

SNOMED CT Spanish Extension of Medicines

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Abstract

The SNOMED CT National Release Center of Spain (NRC Spain) has among its objectives to provide licensees in Spain, beyond the resources published by SNOMED International, a comprehensive set of quality-tested content of its own production.

One of the main contents of interest to the National System of Health (NSH) is information on medicines, as an added resource to facilitate semantic interoperability.

For the generation and persistence of a SNOMED CT National Extension for Spain, we have had the collaboration of other areas and institutions, such as the regulatory agency “Agencia Española de Medicamentos y Productos Sanitarios (AEMPS)” and the NSH e-Prescription Area of the Ministry of Health, collaborating as authors of the contents on medicines and official preparations and formulas.

Information substrate

The dictionaries named “Nomenclator for Prescription” and “Nomenclator for Management” nomenclatures are the main sources of information used for the extraction and automated processing of primary information:

- A medicines database intended to provide core prescription information to the health care information services.
- Contains all medicinal products that have been authorized and marketed, both financed and not financed.
- Data for medicinal product identification.
- Technical information for each individual product.



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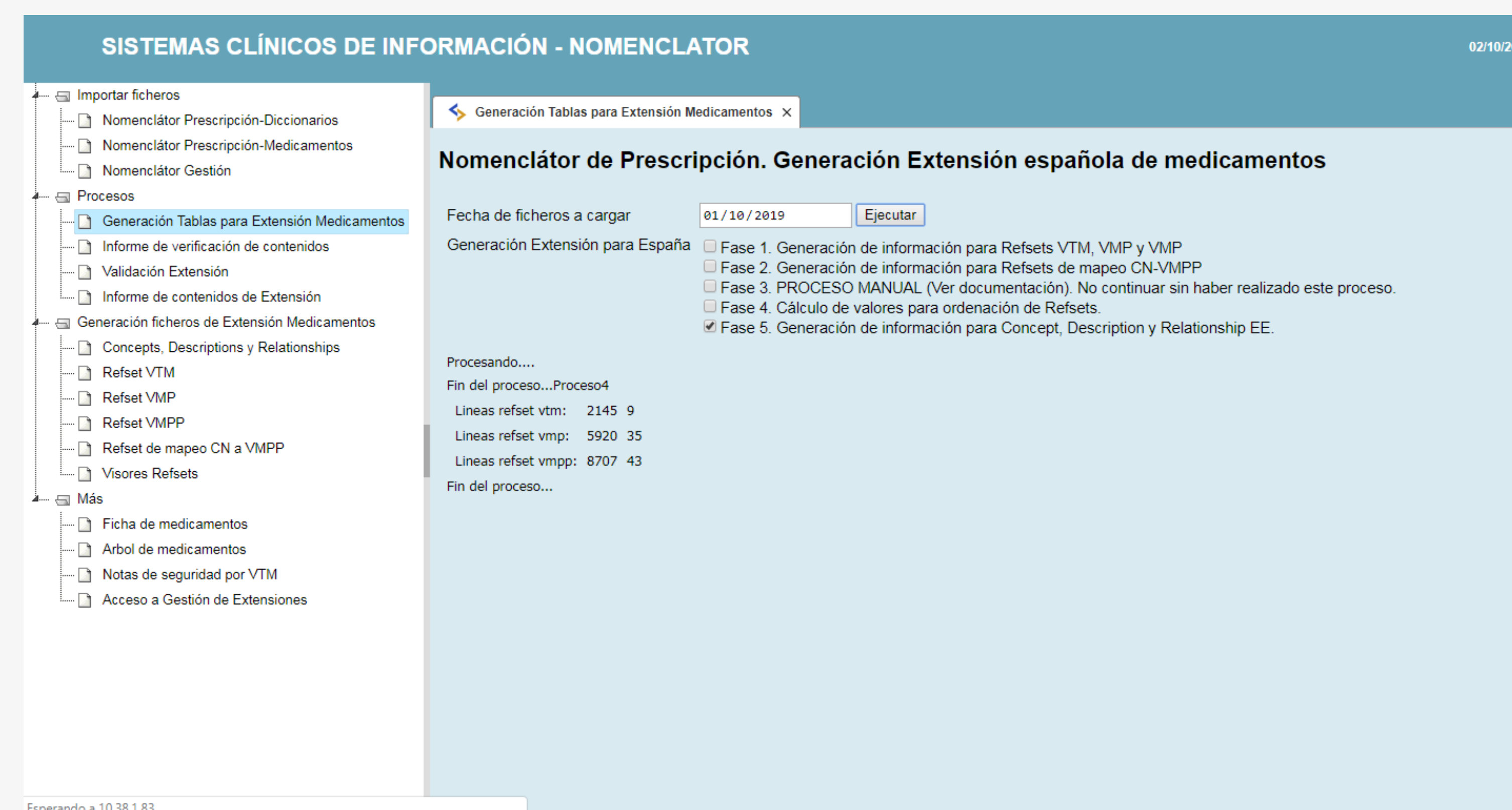


