



GIDWG

Global IDMP Identifiers

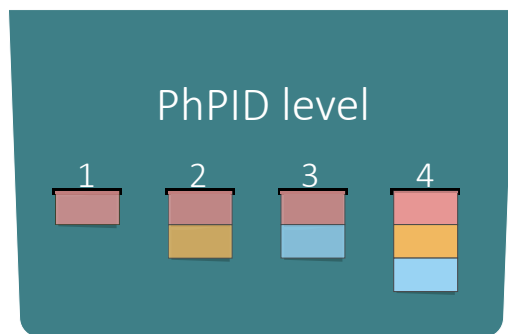
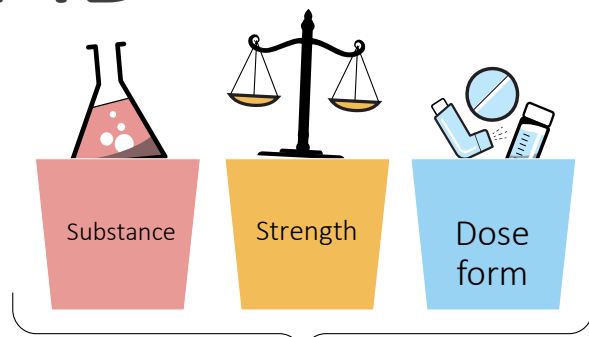
Olof Lagerlund (UMC)

Agenda

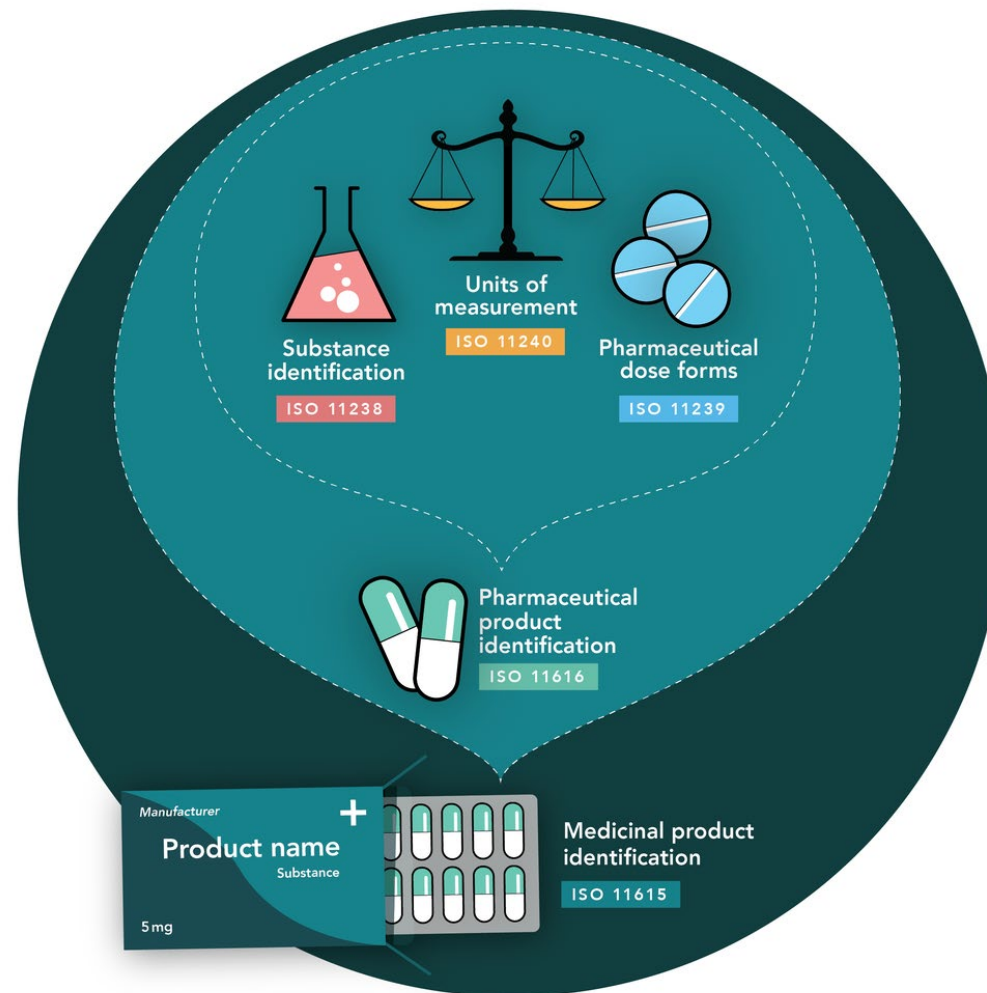
- Global IDMP identifiers in the GIDWG End-to-end
 - PhPID
 - GSID
 - Strength
 - Dose Form
- Outcomes of the GIDWG end-to-end

