



---

## **Oxford Technology AGM** **July 2017**

# Arecor Presentation

- **Company Executive Summary**
- **Technology Overview**
- **Market Opportunity**
- **Diabetes Product Development**
- **Growth Next Steps**

# Arecor Company Overview

**Formulation Technology Leader** – Innovative and proprietary formulation platform enabling superior biopharmaceutical products

**Proprietary Diabetes Product Portfolio** – Delivering superior therapeutic treatments through leveraging innovative formulation technology on already approved peptides (Insulins and Glucagon)

## PLUS Successful Technology Business

**Revenue Generating** - Funded feasibility studies + milestone and royalties from licensing

- **Technology Partnering:**
  - Deep long-term partner relationships with major pharma and biotech (85% repeat business)
  - Self-sustaining and profitable
  - License Upside: Milestone & royalty bearing license model

## Barriers to entry

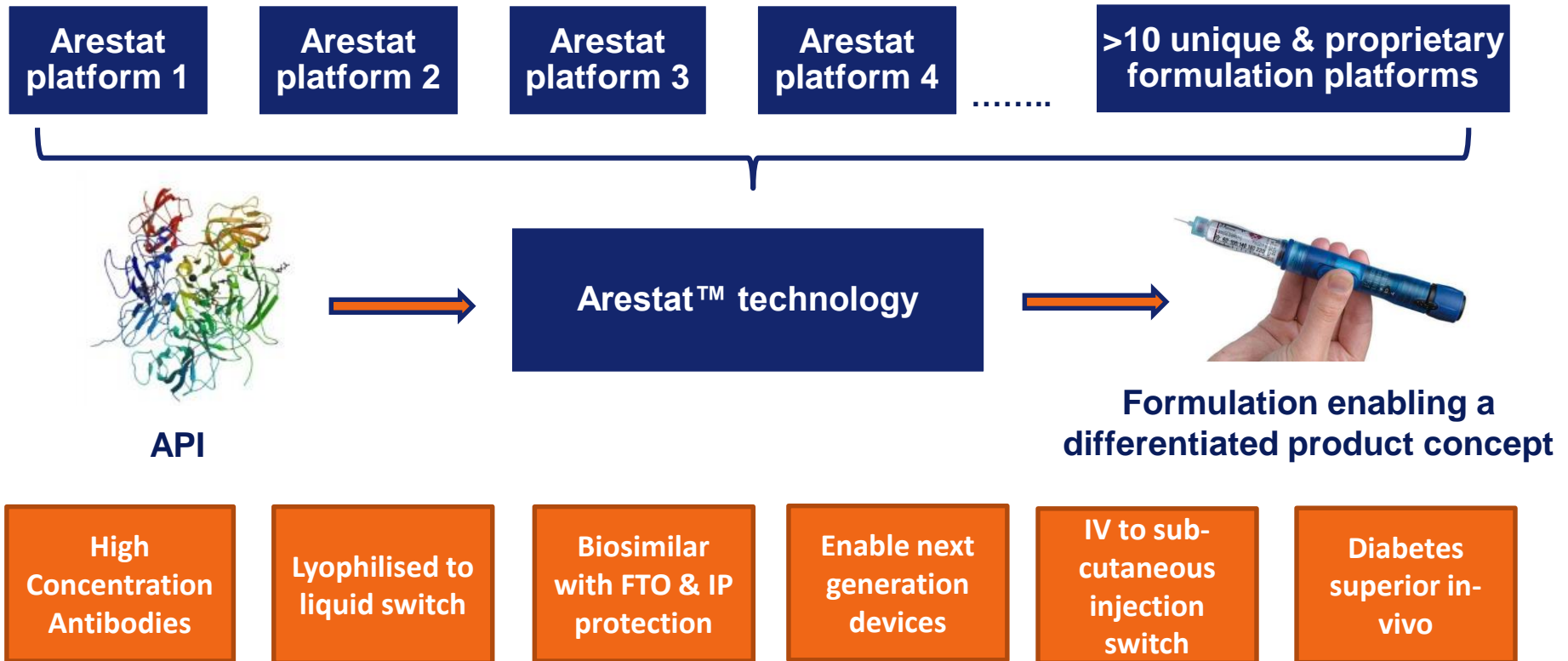
- Broad IP protection of enabling technology and specific proprietary products (22 granted)
- Formulation Technology Leader
- Scientifically challenging



# Arestat™ Technology

*Innovative formulation approach to achieve superior biopharmaceutical product profiles*

