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Phase II results with dasiglucagon[1] (ZP4207) support its potential for use in a ready-to-use rescue pen to treat severe hypoglycemia in diabetes

- **In the Phase II trial, all type 1 diabetes patients treated with dasiglucagon had a clinically relevant increase in blood glucose levels after an insulin-induced hypoglycemic event**
- **Zealand plans to discuss the trial results with the FDA later in 2016 to define the next development steps for dasiglucagon as a single-dose rescue treatment**

Copenhagen, 11 August 2016 – Zealand Pharma (Zealand) announces supportive results from a Phase II trial with a single-dose version of dasiglucagon as rescue treatment of severe hypoglycemia in insulin dependent diabetic patients. Dasiglucagon, formerly referred to as ZP4207, is a glucagon peptide analog, invented and fully owned by Zealand and observed to have a favorable physical and chemical stability in liquid solution. In June 2016, dasiglucagon was proposed as an International Nonproprietary Name (pINN) for this product candidate.

Severe hypoglycemia is a potential life threatening condition and the most feared side effect associated with insulin treatment of diabetes[2]. At present, hypoglycemia rescue treatments are based on native glucagon and solely available as a lyophilized powder, which requires reconstitution with sterile water in a multi-step process prior to use[3].

The primary objective of this Phase II trial was to characterize the pharmacological profile of an optimized formulation of dasiglucagon and compare it to an approved glucagon rescue product. Results from the trial showed that all subjects treated with one of the three highest doses of dasiglucagon or with the approved glucagon product achieved a blood glucose concentration of $\geq$70 mg/dL within 30 minutes of dosing. In the same dose groups, time to clinically relevant plasma glucose increases of $\geq$20 mg/dL was shown to be similar for dasiglucagon and approved glucagon with a median time of 9-10 minutes. In the trial, dasiglucagon was observed to be well tolerated and have a similar safety profile compared to approved glucagon. The full Phase II results will be published at a later date.

Adam Steensberg, Chief Development and Medical Officer of Zealand commented: *"We are pleased with the results of this Phase II trial, which we believe further support dasiglucagon's attractive profile. We have designed dasiglucagon to be stable in liquid formulation, and with the*

[1] Dasiglucagon is a proposed International Nonproprietary Name (pINN)
[2] According to Diabetes Associations
[3] Glucagon rescue kit labels

current results we believe to be one step closer to being able to offer insulin dependent diabetes patients a ready-to-use pen for convenient and fast rescue from severe hypoglycemia – or insulin shock. We see a clear need for a patient friendly rescue product and we look forward to the next step in development."

The Phase II trial was conducted as a single-center, randomized, double-blind clinical study to determine the pharmacokinetic and pharmacodynamic (PK/PD) properties of single doses of dasiglucagon compared to an approved and commercially available hypoglycemia rescue product based on a lyophilized form of native glucagon (GlucaGen from Novo Nordisk). A total of 58 patients with type 1 diabetes were enrolled in the trial and randomized into four groups, each receiving one of four different single doses of dasiglucagon administered subcutaneously after an insulin-induced hypoglycemia event. In the lowest dose group, a parallel design was applied, and in the three highest dose groups, patients were dosed with both dasiglucagon and approved glucagon in a cross-over design. Zealand initiated dosing in the trial in February 2016. For further details, see ClinicalTrials.gov - Identifier: NCT02660008.

Zealand plans to discuss the results of the Phase II trial with the U.S. Food and Drug Administration (FDA) later in 2016 with the objective of defining the next development steps for dasiglucagon as a single-dose rescue treatment.

Zealand is also developing a multiple-dose version of dasiglucagon intended for use in a dual-hormone artificial pancreas system to better control hypoglycemia and potentially provide diabetes patients on insulin with options for an easier and overall more effective management of their disease. The multiple-dose version of dasiglucagon is currently in preparation for a Phase II clinical trial, expected to start later in 2016.

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About Zealand Pharma A/S

Zealand Pharma A/S (Nasdaq Copenhagen: ZEAL) ("Zealand") is a biotechnology company focused on the discovery, design and development of innovative peptide-based medicines. Zealand has a pipeline of proprietary product candidates which primarily target specialty disease areas with significant unmet medical needs and a portfolio of medicines and product candidates under license collaborations with Sanofi, Boehringer Ingelheim and Helsinn.

The company's first invented medicine, lixisenatide, a once-daily prandial GLP-1 analogue for the treatment of type 2 diabetes, is licensed to Sanofi. Lixisenatide is marketed globally outside the United States as Lyxumia® and approved in the U.S. as Adlyxin™. A fixed-ratio combination of lixisenatide with insulin glargine (Lantus®), referred to as iGlarLixi, is under regulatory review in the U.S. and in Europe.

Zealand's proprietary pipeline of product candidates includes: *Dasiglucagon[*] (ZP4207) single-dose rescue treatment* for acute, severe hypoglycemia (Phase II); *ZP1848* for short bowel syndrome (Phase II); *Dasiglucagon* (ZP4207) multiple-dose* intended for use in a dual-hormone artificial pancreas system for better hypoglycemia control and diabetes management (in preparation for Phase II); and other earlier stage clinical and preclinical peptide therapeutics.

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

* Dasiglucagon is a proposed International Nonproprietary Name (pINN).