

# Concept change request

## Substance

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<b>Dataset release</b>	2022.1	<b>Consulted expert</b>	Oncologists from SPO

## 1 Change request input / rationale

The SPO driver project is using the National Cancer Institute (NCI) Thesaurus (<https://ncithesaurus.nci.nih.gov/ncitbrowser/>) for identifying the substance if there is no ATC code. It is proposed to add the NCI Thesaurus as a standard to the concept *Substance* in the SPHN Dataset so that this standard can be used in general beyond the oncology domain.

## 2 Change content

### 2.1 Currently released concept

SPHN Dataset version: 2021.1

Unique concept ID: 0000000363

Concept name	Description	Type	Standard	Value set
<b>Substance</b>	any matter of defined composition that has discrete existence, whose origin may be biological, mineral or chemical			
code	code, name, coding system and version representing the substance, e.g. ATC or SNOMED CT	Code	SNOMED CT, ATC, other	for SNOMED : child of : 105590001  Substance (substance)
generic name	name of the substance, for not yet approved medications the international nonproprietary name (INN) of a substance given by the World Health Organization (WHO)	string		

## 2.2 Proposed new concept

Contextualized concept name	Description	Type	Standard	Value set
<b>Substance</b>	any matter of defined composition that has discrete existence, whose origin may be biological, mineral or chemical	Self		
code	code, name, coding system and version representing the substance, e.g. ATC or SNOMED CT	Code	SNOMED CT, ATC, NCI Thesaurus, other	for SNOMED : child of : 105590001 [Substance (substance)]
generic name	name of the substance, for not yet approved medications the international nonproprietary name (INN) of a substance given by the World Health Organization (WHO)	string		

## 3 Pros and cons

### 3.1 Advantages

- the substance can be uniquely identified with a unique identifier from a semantic standard even if the medication is not yet approved by the authorities
- the NCI Thesaurus provides persistent unique resource identifiers (URIs) and thus supports FAIRification of data
- it is made transparent that this semantic standard is recommended to be used
- the NCI thesaurus provides a classification of pharmaceutical substances, e.g. Atibucolimab is a monoclonal antibody

### 3.2 Disadvantages

- none

## 4 Discussion

The addition of the standard would support identifying the substance uniquely (if ATC code and SNOMED CT code is not available) instead of stating the generic name only.

## 5 Example

The substance Atibucolimab can be represented with the concept *Code* as follows:

Code: C172657

Name: Atibucolimab

Coding System and Version: NCI-Thesaurus-21.07

Source: <https://ncim.nci.nih.gov/ncimbrowser/ConceptReport.jsp?dictionary=NCI%20MetaThesaurus&code=CL1406551>