

KIWI – Sample Collection at Biobank Graz

Aim of the project

The KIWI Collection project aims to establish a database of infertile couples to elucidate the mechanisms of infertility and improve the success of fertility treatments in assisted reproductive technology (ART). By retrospective analysis of prospectively collected body fluids within the process of ART treatment, scientific approaches and leading questions in reproductive medicine can be easily addressed.

Inclusion / Exclusion criteria

The collection includes male and female patients ranging from 18 to 45 years who are referred to the fertility clinic Das Kinderwunsch Institut Schenk GmbH in Dobl, Austria within the process of ART treatment. Hence, the spectrum of objects comprises primary infertility and secondary infertility patients, as well as patients with gynecologic disorders like endometriosis or polycystic ovary syndrome. Participants give their written informed consent according to the Declaration of Helsinki and national regulations.

Dataset / Parameters

The major advantage of the KIWI collection is the correlation between samples and respective demographic data, endocrine profile and monitored stimulation. Furthermore, every sample collected can be linked to the respective oocyte pick up, embryo development (e.g. embryo morphokinetics) and treatment outcome. Another unique innovation is the fact that follicular fluid is collected with a special needle (Steiner-TAN-Needle), which allows the collection of follicular fluid per oocyte instead of pooling.

Samples / Material

The collection comprises samples of blood serum, follicular fluid, cumulus cells, embryo culture supernatant and seminal plasma. These fluids are promising candidates to investigate and correlate a variety of different parameters within the process of ART. All samples are collected under standardized conditions and stored at -80°C. The collection started in 2013 with a current sample size of 16.102 specimens (as of JUL 2018).

Principal Investigator:

Dr. Michael Schenk, MAS

Das Kinderwunsch Institut Schenk GmbH

FRED Fertility Research Education and Development GmbH

Contact:

biobank-pm@medunigraz.at, michael.schenk@kinderwunsch-institut.at

