



DISCOVER OUR FIRST PRODUCT DEVELOPMENT
BASED ON ITS INNOVATIVE AND PATENDED
MMCR TECHNOLOGY.

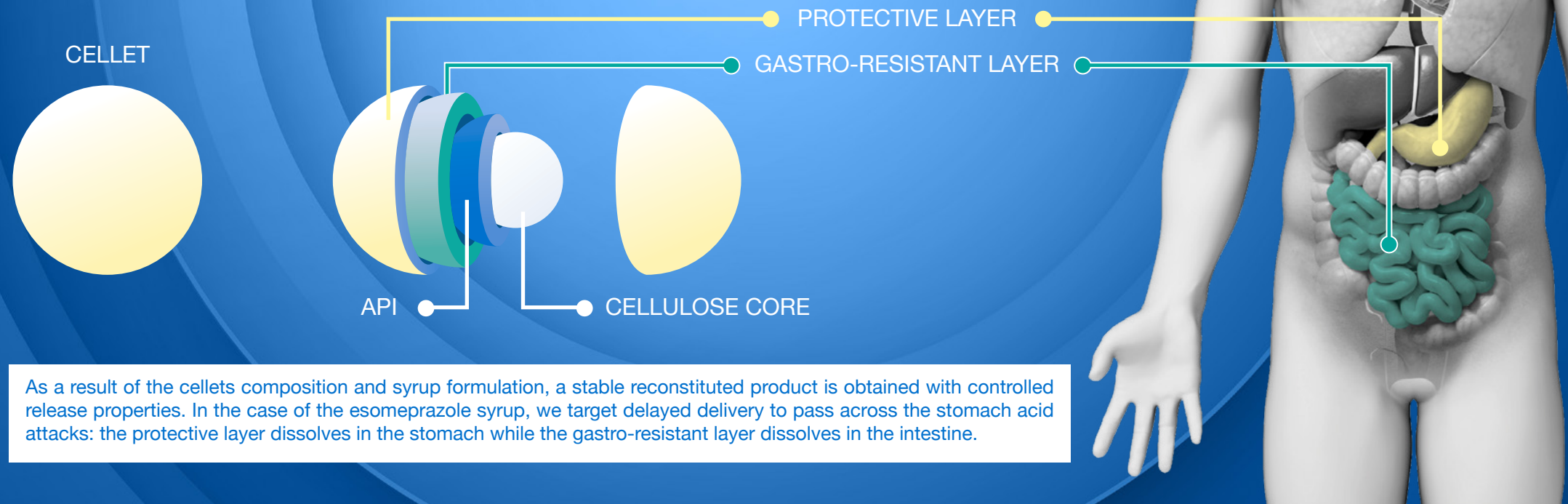
A GASTRO-RESISTANT SYRUP FOR THE TREATMENT OF PAEDIATRIC GERD

1. THE MMCR TECHNOLOGY

The MMCR Technology (Multi-layer Microparticles Controlled-Release system) is a groundbreaking patented technology:

- enabling the development of a sustained or delayed release syrup for any molecule that requires oral liquid administration.
- by delivering an Active Pharmaceutical Ingredient under the form of coated microparticles (cellets) suspended in a highly stable syrup.

GASTRO-RESISTANT CELLET IN ESOMEPRAZOLE SYRUP



As a result of the cellets composition and syrup formulation, a stable reconstituted product is obtained with controlled release properties. In the case of the esomeprazole syrup, we target delayed delivery to pass across the stomach acid attacks: the protective layer dissolves in the stomach while the gastro-resistant layer dissolves in the intestine.

