>.

<http://our-data.org/data/individual\_B0003#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0003#RoleBirthdate>.

<http://our-data.org/data/individual\_B0004#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0004#RoleBirthdate>.

<http://our-data.org/data/individual\_B0005#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0005#RoleBirthdate>.

<http://our-data.org/data/individual\_B0006#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0006#RoleBirthdate>.

<http://our-data.org/data/individual\_B0007#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0007#RoleBirthdate>.

<http://our-data.org/data/individual\_B0008#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0008#RoleBirthdate>.

<http://our-data.org/data/individual\_B0009#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0009#RoleBirthdate>.

<http://our-data.org/data/individual\_B0010#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0010#RoleBirthdate>.

<http://our-data.org/data/individual\_B0001#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0001#MVGender>.

<http://our-data.org/data/individual\_B0002#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0002#MVGender>.

<http://our-data.org/data/individual\_B0003#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0003#MVGender>.

<http://our-data.org/data/individual\_B0004#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0004#MVGender>.

<http://our-data.org/data/individual\_B0005#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0005#MVGender>.

<http://our-data.org/data/individual\_B0006#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0006#MVGender>.

<http://our-data.org/data/individual\_B0007#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0007#MVGender>.

<http://our-data.org/data/individual\_B0008#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0008#MVGender>.

<http://our-data.org/data/individual\_B0009#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0009#MVGender>.

<http://our-data.org/data/individual\_B0010#ProcessGender> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0010#MVGender>.

<http://our-data.org/data/individual\_B0001#Person> sio:has-quality <http://our-data.org/data/individual\_B0001#QualityBirthdate>.

<http://our-data.org/data/individual\_B0002#Person> sio:has-quality <http://our-data.org/data/individual\_B0002#QualityBirthdate>.

<http://our-data.org/data/individual\_B0003#Person> sio:has-quality <http://our-data.org/data/individual\_B0003#QualityBirthdate>.

<http://our-data.org/data/individual\_B0004#Person> sio:has-quality <http://our-data.org/data/individual\_B0004#QualityBirthdate>.

<http://our-data.org/data/individual\_B0005#Person> sio:has-quality <http://our-data.org/data/individual\_B0005#QualityBirthdate>.

<http://our-data.org/data/individual\_B0006#Person> sio:has-quality <http://our-data.org/data/individual\_B0006#QualityBirthdate>.

<http://our-data.org/data/individual\_B0007#Person> sio:has-quality <http://our-data.org/data/individual\_B0007#QualityBirthdate>.

<http://our-data.org/data/individual\_B0008#Person> sio:has-quality <http://our-data.org/data/individual\_B0008#QualityBirthdate>.

<http://our-data.org/data/individual\_B0009#Person> sio:has-quality <http://our-data.org/data/individual\_B0009#QualityBirthdate>.

<http://our-data.org/data/individual\_B0010#Person> sio:has-quality <http://our-data.org/data/individual\_B0010#QualityBirthdate>.

<http://our-data.org/data/individual\_B0001#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0001#MVGender>.

<http://our-data.org/data/individual\_B0002#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0002#MVGender>.

<http://our-data.org/data/individual\_B0003#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0003#MVGender>.

<http://our-data.org/data/individual\_B0004#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0004#MVGender>.

<http://our-data.org/data/individual\_B0005#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0005#MVGender>.

<http://our-data.org/data/individual\_B0006#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0006#MVGender>.

<http://our-data.org/data/individual\_B0007#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0007#MVGender>.

<http://our-data.org/data/individual\_B0008#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0008#MVGender>.

<http://our-data.org/data/individual\_B0009#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0009#MVGender>.

<http://our-data.org/data/individual\_B0010#QualityGender> a obo:NCIT\_C17357;

sio:is-basis-for <http://our-data.org/data/individual\_B0010#MVGender>.

<http://our-data.org/data/individual\_B0001#MVGender> a sio:measurement-value, <snomed:masculine-gender>.

<http://our-data.org/data/individual\_B0002#MVGender> a sio:measurement-value, <snomed:masculine-gender>.

<http://our-data.org/data/individual\_B0003#MVGender> a sio:measurement-value, <snomed:masculine-gender>.

<http://our-data.org/data/individual\_B0004#MVGender> a sio:measurement-value, <snomed:feminine-gender>.

<http://our-data.org/data/individual\_B0005#MVGender> a sio:measurement-value, <snomed:feminine-gender>.

<http://our-data.org/data/individual\_B0006#MVGender> a sio:measurement-value, <snomed:masculine-gender>.

<http://our-data.org/data/individual\_B0007#MVGender> a sio:measurement-value, <snomed:feminine-gender>.

<http://our-data.org/data/individual\_B0008#MVGender> a sio:measurement-value, <snomed:feminine-gender>.

<http://our-data.org/data/individual\_B0009#MVGender> a sio:measurement-value, <snomed:masculine-gender>.

<http://our-data.org/data/individual\_B0010#MVGender> a sio:measurement-value, <snomed:feminine-gender>.

