Communiqué de presse
Genève, le 19 décembre 2006

In vivo rather than *in vitro* **assisted reproductive technology**: Anecova is developing a promising approach for the future

- **During a press conference in Geneva this morning, Martin Velasco, Pascal Mock MD and Prof. Patrick Aebischer, President of the EPFL (Ecole Polytechnique Fédérale de Lausanne), presented a solution which opens promising new prospects in terms of assisted reproductive technology.**

- **A major advantage of the leading-edge technique developed by the Swiss biotech company Anecova SA is that it constitutes a return to a solution which is closer to the natural process. Thus, fertilization and embryonic development take place *in vivo* (within a capsule in the future mother's uterus) rather than *in vitro* (in a test tube).**

- **Anecova has now announced proven results which were better than anticipated. This is a major challenge, as sterility now affects one in ten couples, or more than 80 million people throughout the world.**

Specialised in reproductive medicine, based in the Medically Assisted Procreation (MAP) Centre at the Clinique des Grangettes in Geneva and researcher into human embryo implantation, Dr. Pascal Mock has always aimed to improve the treatment of infertile couples. In 2000, he came up with the novel idea of replacing the test tube used for *in vitro* fertilisation by a permeable capsule, inserted in the mother's uterus, so that gametes (spermatozoa, ovules) and/or embryos would develop under more natural conditions, *in vivo*.

Having confirmed his hypotheses in mice, Pascal Mock patented his invention in 2001. Although the idea was simple, however, putting it into practice required the development of both the capsule and a system to introduce it into the uterus, involving the implementation of leading-edge technologies and complicated studies on the materials used.

Considered the leading European "Business Angel" by the *Wall Street Journal*, and one of the leaders of European change by *Business Week* ("The Stars of Europe"), Martin Velasco has been based in Geneva for several years, where he has contributed to the success of companies such as Sumerian Networks, Speedlingua, AC Immune and NovImmune. He became fascinated by this new challenge, and in March 2004 became Dr Mock's partner, setting up Anecova SA, based in Geneva (head office) and Epalinges (laboratories). From the start, Anecova benefited from the advice of leading international scientists from Belgium, France, Spain, Germany and the US.

In terms of the materials used and the way they were treated, Anecova has benefited from the active support of the Ecole Polytechnique Fédérale in Lausanne, well-known for its remarkable expertise in this area. Indeed, not only does the Anecova capsule measure less than a millimetre in diameter, it is also pierced with hundreds of tiny apertures (several tens of micrometres wide), to facilitate communication between the embryo and its natural environment.

The design and production of this capsule, which had to be compatible with the transfer catheters already used at present, required extremely high precision techniques and the leading-edge expertise of Prof. Patrick Aebischer's team in cell encapsulation.

The solution developed by Anecova has been closely protected by the filing of numerous patents, and is currently in its clinical trial phase at the MAP Centre at Brussels Free University Hospital, under the direction of Prof. Paul Devroey. These initial clinical trials have produced more than encouraging results, in terms of technical feasibility, the physical and psychological tolerance of patients and, particularly, the quality of the embryos.

From now on clinical trials will also be ongoing in two other European countries, and their rigorous scientific results will be published next year. Anecova will then apply for the authorizations necessary to market its solution, priority being given to Europe, the US, Japan and China.

"We hope to be able to launch the Anecova solution in 2008," explained Martin Velasco, before adding that the company's prime objective is to pursue its research in medically assisted procreation and to market its solution. Anecova will thus be sub-contracting the manufacture of the numerous components involved to companies specialised in micro-technologies. It will retain overall control over final assembly and development of the system at its Epalinges laboratories, however, in order to protect its expertise and ensure high quality standards.

With these objectives in mind, Anecova is considering hiring some fifteen new specialists during 2007.

When asked about other applications of this solution, Martin Velasco and Dr. Mock emphasised the fact that the Anecova solution (the preclinical studies were performed in cattle) could, of course, also be applied to animal reproduction. In this respect, it should also be pointed out that INRA (the French Institute for Agricultural Research) and its German counterpart, the Bundesforschungsanstalt für Landwirtschaft, are fully aware of the system's major potential and have been working in close collaboration with Anecova.