



Realheart's artificial heart becomes 10-20 percent smaller

Realheart is developing the world's first four-chamber artificial heart. Now the company's design team has identified an opportunity to make the heart 10-20 percent smaller in size, which could have a major impact on future patients and on Realheart's future market.

Realheart's research and development work is conducted in three legs: digitally, in the laboratory, and through anatomical and animal studies, all of which are progressing in parallel.

During this autumn's animal studies, the pump was again confirmed to work well. At the same time, the design team discovered in laboratory tests that the newer version of the pump needed less stroke length compared to the previous one. In addition, the right-hand pump was found to require an even shorter stroke length than the left-hand pump, because it works against a lower afterload (pressure in the lungs versus pressure in the aorta). As a result, the clinical version of the Realheart TAH, now in development, will be about 10 percent smaller on the left side and 20 percent smaller on the right.

"There is a tendency towards focussing a lot on the animal studies, but the other parts of the research and development work are just as important and this is a very good example of that. A smaller heart will be easier for the surgeon to adjust to the patient's anatomy – and make our future market potential bigger," said Ina Laura Perkins, CEO.

In January, the company plans to perform a couple of surgeries with a hybrid version to evaluate the latest design changes and train surgeons, before performing the first implantations with the clinical version of the Realheart TAH in the spring.

För ytterligare information kontakta:

Ina Laura Perkins, VD

Tel: +46(0)70 406 49 21

E-post: inalaura.perkins@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.