- Consists of a number of proprietary formulation platforms
- Each based on innovative science and defines formulations (i.e. excipients & conditions) for improving a specific aspect of stability of a biotherapeutic product



# Arestat™ - Unique formulations for strategic advantage

Creating patentable differentiation



**Heat Stability** - Enable distribution outside the cold chain & longer in-use period at room temperature



**Lyo to Liquid** - Enable new routes of delivery and convenient delivery devices



**High concentrations** - Enable convenient routes of delivery (IV to Sub-Q) and potential for self-administration



**Combination Products** – Co-formulations that enable single injection administration that would otherwise not be possible

---

**Technology Partnering Business**

# Profitable Technology Business

**Technology Business** – Applying Arecor technologies to Pharma/Biotech problems

**Revenue Generating YoY Growth Business** – From funded feasibility studies + licensing milestones and royalties (excluding grant revenue)

- 33% revenue growth FYE16 £1.0Mn
- ~40% revenue growth FYE17 ~£1.4Mn
- >50% forecast for FYE18 >£2.3Mn

**High margin (70-80%) self sustaining and profitable**

**Deep long-term partner relationships with pharma and biotech (85% repeat business)**

**License upside – multiple products in pharma pipelines (milestones & royalties)**

SANOFI 

 Bristol-Myers Squibb

genzyme  
A SANOFI COMPANY





MERCK

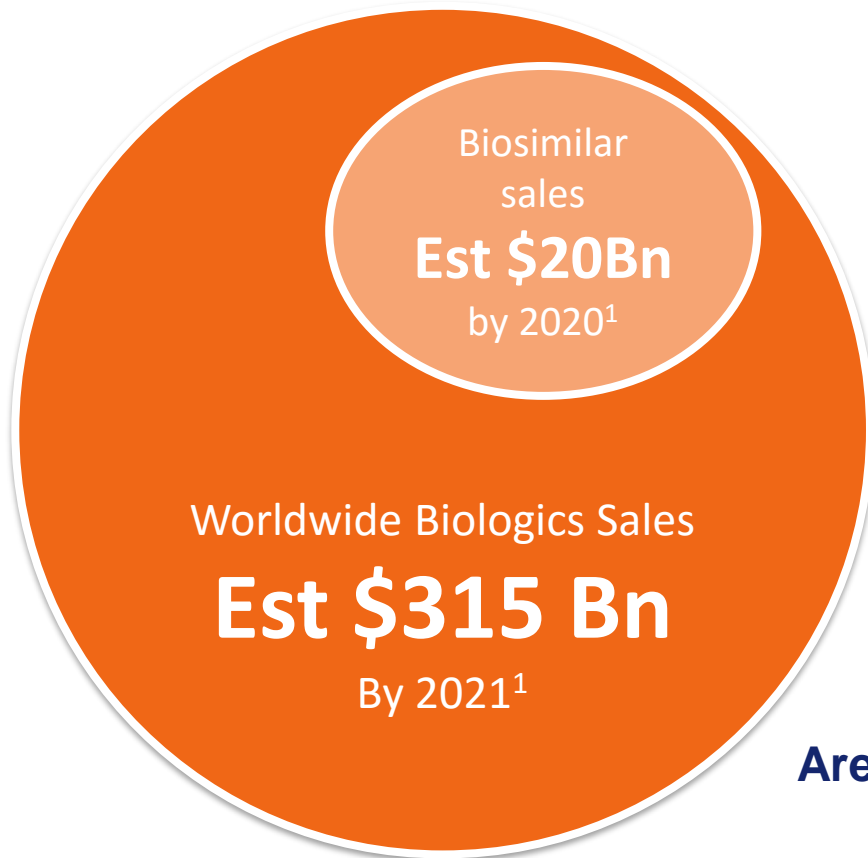
FERRING  
PHARMACEUTICALS

 DR. REDDY'S

 Arecor

# Biologics Target Market Forecast to Continue to Experience Significant Growth

- *The Biologics Market and Biosimilar Market Share is forecast continued growth with antibodies expected to grow at a CAGR of 12.2%*



- Highly diverse and competitive space  
Differentiation to capture market share
- Originators aggressively protecting brands  
– Defensive IP strategies, LCM
- Biosimilars require FTO, IP protection and differentiation to compete
- 2<sup>nd</sup> generation products difficult to formulate



