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### **PUBLICATIONS:**

#### *Is there a benefit to biopsy 4-cell embryos on day 3?*

Juergen Lieberman, Ph.D., HCLD, Jill Mathews, B.S., T .S., Andrew Barker, M.S., T .S., Sara Sanchez, B.S., T .S., Amanda Erman, and Elissa Pelts, B.S., T .S.

Summary: Although biopsy results in the 4-cell embryo group demonstrated a surprisingly high percentage of chromosomal normality, the biopsied embryos displayed poor rates of blastocyst development, clinical pregnancies or live births. Based on these outcomes, we do not recommend PGD embryo biopsy on 4 cell, cleavage stage embryos.

Fertility and Sterility 2008: 90, Suppl 1: S297.

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#### *4-years of vitrifying blastocysts: What is the verdict?*

Juergen Lieberman, Ph.D., HCLD. Jill Mathews, B.S., T.S., Yuri Wagner, B.S., Rebecca Brohammer, B.S., T .S., Andrew Barker, M.S., TS., Sara Sanchez, B.S., T .S., Amanda Erman, and Elissa Pelts, B.S., T .S.

Summary: Vitrification of blastocysts provides significant clinical improvement in FET outcomes. Although clinical pregnancy rates per transfer and implantation rates were higher in the day 5 compared to the day 6 blastocyst group, there was no significant difference in pregnancy outcomes between the two groups.

Fertility and Sterility 2008: 90, Suppl 1: S297.

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***Transfer of compacting embryos or early blastocysts on day 5: What we can expect in terms of outcome?***

**Juergen Lieberman, Ph.D., HCLD, Jill Mathews, B.S., T.S., Andrew Barker, M.S., T.S., Rebecca Brohammer, B.S., T.S., Yud Wagner, B.S., and Elissa Pelts, B.S., T.S.**

Summary: When comparing underdeveloped, suboptimal day 5 embryos (either compacting or early blastocysts), early blastocyst embryos have a 50% higher potential for implantation, as well as a 50% higher pregnancy rate. If only compacting embryos are available, it is recommended that the embryo transfer be moved to day 6 to improve the selection of available embryos.

Fertility and Sterility 2008: 90, Suppl I: S369.

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***1-year experience with elective single embryo transfers (eSET): Is it worth it?***

**Juergen Liebermann, Ph.D., HCLD, Jill Matthews, B.S., T.S., Amanda Ernum, Rebecca Brohammer, B.S., T.S., Andrew Barker, M.S., T.S., Elissa Pelts, B.S., T.S.**

Summary: For patients with good pregnancy prognosis (age < 35, no prior IVF failure, availability of one or more high quality blastocysts, and additional embryos suitable for Cryopreservation), elective single embryo transfer (eSET) was recommended. High blastocyst formation rates (49.6%) and pregnancy rates (68.8%) were achieved in the eSET patients.

Fertility and Sterility 2008: 90, Suppl I: S369.

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***IVF Cycles with 3 or less mature oocytes: What should the patient expect in terms of outcome?***

**Juergen Liebermann, Ph.D., HCLD, Jill Mathews, B.S., T .S., Amanda Erman, Sara Sanchez, B.S., T .S., Andrew Baker, M.S., T.S., and Elissa Pelts, B.S., T .S.,**

Summary: Our retrospective analysis indicates that cycles with 3 or less mature oocytes provides good embryonic development, but also display the following suboptimal characteristics: (1) low chance of developing to blastocyst stage (2) a higher chance of embryo transfer cancellation (3) a low chance of having embryos available for cryopreservation, and (4) an outcome that is unsatisfactory considering the average age of these patients. Overall, patients with a low number of eggs at the time of Egg Retrieval have a much lower chance to achieve pregnancy than normally responding patients in matched age groups.

Fertility and Sterility 2008: 90, Suppl 1, S395-396.

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***Clinical benefit from in vitro matured metaphase I oocytes?***

**Juergen Liebermann, Ph.D., HCLD, Elissa Pelts, B.S, T.S., Jill Matthews, B.S., T.S., Amanda Erman, Sara Sanchez, B.S., T.S., and Andrew Barker, M.S., T.S.**

Summary: There was a reasonable fertilization rate and blastocyst formation rate with over 1000 in vitro matured oocytes analyzed. In situations where only a limited number of embryos are available, embryos derived from in vitro mature oocytes should be considered to be included in the embryo transfer cohort because they can result in pregnancy.

Fertility and Sterility 2006: 86, Suppl 2: S388.

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***Early cleavage of embryos as a rigorous and efficient tool to predict the implantation competence of a human embryo: still a good diagnostic tool?***

**Juergen Liebermann, Ph.D., HCLD, Elissa Knopoff, B.S., T .S., Jill Matthews, B.S., T .S., Amanda Erman, Sara Sanchez, B.S., T .S., Andrew Barker, M.S., T .S., and Michael Tucker, Ph.D.**

Summary: Based on strong statistical significance in clinical improvement, it is evident that early cleavage is a strong diagnostic tool yielding useful information regarding the implantation potential of the human embryo.

Fertility and Sterility 2005: 84, Suppl 1: S285.