



ZILOS-tk/ZILOS PUBLICATIONS

2011

Brezina P, Barker A, Benner A, Ross R, Nguyen KH, Anchan R, Richter K, Cutting G, Kearns W. Genetic normalization of differentiating aneuploid human embryos. *Nature Precedings*. Posted 23 June 2011. hdl:10101/npre.2011.6045.1

<http://precedings.nature.com/documents/6045/version/1/files/npre20116045-1.pdf>

Choi KH, Lee JH, Yang YH, Yoon TK, Lee DR, Lee WS. Efficiency of laser-assisted intracytoplasmic sperm injection in a human assisted reproductive techniques program. *Clin Exp Reprod Med*. 2011 Sep;38(3):148-152. <http://dx.doi.org/10.5653/cerm.2011.38.3.148>

Hur YS, Park JH, Ryu EK, Yoon HJ, Yoon SH, Hur CY, Lee WD, Lim JH. Effect of artificial shrinkage on clinical outcome in fresh blastocyst transfer cycles. *Clin Exp Reprod Med*. 2011 Jun;38(2):87-92. <http://dx.doi.org/10.5653/cerm.2011.38.2.87>

Shahine LK, Milki AA, Westphal LM, Baker VL, Behr B, Lathi RB. Day 2 versus day 3 embryo transfer in poor responders: a prospective randomized trial. *Fertil Steril*. 2011 Jan;95(1):330-2. Epub 2010 Sep 1. PubMed PMID: 20813357.

Vandewoestyne M, Heindryckx B, Lepez T, Van Coster R, Gerris J, De Sutter P, Deforce D. Polar body mutation load analysis in a patient with A3243G tRNA^{Leu}(UUR) point mutation. *Mitochondrion*. 2011 Jul;11(4):626-9. Epub 2011 Apr 6. PubMed PMID: 21496500.

Xu X, Duan X, Lu C, Lin G, Lu G. Dynamic distribution of NuMA and microtubules in human fetal fibroblasts, developing oocytes and somatic cell nuclear transferred embryos. *Hum Reprod*. 2011 Mar 15. [Epub ahead of print] PubMed PMID: 21406448.

Zhu D, Zhang J, Cao S, Zhang J, Heng BC, Huang M, Ling X, Duan T, Tong GQ. Vitrified-warmed blastocyst transfer cycles yield higher pregnancy and implantation rates compared with fresh blastocyst transfer cycles-time for a new embryo transfer strategy? *Fertil Steril*. 2011 Apr;95(5):1691-5. PubMed PMID: 21315339

2010

Brezina PR, Benner A, Rechitsky S, Kuliev A, Pomerantseva E, Pauling D, Kearns WG. Single-gene testing combined with single nucleotide polymorphism microarray preimplantation genetic diagnosis for aneuploidy: a novel approach in optimizing pregnancy outcome. *Fertil Steril*. 2010 Dec 6. [Epub ahead of print] PubMed PMID: 21144509.

Christopikou D, Karamalegos C, Doriza S, Argyrou M, Sisi P, Davies S, Mastrominas M. Spindle and chromosome configurations of human oocytes matured in vitro in two different culture media. *Reprod Biomed Online*. 2010 May;20(5):639-48. Epub 2010 Feb 10. PubMed PMID: 20347392.

Eaton JL, Hacker MR, Barrett CB, Thornton KL, Penzias AS. Influence of patient age on the association between euploidy and day-3 embryo morphology. *Fertil Steril*. 2010 Jun;94(1):365-7. Epub 2009 Dec 14. PubMed PMID: 20004892.

Fragouli E, Katz-Jaffe M, Alfarawati S, Stevens J, Colls P, Goodall NN, Tormasi S, Gutierrez-Mateo C, Prates R, Schoolcraft WB, Munne S, Wells D. Comprehensive chromosome screening of polar bodies and blastocysts from couples experiencing repeated implantation failure. *Fertil Steril*. 2010 Aug;94(3):875-87. Epub 2009 Jun 21. PubMed PMID: 19540479.

Fiorentino F, Kokkali G, Biricik A, Stavrou D, Ismailoglu B, De Palma R, Arizzi L, Harton G, Sessa M, Pantos K. Polymerase chain reaction-based detection of chromosomal imbalances on embryos: the evolution of preimplantation genetic diagnosis for chromosomal translocations. *Fertil Steril*. 2010 Nov;94(6):2001-11, 2011, Epub 2010 Feb 18. PubMed PMID: 20171625.