2. THE MEDICAL NEED

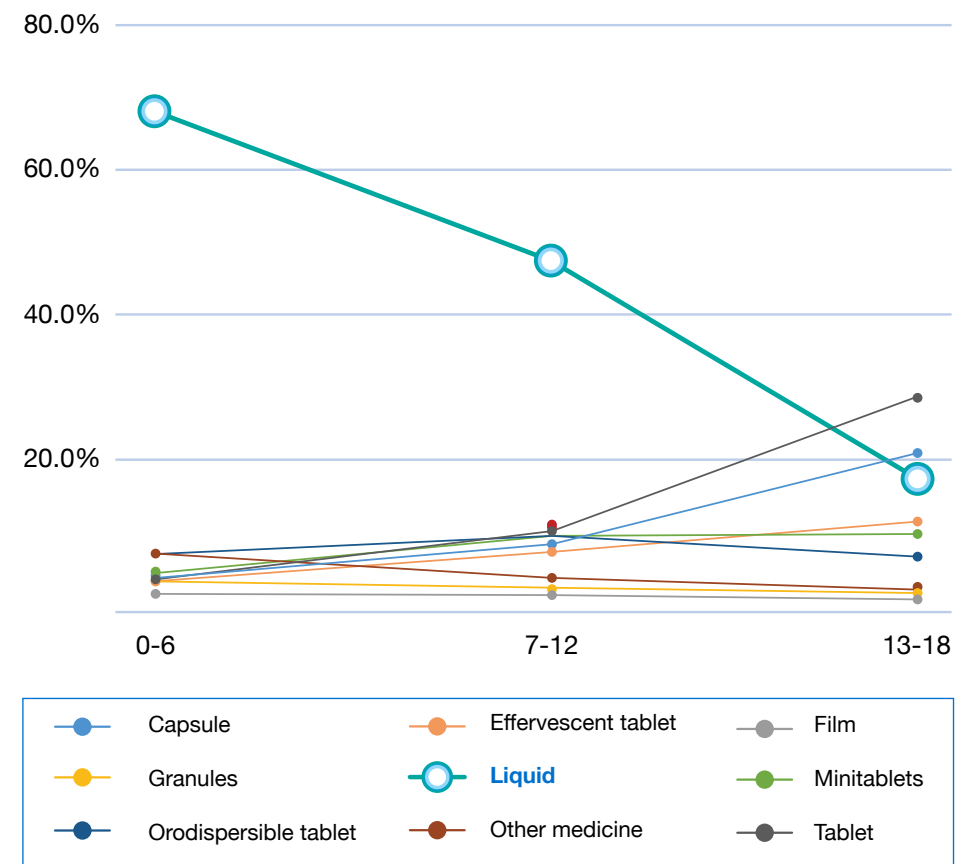
GASTROESOPHAGEAL REFLUX DISEASE (GERD)

- a chronic gastrointestinal disorder characterized by the regurgitation of gastric contents into the esophagus.
- one of the most commonly diagnosed digestive disorders estimated to affect **20% of the western population**⁽¹⁾.

GERD AMONGST THE PAEDIATRIC POPULATION

- most commonly treated by PPI's (Proton Pump Inhibitors) as recommended by ESPGHAN⁽²⁾.
- 3-6% of the population using PPI's are children aged 1-11 years old⁽³⁾.
- Represents 60 Million months of treatments worldwide and 21 Million in Europe⁽⁴⁾.
- Currently available PPI's dosage forms (solid caps and tabs) show strong limitations - particularly when swallowing impairments harm the ingestion process or when dosage adjustments are approximate – leading to efficacy or compliance issues.