<http://our-data.org/data/individual\_B0001#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0001#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0002#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0002#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0003#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0003#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0004#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0004#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0005#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0005#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0006#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0006#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0007#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0007#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0008#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0008#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0009#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0009#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0010#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0010#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0001#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0001#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0002#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0002#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0003#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0003#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0004#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0004#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0005#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0005#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0006#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0006#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0007#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0007#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0008#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0008#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0009#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0009#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0010#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0010#RoleDiagnosis>.

<http://our-data.org/data/individual\_B0001#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0001#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0002#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0002#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0003#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0003#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0004#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0004#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0005#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0005#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0006#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0006#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0007#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0007#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0008#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0008#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0009#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0009#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0010#RoleDiagnosis> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0010#ProcessDiagnosis>.

<http://our-data.org/data/individual\_B0001#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0001#MVDiagnosis>.

<http://our-data.org/data/individual\_B0002#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0002#MVDiagnosis>.

<http://our-data.org/data/individual\_B0003#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0003#MVDiagnosis>.

<http://our-data.org/data/individual\_B0004#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0004#MVDiagnosis>.

<http://our-data.org/data/individual\_B0005#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0005#MVDiagnosis>.

<http://our-data.org/data/individual\_B0006#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0006#MVDiagnosis>.

<http://our-data.org/data/individual\_B0007#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0007#MVDiagnosis>.

<http://our-data.org/data/individual\_B0008#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0008#MVDiagnosis>.

<http://our-data.org/data/individual\_B0009#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0009#MVDiagnosis>.

<http://our-data.org/data/individual\_B0010#ProcessDiagnosis> a "http://purl.org/dc/terms/Date", sio:process, sio:medical-diagnosis;

sio:has-output <http://our-data.org/data/individual\_B0010#MVDiagnosis>.

<http://our-data.org/data/individual\_B0001#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0002#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0003#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0004#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0005#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0006#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0007#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0008#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0009#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_B0010#MVDiagnosis> a sio:measurement-value, sio:realizable-entity, ordo:Orphanet\_36397.

<http://our-data.org/data/individual\_8640#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_8640#RoleDrug>;

sio:has-value "8640";

rdfs:label "prednisone";

a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_8640#RoleDrug>;

sio:has-value "8640";

rdfs:label "prednisone".

<http://our-data.org/data/individual\_191831#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_191831#RoleDrug>;

sio:has-value "191831";

rdfs:label "infliximab".

<http://our-data.org/data/individual\_8640#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_8640#RoleDrug>;

sio:has-value "8640";

rdfs:label "prednisone".

<http://our-data.org/data/individual\_161#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_161#RoleDrug>;

sio:has-value "161";

rdfs:label "acetaminophen".

<http://our-data.org/data/individual\_8640#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_8640#RoleDrug>;

sio:has-value "8640";

rdfs:label "prednisone";

a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_8640#RoleDrug>;

sio:has-value "8640";

rdfs:label "prednisone".

<http://our-data.org/data/individual\_161#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_161#RoleDrug>;

sio:has-value "161";

rdfs:label "acetaminophen".

<http://our-data.org/data/individual\_8640#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_8640#RoleDrug>;

sio:has-value "8640";

rdfs:label "prednisone".

<http://our-data.org/data/individual\_161#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_161#RoleDrug>;

sio:has-value "161";

rdfs:label "acetaminophen".

<http://our-data.org/data/individual\_B0001#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0001#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0002#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0002#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0003#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0003#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0004#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0004#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0005#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0005#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0006#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0006#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0007#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0007#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0008#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0008#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0009#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0009#ProcessBirthdate>.

<http://our-data.org/data/individual\_B0010#RoleBirthdate> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0010#ProcessBirthdate>.

<http://our-data.org/data/individual\_8640#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_8640#RoleDrug>;

a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_8640#RoleDrug>.

<http://our-data.org/data/individual\_191831#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_191831#RoleDrug>.

<http://our-data.org/data/individual\_8640#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_8640#RoleDrug>.

<http://our-data.org/data/individual\_161#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_161#RoleDrug>.

<http://our-data.org/data/individual\_8640#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_8640#RoleDrug>;

a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_8640#RoleDrug>.

<http://our-data.org/data/individual\_161#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_161#RoleDrug>.

<http://our-data.org/data/individual\_8640#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_8640#RoleDrug>.

<http://our-data.org/data/individual\_161#Entity> a sio:SIO\_010038;

sio:has-role <http://our-data.org/data/individual\_161#RoleDrug>.

<http://our-data.org/data/individual\_8640#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>;

a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_191831#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_191831#Talking\_drug\_process>.

<http://our-data.org/data/individual\_8640#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_161#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_161#Talking\_drug\_process>.

<http://our-data.org/data/individual\_8640#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>;

a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_161#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_161#Talking\_drug\_process>.

<http://our-data.org/data/individual\_8640#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_161#RoleDrug> a obo:OBI\_0000040;

sio:is-realized-in <http://our-data.org/data/individual\_161#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0001#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0001#RoleDrugconsume>;

sio:has-value "B0001".