Galán A, Montaner D, Póo ME, Valbuena D, Ruiz V, Aguilar C, Dopazo J, Simón C. Functional genomics of 5- to 8-cell stage human embryos by blastomere single-cell cDNA analysis. *PLoS One*. 2010 Oct 26;5(10):e13615. PubMed PMID: 21049019; PubMed Central PMCID: PMC2964308.

Hammoud I, Molina-Gomes D, Albert M, Bergere M, Bailly M, Wainer R, Selva J, Vialard F. Are zona pellucida laser drilling and polar body biopsy safe for in vitro matured oocytes? *J Assist Reprod Genet*. 2010 Jul;27(7):423-7. Epub 2010 May 22. PubMed PMID: 20495883.

Jia Y, Hartshorn C, Hartung O, Wangh LJ. Heat shock memory in preimplantation mouse embryos. *Fertil Steril*. 2010 May 15;93(8):2760-3. Epub 2010 Apr 7. PubMed PMID: 20378108; PubMed Central PMCID: PMC2873134.

Laurie AD, Hill AM, Harraway JR, Fellowes AP, Phillipson GT, Benny PS, Smith MP, George PM. Preimplantation genetic diagnosis for hemophilia A using indirect linkage analysis and direct genotyping approaches. *J Thromb Haemost*. 2010 Apr;8(4):783-9. Epub 2010 Jan 21. PubMed PMID: 20102489.

Marquard KL, Stephens SM, Jungheim ES, Ratts VS, Odem RR, Lanzendorf S, Moley KH. Polycystic ovary syndrome and maternal obesity affect oocyte size in in vitro fertilization/intracytoplasmic sperm injection cycles. *Fertil Steril*. 2010 Nov 10. [Epub ahead of print] PubMed PMID: 21071018.

Miyata H, Matsubayashi H, Fukutomi N, Matsuba J, Koizumi A, Tomiyama T. Relevance of the site of assisted hatching in thawed human blastocysts: a preliminary report. *Fertil Steril*. 2010 Nov;94(6):2444-7. Epub 2010 Feb 26. PubMed PMID: 20189555.

Parks JC, McCallie BR, Janesch AM, Schoolcraft WB, Katz-Jaffe MG. Blastocyst gene expression correlates with implantation potential. *Fertil Steril*. 2010 Sep 21. [Epub ahead of print] PubMed PMID: 20864103.

Schoolcraft WB, Fragouli E, Stevens J, Munne S, Katz-Jaffe MG, Wells D. Clinical application of comprehensive chromosomal screening at the blastocyst stage. *Fertil Steril*. 2010 Oct;94(5):1700-6. Epub 2009 Nov 25. PubMed PMID: 19939370.

Shu Y, Peng W, Zhang J. Pregnancy and live birth following the transfer of vitrified-warmed blastocysts derived from zona- and corona-cell-free oocytes. *Reprod Biomed Online*. 2010 Oct;21(4):527-32. Epub 2010 May 10. PubMed PMID: 20800550.

Taei A, Gourabi H, Seifinejad A, Totonchi M, Shahbazi E, Valojerdi MR, Eftekhari P, Karimian L, Baharvand H. Derivation of new human embryonic stem cell lines from preimplantation genetic screening and diagnosis-analyzed embryos. *In Vitro Cell Dev Biol Anim*. 2010 Apr;46(3-4):395-402. Epub 2010 Feb 23. PubMed PMID: 20177993.

Traversa MV, Carey L, Leigh D. A molecular strategy for routine preimplantation genetic diagnosis in both reciprocal and Robertsonian translocation carriers. *Mol Hum Reprod*. 2010 May;16(5):329-37. Epub 2010 Feb 19. PubMed PMID: 20172975.

Valojerdi MR, Eftekhari-Yazdi P, Karimian L, Hassani F, Movaghar B. Effect of laser zona thinning on vitrified-warmed embryo transfer at the cleavage stage: a prospective, randomized study. *Reprod Biomed Online*. 2010 Feb;20(2):234-242. Epub 2009 Nov 18. PubMed PMID: 20113961.

2009

Balakier H, Mandel R, Sojecki A, Motamedi G, Zaver S, Librach C. Laser zona thinning in women aged ≤ 37 years: a randomized study. *Fertil Steril*. 2009 Apr;91(4 Suppl):1479-82. Epub 2008 Sep 14. PubMed PMID: 18793768.

Eaton JL, Hacker MR, Harris D, Thornton KL, Penzias AS. Assessment of day-3 morphology and euploidy for individual chromosomes in embryos that develop to the blastocyst stage. *Fertil Steril*. 2009 Jun;91(6):2432-6. Epub 2008 Apr 28. PubMed PMID: 18440522.

