

# The role of drug database providers in the implementation of the IDMP Standard

access needs and business challenges of drug database providers



# Belgian Centre for Pharmacotherapeutic Information (BCPI)

- The BCPI is a:
  - not for profit,
  - non-governmental organization
  - providing independent information on drugs and promoting Rational Prescribing,
  - intended for health professionals



# Belgian Centre for Pharmacotherapeutic Information

- The BCPI is one of the partners of SAM (*Source Authentique des Médicaments* - Authentic Source of Medicines in Belgium)
  - FAMHP: Federal Agency for Medicines and Health Products
  - NIHDI: National Institute for Health and Disability Insurance
  - BCPI: Belgian Centre for Pharmacotherapeutic Information



# SAM data model

- Scope:
  - authorised medicines in Belgium
  - some of the information only present for commercialised medicines
- data suppliers
  - famhp (for official package information)
  - NIHDI (for legal and reimbursement information)
  - BCPI (for clinical information, groups for generic prescription in Belgium and implementation of international standards such as SNOMED CT)
  - ... other data suppliers can be added in future



# SAM data model

- Medicinal product definition part is based on the dm+d model of UK
  - **Virtual part:** describes commercialised drugs in a generic, brand-independent and clinically oriented way, playing a key role in the generic prescription process
  - **Actual part:** describes authorised branded drugs
- Reimbursement law definition part
  - Models the law texts concerning reimbursement of branded drugs
- Reimbursement part
  - The link between a drug and reimbursement law texts



# SAM data model

## Virtual part

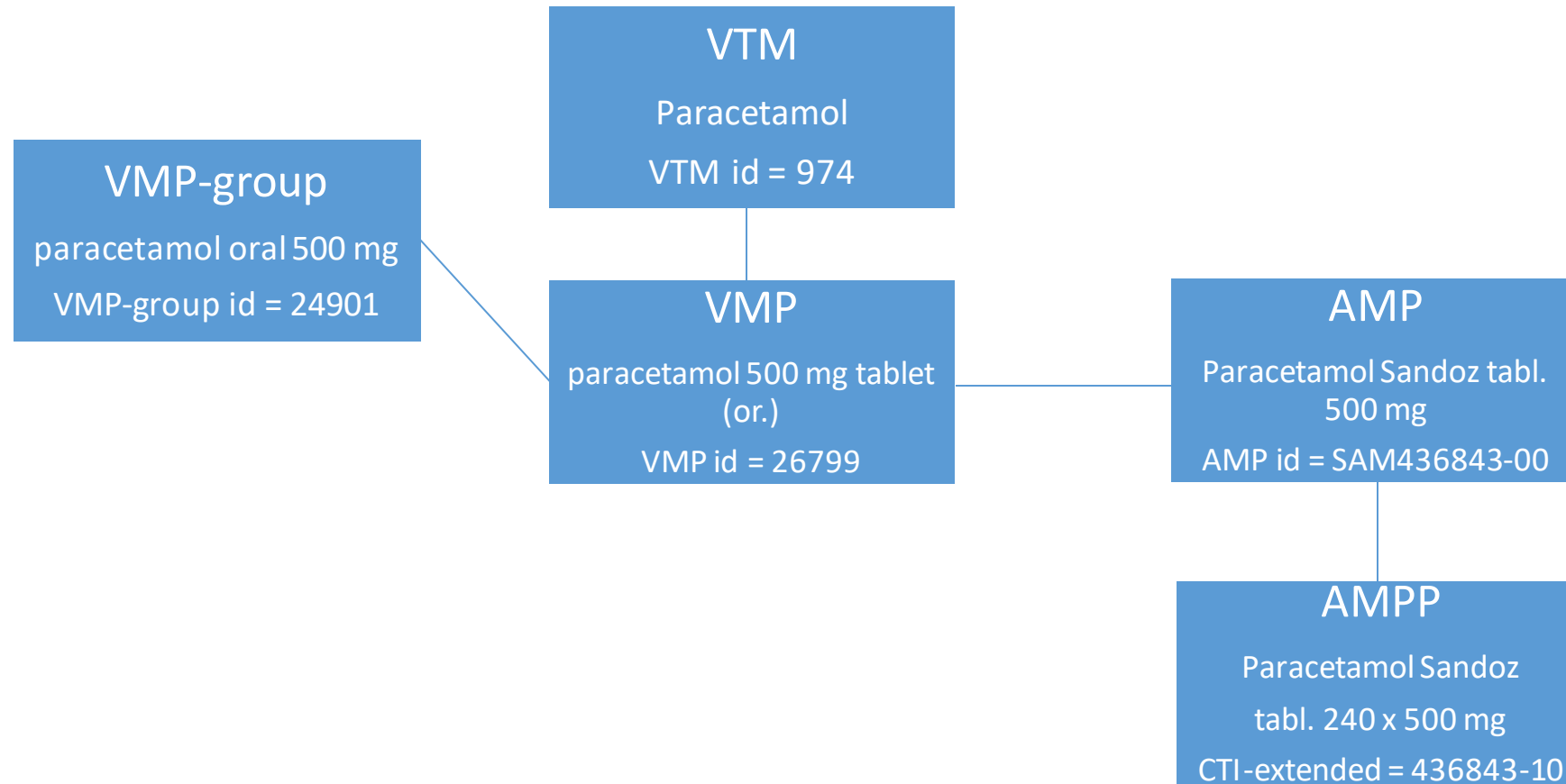
- **VTM** (Virtual Therapeutic Moiety):  
*VTM id (BCPI)*
  - amlodipine
- **VMP group** (Virtual Medicinal Product Group):  
*VMP-group id (BCPI)*
  - amlodipine oral 5 mg
  - amlodipine oral 10 mg
  - ...
- **VMP** (Virtual Medicinal Product)  
*VMP id (BCPI)*
  - amlodipine 5 mg capsule (or.)
  - amlodipine 5 mg tablet (or.)
  - ...