Pharmaceutical product ID

PhPID



PhPID: 0x073AF2E5B92AE19E8867635AFFB3D6CA

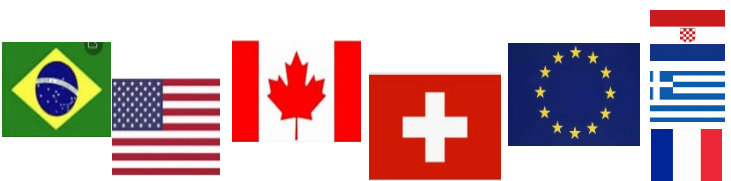


ISO IDMP suits of standards

ISO 11615, 11616, 11238, 11239 and 11240

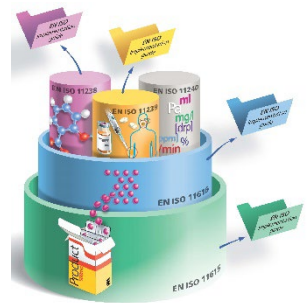
E2E: Data Validation Working Process

Countries:



Medicinal product data

Selected data set

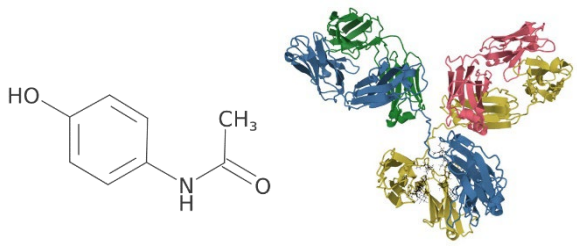


Substance




Strength

Dose form

PhPID



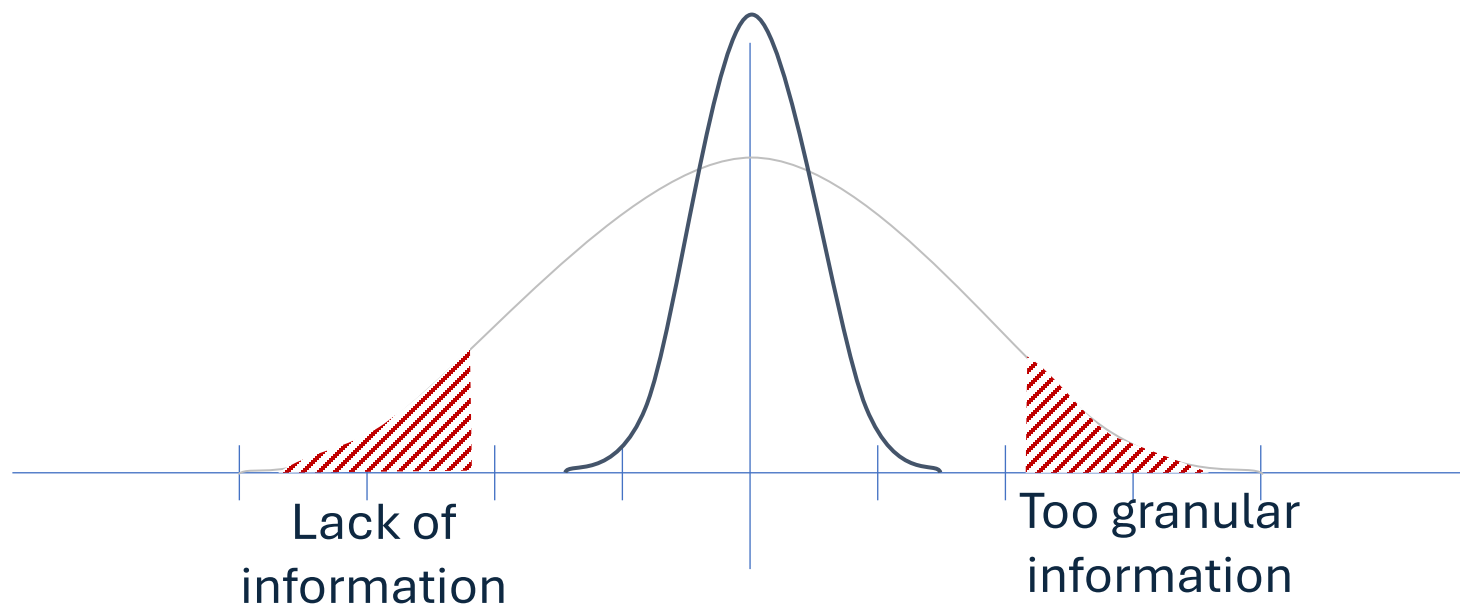
- Administration method
- Intended site
- Basic dose form
- Release characteristics

Pattern	Type of product
A	
B	
C	

0x073AF2E5B92AE19E8B67635AFFB3D6CA

Harmonization

Medicinal product information
when assigning global identifiers.



Consultation with experts

Finding

The extent of medicinal product information harmonization was evaluated across three use-cases:

1. Pharmacovigilance
2. Drug shortage
3. Cross-border healthcare

Recommendation

Ensure involvement of SMEs with competence within the different use-cases for global PhPID.

