

# ExOlin<sup>®</sup>

## Defymed is developing ExOlin<sup>®</sup>, a new insulin delivery device *Real progress in the fight against diabetes*

Strasbourg, July 2017 – Medical technology company [Defymed](#), based in Strasbourg, is pleased to announce the development of ExOlin<sup>®</sup>, a new insulin delivery device. Targeted at persons suffering from diabetes (Type 1 diabetics and some Type 2 diabetics) needing to administer insulin, this innovative medical device is being created to offer patients a better means to manage the disease, and thus a better quality of life. Following the established roadmap, this device, which shall enter the clinical phase in 2018, should be available on the market by the end of 2020.

Diabetes is a condition characterized by an abnormally elevated level of sugar in the blood. Considered to be one of the **major epidemics of the 21<sup>st</sup> century**, diabetes may affect up to **592 million people worldwide by 2035**. Current insulin delivery systems available on the market do not meet all medical needs. In addition, only 23.5% of diabetic men and 36.4% of diabetic women properly control their blood sugar levels.

### ExOlin<sup>®</sup>, a promising therapeutic alternative

An insulin delivery medical device, ExOlin<sup>®</sup> is composed of a biocompatible membrane, nonbiodegradable and permeable to insulin. It will be implanted into the patient's abdomen and will enable insulin to be delivered to a physiological site by simply injecting the insulin through the skin. ExOlin<sup>®</sup> **has considerable advantages for patients**, who can continue **their normal injection methods** (syringe, pen, pump, etc.) and **better stabilize their blood sugar levels** in the long term. Unlike pens or external pumps that deliver insulin sub-cutaneously, the innovative ExOlin<sup>®</sup> device delivers insulin in a much more physiologically suitable location.



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*"With ExOlin<sup>®</sup>, Defymed shall offer diabetic patients a more physiological approach for delivering insulin. The therapeutic effectiveness of the treatment should thus be significantly improved. The patient should also benefit from greater stability in their blood sugar levels and therefore a better quality of life"* explains Dr Séverine Sigrist, CEO and founder of Defymed.

This medical device is suitable for a wider range of applications than just diabetic patients. It could also be **adapted for other applications and pathologies** requiring a physiological delivery method for drugs or active ingredients.

### Clinical testing and fundraising are expected

Currently in the advanced preclinical phase, Defymed shall enter the **clinical phase in 2018** with 8 patients in Europe, with aims to extend the study to a larger number of patients. By the end of 2020, Defymed aims to obtain the **CE mark** and then launch ExOlin® onto the market in Europe. Following this, it will pursue FDA (Food and Drug Administration) approval in the United States.

To achieve this, Defymed intends to **raise 10 million euros in funds** for the clinical development of ExOlin®. This should also allow Defymed to continue with the preclinical development of the MailPan® bioartificial pancreas, combined with several insulin-secreting cell candidates derived from stem cells, to enable a clinical phase to begin in the United States with the best cell(s).

As part of the development of MailPan®, Defymed benefits from the financial support of [JRDE](#), a worldwide foundation that finances therapies for Type 1 diabetes. At the end of 2016, the company also concluded a partnership agreement with [Semma Therapeutics](#), an American biotechnology company specialized in the development of cellular therapies for the treatment of diabetes.

#### About Defymed:

Defymed is a Medtech company spin-off from the Centre Européen d'Étude du Diabète (European Center for Diabetes Study) in March 2011, specialized in the design and development of innovative medical devices for delivering therapeutic treatments. Defymed's primary focus is on applications for the treatment of Type 1 diabetes.

The first product designed was MailPan®, an implantable bioartificial pancreas created to reestablish normal insulin production in Type 1 diabetic patients. The MailPan® prototype first saw the light of day thanks to the financial support of the European Commission, the Grand Est region, and BPI France. The second product developed by Defymed is ExOlin®, a medical device for delivering insulin.

The company has an exclusive technology that enables it to customize these medical devices to meet other therapeutic applications. Defymed's strength lies in its network of national and international partners.

For further information, please see [www.defymed.com](http://www.defymed.com)

Additional information and visuals available on request from the press department:

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