Feng HL, Hershlag A, Scholl GM, Cohen MA. A retrospective study comparing three different assisted hatching techniques. *Fertil Steril*. 2009 Apr;91(4 Suppl):1323-5. Epub 2008 Apr 3. PubMed PMID: 18394610.

Hiraoka K, Hiraoka K, Horiuchi T, Kusuda T, Okano S, Kinutani M, Kinutani K. Impact of the size of zona pellucida thinning area on vitrified-warmed cleavage-stage embryo transfers: a prospective, randomized study. *J Assist Reprod Genet*. 2009 Sep-Oct;26(9-10):515-21. Epub 2009 Oct 15. PubMed PMID: 19830543; PubMed Central PMCID: PMC2788686.

Keskintepe L, Agca Y, Sher G, Keskintepe M, Maassarani G. High survival rate of metaphase II human oocytes after first polar body biopsy and vitrification: determining the effect of previtrification conditions. *Fertil Steril.* 2009 Nov;92(5):1706-15. Epub 2008 Oct 19. PubMed PMID: 18937944.

Krieg SA, Lathi RB, Behr B, Westphal LM. Normal pregnancy after tetraploid karyotype on trophoctoderm biopsy. *Fertil Steril.* 2009 Sep;92(3):1169.e9-1169.e10. Epub 2009 Jul 15. PubMed PMID: 9608167.

Lathi RB, Behr B. Pregnancy after trophoctoderm biopsy of frozen-thawed blastocyst. *Fertil Steril.* 2009 May;91(5):1938-40. Epub 2008 Apr 18. PubMed PMID: 18371958.

Li J, Liu X, Wang H, Zhang S, Liu F, Wang X, Wang Y. Human embryos derived by somatic cell nuclear transfer using an alternative enucleation approach. *Cloning Stem Cells.* 2009 Mar;11(1):39-50. PubMed PMID: 19196043.

Schoolcraft WB, Katz-Jaffe MG, Stevens J, Rawlins M, Munne S. Preimplantation aneuploidy testing for infertile patients of advanced maternal age: a randomized prospective trial. *Fertil Steril.* 2009 Jul;92(1):157-62. Epub 2008 Aug 9. PubMed PMID: 18692827

Sertedaki A, Pantos K, Vrettou C, Kokkali G, Christofidou C, Kanavakis E, Dacou-Voutetakis C. Conception and pregnancy outcome in a patient with 11-bp deletion of the steroidogenic acute regulatory protein gene. *Fertil Steril.* 2009 Mar;91(3):934.e15-8. Epub 2008 Sep 30. PubMed PMID: 18829024.

Sher G, Keskintepe L, Keskintepe M, Maassarani G, Tortoriello D, Brody S. Genetic analysis of human embryos by metaphase comparative genomic hybridization (mCGH) improves efficiency of IVF by increasing embryo implantation rate and reducing multiple pregnancies and spontaneous miscarriages. *Fertil Steril.* 2009 Dec;92(6):1886-94. Epub 2009 Jan 9. PubMed PMID: 19135663.

2008

Fathi R, Valojerdi MR, Eftekhari-Yazdi P. Effect of laser-assisted hatching and necrotic blastomere removal on the development of vitrified-warmed four-cell mouse embryos. *J Assist Reprod Genet.* 2008 Jul;25(7):333-9. Epub 2008 Aug 8. PubMed PMID: 18688708; PubMed Central PMCID: PMC2596673.

Hiraoka K, Fuchiwaki M, Hiraoka K, Horiuchi T, Murakami T, Kinutani M, Kinutani K. Effect of the size of zona pellucida opening by laser assisted hatching on clinical outcome of frozen cleaved embryos that were cultured to blastocyst after thawing in women with multiple implantation failures of embryo transfer: a retrospective study. *J Assist Reprod Genet.* 2008 Apr;25(4):129-35. PubMed PMID: 18365308; PubMed Central PMCID: PMC2582072.

Jones GM, Cram DS, Song B, Kokkali G, Pantos K, Trounson AO. Novel strategy with potential to identify developmentally competent IVF blastocysts. *Hum Reprod.* 2008 Aug;23(8):1748-59. Epub 2008 May 13. PubMed PMID: 18477572.

Pangalos CG, Hagnefelt B, Kokkali G, Pantos K, Konialis CP. Birth of a healthy histocompatible sibling following preimplantation genetic diagnosis for chronic granulomatous disease at the blastocyst stage coupled to HLA typing. *Fetal Diagn Ther.* 2008;24(4):334-9. Epub 2008 Oct 8. PubMed PMID: 18841023.