Five-regions verification

Finding

Analyzing substances and products across five key regions to understand how specific substances or products are described globally.

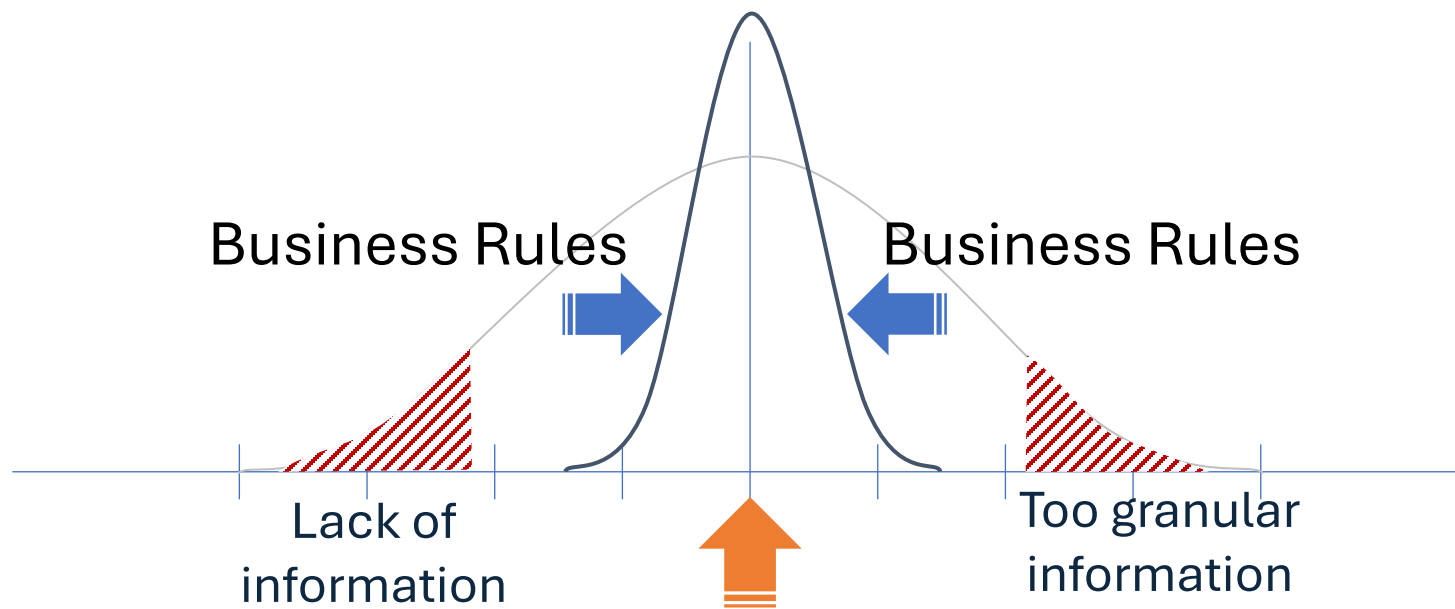
Recommendation

Pro: Valuable method when validating additional products with the same substance variant and pharmaceutical form.

Con: time consuming, should only be applied when relevant.

Harmonization

Reduce variations on medicinal product information when assigning global identifiers.