<http://our-data.org/data/individual\_B0002#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0002#RoleDrugconsume>;

sio:has-value "B0002".

<http://our-data.org/data/individual\_B0003#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0003#RoleDrugconsume>;

sio:has-value "B0003".

<http://our-data.org/data/individual\_B0004#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0004#RoleDrugconsume>;

sio:has-value "B0004".

<http://our-data.org/data/individual\_B0005#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0005#RoleDrugconsume>;

sio:has-value "B0005".

<http://our-data.org/data/individual\_B0006#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0006#RoleDrugconsume>;

sio:has-value "B0006".

<http://our-data.org/data/individual\_B0007#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0007#RoleDrugconsume>;

sio:has-value "B0007".

<http://our-data.org/data/individual\_B0008#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0008#RoleDrugconsume>;

sio:has-value "B0008".

<http://our-data.org/data/individual\_B0009#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0009#RoleDrugconsume>;

sio:has-value "B0009".

<http://our-data.org/data/individual\_B0010#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0010#RoleDrugconsume>;

sio:has-value "B0010".

<http://our-data.org/data/individual\_B0001#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0001#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0002#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0002#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0003#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0003#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0004#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0004#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0005#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0005#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0006#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0006#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0007#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0007#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0008#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0008#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0009#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0009#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0010#PersonDrugconsume> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0010#RoleDrugconsume>.

<http://our-data.org/data/individual\_B0001#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0002#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0003#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_191831#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0004#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0005#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_161#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0006#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0007#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0008#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_161#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0009#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_8640#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0010#RoleDrugconsume> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_161#Talking\_drug\_process>.

<http://our-data.org/data/individual\_B0001#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0001#Rolephenotype>;

sio:has-value "B0001".

<http://our-data.org/data/individual\_B0002#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0002#Rolephenotype>;

sio:has-value "B0002".

<http://our-data.org/data/individual\_B0003#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0003#Rolephenotype>;

sio:has-value "B0003".

<http://our-data.org/data/individual\_B0004#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0004#Rolephenotype>;

sio:has-value "B0004".

<http://our-data.org/data/individual\_B0005#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0005#Rolephenotype>;

sio:has-value "B0005".

<http://our-data.org/data/individual\_B0006#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0006#Rolephenotype>;

sio:has-value "B0006".

<http://our-data.org/data/individual\_B0007#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0007#Rolephenotype>;

sio:has-value "B0007".

<http://our-data.org/data/individual\_B0008#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0008#Rolephenotype>;

sio:has-value "B0008".

<http://our-data.org/data/individual\_B0009#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0009#Rolephenotype>;

sio:has-value "B0009".

<http://our-data.org/data/individual\_B0010#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0010#Rolephenotype>;

sio:has-value "B0010".

<http://our-data.org/data/individual\_B0001#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0001#Rolephenotype>.

<http://our-data.org/data/individual\_B0002#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0002#Rolephenotype>.

<http://our-data.org/data/individual\_B0003#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0003#Rolephenotype>.

<http://our-data.org/data/individual\_B0004#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0004#Rolephenotype>.

<http://our-data.org/data/individual\_B0005#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0005#Rolephenotype>.

<http://our-data.org/data/individual\_B0006#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0006#Rolephenotype>.

<http://our-data.org/data/individual\_B0007#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0007#Rolephenotype>.

<http://our-data.org/data/individual\_B0008#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0008#Rolephenotype>.

<http://our-data.org/data/individual\_B0009#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0009#Rolephenotype>.

<http://our-data.org/data/individual\_B0010#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0010#Rolephenotype>.

<http://our-data.org/data/individual\_B0001#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0001#Processphenotype>.

<http://our-data.org/data/individual\_B0002#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0002#Processphenotype>.

<http://our-data.org/data/individual\_B0003#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0003#Processphenotype>.

<http://our-data.org/data/individual\_B0004#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0004#Processphenotype>.

<http://our-data.org/data/individual\_B0005#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0005#Processphenotype>.

<http://our-data.org/data/individual\_B0006#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0006#Processphenotype>.

<http://our-data.org/data/individual\_B0007#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0007#Processphenotype>.

<http://our-data.org/data/individual\_B0008#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0008#Processphenotype>.

<http://our-data.org/data/individual\_B0009#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0009#Processphenotype>.

<http://our-data.org/data/individual\_B0010#Rolephenotype> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0010#Processphenotype>.

<http://our-data.org/data/individual\_B0001#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0001#MVphenotype>.

<http://our-data.org/data/individual\_B0002#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0002#MVphenotype>.

<http://our-data.org/data/individual\_B0003#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0003#MVphenotype>.

<http://our-data.org/data/individual\_B0004#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0004#MVphenotype>.

<http://our-data.org/data/individual\_B0005#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0005#MVphenotype>.

<http://our-data.org/data/individual\_B0006#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0006#MVphenotype>.

<http://our-data.org/data/individual\_B0007#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0007#MVphenotype>.

<http://our-data.org/data/individual\_B0008#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0008#MVphenotype>.

<http://our-data.org/data/individual\_B0009#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0009#MVphenotype>.

