

## Pharmanest initiates Phase I trial with SHACT

**STOCKHOLM, SWEDEN – April 30, 2012.** Pharmanest AB today announced that the first patient has been dosed in an open label pharmacokinetic study with its drug candidate SHACT, a product developed for pain relief in connection with intrauterine device (IUD) insertion. Karolinska Development AB owns 55% of Pharmanest.

Pharmanest's Phase I-study is an open study with the objective of establishing the pharmacokinetic properties of SHACT when applied in the cervix and uterus of women receiving an IUD. Secondary objectives are to evaluate the safety and tolerability. A randomized, double blind Phase II study with about 200 patients is planned to start later this year.

"Every year, millions of women have IUDs inserted. Many women experience pain in connection with the insertion, and there are only few local pain relief products on the market with documented efficacy. Therefore, in most countries, patients have no choice other than oral painkillers or no pain relief at all. We see a great need for local pain relief products in connection with IUD insertions and also in other gynecological procedures", says Gunilla Lundmark, CEO of Pharmanest.

SHACT is applied topically in the cervix and uterus using applicator developed by Pharmanest. The aim is to achieve immediate pain relief without the use of advanced equipment.

The trial is expected to enroll 15 patients and the study will be conducted at the Karolinska University Hospital, Solna, Sweden. Principal investigator is Dr. Sara Törnblom Paulander, specialist in obstetrics and gynecology.

"As the majority owner of Pharmanest, we are very pleased about the initiation of this trial which marks an important step from preclinical to clinical stage. I am excited about SHACT because it is a product that addresses a clear medical need among millions of women around the world", says Torbjörn Bjerke, CEO of Karolinska Development AB.

**For further information, please contact:**

Gunilla Lundmark, CEO, Pharmanest AB

Phone: +46 (0)70 974 90 57, e-mail: [gunilla.lundmark@pharmanest.se](mailto:gunilla.lundmark@pharmanest.se)

Torbjörn Bjerke, CEO, Karolinska Development AB

Phone: +46 (0)72 744 41 23, e-mail: [torbjorn.bjerke@karolinskadevelopment.com](mailto:torbjorn.bjerke@karolinskadevelopment.com)

**TO THE EDITORS**

**About Pharmanest AB**

Pharmanest is a Stockholm-based pharmaceutical company specializing in developing products for local pain relief in gynecology and obstetrics. [www.pharmanest.se](http://www.pharmanest.se)

**About Karolinska Development AB**

Karolinska Development aims to create value for investors, patients, and researchers by developing innovations from world class science into products that can be sold or out-licensed with high returns. The business model is to: SELECT the most commercially attractive medical innovations; DEVELOP innovations to the stage where the greatest return on investment can be achieved; and COMMERCIALIZE the innovations through the sale of companies or out-licensing of products. An exclusive deal flow agreement with Karolinska Institutet Innovations AB, along with other cooperation agreements with leading Nordic universities, delivers a continuous flow of innovations. Today, the portfolio consists of 36 projects, of which 14 are in clinical development. For more information, please visit [www.karolinskadevelopment.com](http://www.karolinskadevelopment.com).

*Karolinska Development is listed on NASDAQ OMX. Karolinska Development may be required to disclose the information provided herein pursuant to the Securities Markets Act.*