

GeneraLife

GENERALIFE at the ESHRE 2021 congress

The leading IVF group in Europe will present its new scientific researches.

Rome (Italy), 26th of June 2021 - As every year, **GeneraLife** group attends the annual congress of the **European Society of Human Reproduction and Embryology (ESHRE)**. Following are the new scientific researches, carried out by Genera Life and will be illustrated at the ESHRE conference, which aim to contribute to the debate, progress and development of in vitro fertilization (IVF) techniques:

- The importance of **body weight** for the success of an in vitro fertilization cycle: overweight women are more prone to miscarriages and have lower birth rates, even after the transfer of chromosomally normal blastocysts (first author Gemma Fabozzi, embryologist and nutritionist of the GeneraLife center in Rome).
- The **duration of blastocysts cryopreservation**, which can last up to several years, does not affect the clinical, obstetric and perinatal results following an IVF cycle (first author Roberta Maggiulli, supervisor of the Embryology laboratory of the GeneraLife center in Rome). This poster will also be **orally presented** by Roberta Maggiulli.
- **Time lapse microscopy** in specific incubators allows the embryologist to view a short movie of the first days of embryo development. Abnormal patterns of cell division can thus be visualised and analysed for their prevalence, association with embryo competence and the possible predisposition of patients to such events (first author Danilo Cimadomo, research and development manager of the GeneraLife group).
- **Double stimulation** (a second stimulation in the same ovarian cycle, the so-called "DuoStim" protocol) is confirmed as an effective strategy for patients in advanced maternal age and/or with reduced ovarian reserve. In this study, the GeneraLife group successfully tested the possibility of suggesting the DuoStim "in due course", for instance when a low number of blastocysts were obtained after the first egg retrieval (first author Alberto Vaiarelli, medical scientific coordinator of the center GeneraLife of Rome).
- The **transfer of euploid embryos reduces anxiety** in advanced maternal age patients, during the waiting period before the pregnancy test. Preimplantation genetic testing therefore contributes to reducing stress in women, as a result of this allowing their confidence regarding the treatment they are attempting, to grow (first authors Marina Forte and Federica Faustini, psychologists at the GeneraLife center in Rome).
- An analysis of 1,884 IVF procedures has confirmed that the **endometrial preparation protocol does not affect the rate of live births** after transfers of single vitrified euploid blastocysts: new

evidence in favor of treatments personalisation (authors from centers GeneralLife in Rome, Umbertide, Naples, Marostica, the Demetra by GeneralLife centers in Florence, the GeneralLife Livet center in Turin, the GeneralLife Ferticare clinic in Karlovy Vary in the Czech Republic, the GeneralLife Ginefiv clinic in Barcelona, the GeneralLife Carl von Linnèkliniken of Uppsala in Sweden).

Lastly, the scientific director of GeneralLife, **Laura Rienzi**, will chair a pre-congress course entitled "Could we increase success in IVF - unsolved issues in ART", on Saturday 26th June. This course aims to discuss these issues by providing the most recent evidence, whilst covering all the stages of the IVF process, to help clinicians and embryologist improve their IVF treatments. The main goal is to highlight these unsolved issues and fostering discussions and proposals on how to address them with future clinical and laboratory research.

Our R&D manager dr. Danilo Cimadomo will also chair the pre-congress course entitled "**Old topics, new aspects: endometrium, implantation and early pregnancy**", on Saturday 26th June. This course will cover the main aspects of regarding the implantation process from the point of view of both the embryo and the endometrium, up to early pregnancy issues like miscarriage. The biochemical, molecular and pathophysiological aspects of the inherent processes will be covered to provide the audience with a novel perspective which tackles an old topic. Cimadomo will also make a presentation during this session on "**Genetic testing of the non-pregnant couple: the Kingsmore Panel and its impact on human reproduction**" on the expanded carrier screening applications. He will also be the moderator of the session "**Implantation and early pregnancy poster discussions**", on Wednesday 30th of June 2021.

*"We strongly believe in the importance of scientific progress in IVF - comment **Filippo Maria Ubaldi and Laura Rienzi, scientific directors of GeneralLife** - and therefore we attend the ESHRE congress every year to participate in debates with other experts and give our contribution to science in reproductive medicine. In recent years, much has been done to improve the success rate of assisted fertilization techniques, yet there remains a lot to be done. It is imperical for this to be addressed with solid scientific evidence, and we are proud of contributing to this momentum with our daily work."*