

<u>Media release</u>

## CARAG AG Wins the 2014 Zuger Innovation Prize

## CARAG AG (Baar, Switzerland) wins the 2014 Zuger Innovation Prize for the development of the Carag Bioresorbable Septal Occluder (CBSO). CBSO is the world's first implant for the closure of congenital heart defects employing a bioresorbable framework.

Carag was awarded the Zuger Innovation Prize by Matthias Michel, head of the Department of Economic Affairs of the canton of Zug. The prize, worth CHF 20,000, was awarded at the Zuger Innovation and Technology Day, November 12, 2014. The jury honored Carag for the successful development of the Carag Bioresorbable Septal Occluder (CBSO).

The CBSO is the world's first implant for closure of atrial level defects, such as atrial septal defect (ASD), that employs a framework which is resorbed by the human body. ASD is a hole in the wall between the right and the left atrium of the heart and is one of the most common congenital heart defects. Until now, treatment was only possible with open heart surgery or with catheter delivered implants composed of a metallic framework. Metal implants remain in the heart for the life of the patient. "We believe a framework that is resorbed by the patient's body while tissue grows in to the implant will lead to better results and fewer complications associated with metal devices such as erosion, arrhythmia and thrombus formation." explains Jérôme Bernhard, Chief Executive Officer of Carag. "This is a major benefit for patients needing a septal closure device." The CBSO is implanted by cardiologists using established techniques for septal closure procedures.

Catheter closure of septal defects was first performed in the mid 1980's. It is the treatment of choice for most patients with ASD, and cardiologists have desired a resorbable septal implant ever since. However, until now, no company has been able to successfully develop a functional resorbable framework. Indeed, the development of the CBSO from first concepts to a market ready product required ten years. As a last step prior to final approval, first devices have been successfully implanted in a clinical investigation of patients suffering from an ASD. These interventions are performed by Prof. Dr. Horst Sievert and Dr. Björn Söderberg at Cardiovascular Center Frankfurt. At the conclusion of the clinical investigation, the CBSO will be available to interventional cardiologists. Carag is in negotiations with multiple international medical device companies for the future marketing of the technology.

Michael Larsson, Chairman of the Board and co-founder of Carag also sees the award as confirmation of the high level of innovation taking place at Carag and in Central Switzerland: "We have an outstanding team at Carag, and I am extremely proud that they have developed a pioneering, and now internationally recognized, innovation all the way to marketability."

Baar, November 12, 2014

## Further Information:

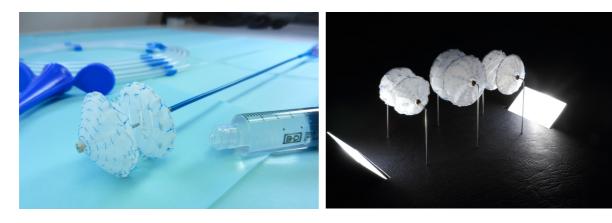
Jérôme Bernhard, CEO of CARAG AG +41 41 766 02 02 jerome.bernhard@caraq.com, www.caraq.com

Picture download: <u>www.carag.com/CBSO</u>

## About CARAG AG

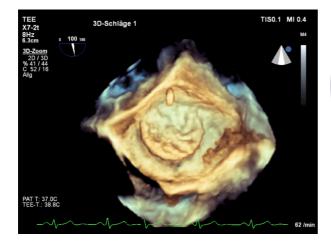
Carag is part of the Olle Larsson Holding as is the Medela Group in Baar. Carag is an innovation-think tank for the medtech industry. As a leading Swiss engineering company and point of contact for physicians, developers, and medtech companies developing high-quality products for cutting-edge medical applications, Carag has an experienced, performance-driven, interdisciplinary team consisting of engineers, physicians, medical technicians, electronic technicians and software developers. The broad range of services starts with technical feasibility checks and continues with product development through marketing approvals, regardless of the regulatory complexity.

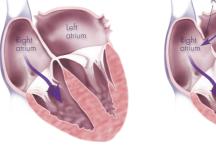




Carag Bioresorbable Septal Occluder CBSO

3 sizes of CBSO







Visibility in 3D-Echocardiography

Picture download: <u>www.carag.com/CBSO</u>

Healthy heart, and heart with atrium septum defect