Five Region Verification



Global substances



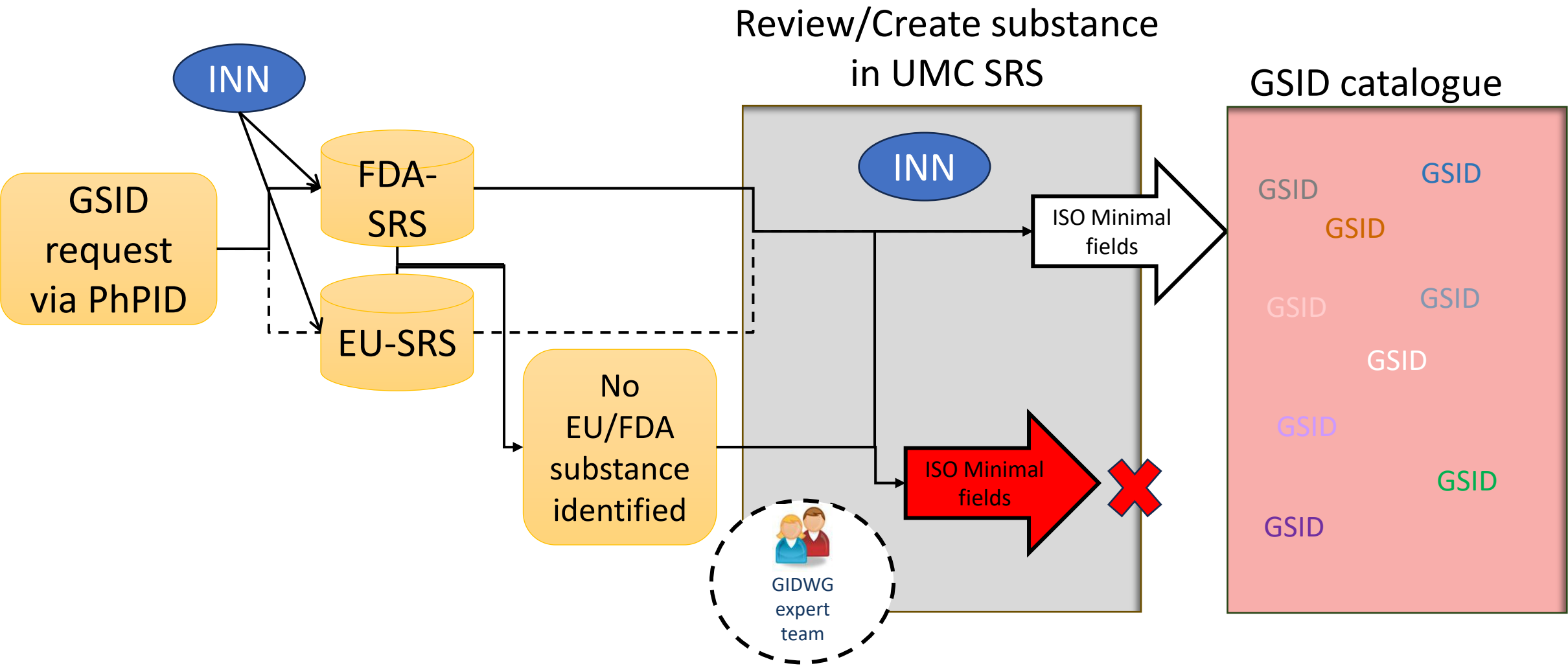
Several different naming
(including definition)
organisations

- INN
- USAN
- Ph. Eur.
- JAN

Alignment to ISO IDMP
standards 11238 and TS
19844

- For the majority of substances there are no issues
- Business Rules
- Case by case mitigation

GSID assignment



Selection of GSID for PhPID Hydrates

Finding

Comparable products are often described differently when it comes to hydrates, therefore, hydrates were excluded to ensure aggregation of comparable products to the same PhPID.

Decision

After the end-to-end and considering the use cases, the recommendation is to continue to use the corresponding anhydrous substance.

Global Strength Definitions



No common approach to strength and unit

- Different unit expression
 - IU, %, mg/mL, or mg/g
- Different precision of strength
 - 18 mg vs 18.06 mg
- Concentration strength vs presentation strength for liquids
 - 500 mg or 500 mg/ml

Mitigation

- Business Rules
- Patterns
- Conversion tables
- UCUM units

Strength Unit Conversion

Finding

The absence of a globally approved unit conversion framework presents challenges in handling unit conversions (e.g., mg to IU).

Strength Unit Conversion

Some examples of Unit Conversions During End-to-End Testing			
Substance	From unit	To PhPID unit	Conversion factor (Source)
Alteplase	IU	mg	10 mg = 5.8 MIU (SPCs)
Lenograstim	IU	mcg	150 mcg = 19.2 MIU (Martindale)
Somatropin	IU/units	mg	3 units = 1 mg (Martindale)

Strength Unit Conversion

Finding

The absence of a globally approved unit conversion framework presents challenges in handling unit conversions (e.g., mg to IU).

Recommendation

To minimize the number of unit conversions, a five-region verification has been performed to identify the most common unit which is used for PhPID generation.

