

IS PGS APPROPRIATE FOR EMBRYO SELECTION: NO

P. Devroey

Centre for Reproductive Medicine, UZ Brussels, Belgium

For sure, the description and information on major chromosome aneuploidies in human preimplantation embryos are crucial. In different conditions preimplantation genetic screening could be helpful such as in case of advanced maternal age, in the recurrent miscarriages and in repeated implantation failure. Selection of euploid embryos might improve embryonic implantation.

It's well known that PGS is a widespread procedure as published recently. Surprisingly randomized controlled trials could not demonstrate the benefit in favour of PGS. Ongoing pregnancy and delivery rates were similar in PGS-tested and in the control arm. One thousand four hundred eighty patients have been randomized so far.

In line with these results several recommendations have been published. According to ASRM, available evidence does not support the use of PGS in advanced maternal age, implantation failure and recurrent pregnancy losses.

According to the British Fertility Society PGS should be offered within the context of robust and well-designed trials performed in suitable experienced centres.

It's apparent that none of the eight randomized trials is in the benefit of PGS. Evidence based medicine invites to stop PGS on clinical patient care. The presence of mosaicism is probably the reason of failure.

References: Munné HR 1993; Goossens HR 2008; Staessen HR 2004; Staessen HR 2008; Mastenbroek NEJM 2007; Schoolcraft FS 2008; Jansen HR 2008; Hardarson HR 2008; Meyer FS 2008; Blockeel RBMO 2008; Practice Committee ASRM FS 2007; Anderson HF 2008