

excelra

Product Ideation for pre-filled syringe market

CASE STUDY



Purpose

To identify the product ideas for portfolio expansion in critical care for the US pre-filled syringe market.

Client



Industry
Small pharma



Location
Europe



Sector
Critical care

Client specification

- Products with patent expiry on or before 2025.
- Regulatory markets of interest-FDA.

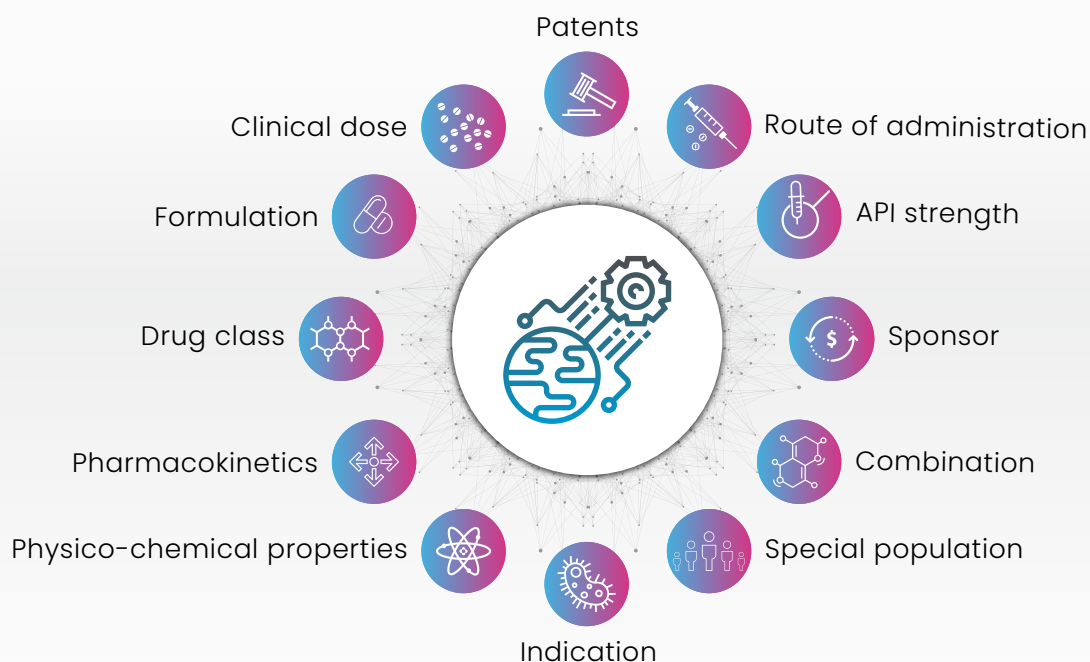
Our approach

Machine learning models were built using three different methods to prioritize biomarkers associated with drug-response. Pathway enrichment analysis was performed to understand the role of the biomarkers in disease pathophysiology. Stratification of patients based on these biomarkers resulted in correct prediction of drug response in 8 out of 11 patients.

Excelra's integrated drug approval data



Data extraction



Excelra's drug life cycle management platform

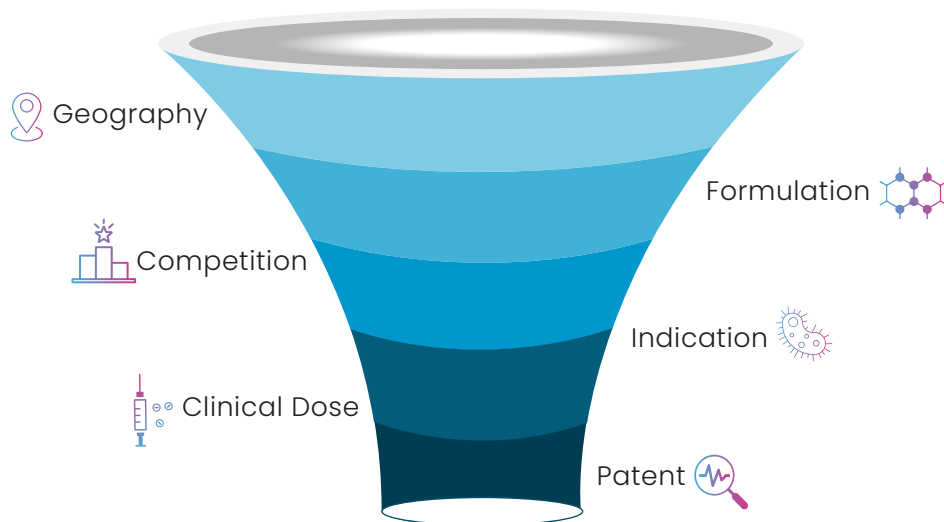
Simplified solutions from complex data

Salient features

- ✓ 5 Major regulatory agencies (US, europe, japan, india & russia)
- ✓ Manually curated database
- ✓ Standardized data across regulatory agencies
- ✓ Regular updates
- ✓ 4,000+ APIs and 40,000+ Products

Data filtering

Excelra's integrated drug approval data



Short-listing of relevant products

Detailed data collection & short-listing

- ✓ Critical care indication
- ✓ Unmet medical need

Analysis, ranking, and prioritization

Analysis, ranking and prioritization (contd.)

Drug name	API 1	API 2	API 3	API 4	API 5	API 6	API 7	API 8	API 9	API 10
Indication	Disease 1	Disease 2	Disease 3	Disease 4	Disease 5	Disease 6	Disease 7	Disease 8	Disease 9	Disease 10
Patent	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
Geography	HIGH	HIGH	HIGH	HIGH	LOW	HIGH	HIGH	HIGH	HIGH	LOW
Formulation	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	LOW
Drug PFS availability and competition	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	LOW	HIGH	LOW
Indication in critical care	HIGH	HIGH	HIGH	LOW	LOW	LOW	LOW	LOW	HIGH	LOW
Dose and dose regimen	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	LOW
Dose precision necessary	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	LOW	HIGH	LOW

Recommendation

TOP 5 product ideas in critical care

Our contribution

- ✓ Strategy for entry into niche therapeutic areas in new markets for generics.
- ✓ Recommendation of low risk-high value product ideas for accelerated entry into niche markets.
- ✓ Identifying differentiating parameters to tackle generic competition.
- ✓ Portfolio expansion by identifying commercially attractive product opportunities.
- ✓ Top 5 product ideas in critical care.

Our service portfolio



Data

Data curation

Filter out the noise, focus your attention

Clinical data

Analysis-ready data for informed clinical decision-making

Semantic data

Refine your decisions, find your value



Insights

Bioinformatics

Illuminating the path to faster discoveries

Data science

Unlock the power of data

Visualization

Pictures paint a thousand words



R&D
technology

Product design and development

Unlock your potential with data-driven design and development

Cloud enablement

Optimize your output on the cloud

Data engineering

Mitigate risks, protect your data, and rationalize your portfolio and processes.



Where data means more

excelra

BOSTON | UTRECHT | HYDERABAD

Connect with our experts: marketing@excelra.com

www.excelra.com