Company announcement – No. 55/2017

Zealand Pharma initiates the pivotal Phase 3 trial with dasiglucagon for the treatment of severe hypoglycemia in diabetes

- **First patient recruited in the second Phase 3 clinical trial of dasiglucagon**
- **Dasiglucagon is a potential first-in-class soluble glucagon analog, for delivery in a ready-to-use rescue pen to treat severe hypoglycemia**
- **Results from the Phase 3 trial expected in H2 2018**

Copenhagen, December 7, 2017 – Zealand Pharma A/S ("Zealand") announces the initiation of the second Phase 3 trial to confirm the clinical efficacy and safety of dasiglucagon in the rescue treatment of severe hypoglycemia in patients with Type 1 Diabetes (T1DM).

Dasiglucagon is a potential first-in-class soluble glucagon analog invented and developed by Zealand Pharma. It has a unique stability profile in liquid formulation with no preservatives and is suitable for a ready-to-use rescue pen to treat severe hypoglycemia. The Phase 2 clinical results, which were presented at the American Diabetes Association meeting in June 2017, indicated that:

- dasiglucagon rapidly increases plasma glucose (PG) levels after insulin-induced hypoglycemia, with a longer lasting and more pronounced PG increase when compared to reconstituted glucagon.
- there were fewer post dosing hypoglycemia events with dasiglucagon (two events within six hours) compared to reconstituted glucagon (nine events within six hours).

The first Phase 3 trial was initiated in July 2017. Recruitment was completed in October 2017 and results are expected in Q2 2018, ahead of previous expectations.

The aim of this pivotal Phase 3 trial is to confirm rapid PG increase after single dose administration of dasiglucagon to subjects with type 1 diabetes mellitus with insulin-induced hypoglycemia. The secondary aim is to compare the glycemic response observed after administration of dasiglucagon with that of reconstituted glucagon currently marketed in powder form. The trial will be conducted in 156 patients, exposed to either dasiglucagon, placebo or reconstituted glucagon in a parallel randomized double-blind design.

Britt Meelby Jensen, President and CEO of Zealand, comments: *"The initiation of this second Phase 3 trial brings us closer to making our dasiglucagon rescue pen available to patients. Many people with diabetes and their relatives live with the constant fear of experiencing too low blood sugar levels. A user-friendly solution to address severe hypoglycemia, or insulin shock, holds potential to significantly reduce this fear and to better patient care."*

Type 1 Diabetes and 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, both in the short and long term.

Severe hypoglycemia is an acute, life-threatening condition resulting from a critical drop in blood glucose levels associated primarily with insulin therapy. Severe hypoglycemia is most frequently seen in people with Type 1 Diabetes due to injecting insulin multiple times daily. Severe hypoglycemic events occur when blood glucose levels become critically low and it is the biggest concern for insulin-dependent patients and the most feared complication of diabetes treatment. It is a condition

characterized by confusion, seizures and, often, loss of consciousness which, if left untreated, can result in death. The patient requires assistance from another person to treat.

Currently marketed formulations of glucagon for the treatment of severe hypoglycemia require mixing first by the person assisting to treat and then immediate administration due to poor drug stability. Dasiglucagon is being developed to offer a stable ready-to-use rescue treatment for severe hypoglycemia.

Dasiglucagon (glucagon analog stable in liquid formulation) for use in other indications
Dasiglucagon is a Zealand-invented glucagon analog with a unique stability profile in a ready-to-use aqueous solution also in development for two additional indications.

Treatment of Type 1 Diabetes with a next-generation artificial pancreas pump containing both insulin and glucagon (dasiglucagon) with potential to bring a paradigm shift in treatment, improving blood glucose control, with limited patient intervention. Zealand reported positive results from two Phase 2a trials in Q2 2017 for this treatment option and a Phase 2b trial is planned for 2018.

Dasiglucagon also holds potential to treat the rare pediatric disease congenital hyperinsulinism. This severe condition covers several congenital disorders caused by gene mutations in the pancreatic beta-cells resulting in too high circulating insulin levels and associated severe and persistent low blood glucose levels and. In June 2017, the European Commission granted orphan medicinal product designation for dasiglucagon. This was followed by the granting of a similar orphan drug designation by the U.S. FDA in August 2017. A Phase 2 clinical trial is expected to start during H1 2018.

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, 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 portfolio of medicines and product candidates under license collaborations with Sanofi, Boehringer Ingelheim and a pipeline of internal product candidates focusing on specialty gastrointestinal and metabolic diseases.

Zealand is based in Copenhagen (Glostrup), Denmark. For further information about the Company's business and activities, please visit www.zealandpharma.com. or follow Zealand on Linked-in or Twitter @ZealandPharma.