<http://our-data.org/data/individual\_B0010#Processphenotype> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0010#MVphenotype>.

<http://our-data.org/data/individual\_B0001#Person> sio:has-quality <http://our-data.org/data/individual\_B0001#Qualityphenotype>.

<http://our-data.org/data/individual\_B0002#Person> sio:has-quality <http://our-data.org/data/individual\_B0002#Qualityphenotype>.

<http://our-data.org/data/individual\_B0003#Person> sio:has-quality <http://our-data.org/data/individual\_B0003#Qualityphenotype>.

<http://our-data.org/data/individual\_B0004#Person> sio:has-quality <http://our-data.org/data/individual\_B0004#Qualityphenotype>.

<http://our-data.org/data/individual\_B0005#Person> sio:has-quality <http://our-data.org/data/individual\_B0005#Qualityphenotype>.

<http://our-data.org/data/individual\_B0006#Person> sio:has-quality <http://our-data.org/data/individual\_B0006#Qualityphenotype>.

<http://our-data.org/data/individual\_B0007#Person> sio:has-quality <http://our-data.org/data/individual\_B0007#Qualityphenotype>.

<http://our-data.org/data/individual\_B0008#Person> sio:has-quality <http://our-data.org/data/individual\_B0008#Qualityphenotype>.

<http://our-data.org/data/individual\_B0009#Person> sio:has-quality <http://our-data.org/data/individual\_B0009#Qualityphenotype>.

<http://our-data.org/data/individual\_B0010#Person> sio:has-quality <http://our-data.org/data/individual\_B0010#Qualityphenotype>.

<http://our-data.org/data/individual\_B0001#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0001#MVBirthdate>.

<http://our-data.org/data/individual\_B0002#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0002#MVBirthdate>.

<http://our-data.org/data/individual\_B0003#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0003#MVBirthdate>.

<http://our-data.org/data/individual\_B0004#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0004#MVBirthdate>.

<http://our-data.org/data/individual\_B0005#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0005#MVBirthdate>.

<http://our-data.org/data/individual\_B0006#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0006#MVBirthdate>.

<http://our-data.org/data/individual\_B0007#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0007#MVBirthdate>.

<http://our-data.org/data/individual\_B0008#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0008#MVBirthdate>.

<http://our-data.org/data/individual\_B0009#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0009#MVBirthdate>.

<http://our-data.org/data/individual\_B0010#Process> a sio:process;

sio:has-output <http://our-data.org/data/individual\_B0010#MVBirthdate>.

<http://our-data.org/data/individual\_B0001#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0001#MVphenotype>.

<http://our-data.org/data/individual\_B0002#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0002#MVphenotype>.

<http://our-data.org/data/individual\_B0003#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0003#MVphenotype>.

<http://our-data.org/data/individual\_B0004#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0004#MVphenotype>.

<http://our-data.org/data/individual\_B0005#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0005#MVphenotype>.

<http://our-data.org/data/individual\_B0006#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0006#MVphenotype>.

<http://our-data.org/data/individual\_B0007#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0007#MVphenotype>.

<http://our-data.org/data/individual\_B0008#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0008#MVphenotype>.

<http://our-data.org/data/individual\_B0009#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0009#MVphenotype>.

<http://our-data.org/data/individual\_B0010#Qualityphenotype> a sio:quality;

sio:is-basis-for <http://our-data.org/data/individual\_B0010#MVphenotype>.

<http://our-data.org/data/individual\_B0001#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "Obesity".

<http://our-data.org/data/individual\_B0002#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "".

<http://our-data.org/data/individual\_B0003#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "".

<http://our-data.org/data/individual\_B0004#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "Obesity".

<http://our-data.org/data/individual\_B0005#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "".

<http://our-data.org/data/individual\_B0006#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "Obesity".

<http://our-data.org/data/individual\_B0007#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "".

<http://our-data.org/data/individual\_B0008#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "".

<http://our-data.org/data/individual\_B0009#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "Obesity".

<http://our-data.org/data/individual\_B0010#MVphenotype> a sio:object-quality, obo:NCIT\_C3283;

rdfs:label "Obesity".

<http://our-data.org/data/individual\_B0001#Person> sio:has-quality <http://our-data.org/data/individual\_B0001#QualityBirthdate>.

<http://our-data.org/data/individual\_B0002#Person> sio:has-quality <http://our-data.org/data/individual\_B0002#QualityBirthdate>.

<http://our-data.org/data/individual\_B0003#Person> sio:has-quality <http://our-data.org/data/individual\_B0003#QualityBirthdate>.

<http://our-data.org/data/individual\_B0004#Person> sio:has-quality <http://our-data.org/data/individual\_B0004#QualityBirthdate>.

<http://our-data.org/data/individual\_B0005#Person> sio:has-quality <http://our-data.org/data/individual\_B0005#QualityBirthdate>.

<http://our-data.org/data/individual\_B0006#Person> sio:has-quality <http://our-data.org/data/individual\_B0006#QualityBirthdate>.