Dose Form Attributes



No centralized/common terminology for Dose Form

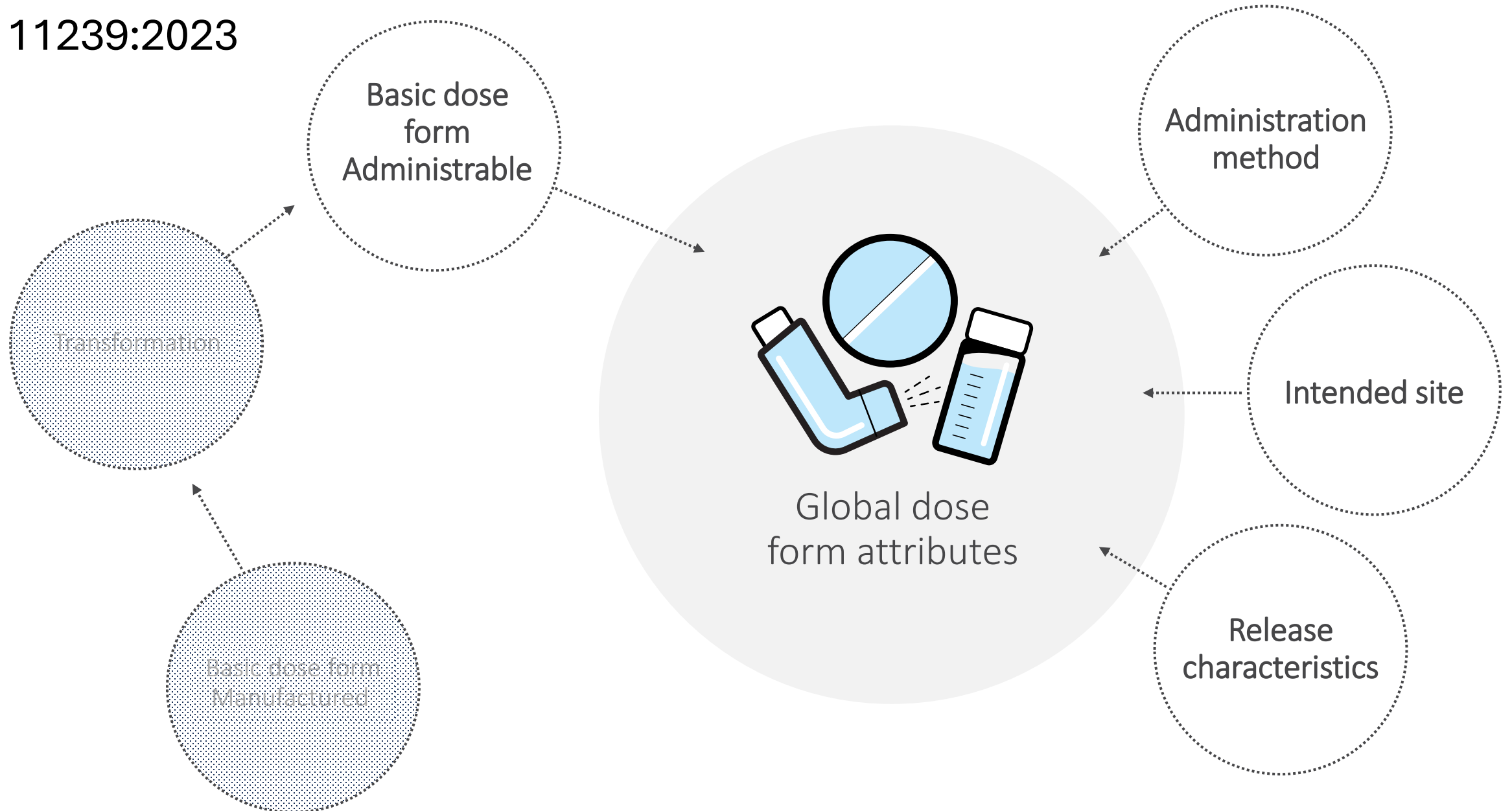
- Different granularity
 - Capsule vs Soft or Hard Capsule
 - Tablet, Coated Tablet, Film coated Tablet
- Regulators approve different terms
 - Pellet vs granule

Mitigation

- Dose Form Attributes
- Business Rules

Dose Form Attributes

ISO 11239:2023



Dose Form Attributes Release characteristics (RCA)

Finding

The dose form are differently labeled, for example “delayed release tablet” in one country and a “modified-release tablet” in another.

Information about how the active substance is released is not always available in SPCs.

Terms such as ‘controlled release’ and ‘modified release’ indicate some special form of release, but not exactly which RCA.

Dose form attributes

Release characteristics (RCA)

Example of advanced formulations of Mesalazine

Formulations	Proprietary names	Mode of delivery	Site of drug release	Corresponding RCA for PhPID
pH dependent	Asacol [®] ; Mesren [®]	Eudragit-S coating (dissolves at pH ≥ 7)	Terminal ileum, colon	Delayed
	Salofalk [®] ; Mesasal [®] ; Claversal [®]	Eudragit-L coating (dissolves at pH ≥ 6)	Mid ileum to colon	Delayed
	Salofalk Granules [®]	Eudragit-L coating and matrix core	Mid ileum to colon	Delayed + Prolonged → Prolonged
Time dependent	Pentasa [®] , Pentasa [®] granules	Microspheres encapsulated within an ethycellulose semi-permeable membrane	Duodenum to colon	Prolonged
MMX	Lialda [®] ; Mezavant XL [®] ; Mezavant [®]	Enteric coating (dissolves at pH ≥ 7). MMX of lipophilic and hydrophilic excipients	Terminal ileum and entire colon	Delayed + Prolonged → Prolonged

Dose form attributes Release characteristics (RCA)

Finding

The dose form are differently labeled, for example “delayed release tablet” in one country and a “modified-release tablet” in another.