TRENDS OF DOSAGE FORMS' PERCEIVED PREFERENCE AMONG THREE AGE GROUPS



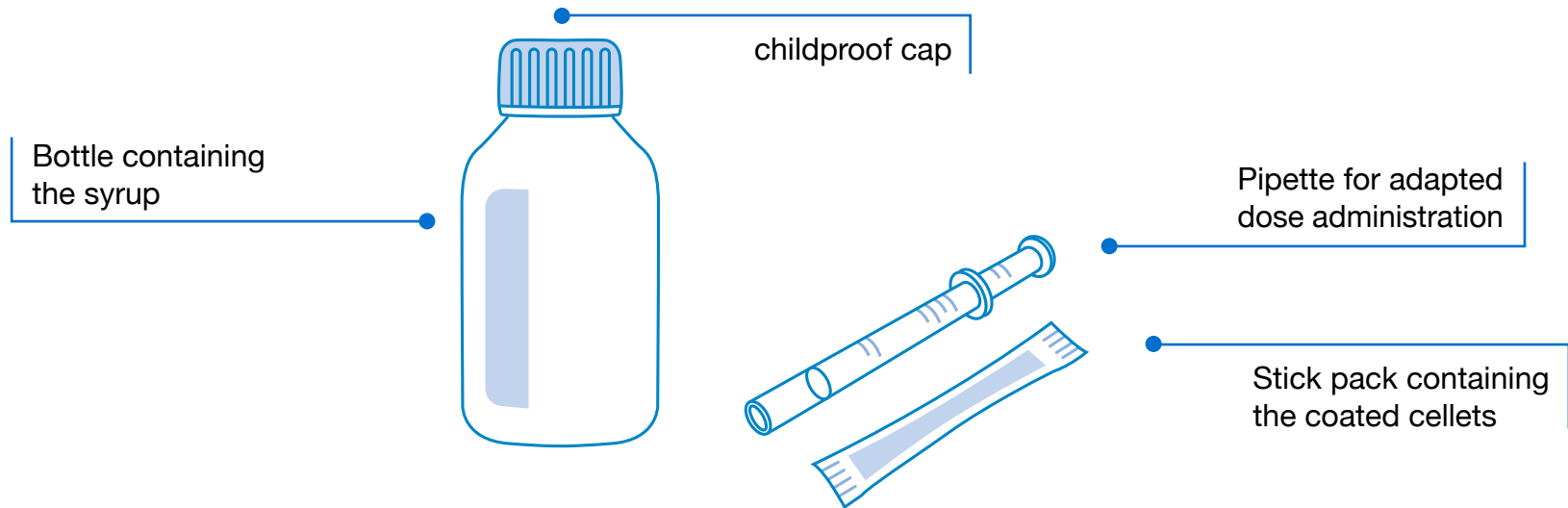
Source : Pharmaceutics 2021, 13, 730

(1) Gastroesophageal Reflux Disease : Catiele Antunes; Abdul Aleem; Sean A. Curtis
(2) European Society for Paediatric Gastroenterology Hepatology and Nutrition
(3) Source: Expert interviews, QYResearch 2021 and IQVIA 2021
(4) Data IQVIA

Syrcelet™

Esomeprazole 2 mg/ml

COMPONENTS



PREPARATION



3. THE ESOMEPRAZOLE SYRUP

MEDICAL NEED

CONVENIENT

GASTRO-RESISTANT

STABLE FORMULATION

MULTI-DOSAGE

FLEXIBLE DOSAGE

ACCESSIBLE

- **The product presentation**

- 125 ml or 100 ml syrup
- Stick pack with Esomeprazole cellets
- Concentration of the reconstituted syrup : 2 mg Esomeprazole per ml of syrup.
- Covers dosages from 5 mg to 20 mg esomeprazole
- Stability of the reconstituted syrup : maximum of 4 weeks when stored at 2-8°C
- Syrup and cellets shelf life : 36 months



4. COMPARED TO COMPETITION

The in vitro study demonstrated that the reconstituted syrup has a similar dissolution profile to both reference products :

similarity factor F2 :

