Proprietary product development
Arecor leverages its formulation platform to develop a portfolio of proprietary products enabling improved treatment for diabetes care via the innovative reformulations of approved proteins and peptides.

The portfolio includes:
- Ultra-rapid acting insulin
- Ultra-concentrated rapid acting insulin
- Stable aqueous glucagon
- A number of early stage programmes in diabetes area

Technology partnering
Arecor partners with leading pharmaceutical and biotech companies to deliver superior reformulations of their proprietary products, which would simply not be possible using conventional formulation science.

Examples include:
- Thermostable products
- Enabling lyophilised powder to liquid switch
- Differentiated biosimilars
- Enabling stable high concentration biopharmaceuticals

Technology platform (Arestat™)
The proprietary Arestat™ technology platform is based on a number of fundamentally novel insights into interactions between formulation excipients and proteins, allowing control of protein behaviour under various stress conditions, both in vitro and in vivo. Application of the technology to a protein or peptide of interest results in superior product stability in aqueous solutions, low viscosity and desirable PK/PD profiles. The technology is protected by 23 granted patents and a number of additional patent applications.

Arestat™ formulation platform
Formulation enabling a differentiated product concept

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Ultra-rapid acting insulin

Arecor is developing an ultra-rapid acting insulin that more closely matches a healthy body’s physiological response to blood glucose, which will be a major advancement for diabetes care. Arecor’s ultra-rapid acting insulin is based on insulin aspart, however, the formulation approach is applicable to other insulin analogues. A more rapid onset of action has been demonstrated in a validated diabetic pig model and the stability is non-inferior compared with currently marketed rapid acting insulins.

Ultra-concentrated rapid acting insulin

Arecor’s ultra-concentrated rapid acting insulin aspart is formulated at concentrations up to 1000 U/mL and has a pharmacokinetic and pharmacodynamic profile in a validated diabetic pig model that is equivalent to that of the currently marketed rapid acting 100 U/mL insulin aspart, whilst having excellent stability.

Additional early stage programmes

- Stable aqueous glucagon
- Liraglutide formulation with improved stability and Freedom-to-Operate
- Other undisclosed programmes, including key co-formulations

The product may deliver a superior mealtime treatment for people requiring >200 U/day, and is also a critical step towards the advancement of the miniaturisation of next generation insulin delivery devices.