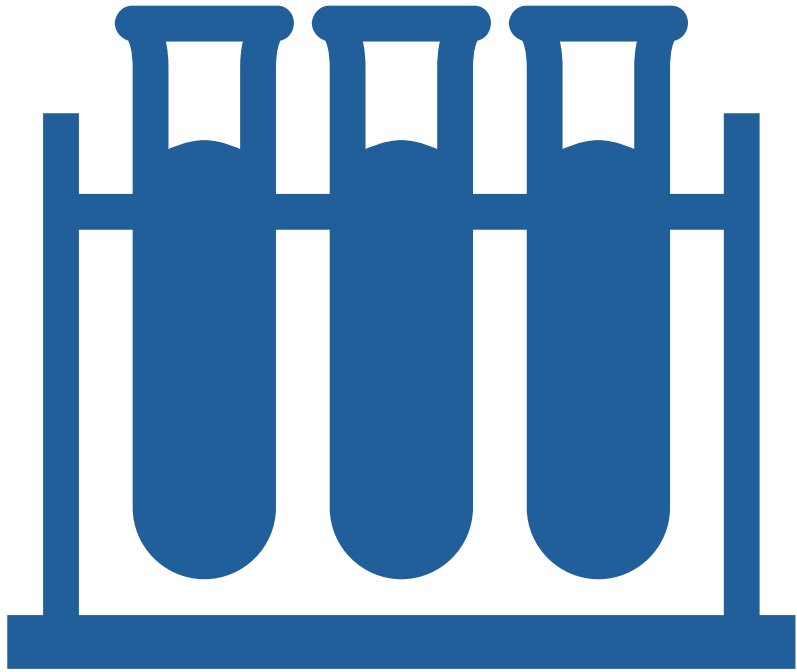
Information about how the active substance is released is not always available in SPCs.

Terms such as ‘controlled release’ and ‘modified release’ indicate some special form of release, but not exactly which RCA.

Recommendation

Only one RCA is used for one PhPID.

Formulations combining different release characteristics will be assigned one RCA.