## Actual part

- **AMP** (Actual Medicinal Products)  
*AMP id (FAMHP)*
  - Amlodipine Apotex tabl. 5 mg
  - Amlodipine EG tabl. 5 mg
  - ...
- **AMPP** (Actual Medicinal Product Packages)  
*CTI-extended (FAMHP)*
  - Amlodipine Apotex tabl. 28 x 5 mg
  - Amlodipine Apotex tabl. 56 x 5 mg
  - Amlodipine Apotex tabl. 98 x 5 mg



# SAM data model



The Medicinal product definition part **will** contain, among others:

### **Administrative information**

- Company
- Route(s) of administration
- Pharmaceutical form
- Substances and their strengths
- Divisibility
- Commercialisation status
- Supply problems (if applicable)
- Price (public and reimbursement)

### **Clinical information**

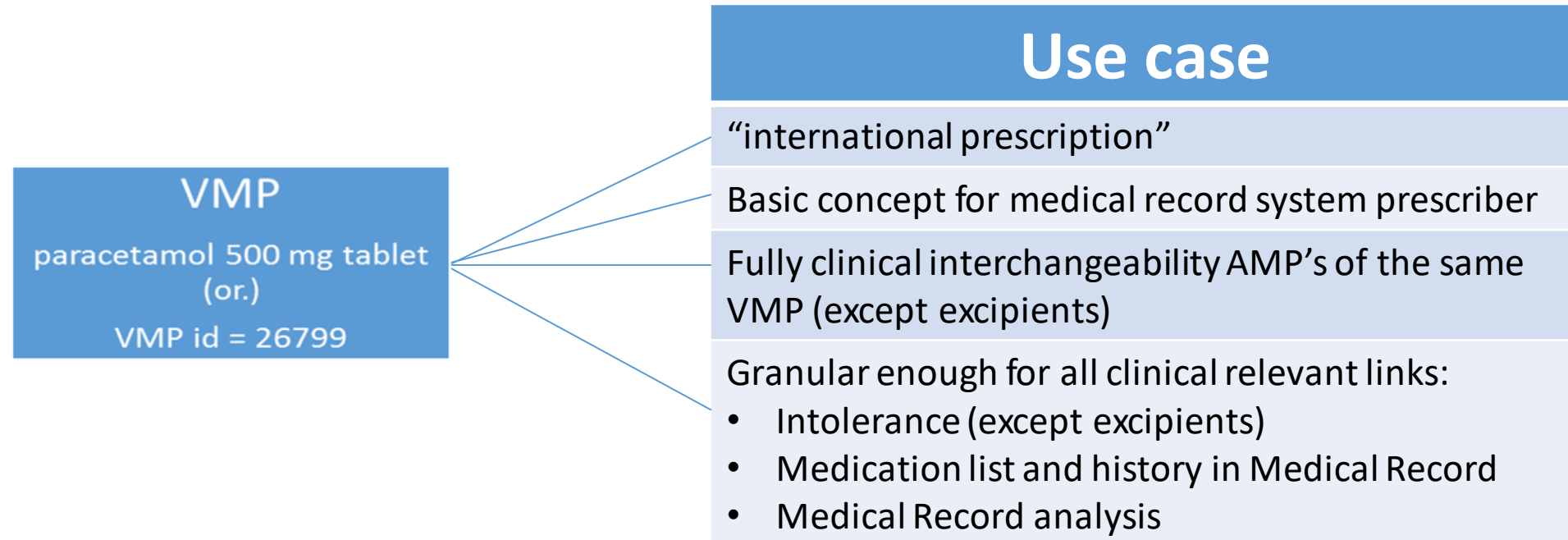
- Indication
- Contra-indications
- Cautions
- Side-effects
- Pregnancy and Breast feeding
- Interactions
- Dosing instructions
- Direct link to the SPC and patient leaflet

Clinical relevant selection





# VMP: virtual but granular enough



# VMP: virtual but granular enough

- VMP = basic concept of SAM for international interoperability
- VMP  $\approx$  Generic drug preparation (GDPrep) of SNOMED CT default drug model
- VMP  $\approx$  Pharmaceutical Product (PhPID)



# VMP: virtual but granular enough

- **Active ingredient(s)** = from list of coded substances with specifications if it refers to the base, the salt or an ester
- **The strength(s)** → UCUM (Unified Code for Units of Measure) is used for units
- **The pharmaceutical form(s)** → EDQM
- **The route(s) of administration** → EDQM
- Possible clinically relevant **additional information** is specified( e.g. for ASA cardiovascular >< pain and fever
  - acetyl salicylic acid oral 100 mg
  - acetyl salicylic acid oral 100 mg (cardiovascular use)



# Decision support and clinical knowledge

- Implementation of the VMP concept well-suited for decision support
- Decision support should be linked to both the pharmaceutical product (actual and virtual) and to substances
  - because strength matters
  - because route of administration matters
  - because additional clinical information matters
- Several types of (often overlapping) groups of medicines are needed
  - anatomical groups
  - therapeutical groups
  - pharmacological groups
  - generic prescription groups
  - chemical groups
  - molecules

