

NewsLetter April

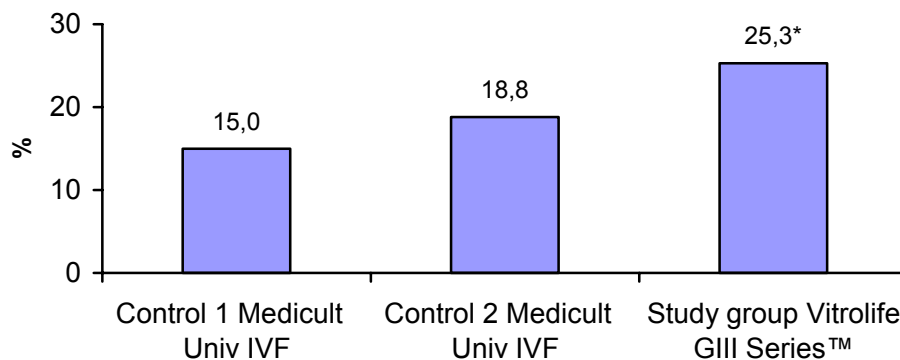
LP050329

Improved results with the Vitrolife GIII Series™ - confirmed in recent publications.

Optimization of possible success in an IVF program. Ludwig M and Nitz B. Zentralbl. Gynacol. 2004 Dec 12; 1226(6): 368-72.

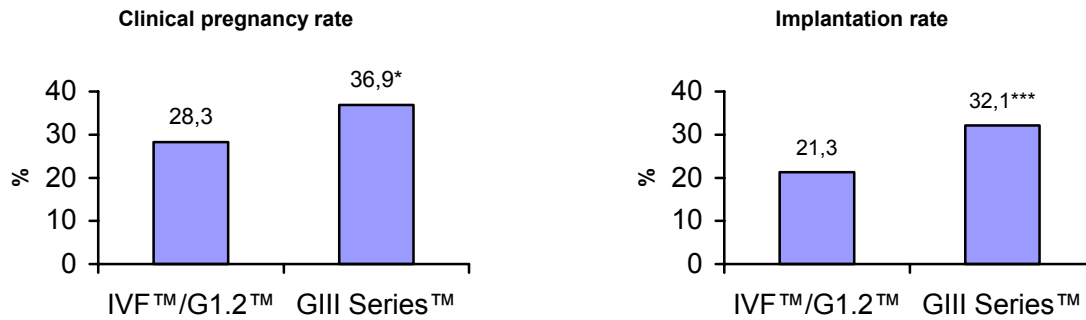
The study design was prospective with two historical controls. The culture medium Universal IVF from Medicult, Denmark, was used for the control groups (patients n=255 and 343 respectively), while the GIII Series™ including EmbryoGlue®, from Vitrolife, Sweden, was used for the study group (n=503). The clinical pregnancy rates in the control groups were 15.0 and 18.8 %, respectively and the pregnancy rate in the GIII Series™ study group was 25.3 %. The increase in pregnancy rate obtained with the GIII Series™ was statistically significant, compared to both control groups ($p < 0.001$ and $p < 0.03$, respectively). It should be noted that the strict legislation in Germany permits embryo selection only at the pronuclear stage.

Clinical pregnancy rate



2. Comparison of results in a day 2 embryo transfer IVF programme, using the Vitrolife IVF™/G1.2™ or GIII Series™ media: A retrospective study. Zalavary S. Nordic Fertility Society Meeting, Jan 2005.

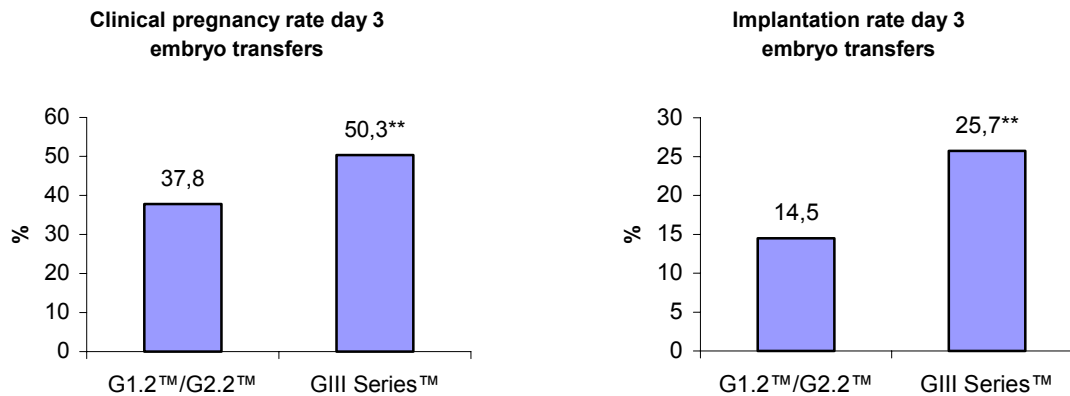
324 patients were included in the GIII Series™ study group and 357 in the IVF™/G1.2™ control group. The number of transferred embryos was 1.25 in the study group and 1.64 in the control group, the difference was statistically significant. Despite the lower number of transferred embryos in the study group, both clinical pregnancy rate and implantation rate were significantly increased. The pregnancy rate was 28.3 % in the IVF™/G1.2™ group and 36.9 % in the GIII Series™ group ($p < 0.05$). The implantation rate was 21.3 % in the IVF™/G1.2™ group and 32.1 % in the GIII Series™ group, respectively ($p < 0.001$). G-MOPS™ was not used in this study.



