Zealand Pharma achieves milestone in first Phase 3 trial with
dasiglucagon for the treatment of severe hypoglycemia in diabetes

- The results of the first of two completed Phase 3 trials confirm dasiglucagon’s safety and efficacy profile in patients with type 1 diabetes
- Dasiglucagon is a potential first-in-class glucagon analog and will be launched in the HypoPal® ready to use rescue pen for the treatment of severe hypoglycemia
- This brings our fully owned ready-to-use HypoPal® rescue pen one step closer to the patients, in line with our strategy of taking our medicines all the way to market

Copenhagen, 8 June, 2018 - Zealand Pharma A/S (“Zealand”) announces that the primary and key secondary objectives of the first multinational Phase 3 clinical trial of dasiglucagon for the treatment of severe hypoglycemia have been met. As previously reported, no treatment-induced or treatment-elevated anti-drug antibodies were detected in the trial. Nausea and vomiting were the most frequently reported adverse events with similar numbers observed for both dasiglucagon and GlucaGen®. In addition the glycemic responses were similar for dasiglucagon and GlucaGen®.

The Phase 2 clinical results published last year showed that dasiglucagon rapidly increased plasma glucose levels after insulin-induced hypoglycemia. The median time to plasma glucose response of 20 mg/dL following dosing with 0.6 mg dasiglucagon was 9 minutes (range 6-16 minutes). Dasiglucagon also demonstrated a longer-lasting and more pronounced plasma glucose increase, compared to GlucaGen®. ¹

The primary aim of this first Phase 3 trial was to evaluate the immunogenicity of three single doses of dasiglucagon (0.6 mg) following subcutaneous administration in 90 patients with type 1 diabetes. The trial also evaluated safety and tolerability as well as pharmacodynamic measurements of plasma glucose profiles. Recombinant glucagon powder (GlucaGen®) that requires reconstitution immediate before injection served as comparator in the trial.

In addition to this trial, a second and pivotal Phase 3 efficacy trial was initiated late 2017 and last patient visit occurred in May 2018. The final results are expected in Q3 2018.

Britt Meelby Jensen, President and CEO of Zealand Pharma, comments: "The positive outcome and conclusions of this first Phase 3 trial with dasiglucagon for the treatment of severe hypoglycemia is a major event for Zealand taking us a significant step closer to delivering on our strategy of taking our medicines all the way to market. Throughout the first half of 2018, we have made significant progress in all our late stage clinical pipeline products and we are in final preparations to advance two additional programs into Phase 3 clinical testing later this year."

Diabetes and severe hypoglycemia
People with type 1 diabetes suffer from insulin deficiency and inappropriate glucagon secretion. Both hormones are essential to ensure stable and healthy blood glucose levels. Consequently, patients must monitor and adjust their blood glucose levels to remain in proper glycemic control, as both high and low blood glucose may affect their health.
Severe hypoglycemia is an acute, life-threatening condition resulting from a critical drop in blood glucose levels. It is primarily associated with insulin therapy and is one of the biggest concerns for insulin-dependent patients and their relatives. Severe hypoglycemia is mainly seen in people with type 1 diabetes but also in type 2 diabetes patients on insulin. Severe hypoglycemic events are characterized by confusion, seizures and often loss of consciousness, which if untreated can result in death.
Today's marketed native glucagon for treatment of severe hypoglycemia requires the powder to be
dissolved in an aqueous solution and then used immediately due to the limited stability of the drug.

**Dasiglucagon (glucagon analog stable in liquid formulation)**
Dasiglucagon is a potential first-in-class glucagon analog invented and developed by Zealand with a unique stability profile in liquid formulation. The Company is pursuing several indications where a stable profile would provide new treatment options:

- **HypoPal® rescue pen for severe hypoglycemia**
  The ready-to-use dasiglucagon hypo pen, the HypoPal®, is designed to offer people with diabetes a fast treatment solution for severe hypoglycemia. A pivotal Phase 3 efficacy trial was initiated late in 2017 with results expected in the third quarter of 2018.

- **Dasiglucagon dual hormone pump therapy for diabetes**
  A next-generation artificial pancreas device containing both insulin and glucagon (dasiglucagon) that could control blood sugar levels, guided by an algorithm developed to maintain and control blood glucose levels without the need for patient intervention. A Phase 2b study is planned to start later this year to test dasiglucagon in a home-use setting in the iLet™, a bionic pancreas system developed by Beta Bionics.

- **Dasiglucagon for congenital hyperinsulism (CHI)**
  Zealand is developing dasiglucagon as a potential treatment option for CHI, a rare disease affecting mainly newborns and toddlers. It is caused by a defect in the pancreatic beta cells, resulting in insulin overproduction. The FDA’s approval of Zealand’s IND application allows the Company to proceed into Phase 3 development of dasiglucagon for the treatment of CHI.

1 https://doi.org/10.2337/dc17-1402

**For further information, please contact:**

**Britt Meelby Jensen**, President and CEO  
Tel.: +45 51 67 61 28, e-mail: bmj@zealandpharma.com

**Mats Blom**, Executive Vice President and Chief Financial Officer  
Tel.: +45 31 53 79 73, e-mail: mabl@zealandpharma.com

**About Zealand Pharma A/S**
Zealand Pharma A/S (Nasdaq Copenhagen and New York: ZEAL) (“Zealand”) is a biotechnology company focused on the discovery, design and development of innovative peptide-based medicines. Zealand has a late-stage clinical portfolio of proprietary product candidates focusing on specialty gastrointestinal and metabolic diseases. In addition, it has two marketed products, commercialized by Sanofi, and two product candidates under license collaboration with Boehringer Ingelheim.
Zealand is based in Copenhagen (Glostrup), Denmark. For further information about the Company’s business and activities, please visit [www.zealandpharma.com](http://www.zealandpharma.com) or follow Zealand on LinkedIn or Twitter @ZealandPharma.