

If you decide to participate in this study you will contribute information that may help pregnancies similar to yours in the future.

If you are interested in this study, please contact:

Dr. Sai Ma

604-875-2000 ext. 5686

sai@interchange.ubc.ca

Department of Obstetrics and
Gynaecology
University of British Columbia

Room D414B
BC Women's Hospital and Health
Centre,
D6-4500 Oak Street,
Vancouver, BC V6H-3N1

MORE ABOUT THIS STUDY

This is a multi-center study, involving couples seeking assisted reproduction.

This study is funded by the Canadian Institutes of Health Research.



A study of genetic outcomes in pregnancies conceived by In-vitro Fertilization (IVF) and Intracytoplasmic Sperm Injection (ICSI)



Are you pregnant?

Did you conceive by In-vitro Fertilization (IVF) or Intracytoplasmic Sperm Injection (ICSI)?

Would you donate your placenta and umbilical cord blood after birth?

If yes, you may want to participate in this important research study.



University of British Columbia

IVF / ICSI PREGNANCIES

IVF and ICSI are the most common techniques of assisted reproduction. They allow infertile couples to conceive their own genetically-related child. With the use of these techniques, some of the barriers in natural conception are bypassed. It is suggested that this may cause an increased risk of transmitting any genetic abnormalities present in the sperm or oocyte to the offspring.

It is estimated that 20% of eggs and 1-2% of sperm contain abnormal numbers of chromosomes (genetic content). Most of them do not survive fertilization or result in spontaneous abortions and stillbirths, while 0.4% results in live births.

The risk of having genetically abnormal offspring in ICSI has been estimated to be three times greater than the general population. However, the causes of genetically abnormal conceptions in IVF and ICSI pregnancies have not been established. They may be due to the ICSI procedure itself, embryo culture conditions, and the use of genetically abnormal eggs and sperm.



WHAT IS THE PURPOSE OF THIS STUDY?

We are interested in determining the prevalence of genetic abnormalities in newborns conceived by IVF and ICSI pregnancies. We want to determine the origin of any genetic abnormalities found in these babies. This will allow us to estimate the risks of passing on any genetic abnormalities from sub-fertile couples to their offspring.

This study is approved by the Ethics Committee Board of the University of British Columbia.

WHO IS THE PRINCIPLE INVESTIGATOR?

Dr. Sai Ma is an associate professor at the University of British Columbia. She has been studying the causes of infertility, and the outcomes of infertility treatments for over 10 years. She helped establish the Intracytoplasmic Sperm Injection Program (ICSI) at the UBC Centre for Reproductive Health.

WHAT IS INVOLVED FOR ME IF I PARTICIPATE IN THIS STUDY?

If you participate in this study, you will receive information about the genetic makeup of your baby conceived by IVF or ICSI.

Following your delivery, the placenta and cord blood will be collected for genetic analyses. Genetic material (DNA) will be extracted from both samples. If any genetic abnormalities are discovered, a blood sample from both you and your spouse will be collected to determine the origin of the abnormalities. If you conceived by ICSI a sample of your partner's semen will be collected to determine the rate of genetically abnormal sperm. This additional information will help us determine whether the ICSI treatment itself or other factors increases the risk of genetic abnormalities.

In the unfortunate event of a pregnancy loss or spontaneous abortion, you may still participate in this study. Aborted fetal or placental material can still be used for the genetic analyses.