Storage of umbilical cord stem cells makes sense

- Consensus found on six fundamental issues including storage and applications of umbilical cord derived stem cells
- Public-shared banking viewed as a good solution for individuals and the general public
- To date, over 85 diseases can be treated or supported with stem cells

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Over 70 diseases can already be successfully treated with hematopoietic (blood) stem cells and around 15 diseases are treated with non-hematopoietic stem cells. Considering ongoing experiments and clinical trials, the number of therapeutic applications is expected to increase in the future. These are some of the results an expert panel presented after the first ITERA consensus meeting on the use, efficacy and medical applications of umbilical cord stem cells. Eight of the leading scientists and clinicians from the field of stem cell research and stem cell therapy united in the course of the fourth ITERA workshop on October 14 and agreed on a consensus addressing seven fundamental issues.

Umbilical stem cells can be easily obtained, stored for many years and are readily available
Umbilical cord stem cells can be obtained after the delivery of a child. All eight experts consented that the isolation of umbilical cord stem cells is harmless, easy and without risk for the mother or the child. They can be stored for many years and are immediately available when needed, potentially also for therapies that are still to be developed. Umbilical cord stem cells can potentially be used on the child itself (autologous use) or on a related compatible family member or unrelated patients (related or unrelated allogeneic use). "Umbilical cord and the cord blood are the most easily accessible source of stem cells and are mostly uncompromised from environmental or ageing influences. They are considered to be more vital and in some cases have shown to be more powerful in treatments as compared to stem cells from other sources", said Colin McGuckin, Professor of Regenerative Medicine at Newcastle University and member of the consensus board.

Storage can be provided by so called private/family banks or, in some countries, by public banks. Both forms of banks have their specific merits. A more modern approach, so called public-shared banking, might offer a good solution to fulfil the needs of individuals as well as the general public, so the expert panel agreed.

The consensus will serve as guidance for clinicians and the public to support well-informed decision-making. The full consensus with authorship can be downloaded at http://www.itera-ls.org/downloads.html.

About ITERA
The ITERA (International Tissue Engineering Research Association) Life-Sciences Forum is an international forum of scientists specialised in stem cells, tissue-engineering and regenerative medicine. The international board of the ITERA Life-Sciences Forum is composed of researchers and physicians from universities, university hospitals, stem cell and research institutes and biotechnological companies. The annual international ITERA Life-Sciences Forum workshop is dedicated to the latest developments in stem cell research.

About Cryo-Save
Cryo-Save, Europe's leading provider of stem cell banks, is a founding member of ITERA and sponsors the yearly workshops with an unrestricted educational grant. Headquartered in the Netherlands, the company conducts fundamental research in the field of cryopreservation techniques for stem cells. The research is done in partnership with five European universities and the Fraunhofer Institute for Biomedical Engineering (IBMT) and is part of an EU funded project CRYSTAL. The stem cell banking services of Cryo-Save are available in 37 countries across three continents (Europe, Asia, and Africa). The company offers a private-shared banking service in Italy and will start to introduce this in other countries after regulatory clearance.

For further details

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