Turetsky T, Aizenman E, Gil Y, Weinberg N, Shufaro Y, Revel A, Laufer N, Simon A, Abeliovich D, Reubinoff BE. Laser-assisted derivation of human embryonic stem cell lines from IVF embryos after preimplantation genetic diagnosis. *Hum Reprod.* 2008 Jan;23(1):46-53. Epub 2007 Nov 7. PubMed PMID: 17989069.

Valojerdi MR, Eftekhari-Yazdi P, Karimian L, Ashtiani SK. Effect of laser zona pellucida opening on clinical outcome of assisted reproduction technology in patients with advanced female age, recurrent implantation failure, or frozen-thawed embryos. *Fertil Steril.* 2008 Jul;90(1):84-91. Epub 2007 Sep 24. PubMed PMID: 17889864.

Wang WH, Kaskar K, Gill J, DeSplinter T. A simplified technique for embryo biopsy for preimplantation genetic diagnosis. *Fertil Steril.* 2008 Aug;90(2):438-42. Epub 2007 Sep 19. PubMed PMID: 17880956.

2007

Hiraoka K, Fuchiwaki M, Hiraoka K, Horiuchi T, Murakami T, Kinutani M, Kinutani K. Zona pellucida removal and vitrified blastocyst transfer outcome: a preliminary study. *Reprod Biomed Online.* 2007 Jul;15(1):68-75. PubMed PMID: 17623540.

Kokkali G, Traeger-Synodinos J, Vrettou C, Stavrou D, Jones GM, Cram DS, Makrakis E, Trounson AO, Kanavakis E, Pantos K. Blastocyst biopsy versus cleavage stage biopsy and blastocyst transfer for preimplantation genetic diagnosis of beta-thalassaemia: a pilot study. *Hum Reprod.* 2007 May;22(5):1443-9. Epub 2007 Jan 29. PubMed PMID: 17261575.

Konialis C, Hagnefelt B, Kokkali G, Pantos C, Pangalos C. Pregnancy following preimplantation genetic diagnosis of cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). *Prenat Diagn.* 2007 Nov;27(11):1079-83. PubMed PMID: 17729386.

Lanzendorf SE, Ratts VS, Moley KH, Goldstein JS, Dahan MH, Odem RR. A randomized, prospective study comparing laser-assisted hatching and assisted hatching using acidified medium. *Fertil Steril.* 2007 Jun;87(6):1450-7. Epub 2007 Jan 4. PubMed PMID: 17207801.

Sagoskin AW, Levy MJ, Tucker MJ, Richter KS, Widra EA. Laser assisted hatching in good prognosis patients undergoing in vitro fertilization-embryo transfer: a randomized controlled trial. *Fertil Steril.* 2007 Feb;87(2):283-7. Epub 2006 Nov 13. PubMed PMID: 17094975.

Tadir Y, Douglas-Hamilton DH. Laser effects in the manipulation of human eggs and embryos for in vitro fertilization. *Methods Cell Biol.* 2007;82:409-31. PubMed PMID: 17586266.

2006

Balaban B, Urman B, Yakin K, Isiklar A. Laser-assisted hatching increases pregnancy and implantation rates in cryopreserved embryos that were allowed to cleave in vitro after thawing: a prospective randomized study. *Hum Reprod.* 2006 Aug;21(8):2136-40. Epub 2006 Apr 13. PubMed PMID: 16613888.

Hwu YM, Chen CP, Li SH, Chen PW, Lee RK, Fleming S. Expression of vascular endothelial growth factor messenger ribonucleic acid and protein in human preimplantation embryos. *Fertil Steril.* 2006 Jun;85(6):1830-2. Epub 2006 Apr 27. PubMed PMID: 16643910.

Jones AE, Wright G, Kort HI, Straub RJ, Nagy ZP. Comparison of laser-assisted hatching and acidified Tyrode's hatching by evaluation of blastocyst development rates in sibling embryos: a prospective randomized trial. *Fertil Steril.* 2006 Feb;85(2):487-91. PubMed PMID: 16595232.

Liebermann J, Tucker MJ. Comparison of vitrification and conventional cryopreservation of day 5 and day 6 blastocysts during clinical application. *Fertil Steril.* 2006 Jul;86(1):20-6. Epub 2006 Jun 8. PubMed PMID: 16762345.

Makrakis E, Angeli I, Agapitou K, Pappas K, Dafereras A, Pantos K. Laser versus mechanical assisted hatching: a prospective study of clinical outcomes. *Fertil Steril.* 2006 Dec;86(6):1596-600. Epub 2006 Oct 20. PubMed PMID: 17055494.

