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PRESS RELEASE

METABOLOMICS: Check - up for foetuses in MITERA Assisted Reproduction Unit

The 'key' to the selection of the healthiest embryos in order to increase the possibility of pregnancy is the method of **Metabolomics** applied now by MITERA Assisted Reproduction Unit.

It is a non invasive technique of just two-minute duration; identifying the differences in the metabolism of viable against non viable embryos and selecting the best embryos for embryo transfer after IVF (in vitro fertilization).

As stated by the **director of MITERA Assisted Reproduction Unit, embryologist Mr. Giles Palmer** 'With **Metabolomics**, we measure the **metabolic profile** and can predict in 85% of the cases whether an embryo will result in pregnancy or not .

Explaining the procedure, Mr. Palmer stresses that 'through the investigation of small-molecule metabolites produced by embryos during the cellular processes, we can take a small 'snapshot' of the embryo's physiology that portrays its general health. We, therefore, select the healthier embryos for embryo transfer after IVF, thus fast, easily and effectively increasing the chance of pregnancy.

Every year more than 10.000 IVF cycles are performed in Greece.

To date the only way to assess an embryo's viability has been to study the morphology using the microscope. Moreover, due to restrictions of the legislative in many European countries regarding the number of oocytes that can be fertilized or the number of embryos that can be transferred, it is legal only to select very few or even just one embryo for embryo transfer, hence the need to select the most appropriate embryo.

'The biggest risk in IVF is multiple gestations', says Mr. Palmer. 'Now with the **Metabolomics method**, we are able to increase the success rate of implanting a viable embryo, making sure that fewer embryos will be transferred to avoid twin or triplet pregnancies. Our objective is to assist sub-fertile couples to have a healthy pregnancy and a healthy child'.

GENERAL, MATERNITY & CHILDREN'S HOSPITAL S.A.