**Arecor delivers superior market differentiated & patented product formulations**

<sup>1</sup> Deloitte 2017 Global Life Sciences Outlook; IMS Health biosimilar market share estimated 2020 \$11-25BN, with \$20BN base case (represents 8% share of biologics market)

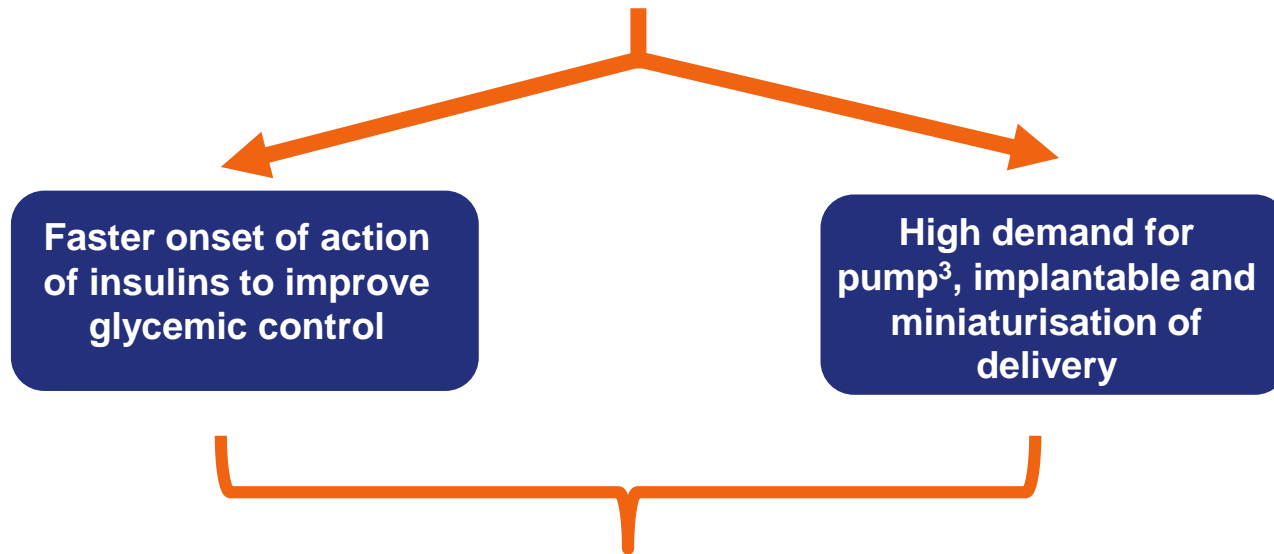


---

**Proprietary Diabetes Portfolio**

## Why Diabetes?

- **Large growing worldwide market** 415M people with diabetes, estimated 642 M diabetics by 2040, 25M insulin users currently<sup>1</sup>
  - \$22Bn global insulin market<sup>2</sup>
- Majority of **innovation** focussed on sophisticated delivery, patient compliance, improved glyceimic control



**Significant challenges that Arecor can solve utilising innovative formulation technology**

<sup>1</sup> International Diabetes Federation, Diabetes Atlas, 2015; <sup>2</sup>estimate collated from pharma annual reports  Arecor

<sup>3</sup>46% of US T1DM patients use pumps

# Why Diabetes – Arecor's superior 2<sup>nd</sup> generation products

## Currently Marketed Products

- Established safety & efficacy
- Off Patent molecules
- Drug actives available
- Comparator profiles known



- Gold standard PD models available
- Clinical PoC studies

## Arecor Formulation Technology

- Improve *in-vitro* and *in-vivo* profile
- 505(b)2 development
- Proprietary product patents



## Ultra-Concentrated Rapid Acting Insulin

- Critical for miniaturisation of delivery devices
- Superior fast acting insulin for high insulin users
- U1000 targeted – JDRF grant 2016



## Stable Aqueous Glucagon

- No stable aqueous glucagon currently available
- Ready to use pen to treat severe hypoglycemia
- Critical unmet need for bi-hormonal artificial pancreas
- Innovate UK Grant 2017



## Ultra-rapid Acting Insulin

- Faster onset of action
- Dosing at or after mealtime
- Improved glycaemic control
- Desired advancement for artificial pancreas
- Target faster than FIAsp

## Arecor Glucagon Liquid Formulation Programme can deliver a Superior Life-saving Product for Severe Hypoglycaemia in Diabetics

### Current Gold Standard Products

- Powder formulation
- Complex 4-6 step reconstitution by layperson
- For immediate use once reconstituted



