



# Better Way to Treat Diabetes

**Cellnovo Group is a medical technologies company in Wales, specialising in diabetes. Sophie Baratte (CEO) chats to us about their innovative connected product and how this product has benefitted patients with type 1 diabetes.**

Cellnovo has developed and markets the first mobile, connected, all-in-one diabetes management system that helps make life easier for patients. Compact, tubeless, intuitive and entirely connected, Cellnovo's insulin pump comprises a mobile touchscreen controller with an integrated blood-glucose meter. This unique device allows optimal management of insulin delivery whilst ensuring extensive freedom of movement and peace of mind for patients and their families. Thanks to the automatic transmission of data, it also allows the patient's condition to be continually monitored by family members and healthcare professionals in real time.

Sophie Baratte, CEO of the company talks to us about what differentiates Cellnovo from their competitors and what helps them to stand out from other players in the insulin pump industry.

"The Cellnovo System is the world's first and only mobile diabetes management system, which includes an insulin patch pump, activity monitor, cellular-enabled wireless touchscreen handset with integrated blood glucose meter and automatic connectivity to an online platform via secure servers. No other diabetes management system offers this type of mobile health management system based on three parts: a patch pump, a touchscreen handset and

connectivity in real time to an online platform.

"The Cellnovo System is a game changer for insulin pump technology. As proven in a recent article published in *European Endocrinology*, the Cellnovo System has demonstrated superior levels of accuracy and precision in insulin delivery.

"The core technology of the Cellnovo System is a paraffin wax micro-actuator; technology that is used in NASA satellites, which was developed by our founder and Chief Scientific Officer, Julian Shapley. The expansion of heated paraffin wax serves as a mechanism to push a piston against a membrane, thereby creating a pumping mechanism that allows for the technology's accuracy and precision in insulin delivery. No other insulin pump on the market uses this type of state-of-the-art technology.

"Today, the demand for our product by far outstrips our ability to deliver. There are waiting lists of patients for the Cellnovo System because of our limited production capacity which is only semi-automated and therefore time-consuming and costly. A key project since our IPO in July 2015 has been the industrialisation of the production process to enable us to meet this demand. We are currently working on the transfer of our manufacturing to Flex (formerly known as Flextronics), an industry leader in mass manufacturing. This

flex production line will allow an exponentially growth in production capacity which will also be fully scalable, with the potential to meet customer demand this year and beyond."

Sophie goes on to describe the company's latest projects and how this has helped them to stay ahead of any emerging developments in an innovative sector.

"Cellnovo is the system of choice for artificial pancreas projects and has been selected for three major initiatives: Diabeloop, Type Zero and PEPPER. Diabeloop is a French Artificial Pancreas Project in partnership with CERITD, CEA and 10 major teaching hospitals in France. The project is based on remote surveillance through a connected management system. Type Zero is a US based project with \$12,7M of funding from the NIH. The project includes many renowned centres of excellence including Harvard University, Mount Sinai School of Medicine, Mayo Clinic, Stanford University, and University of Montpellier, France. PEPPER is part of Horizon 2020, and benefits from an EU innovation fund, which includes a consortium of European partners, including Imperial College of London, Oxford Brooks University, University of Girona and Romsoft - Romania. The project is based on Artificial Intelligence for predictive and personalized decision support."

Building a team of people who understand each other and the company's goals is key to any business. Sophie explains what the firm's approach is to attracting the right staff.

"Cellnovo is a creative and innovative company. We are willing to be quick, agile and more risk-facing than our bigger, more established counterparts in the medical device industry. Furthermore, we are part of an industry that is in constant flux and change with a device that has real impact on people's lives. So this great potential for growth in the industry combined with a dynamic company culture helps us to attract the best talent in the industry."

The company culture is dynamic, driven and inherently multi-national, as the firm is based in Wales and France. Cellnovo brings together professionals who have extensive experience in their respective fields. Above all, Cellnovo staff work together toward a shared mission and desire to make life easier for those with type 1 diabetes. This is what motivates Cellnovo day-to-day and will continually do so in the future.

“Today, the demand for our product by far outstrips our ability to deliver.”



Company: Cellnovo Group SA  
Name: Sophie Baratte  
Web Address : [www.cellnovo.com](http://www.cellnovo.com)  
Address : 13, rue de Londres 75009 Paris France / Pencoed  
Technology Centre, Bridgend, Mid Glamorgan, Wales, CF35  
5HZ, UK