<http://our-data.org/data/individual\_B0007#Person> sio:has-quality <http://our-data.org/data/individual\_B0007#QualityBirthdate>.

<http://our-data.org/data/individual\_B0008#Person> sio:has-quality <http://our-data.org/data/individual\_B0008#QualityBirthdate>.

<http://our-data.org/data/individual\_B0009#Person> sio:has-quality <http://our-data.org/data/individual\_B0009#QualityBirthdate>.

<http://our-data.org/data/individual\_B0010#Person> sio:has-quality <http://our-data.org/data/individual\_B0010#QualityBirthdate>.

<http://our-data.org/data/individual\_B0001#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0001#MVBirthdate>.

<http://our-data.org/data/individual\_B0002#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0002#MVBirthdate>.

<http://our-data.org/data/individual\_B0003#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0003#MVBirthdate>.

<http://our-data.org/data/individual\_B0004#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0004#MVBirthdate>.

<http://our-data.org/data/individual\_B0005#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0005#MVBirthdate>.

<http://our-data.org/data/individual\_B0006#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0006#MVBirthdate>.

<http://our-data.org/data/individual\_B0007#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0007#MVBirthdate>.

<http://our-data.org/data/individual\_B0008#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0008#MVBirthdate>.

<http://our-data.org/data/individual\_B0009#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0009#MVBirthdate>.

<http://our-data.org/data/individual\_B0010#QualityBirthdate> a <ncit:NCIT\_C68615>;

sio:is-basis-for <http://our-data.org/data/individual\_B0010#MVBirthdate>.

<http://our-data.org/data/individual\_B0001#MVBirthdate> a sio:measurement-value;

sio:has-value "09/01/1999".

<http://our-data.org/data/individual\_B0002#MVBirthdate> a sio:measurement-value;

sio:has-value "11/11/1987".

<http://our-data.org/data/individual\_B0003#MVBirthdate> a sio:measurement-value;

sio:has-value "28/03/2000".

<http://our-data.org/data/individual\_B0004#MVBirthdate> a sio:measurement-value;

sio:has-value "26/08/1974".

<http://our-data.org/data/individual\_B0005#MVBirthdate> a sio:measurement-value;

sio:has-value "14/02/1981".

<http://our-data.org/data/individual\_B0006#MVBirthdate> a sio:measurement-value;

sio:has-value "02/03/1995".

<http://our-data.org/data/individual\_B0007#MVBirthdate> a sio:measurement-value;

sio:has-value "22/10/1968".

<http://our-data.org/data/individual\_B0008#MVBirthdate> a sio:measurement-value;

sio:has-value "01/06/1992".

<http://our-data.org/data/individual\_B0009#MVBirthdate> a sio:measurement-value;

sio:has-value "11/09/1989".

<http://our-data.org/data/individual\_B0010#MVBirthdate> a sio:measurement-value;

sio:has-value "23/06/1970".

<http://our-data.org/data/individual\_B0001#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0001#RoleGender>.

<http://our-data.org/data/individual\_B0002#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0002#RoleGender>.

<http://our-data.org/data/individual\_B0003#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0003#RoleGender>.

<http://our-data.org/data/individual\_B0004#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0004#RoleGender>.

<http://our-data.org/data/individual\_B0005#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0005#RoleGender>.

<http://our-data.org/data/individual\_B0006#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0006#RoleGender>.

<http://our-data.org/data/individual\_B0007#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0007#RoleGender>.

<http://our-data.org/data/individual\_B0008#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0008#RoleGender>.

<http://our-data.org/data/individual\_B0009#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0009#RoleGender>.

<http://our-data.org/data/individual\_B0010#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_B0010#RoleGender>.

<http://our-data.org/data/individual\_B0001#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0001#RoleGender>.

<http://our-data.org/data/individual\_B0002#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0002#RoleGender>.

<http://our-data.org/data/individual\_B0003#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0003#RoleGender>.

<http://our-data.org/data/individual\_B0004#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0004#RoleGender>.

<http://our-data.org/data/individual\_B0005#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0005#RoleGender>.

<http://our-data.org/data/individual\_B0006#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0006#RoleGender>.

<http://our-data.org/data/individual\_B0007#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0007#RoleGender>.

<http://our-data.org/data/individual\_B0008#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0008#RoleGender>.

<http://our-data.org/data/individual\_B0009#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0009#RoleGender>.

<http://our-data.org/data/individual\_B0010#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_B0010#RoleGender>.

<http://our-data.org/data/individual\_B0001#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0001#ProcessGender>.

<http://our-data.org/data/individual\_B0002#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0002#ProcessGender>.

<http://our-data.org/data/individual\_B0003#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0003#ProcessGender>.

<http://our-data.org/data/individual\_B0004#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0004#ProcessGender>.

<http://our-data.org/data/individual\_B0005#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0005#ProcessGender>.

<http://our-data.org/data/individual\_B0006#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0006#ProcessGender>.

<http://our-data.org/data/individual\_B0007#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0007#ProcessGender>.

<http://our-data.org/data/individual\_B0008#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0008#ProcessGender>.