91.8 vs. Nexiam® delayed release tablets

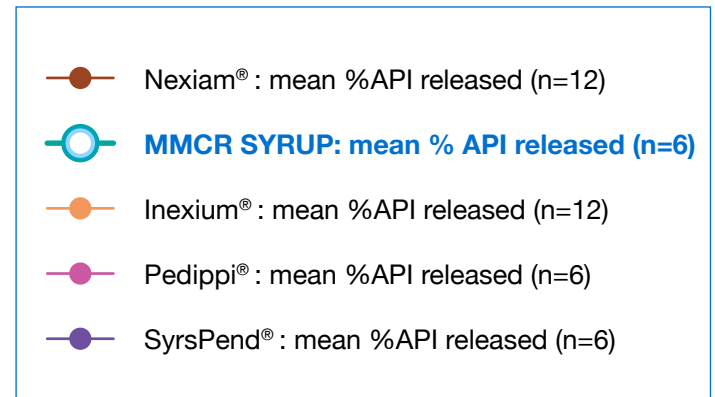
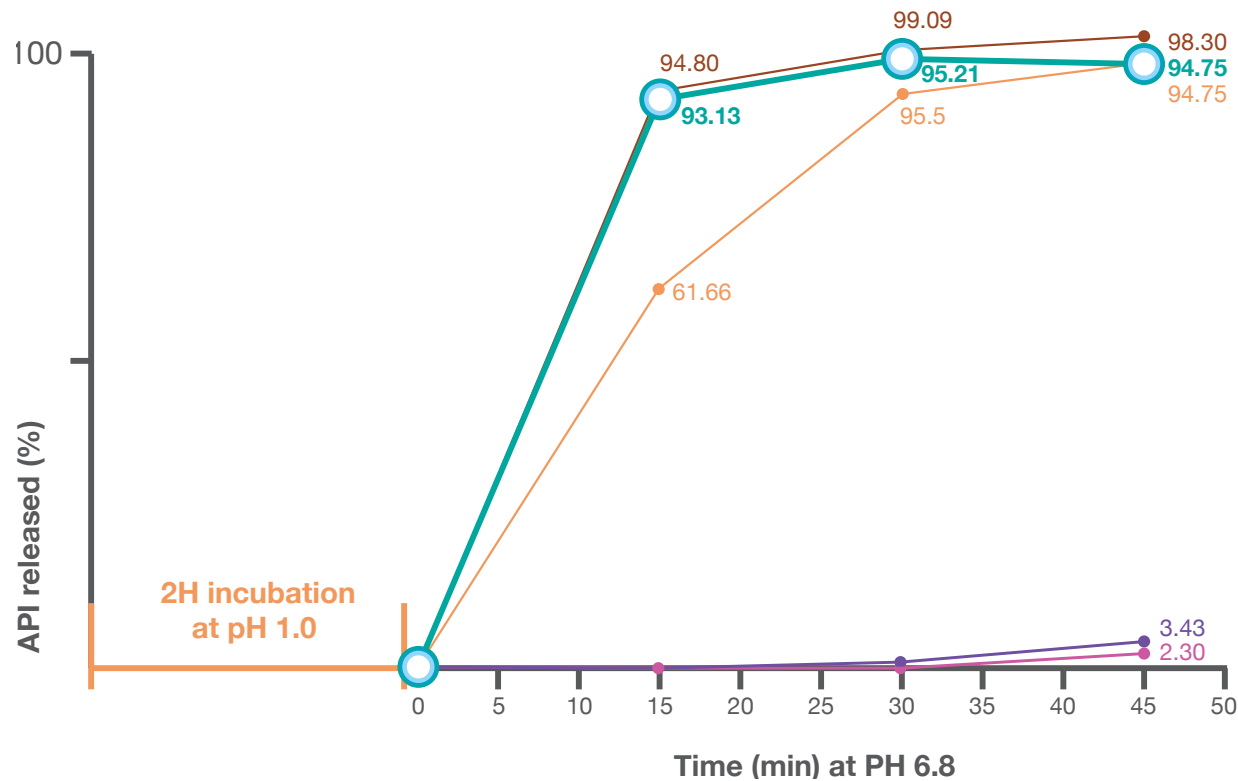
59.1 vs. Inexium® granulates in bags for drinkable suspension⁽¹⁾

(1) Similarity factor calculated as per EMEA guideline.

