

## The world's first smart insulin pens with automatic wireless data transfer

04 August 2016 | News | By BioSpectrum Bureau

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GERMANY: Emperra GmbH based in Germany is launching the world's first Bluetooth insulin pen on the market and therefore expanding its ESYSTA product system's function. The new ESYSTA BT pen is equipped with a Bluetooth interface and transfers the injected insulin doses directly to the patient's digital blood glucose diary. The smart insulin pens automatically connected via the 868 MHz interface (similar to the ISM band) are already being successfully used in medicine in combination with a wireless transmission blood glucose meter as an integrated diabetes management system, ESYSTA. Both the hardware components and software solutions (ESYSTA portal, ESYSTA app) have been certified as CE-compliant medical products. Patients and doctors can achieve a new quality of medical care for Type 1 and Type 2 diabetics using the patented ESYSTA solution. On the basis of the available scientific data and reimbursement by statutory health insurance companies on the complex German healthcare market, Emperra is striving to use this smart insulin pen based ESYSTA telemonitoring solution with an FDA filing process for the US market. FDA clearance is expected in 2016.

"The smart insulin pen and corresponding software appeal to patients and doctors who prefer state-of-the-art technical solutions and who have recognised that the digitalisation of diabetes management is a simple and reliable solution," summarises Dr. Christian Krey, CEO of Emperra GmbH.

With the help of innovative sophisticated software solutions compliant with medical products and the highest integrated data security standards ISO/IEC 27001, several teams of doctors can even solve complex issues with patients whose levels are hard to adjust telemedically for the first time worldwide using unadulterated insulin data from insulin pens.

The mobile CE-compliant ESYSTA app for iOS and Android plays the treatment recommendations back, among other things using innovative traffic light algorithms. ESYSTA convinced most patients, their doctors and care-givers within the first few months during a medical and health economic field trial by German health insurance companies. Besides being listed in the reimbursement catalogue of all statutory health insurance companies, digital diabetic services are being contractually agreed as an important business area for Emperra for the first time in Germany.

Emperra is therefore the only company that can reach all age groups of people with diabetes mellitus using a holistic innovative approach of digital solutions with smart insulin pens. The largest population of older Type 2 diabetics treated with insulin is being digitally reached for the first time as a result.

"We are proud that we can use all U-100 insulins in 3 ml cartridges with the development of specially customised adapters.

As a result every insulin-dependent patient can be equipped with ESYSTA, regardless of whether the insulin comes from Lilly, Sanofi or Novo Nordisk. Even the accidental mixing up of basal and bolus ESYSTA pens and priming (deaeration) can be identified on the ESYSTA portal. In combination with real insulin application data, I believe as a doctor that this constitutes an evolutionary leap for the digital age of diabetes management," says Dr. Janko Schildt, Founder and Managing Director responsible for medicine and technology.

Effective reduction in HbA1c thanks to digitalised diabetes management