<http://our-data.org/data/individual\_B0009#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0009#ProcessGender>.

<http://our-data.org/data/individual\_B0010#RoleGender> a obo:OBI\_0000093;

sio:is-realized-in <http://our-data.org/data/individual\_B0010#ProcessGender>.

**SPARQL (Pablo)**

PREFIX sio: <https://semanticscience.org/resource/>

PREFIX ldp: <http://www.w3.org/ns/ldp#>

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>

PREFIX obo: <http://purl.obolibrary.org/obo/>

SELECT distinct ?id\_drug ?name ?role\_drug ?id\_pat ?role\_pat ?td\_process

FROM <http://localhost:8890/DAV/home/LDP/Container\_adiposis\_dolorosa/adiposis\_dolorosa\_2>

WHERE {

#Drug:

?id\_drug a <https://ejp-rd.eu/vocab/identifier> .

?id\_drug sio:denotes ?role\_drug .

?id\_drug rdfs:label ?name .

?ent\_drug sio:has-role ?role .

?ent\_drug a sio:SIO\_010038 .

?role\_drug sio:is-realized-in ?td\_process .

#Drug\_consumer:

?id\_pat a <https://ejp-rd.eu/vocab/identifier> .

?id\_pat sio:denotes ?role\_pat .

?ent\_pat sio:has-role ?role\_pat .

?ent\_pat a <https://ejp-rd.eu/vocab/Person> .

?role\_pat sio:is-realized-in ?td\_process .

}

# Mock registry Cystic fibrosis

(César)

## Input CSV

Identifier,Birthdate,Gender,Diagnosis,rs,HGVS,Phenotype 1,Phenotype 2,Phenotype 3,Phenotype 4,Phenotype 5,Phenotype 6

A0001,12/04/1990,Male,Cystic fibrosis,rs397508762,NM\_000492.3(CFTR):c.57G>A,,,,,,

A0002,10/12/1980,Female,Cystic fibrosis,rs397508467,NM\_000492.3(CFTR):c.296C>T,Intellectual disability,,,Depression,Hypocalcemia,

A0003,01/12/2002,Female,Cystic fibrosis,rs121908785,NM\_000492.3(CFTR):c.1153\_1154insAT,,,Pulmonary hypoplasia,,,

A0004,24/03/1995,Male,Cystic fibrosis,rs397508257,NM\_000492.3(CFTR):c.1670delC,,Recurrent otitis media,,,,

A0005,03/06/1991,Male,Cystic fibrosis,rs397508326,NM\_000492.3(CFTR):c.1986\_1989delAACT,,,,,,

A0006,15/08/1988,Male,Cystic fibrosis,rs79633941,NM\_000492.3(CFTR):c.2668C>T,Intellectual disability,,,,Hypocalcemia,

A0007,03/11/1991,Female,Cystic fibrosis,rs34911792,NM\_000492.3(CFTR):c.3705T>G,,Recurrent otitis media,,,,Nyctalopia

A0008,09/05/1996,Male,Cystic fibrosis,rs193922525,NM\_000492.3(CFTR):c.4046G>A,,,,,,

A0009,31/08/1989,Female,Cystic fibrosis,rs121908788,NM\_000492.3(CFTR):c.2737\_2738insG,,,,,,

A0010,21/09/2000,Female,Cystic fibrosis,rs397508267,NM\_000492.3(CFTR):c.1680A>C,,,,,,

## Module of focus

Modeling **Genetic diagnosis (**<https://github.com/ejp-rd-vp/ERN-common-data-elements/wiki/Genetic-diagnosis>)

## Input YARRRML

prefixes:

rdf: http://www.w3.org/1999/02/22-rdf-syntax-ns#

rdfs: http://www.w3.org/2000/01/rdf-schema#

ex: http://ejp-rd.eu/ids/

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

this: http://our-data.org/data/

sio: https://semanticscience.org/resource/

wiki: https://www.wikidata.org/wiki/Property

mappings:

identifier\_has\_value:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ID

po:

- [sio:has-value, $(Identifier)]

identifier\_denotes:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#ID

po:

- predicates: a

objects:

value: https://ejp-rd.eu/vocab/identifier

type: iri

- predicates: sio:denotes

objects:

value: this:individual\_$(Identifier)#Role

type: iri

person\_has\_role:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: a

objects:

value: [https://ejp-rd.eu/vocab/Person]

type: iri

- predicates: sio:has-role

objects:

value: [this:individual\_$(Identifier)#Role]

type: iri

role\_realized\_proces:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Role

po:

- predicates: sio:is-realized-in

objects:

value: this:individual\_$(Identifier)#Process

type: iri

person\_hasGeneticDiagnosis:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#Person

po:

- predicates: obo:ERO\_0002100

objects:

value: this:individual\_$(Identifier)#GeneticDiagnosis

type: iri

geneticDiagnosis\_value:

sources:

- ['source\_1.csv~csv']

s: this:individual\_$(Identifier)#GeneticDiagnosis

po:

- predicates: a

objects:

value: obo:NCIT\_C20826

type: iri

- predicates: rdf:value

objects:

value: this:individual\_$(Identifier)#variant\_$(HGVS)

type: iri

variant\_value:

sources:

- ['source\_1.csv~csv']

s: this:variant\_$(HGVS)

po:

- predicates: a

objects:

value: obo:VariO\_0138

type: iri

- predicates: sio:refers\_to

objects:

value: this:gene\_$(rs)

type: iri

- predicates: wiki:P3331

objects:

value: 'HGVS name'

type: literal

gene\_value:

sources:

- ['source\_1.csv~csv']

s: this:gene\_$(rs)

po:

- predicates: a

objects:

value: obo:NCIT\_C16612

type: iri

**Turtle:**

@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.