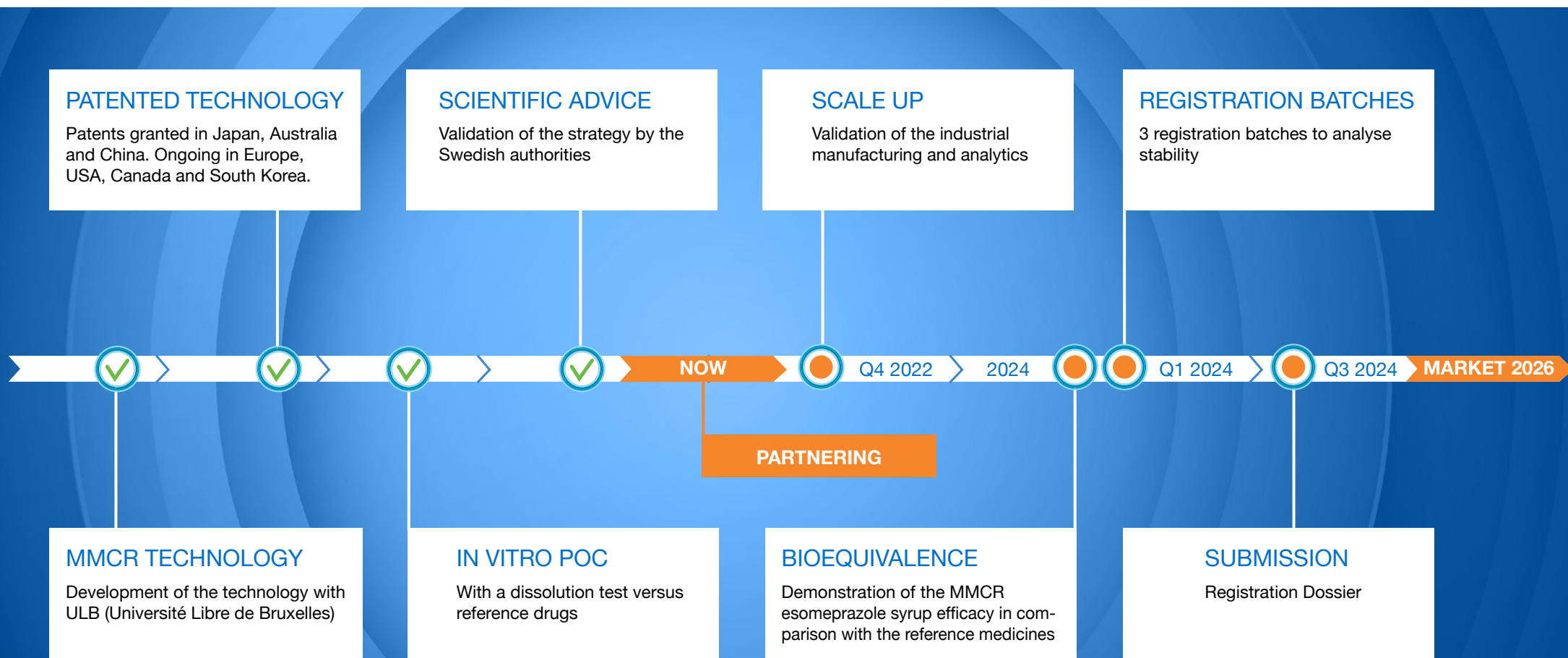
SyrceTM
Esomeprazole 2 mg/ml



% ESOM released vs time in buffer



5. THE DEVELOPMENT STATUS AND TIMELINE



Note: Indicated dates are expected completion dates

6. SUMMARY

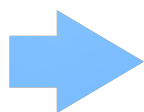
GASTRO-RESISTANT PPI LIQUID DOSAGE FORM

- Worldwide medical need for children 1-11 yrs
- Endorsed by Paediatricians and gastro-enterologists KOL
- Large market with high number of paediatric patients



ESOMEPRAZOLE SYRUP

- Unique esomeprazole liquid formulation in the market with innovative advantages
- Powered by groundbreaking patented MMCR Technology
- Similar in vitro dissolution profile to main reference products
- Next phase : scale up and bioequivalence (estimated market launch : 2026)
- Marketing and regulatory support from BePharBel Manufacturing



FAST MARKET PENETRATION EXPECTED

ARE YOU INTERESTED TO HEAR MORE ?

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