Information Process

The extracts are processed for generating the Extension. Its content is downloaded monthly from the AEMPS website, and includes all drugs identified with a national code (identifying brand names) with associated attributes, all encoded in SNOMED CT:

VTM Virtual Therapeutic Moiety	Active ingredient(s) <i>darunavir + cobicistat</i>
VMP Virtual Medicinal Product	Active ingredient(s) + strength + simplified pharmaceutical form <i>darunavir + cobicistat 800 mg / 150 mg comprimido (Tablet)</i>
VMPP Virtual Medicinal Product Pack	Active ingredient(s) + strength + simplified pharmaceutical form + package size and type of container) <i>darunavir + cobicistat 800 mg / 150 mg 30 comprimidos</i>

The NRC of Spain has developed an application that allows automated generation of the Extension from these contents. Quality assurance modules allow occasional detection of anomalies of content.



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Products and distribution

The NRC releases the **SNOMED CT Medicines National Extension for Spain** on a **monthly** basis. The release includes both manufactured products and officinal preparations, available to all SNOMED CT licensees in Spain.

SNOMED CT releases components and resources

- 13.598 concepts
 - 3.715 International Edition
 - 9.883 AEMPS (namespace 1000140)
- 30.838 descriptions
- 15.260 relationships

Refsets

- VMT (2.176 members)
- VMP (6.039 members)
- VMPP (8.885 members)
- National code to VMPP Mapping (28.277 members)
- Officinal preparations (79 members)
- Officinal preparations with format (104 members)

Additional derived content is generated and released, including:

- Web viewers for all refsets included in the Extension
- Clinical Safety Ontology of Medicines
- Cross-border-ready content as bilingual valuesets (Spanish & English) used in the preparation of the EU Patient Summary document instances
- Generation and publication of IRBD (reference implementation in database format) of SNOMED CT, a resource released every six months with the content of the international and national editions of SNOMED CT

Visor del conjunto de referencias de DCPF-VMPP

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Ayuda

Buscar: Filtrar: Contiene ... Comienza con ... Termina con ... Igual a ... Expresión ... Seleccionados: 6885 elementos de 6885

Orden	M VMPP	Descripción VMPP	Activo	EfectivoTerc	M VTM	Descripción VTM	Mail
1	31000140104	Abacavir 20 mg/ml solución/suspensión oral 240 ml 1 frasco	1	2017-09-01	116084008	producto que contiene abacavir (producto medicinal)	en[es]
2	21000140102	Abacavir 300 mg 60 comprimidos	1	2017-09-01	116084008	producto que contiene abacavir (producto medicinal)	en[es]
3	161000140100	Abacavir/Lamivudina 600 mg/300 mg 30 comprimidos	1	2017-09-01	413881000	producto que contiene abacavir y lamivudina (producto medicinal)	en[es]
4	701000140102	Abacavir/Lamivudina/Zidovudina 300 mg/150 mg/300 mg 60 comprimidos	1	2017-09-01	134571004	producto que contiene abacavir, lamivudina y zidovudina (producto medicinal)	en[es]
5	13021000140104	Abatacept 125 mg inyectable 1 ml 4 jeringas precargadas	1	2017-09-01	421412005	producto que contiene abatacept (producto medicinal)	en[es]
6	16011000140106	Abatacept 125 mg inyectable 1 ml 4 plumas precargadas	1	2017-09-01	421412005	producto que contiene abatacept (producto medicinal)	en[es]
7	101000140101	Abatacept 250 mg inyectable perfusión 1 vial	1	2017-09-01	421412005	producto que contiene abatacept (producto medicinal)	en[es]
8	101000140103	Abacimab 2 mg/ml inyectable perfusión 5 ml 1 vial	1	2017-09-01	109874006	producto que contiene abacimab (producto medicinal)	en[es]
9	246871000140106	Abemaciclib 100 mg 56 comprimidos	1	2019-04-01	246981000140101	abemaciclib (producto)	en[es]
9	176791000140106	Abiraterona 300 mg 60 comprimidos	1	2017-09-01	138871000140109	abiraterona (producto)	en[es]
10	246881000140109	Abemaciclib 150 mg 56 comprimidos	1	2019-04-01	246981000140101	abemaciclib (producto)	en[es]
10	101000140105	Abiraterona 250 mg 120 comprimidos	1	2017-09-01	138871000140109	abiraterona (producto)	en[es]
11	246891000140107	Abemaciclib 50 mg 56 comprimidos	1	2019-04-01	246981000140101	abemaciclib (producto)	en[es]
11	7411000140102	Acamprostat 333 mg 84 comprimidos	1	2017-09-01	420804003	producto que contiene acamprostat (producto medicinal)	en[es]
12	51000140107	Acarbose 50 mg 30 comprimidos	1	2017-09-01	106077006	producto que contiene acarbose (producto medicinal)	en[es]

