

## P23

### A prospective randomized sibling embryo study for comparison of two single step culture media (Sage 1-step<sup>tm</sup> and Global®total)

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#### INTRODUCTION:

One step media is easy to use and can help to reduce the work load in an IVF lab. It has the benefit that it is the ideal medium for time lapse systems.

#### AIM:

Comparison of a well-known single step medium (Global®Total) with a new modification of KSOM developed by ORIGIO in consultancy with Dr. Patrick Quinn (SAGE 1-Step<sup>TM</sup>).

#### MATERIALS AND METHODS:

Couples ( $N=159$ ) undergoing IVF or ICSI February until August 2014 at Medfem Fertility Clinic, South Africa. Zygotes ( $n=1736$ ) were cultured until day 1 in Universal IVF Medium (ORIGIO) for IVF insemination ( $n=1157$ ) and ISM1<sup>TM</sup> (ORIGIO) after ICSI ( $n=579$ ). On day 1 the embryos were randomized for parallel *continuous culture* in SAGE 1-Step<sup>TM</sup> (ORIGIO) and *sequential culture* in Global®Total (change on day 3). All embryos were cultured until day 5. Statistical analyses were performed using Fisher's exact test for categorical data and Students t-test for mean values.

#### RESULTS:

Eighty seven percent of couples ( $N=138$ ) ended up with a transfer (day 5); 34 women with transferred embryos cultured in Global®Total, 35 women with transferred embryo cultured in SAGE 1-Step<sup>TM</sup> and 67 women transferred with an embryo from each culture group. Continuous culture in SAGE 1-Step<sup>TM</sup> resulted in equivalent results compared to sequential culture in Global®Total.

#### CONCLUSION/DISCUSSION:

This study indicates equivalent blastocyst and implantation rates after continuous culture in SAGE 1-Step<sup>TM</sup> compared to sequential culture in Global®Total.

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