### Arecor's New Development Candidate

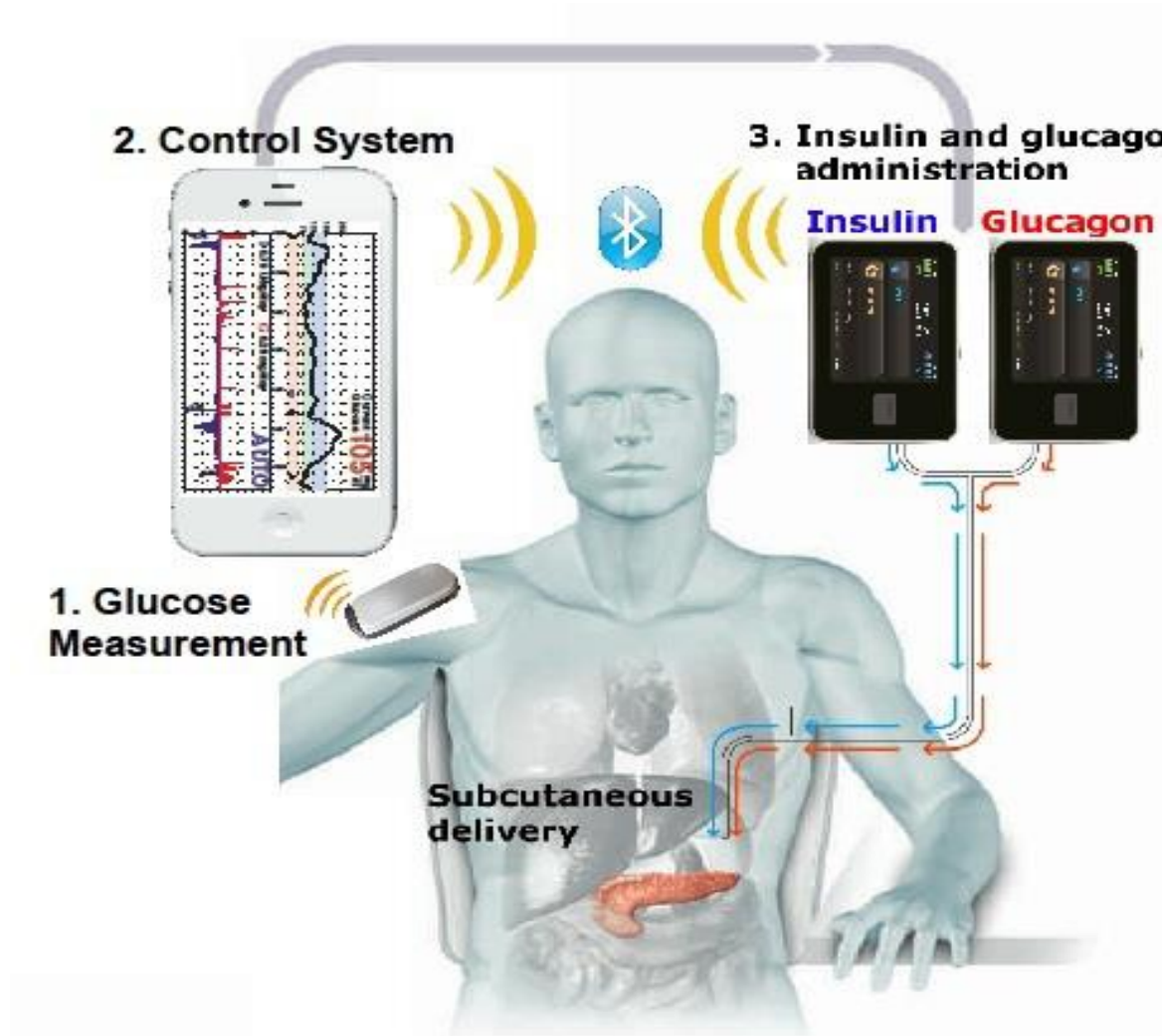
- Stable Liquid formulation
- Facile delivery via auto-injector



Only 1 in 5  
diabetics  
currently carry  
the rescue kits

282,000  
hospitalisations  
due to severe  
hypos in US in  
2012

# Liquid Glucagon and ultra-rapid acting insulin are essential components of next generation diabetes care – Artificial Pancreas



---

**What's Next.....**

# Significant Growth Potential

*Driven by revenue & profit growth in technology business, development of diabetes products to value inflexion points*

