



## Realheart pilots implantation on virtual patients

**Realheart is the first user to have access to Virtonomy's new v-Patients web platform, which includes 3D anatomical models of real heart failure patients. This way, Realheart's designers can themselves perform virtual implantations on humans in parallel with animal studies, thereby increasing efficiency and expertise within the company and shortening time to market.**

Virtonomy, based in Munich, Germany, aims to help companies shorten time to market for medical products by allowing them to conduct data-driven studies on virtual patients in a constantly growing database that reflects anatomical variation, demographic diversity and pathological conditions.

A pilot project is now underway giving Realheart access to Virtonomy's web platform, allowing it to perform virtual implantations on humans in parallel with long-term studies on animals, which will resume shortly after a summer break. In the past, this work has been outsourced to Virtonomy as it has depended on specific skills and access to advanced software. With the new platform, Realheart's engineers can test new designs themselves at any time.

"It is exciting to be the first to test this new way of working in medical technology. We can experiment in a safe environment, which saves significant resources and reduces risks compared to conventional methods. The team can meet in a virtual room, for example, to jointly validate a design change in high-precision 3D anatomical models on any computer" said Ina Laura Perkins, CEO of Realheart.

Virtonomy is the first cloud-based SaaS solution for medical device developers using virtual patients for data-driven clinical trials. Through digital testing methods, the preclinical and clinical phases can be accelerated, a process supported by the FDA and corresponding EU agencies.

"This will help us find the optimal fit for our device to treat as many patients as possible and identify the right anatomical criteria for patients for clinical trials. Virtonomy has helped us in the past to adapt our device to the anatomy of humans and large animals and we look forward to continuing our collaboration as the first users on their platform" said Ina Laura Perkins.

### **For more information please contact:**

Ina Laura Perkins, CEO

Phone: +46(0)70 406 49 21

E-mail: inalaura.pieper@realheart.se

*Scandinavian Real Heart AB develops a total artificial heart (TAH) for implantation in patients with life-threatening heart failure. Realheart TAH has a unique, patented design that resembles that of the natural human heart. The artificial heart consists of a four-chamber system (two atriums and two chambers) which provides the*

*opportunity to generate a physiologically adapted blood flow that mimics the body's natural circulation. A unique concept in the medical technology world.*