Mukaida T, Oka C, Goto T, Takahashi K. Artificial shrinkage of blastocoeles using either a micro-needle or a laser pulse prior to the cooling steps of vitrification improves survival rate and pregnancy outcome of vitrified human blastocysts. *Hum Reprod.* 2006 Dec;21(12):3246-52. Epub 2006 Aug 26. PubMed PMID: 16936299.

Richter KS, Davis A, Carter J, Greenhouse SJ, Mottla GL, Tucker MJ. No advantage of laser-assisted over conventional intracytoplasmic sperm injection: a randomized controlled trial [NCT00114725]. *J Exp Clin Assist Reprod.* 2006 Jul 5;3:5. PubMed PMID: 16822317; PubMed Central PMCID: PMC1550249.

Vialard F, Petit C, Bergere M, Gomes DM, Martel-Petit V, Lombroso R, Ville Y, Gerard H, Selva J. Evidence of a high proportion of premature unbalanced separation of sister chromatids in the first polar bodies of women of advanced age. *Hum Reprod.* 2006 May;21(5):1172-8. Epub 2006 Jan 12. PubMed PMID: 16410329.

2005

Hartshorn C, Anshelevich A, Wangh LJ. Laser zona drilling does not induce hsp70i transcription in blastomeres of eight-cell mouse embryos. *Fertil Steril.* 2005 Nov;84(5):1547-50. PubMed PMID: 16275269.

Hartshorn C, Anshelevich A, Wangh LJ. Rapid, single-tube method for quantitative preparation and analysis of RNA and DNA in samples as small as one cell. *BMC Biotechnol.* 2005 Jan 13;5:2. PubMed PMID: 15649321; PubMed Central PMCID: PMC546192.

Kokkali G, Vrettou C, Traeger-Synodinos J, Jones GM, Cram DS, Stavrou D, Trounson AO, Kanavakis E, Pantos K. Birth of a healthy infant following trophoctoderm biopsy from blastocysts for PGD of beta-thalassaemia major. *Hum Reprod.* 2005 Jul;20(7):1855-9. Epub 2005 May 5. PubMed PMID: 15878929.

McArthur SJ, Leigh D, Marshall JT, de Boer KA, Jansen RP. Pregnancies and live births after trophoctoderm biopsy and preimplantation genetic testing of human blastocysts. *Fertil Steril.* 2005 Dec;84(6):1628-36. PubMed PMID: 16359956.

Nagy ZP, Taylor T, Elliott T, Massey JB, Kort HI, Shapiro DB. Removal of lysed blastomeres from frozen-thawed embryos improves implantation and pregnancy rates in frozen embryo transfer cycles. *Fertil Steril.* 2005 Dec;84(6):1606-12. PubMed PMID: 16359953.

Tinney GM, Windt ML, Kruger TF, Lombard CJ. Use of a zona laser treatment system in assisted hatching: optimal laser utilization parameters. *Fertil Steril.* 2005 Dec;84(6):1737-41. PubMed PMID: 16359974.

2004

Miller KA, Elkind-Hirsch K, Levy B, Graubert MD, Ross SJ, Scott RT Jr. Pregnancy after cryopreservation of donor oocytes and preimplantation genetic diagnosis of embryos in a patient with ovarian failure. *Fertil Steril.* 2004 Jul;82(1):211-4. PubMed PMID: 15237014.

2003

Han TS, Sagoskin AW, Graham JR, Tucker MJ, Liebermann J. Laser-assisted human embryo biopsy on the third day of development for preimplantation genetic diagnosis: two successful case reports. *Fertil Steril.* 2003 Aug;80(2):453-5. PubMed PMID: 12909515.

Wong BC, Boyd CA, Lanzendorf SE. Randomized controlled study of human zona pellucida dissection using the zona infrared laser optical system: evaluation of blastomere damage, embryo development, and subsequent hatching. *Fertil Steril.* 2003 Nov;80(5):1249-54. PubMed PMID: 14607583.

2002

Balaban B, Urman B, Alatas C, Mercan R, Mumcu A, Isiklar A. A comparison of four different techniques of assisted hatching. *Hum Reprod.* 2002 May;17(5):1239-43. PubMed PMID: 11980745.

2001

Douglas-Hamilton DH, Conia J. Thermal effects in laser-assisted pre-embryo zona drilling. *J Biomed Opt.* 2001 Apr;6(2):205-13. PubMed PMID: 11375731.