Visor web - Ontología de Seguridad Clínica de Medicamentos

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Ayuda

Buscar: Filtrar: Contiene ... Comienza con ... Termina con ... Igual a ... Expresión ... Seleccionados: 32177 elementos de 32177

subject	subject_description	predicate	predicate_description	object	object_description
42264000	3,4-diaminopiridina (sustancia)	34821000122108	tiene contraindicación (atributo)	21891000122105	alergia a 3,4-diaminopiridina (trastorno)
35583007	6-iodometilnicotinato (131), 37 MBq/ml, inyectable (producto)	411114001	tiene forma farmacéutica de elaboración (atributo)	385218009	inyectable (airRadior)
355835007	6-iodometilnicotinato (131), 37 MBq/ml, inyectable (producto)	116680003	es un(x) (atributo)	770654000	padre TRANSTORO para fármacos de uso clínico no autorizados (producto)
31000140104	Abacavir 20 mg/ml solución/suspensión oral 240 ml 1 frasco (producto)	116680003	es un(x) (atributo)	324881002	producto que contiene exactamente abacavir (como sulfato de abacavir) 20 miligramos/1 mililitro, solución de liberación convencional para administración oral (fármaco de uso clínico)
21000140102	Abacavir 300 mg 60 comprimidos (producto)	116680003	es un(x) (atributo)	324880001	producto que contiene exactamente abacavir 300 miligramos por cada comprimido para administración oral de liberación convencional (fármaco de uso clínico)
161000140100	Abacavir/Lamivudina 600 mg/300 mg 30 comprimidos (producto)	116680003	es un(x) (atributo)	413882007	producto que contiene exactamente abacavir 600 miligramos y lamivudina 300 miligramos por cada comprimido para administración oral de liberación convencional (fármaco de uso clínico)
701000140102	Abacavir/Lamivudina/Zidovudina 300 mg/150 mg/300 mg 60 comprimidos (producto)	116680003	es un(x) (atributo)	377159005	producto que contiene exactamente abacavir 300 miligramos, lamivudina 150 miligramos y zidovudina 300 miligramos por cada comprimido para administración oral de liberación convencional (fármaco de uso clínico)
13021000140104	Abatacept 125 mg inyectable 1 ml 4 jeringas precargadas (producto)	116680003	es un(x) (atributo)	13021000140101	Abatacept 125 mg inyectable 1 ml jeringa precargada (producto)
16011000140106	Abatacept 125 mg inyectable 1 ml 4 plumas precargadas	116680003	es un(x) (atributo)	16011000140108	Abatacept 125 mg inyectable 1 ml pluma precargada

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Conclusions

Interoperable concept coding of medicinal products is a key element to allow interoperability among the different regions and countries and to deploy cross-system prescription data exchange services without relying on the brand name of medicines.

The use of published resources is growing in the field of health information systems in Spain, which allows the appearance of different initiatives and projects that allow progress in semantic interoperability and patient safety.