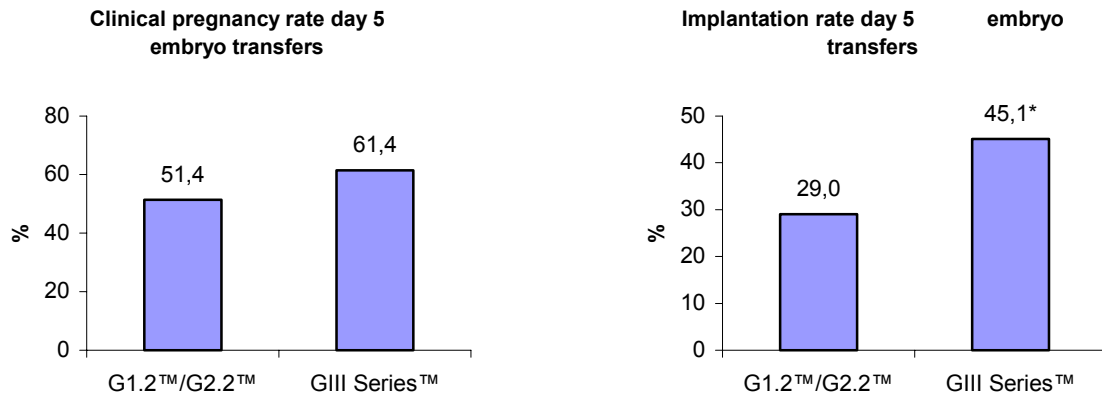
3. Comparison of two sequential media for culturing cleavage stage embryos and blastocysts: embryo characteristics and clinical outcome. Balaban B and Urman B. RBMOnline Vol 10. No 4. 2005. p485-491.

The aim of the study was to compare the outcome of day 3, day 5 and frozen-thawed transfer cycles where embryo culture was performed using the GIII Series™ culture system versus the G1.2™/G2.2™ sequential media. A total of 400 day 3, 73 day 5 and 126 frozen-thawed embryo transfer cycles were analysed. Treatment cycles were quasi-randomized on the day of oocyte retrieval to culture in either culture system. Randomization was undertaken according to alternating week days.

For day 3 embryo transfer cycles, the clinical pregnancy rate was 37.8 % in the G1.2™/G2.2™ group and 50.3 % in the GIII Series™ group ($p < 0.01$). The implantation rate was 14.5 % and 25.7 %, respectively ($p < 0.01$). Significantly more embryos were of good quality in the GIII Series™ group ($p < 0.05$) compared to G1.2™/G2.2™.



For day 5 embryo transfer cycles, implantation rates were significantly higher (29.0 % versus 45.1 %; $p < 0.05$) in the GIII Series™ group. There was a trend towards a higher pregnancy rate but due to fewer cycles analysed, statistical significance was not reached.



Of the frozen-thawed day 3 embryos, 58.3 % in the GIII Series™ group and 26.2 % in the G1.2™/G2.2™ reached the morula stage ($p < 0.01$). Implantation rate per transferred embryo increased from 7.8 % to 15.1 %, which is a 94 % increase of the implantation rate with the GIII Series™ ($p < 0.035$).

Summary

1. The GIII Series™ gives a higher clinical pregnancy rate than Medicult Universal IVF.
2. The GIII Series™ improves pregnancy rate and implantation rate compared to Vitrolife IVF™.
3. The GIII Series™ is superior to Vitrolife sequential media G1.2™/G2.2™.