## Technology Business

- Increasing demand for external innovation & technology from pharmaceutical companies
- Technology applicable to fastest growing segment of the market – biopharmaceuticals
- Continue to strengthen and expand strategic relationships and convert licenses



## Drive Revenues and Profits

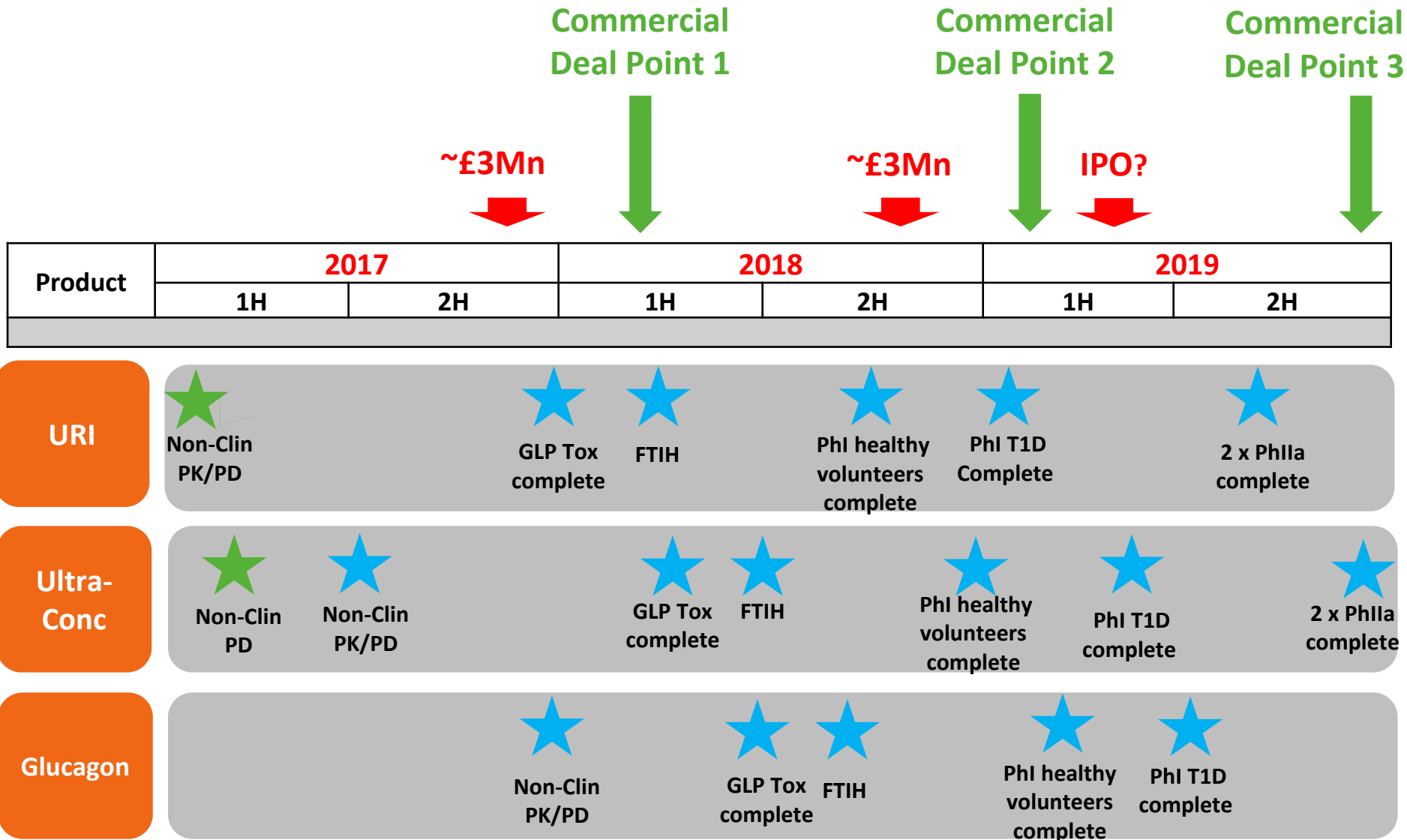
## Product Commercialisation & Portfolio Expansion

- Partner with Pharma at defined value inflexion points
- Active and close relationships with all major diabetes players
- Value points established on gold standard PD models
- Next wave of products selected



## Create Leading European Speciality Pharma

# Diabetes Product Portfolio Milestones & Investment Strategy (Net requirements assuming base case forecast)





---

**Thank You**