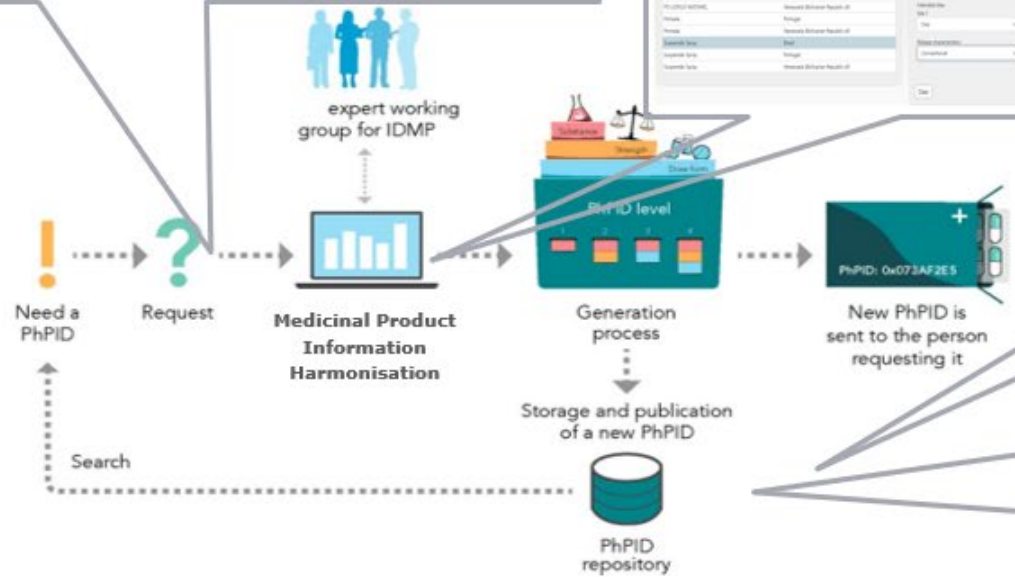
Outcome of the End-to- End

Operating model for Global PhPID

Global PhPID Requesting

Medicinal Product Information Harmonisation for Global PhPID construction

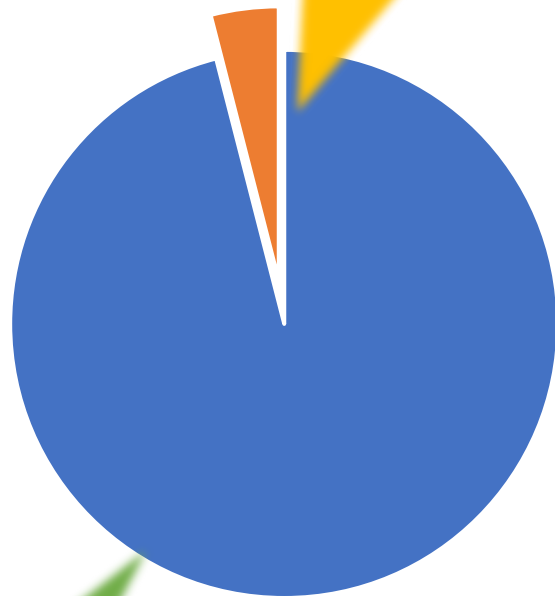
Global PhPID Publishing



Global PhPID publishing in WHODrug

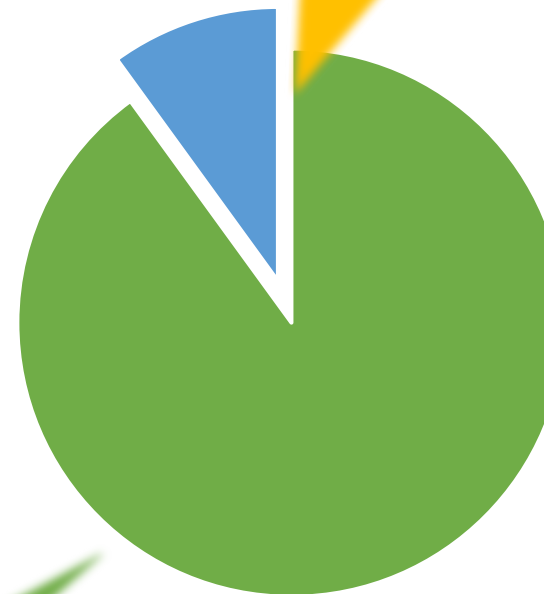
GSID and PhIPD assignment in end-to-end

The 4% not assigned was due to lack of or conflicting information



96% of the substances were successfully assigned a GSID

10% of Medicinal Products are part of E2E Findings and are under evaluation



90% of Medicinal Products have PhIPD assigned

Business rules for PhPID generation



Business rules for PhPID construction

Global IDMP Working Group
Public Version 1.0

1 May 2024

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The flow chart in Figure 10 illustrates strength pattern assignment for different parenteral preparations:

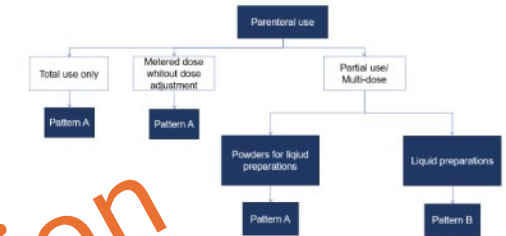


Figure 10. Illustrates strength pattern assignment

2. When the ManDF is different from the AdmDF, the BDF is manually changed from the ManBDF to the AdmBDF (examples in Table 10). For a product example of how dose forms can differ between regions as well change from ManBDF to AdmBDF, see Table 11.

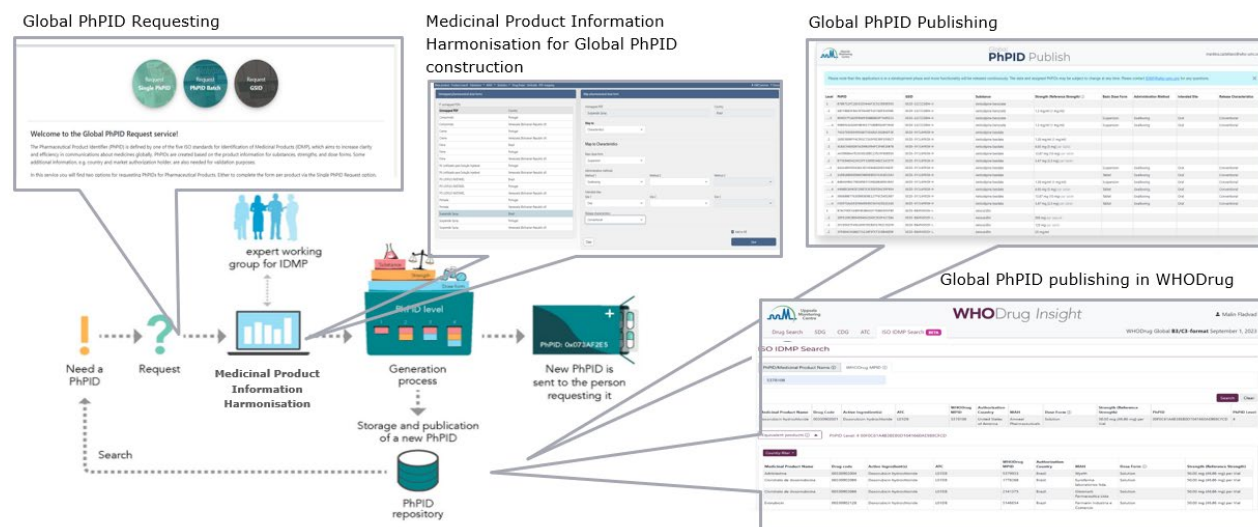
Table 10. Examples of business rules for PDFs with different AdmDF and ManDF

Medicinal product name	ManDF	AdmDF	ManBDF	AdmBDF	Harmonised AdmBDF for PhPID
Hyaluronidase	Powder for solution for infusion	Solution for infusion	Powder	Solution	Solution
Deferasirox*	Dispersible tablet	Oral suspension	Tablet	Suspension	Suspension For tablets that are always dispersed before being taken, the BDF will be 'Suspension'
Lamictal* (Lamotrigine)	Chewable/dispersible tablet	Chewable tablet Oral suspension	Tablet	Tablet Suspension	Tablet For tablets that can be swallowed and taken as a solution/suspension, the BDF will be 'Tablet'
Berocca*	Effervescent (soluble) tablet	Oral solution	Tablet	Solution	Solution

