

# The Future of IVF: Genetic Infertility Testing Breakthroughs Hold the Promise of Higher IVF Pregnancy Rates and Lower Multiple Birth Rates

DALLAS, TX – May 22 (SEND2PRESS NEWSWIRE) – Several breakthroughs in the field of In Vitro Fertilization (IVF), soon to be available in Texas exclusively at the Sher Institute for Reproductive Medicine (SIRM(SM)-Dallas), could dramatically increase the odds of a woman getting pregnant through IVF, while at the same time reducing the likelihood of multiple births.

An ongoing study by Geoffrey Sher, M.D. and Levent Keskintepe Ph.D. of the Sher Institutes for Reproductive Medicine (SIRM(SM)), demonstrates that a new process for the genetic testing of eggs and early embryos may help determine which ones are most likely to produce normal pregnancies in IVF patients. This could lead to a major improvement in IVF success rates for practices using these methods. The current national average pregnancy rate is 30% per treatment cycle in women under 40.

Furthermore, the researchers report that these increases can be achieved by transferring no more than one (1) or sometimes two (2) embryos, thereby virtually eliminating the risk of high order multiple births (triplets or greater).

This genomic testing process involves two steps; the first is the assessment of the full chromosomal or DNA component of the egg (pre-fertilization). The second involves the measurement of a genetic marker called Human Leukocyte Antigen-G (HLA-G) released by the 2-day-old embryo in the media in which it is developing.

The latter component (HLA-G embryo marker) of this research was published in the May 2005 issue of the medical journal *Fertility and Sterility* (Volume 83, Issue 5, Soluble human leukocyte antigen G expression in phase I culture media at 46 hours after fertilization predicts pregnancy and implantation from day 3 embryo transfer) as well as the medical journal *Human Reproduction* (Volume 20, Issue 3, Influence of early ICSI-derived embryo sHLA-G expression on pregnancy and implantation rates: a prospective study) and will be presented at an international conference in Europe later this year.

The egg DNA testing process is nearing the final stage of investigation and promises to be even more predictive of egg/embryo “competence.” These researchers, working in collaboration with a team of Japanese scientists have applied this method to improve the ability to successfully freeze human eggs without causing a large reduction in the thawed egg’s ability to subsequently fertilize and produce embryos.

“Previous methods for selecting the best quality embryos for transfer to the uterus relied mainly on visual assessment of individual embryos by microscope,” said Dr. Sher. “These types of evaluations are severely limited in their ability to provide any strong indication of subsequent normal embryonic and fetal development.”

Because of the limitations of current embryo assessment methods, there has been a tendency among many IVF practitioners to transfer more, rather than fewer embryos to the patient’s uterus in the hope of improving the chances of pregnancy. This in turn has led to a high rate of high-order multiple pregnancies (triplets or more) with inherent long-term or even life-endangering risks to both mother and children. “The explosion in the rate of higher order pregnancies as a result of IVF has created an enormous burden on the health care system,” explains Dr. Sher. “This is the primary reason why most insurance companies don’t currently cover IVF.”

“The advantage of these new methodologies is twofold,” states Dr. Walid Saleh, Medical Director for SIRM(SM)-Dallas. “First, it dramatically increases the chances of success with IVF. Second, by allowing us to select the best embryos to transfer, we can reduce the total number of embryos transferred and thereby reduce the incidence of triplet pregnancies or greater.”

SIRM(SM)-Dallas in affiliation with Medical City Hospital is holding free public seminars in the City Hall Conference Center in Care Tower E on Tuesday, May 23 at 6:30 PM and Wednesday, May 24 at 7:30 PM. Drs. Sher and Saleh will be discussing these breakthroughs along with other infertility-related topics.

### **About SIRM(SM)**

The Sher Institutes for Reproductive Medicine (SIRM(SM)) are separately owned IVF centers that operate under a shared set of practice standards and centralized management systems. Central to the SIRM(SM) philosophy is the concept of compassionate, personalized infertility care that addresses each patient’s individual medical situation. SIRM(SM) physicians have been influential in the development of numerous breakthroughs in the field of reproductive care over the past 23 years. SIRM(SM) founder, Dr. Geoffrey Sher, also established the country’s first private IVF practice in 1982. SIRM(SM) offices are located in Dallas, New York City, New Jersey, St. Louis, Los Angeles, Las Vegas, Central Illinois and Sacramento.

Further information about the Sher Institutes for Reproductive Medicine can be found on the SIRM(SM) Website at <http://www.haveababy.com>.

### **Media Notes:**

Dr. Geoffrey Sher, Founder and Executive Medical Director for the Sher Institutes for Reproductive Medicine will be in Dallas and available for interviews on May 22-24. Media representatives are also invited to attend the Medical City community seminars where he will be discussing infertility breakthroughs on Tuesday, May 23 at 6:30 PM and Wednesday, May 24 at 7:30 PM.

News issued by: Sher Institute for Reproductive Medicine – Dallas

# # #

Original Story ID: (1666) :: 2006-05-0522-006

Original Keywords: Dr. Geoffrey Sher, Medical City community seminars, SIRM, Sher Institute for Reproductive Medicine – Dallas, IVF, Texas, affiliation with Medical City Hospital, increase the odds of a woman getting pregnant through IVF, SIRM-Dallas Sher Institute for Reproductive Medicine – Dallas