@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.

@prefix ex: <http://ejp-rd.eu/ids/>.

@prefix obo: <http://purl.obolibrary.org/obo/>.

@prefix this: <http://our-data.org/data/>.

@prefix sio: <https://semanticscience.org/resource/>.

<http://our-data.org/data/individual\_A0001#ID> sio:has-value "A0001".

<http://our-data.org/data/individual\_A0002#ID> sio:has-value "A0002".

<http://our-data.org/data/individual\_A0003#ID> sio:has-value "A0003".

<http://our-data.org/data/individual\_A0004#ID> sio:has-value "A0004".

<http://our-data.org/data/individual\_A0005#ID> sio:has-value "A0005".

<http://our-data.org/data/individual\_A0006#ID> sio:has-value "A0006".

<http://our-data.org/data/individual\_A0007#ID> sio:has-value "A0007".

<http://our-data.org/data/individual\_A0008#ID> sio:has-value "A0008".

<http://our-data.org/data/individual\_A0009#ID> sio:has-value "A0009".

<http://our-data.org/data/individual\_A0010#ID> sio:has-value "A0010".

<http://our-data.org/data/individual\_A0001#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0001#Role>.

<http://our-data.org/data/individual\_A0002#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0002#Role>.

<http://our-data.org/data/individual\_A0003#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0003#Role>.

<http://our-data.org/data/individual\_A0004#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0004#Role>.

<http://our-data.org/data/individual\_A0005#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0005#Role>.

<http://our-data.org/data/individual\_A0006#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0006#Role>.

<http://our-data.org/data/individual\_A0007#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0007#Role>.

<http://our-data.org/data/individual\_A0008#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0008#Role>.

<http://our-data.org/data/individual\_A0009#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0009#Role>.

<http://our-data.org/data/individual\_A0010#ID> a <https://ejp-rd.eu/vocab/identifier>;

sio:denotes <http://our-data.org/data/individual\_A0010#Role>.

<http://our-data.org/data/individual\_A0001#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0001#Role>.

<http://our-data.org/data/individual\_A0002#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0002#Role>.

<http://our-data.org/data/individual\_A0003#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0003#Role>.

<http://our-data.org/data/individual\_A0004#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0004#Role>.

<http://our-data.org/data/individual\_A0005#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0005#Role>.

<http://our-data.org/data/individual\_A0006#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0006#Role>.

<http://our-data.org/data/individual\_A0007#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0007#Role>.

<http://our-data.org/data/individual\_A0008#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0008#Role>.

<http://our-data.org/data/individual\_A0009#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0009#Role>.

<http://our-data.org/data/individual\_A0010#Person> a <https://ejp-rd.eu/vocab/Person>;

sio:has-role <http://our-data.org/data/individual\_A0010#Role>.

<http://our-data.org/data/individual\_A0001#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0001#Process>.

<http://our-data.org/data/individual\_A0002#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0002#Process>.

<http://our-data.org/data/individual\_A0003#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0003#Process>.

<http://our-data.org/data/individual\_A0004#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0004#Process>.

<http://our-data.org/data/individual\_A0005#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0005#Process>.

<http://our-data.org/data/individual\_A0006#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0006#Process>.

<http://our-data.org/data/individual\_A0007#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0007#Process>.

<http://our-data.org/data/individual\_A0008#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0008#Process>.

<http://our-data.org/data/individual\_A0009#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0009#Process>.

<http://our-data.org/data/individual\_A0010#Role> sio:is-realized-in <http://our-data.org/data/individual\_A0010#Process>.

<http://our-data.org/data/individual\_A0001#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0001#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0002#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0002#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0003#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0003#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0004#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0004#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0005#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0005#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0006#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0006#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0007#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0007#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0008#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0008#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0009#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0009#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0010#Person> obo:ERO\_0002100 <http://our-data.org/data/individual\_A0010#GeneticDiagnosis>.

<http://our-data.org/data/individual\_A0001#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0001#variant\_NM\_000492.3%28CFTR%29%3Ac.57G%3EA>.

<http://our-data.org/data/individual\_A0002#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0002#variant\_NM\_000492.3%28CFTR%29%3Ac.296C%3ET>.

<http://our-data.org/data/individual\_A0003#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0003#variant\_NM\_000492.3%28CFTR%29%3Ac.1153\_1154insAT>.

