

MEDIA RELEASE

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EuroStemCell researcher challenges amniotic stem cell claims

In the March 2008 issue of *Nature Biotechnology*¹ EuroStemCell scientist Elena Cattaneo (University of Milano), with Mauro Toselli (University of Pavia), Elisabetta Cerbai (University of Florence) and Ferdinando Rossi (University of Torino), have challenged findings published in the same journal last year that amniotic fluid-derived stem cells can produce cells of the nervous system.

In the original article, De Coppi *et al.* reported that amniotic fluid-derived stem cells could give rise to a variety of cell types of different lineages, including liver cells, bone-forming cells and neurons.² Cattaneo and colleagues now question the evidence that these amniotic stem cells are able to produce differentiated cells with features of the neuronal lineage.

EuroStemCell coordinator Austin Smith, of the Wellcome Trust Centre for Stem Cell Research in Cambridge, says "this report emphasises the need for full and rigorous evaluation of stem cells before major claims are made. Scientists should be aware of the implications for patients' groups and wider political debates".

Stem cell biologist Ole Isacson, from Harvard Medical School, commends the editors of *Nature Biotechnology* for their decision to publish a challenge to high impact findings. "This [attitude]" Isacson says, "strengthens the basis of stem cell research. Discourse is an essential part of the scientific progress". Report author Cattaneo adds, "this field remains open. We hope the discussion will continue, and look forward to hearing more about the potential of amniotic fluid-derived stem cells."

Although the EuroStemCell project has completed its research programme, its renowned website (www.eurostemcell.org) will continue to promote discourse, discussion and debate around stem cell research when it relaunches next month.

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References

1. Toselli M., Cerbai E., Rossi F. & Cattaneo E. Do amniotic-fluid derived stem cells differentiate into neurons in vitro? *Nat Biotechnol* 26 (2008).
2. De Coppi P., Bartsch G. Jr, Siddiqui M.M., Xu T., Santos C.C., Perin L., Mostoslavsky G., Serre A.C., Snyder E.Y., Yoo J.J., Furth M.E., Soker S. & Atala A. Isolation of amniotic stem cell lines with potential for therapy. *Nat Biotechnol* 25, 100-106 (2007).

Notes for editors

Amniotic fluid is the liquid that surrounds the fetus during pregnancy.

EuroStemCell, the European Consortium for Stem Cell Research, is a four-year Integrated Project funded under the European Union's Sixth Framework Programme. EuroStemCell completed its research programme in January 2008. For more information, see www.eurostemcell.org

For further information

Elena Cattaneo, PhD
Director, Centre for Stem Cell Research, University of Milano
Tel. (+39)-02-5031 8333 (office)
email: elena.cattaneo@unimi.it