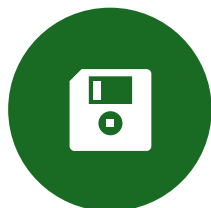
Table 11. Examples of business rules for PDFs with different AdmDF and ManDF, and same product expressed differently in different regions

Medicinal product name	Country	ManDF	AdmDF	ManBDF	AdmBDF	Harmonised AdmBDF for PhPID
Zithromax* (azithromycin)	UK	Powder for oral suspension	Oral suspension	Powder	Suspension	Suspension
	Korea	Dry syrup	Syrup	Powder	Syrup	
	USA	For oral suspension	Oral suspension	Powder	Suspension	

Technical readiness



SYSTEM TESTING:
ALL FUNCTIONAL,
INTEGRATION,
USER
ACCEPTANCE, AND
REGRESSION
TESTING HAVE
BEEN
COMPLETED.



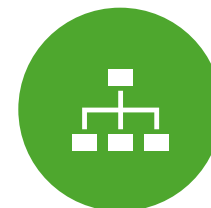
**BACKUP AND
RECOVERY:**
BACKUP AND
DISASTER
RECOVERY
PROCESSES ARE
IN PLACE.



INFRASTRUCTURE:
HARDWARE,
NETWORKING, AND
OTHER
INFRASTRUCTURE
COMPONENTS ARE
CORRECTLY
CONFIGURED.



**SECURITY AND
MONITORING:**
SECURITY
ASSESSMENTS,
AND TESTING
COMPLETED.
MONITORING IN
PLACE



**CONFIGURATION
MANAGEMENT:**
ALL SYSTEM
CONFIGURATIONS
ARE
DOCUMENTED
AND VERSION-
CONTROLLED.



**INTEGRATION
READINESS:**
INTERFACES WITH
THIRD-PARTY
SYSTEMS, APIS, AND
OTHER OPTIONS
ARE STILL UNDER
DEVELOPMENT.

Operational Readiness



User Training and documentation



Help Desk/Customer Support



SLA Agreements



Change Management



Communication Plan



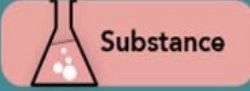
Process readiness

Global PhPID linked to Medicinal product dictionaries

Pharmaceutical products

Medicinal products

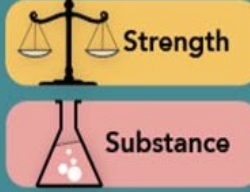
Trastuzumab



Substance

PhPID level 1

150 mg
Trastuzumab

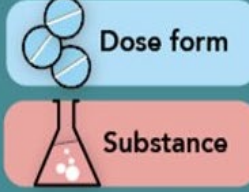


Strength

Substance

PhPID level 2

Solution*
Trastuzumab




Dose form

Substance

PhPID level 3

Solution*
150 mg
Trastuzumab



Dose form

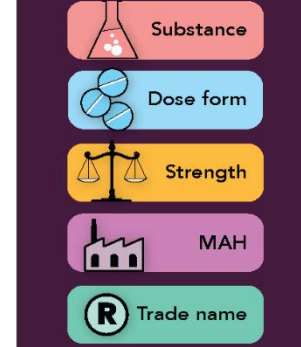
Strength

Substance

PhPID level 4



National IDs:
MPID



Substance

Dose form

Strength

MAH

Trade name

Country of Sales

WHODrug

*Dose form characteristics: Solution, Injection, Parenteral, Conventional

Stable Local IDs

(MPID, local dose form,
local strength
expression, units)

Finding

End-to-end testing identified the need to collect and provide local IDs with global PhPID to facilitate interpretation of the data

Recommendation

Stable local IDs would be recommended to be included in the request both through API and PhPID Request Tool

Overarching PhPID

Product	Substance	Strength (Ref strength)	Dose form	PhPID
NA	Levamlodipine	5 mg	Tablet	NA
Levamlodipine (US)	Levamlodipine Maleate	6,42 (5) mg	Tablet	F7B4655C55ECC3CA BE0069298F1AFC42
Atelop (Brazil)	Levamlodipine Besylate	6,93 (5) mg	Tablet	226114B4B702CF3DC 1E5630FF9B09C2B

Overarching PhPID

Finding

There is a need to group related chemical substances, such as bases and their corresponding salts, to improve aggregation and search functionalities

Recommendation

Development of an overarching PhPID
Recommendations for non-normative amendments to ISO 11616/TS 20451

Key message Global Identifiers

The assignment of Global Identifiers and selection for PhPID are based on the ISO IDMP suite of standards and GIDWG business rules.

All of the work with the GIDWG end-to-end has provided confidence of the establishment of the global PhPID framework.

Thank you!