<http://our-data.org/data/individual\_A0004#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0004#variant\_NM\_000492.3%28CFTR%29%3Ac.1670delC>.

<http://our-data.org/data/individual\_A0005#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0005#variant\_NM\_000492.3%28CFTR%29%3Ac.1986\_1989delAACT>.

<http://our-data.org/data/individual\_A0006#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0006#variant\_NM\_000492.3%28CFTR%29%3Ac.2668C%3ET>.

<http://our-data.org/data/individual\_A0007#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0007#variant\_NM\_000492.3%28CFTR%29%3Ac.3705T%3EG>.

<http://our-data.org/data/individual\_A0008#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0008#variant\_NM\_000492.3%28CFTR%29%3Ac.4046G%3EA>.

<http://our-data.org/data/individual\_A0009#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0009#variant\_NM\_000492.3%28CFTR%29%3Ac.2737\_2738insG>.

<http://our-data.org/data/individual\_A0010#GeneticDiagnosis> a obo:NCIT\_C20826;

rdf:value <http://our-data.org/data/individual\_A0010#variant\_NM\_000492.3%28CFTR%29%3Ac.1680A%3EC>.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.57G%3EA> sio:refers\_to this:gene\_rs397508762;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.296C%3ET> sio:refers\_to this:gene\_rs397508467;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.1153\_1154insAT> sio:refers\_to this:gene\_rs121908785;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.1670delC> sio:refers\_to this:gene\_rs397508257;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.1986\_1989delAACT> sio:refers\_to this:gene\_rs397508326;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.2668C%3ET> sio:refers\_to this:gene\_rs79633941;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.3705T%3EG> sio:refers\_to this:gene\_rs34911792;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.4046G%3EA> sio:refers\_to this:gene\_rs193922525;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.2737\_2738insG> sio:refers\_to this:gene\_rs121908788;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

<http://our-data.org/data/variant\_NM\_000492.3%28CFTR%29%3Ac.1680A%3EC> sio:refers\_to this:gene\_rs397508267;

<https://www.wikidata.org/wiki/PropertyP3331> "HGVS name";

a obo:VariO\_0138.

this:gene\_rs397508762 a obo:NCIT\_C16612.

this:gene\_rs397508467 a obo:NCIT\_C16612.

this:gene\_rs121908785 a obo:NCIT\_C16612.

this:gene\_rs397508257 a obo:NCIT\_C16612.

this:gene\_rs397508326 a obo:NCIT\_C16612.

this:gene\_rs79633941 a obo:NCIT\_C16612.

this:gene\_rs34911792 a obo:NCIT\_C16612.

this:gene\_rs193922525 a obo:NCIT\_C16612.

this:gene\_rs121908788 a obo:NCIT\_C16612.

this:gene\_rs397508267 a obo:NCIT\_C16612.

**RML:**

@prefix rr: <http://www.w3.org/ns/r2rml#>.

@prefix rml: <http://semweb.mmlab.be/ns/rml#>.

@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.

@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.

@prefix ql: <http://semweb.mmlab.be/ns/ql#>.

@prefix map: <http://mapping.example.com/>.

map:map\_person\_0 rml:logicalSource map:source\_0;

a rr:TriplesMap;

rdfs:label "person";

rr:subjectMap map:s\_0;

rr:predicateObjectMap map:pom\_0, map:pom\_1.

map:om\_0 a rr:ObjectMap;

rr:constant "<http://xmlns.com/foaf/0.1/Person>";

rr:termType rr:IRI.

map:om\_1 a rr:ObjectMap;

rml:reference "Identifier";

rr:termType rr:Literal.

map:pm\_0 a rr:PredicateMap;

rr:constant rdf:type.

map:pm\_1 a rr:PredicateMap;

rr:constant <http://example.com/name>.

map:pom\_0 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_0;

rr:objectMap map:om\_0.

map:pom\_1 a rr:PredicateObjectMap;

rr:predicateMap map:pm\_1;

rr:objectMap map:om\_1.

map:s\_0 a rr:SubjectMap;

rr:template "<http://example.com/{Identifier>}".

map:source\_0 a rml:LogicalSource;

rml:source "cystic.csv";

rml:referenceFormulation ql:CSV.

## SPARQL:

PREFIX sio: <https://semanticscience.org/resource/>

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>

select distinct ?pid ?roletype ?qualitytype ?label ?output ?measurement ?measurement2 ?outputtype

FROM <https://ronaldcornet.nl/addison\_test1>

WHERE {

?pid a <https://ejp-rd.eu/vocab/identifier> .

?pid sio:has-value ?o .

?pid sio:denotes ?role .

?patient sio:has-role ?role .

?patient sio:has-quality ?quality .

?quality rdf:type ?qualitytype .

?quality rdfs:label ?label .

?quality sio:is-basis-for ?output .

?role rdfs:label ?roletype .

?role sio:is-realized-in ?measuring .

?measuring sio:has-output ?output .

OPTIONAL{?output rdf:type ?outputtype }

OPTIONAL{?output rdfs:label ?measurement }

OPTIONAL{?output sio:has-value ?measurement2 }

} order by ?pid