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FACULTEIT GENEESKUNDE EN FARMACIE

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UITNODIGING

Voor de openbare verdediging van het
doctoraatsproefschrift van

Evangelos PAPANIKOLAOU

woensdag 21 mei 2008

U wordt vriendelijk uitgenodigd op de openbare verdediging van het proefschrift van

Evangelos PAPANIKOLAOU

'Implementation of blastocyst transfer in IVF'

Op **woensdag 21 mei 2008 om 17 uur** in auditorium **R. Vanden Driessche** van de Faculteit Geneeskunde & Farmacie, Laarbeeklaan 103, 1090 Brussel

Situering van het proefschrift

The current thesis represents the sequence of several studies concerning the transfer of embryos at the blastocyst stage in IVF and whether this has implications on the probability of achieving a pregnancy. In young patients, it was shown that a single blastocyst transfer significantly increases the probability of pregnancy and birth of a child compared to single cleavage-stage embryo transfer. Similarly, it was demonstrated that once a patient has at least four morphologically good embryos on the third day of embryo culture, extending culture to day 5 and transferring two blastocysts, results in a significantly higher live birth rate. As plausible explanations, it was proposed a better genetic euploid status of survived embryos reaching the blastocyst stage and a better synchronization with endometrium at the site of implantation. The latter seems to be distressed by steroid levels and especially progesterone at the late follicular phase. Nevertheless, the fragmentation rate and the developmental stage of an advanced blastocyst quantitated by a systematic scoring system, affects its implantation potential. Finally, a meta-analysis of published studies indicated a significant trend towards higher delivery rate, when blastocysts are utilized for embryo transfer.

Curriculum Vitae

Vaggelis Papanikolaou born in Ioannina in 1970, obtained his MD degree (1994) and the speciality degree in Obstetrics and Gynecology (2002) at the Medical school of Ioannina, University of Ioannina, Greece. The PhD degree was granted to him at the same university in 2004 and his thesis was "Premature ovarian failure and endothelial dysfunction". The same year he obtained the degree of Master in Medical and Pharmaceutical Research from the Dutch speaking Free University of Brussels (VUB). From 2002 till September 2005 he subspecialised in Reproductive Medicine in the Centre of Reproductive Medicine at the University Hospital of VUB in Brussels under prof. P.Devroey, and since 2005 he became a consultant in the above centre. He has published more than 40 articles in peer reviewed journals and he acts as an external reviewer in several leading journals in human reproduction. From July 2006 he has become scientific director in the IVF centre "Biogenesis" in Thessaloniki, Greece under prof. B.Tarlatzis. Dr Papanikolaou current research interests include blastocyst embryo culture, preimplantation genetic diagnosis, OHSS, reproductive endocrinology, and endometrial receptivity.