EVERREST receives 'Go' decision from the EC

The EVERREST project has received a 'Go' decision from the EC allowing the project to continue. The decision supports the conclusions of the bioethics work conducted during the first 18 months of the project that there are no fundamental ethical objections to the use of vascular endothelial growth factor gene therapy in severe early-onset fetal growth restriction (FGR).

These bioethics studies form an important component of EVERREST project; they comprised a literature review and interviews with key stakeholders and women/couples who have experienced pregnancy affected by severe FGR. This programme of work was designed to explore in depth the ethical, legal, regulatory and social acceptability of the proposed treatment. FGR is a serious condition and has a significant risk of stillbirth. Affected babies are small and may be born very early, which can cause them problems as a baby and later on in life. Until the trial is carried out it is not known whether this growth factor therapy will work for FGR and improve growth and whether it is safe in humans.

EC Project Review Committee and EVERREST project leaders at the EC (July 2014)
From left to right: **Dr Joana Namorado** (Ethics, Gender Issues EC Directorate Health), **Professor Peter Daniel** (Professor of Clinical and Molecular Oncology at the Max Delbrück Center for Molecular Medicine in Berlin), **Dr David Gancberg** (EC Project Officer), **Dr Agnès Saint-Raymond** (Head of Programme Design at the European Medicines Agency). **EVERREST Project Team: Dr Anna David** (EVERREST Project Coordinator and Reader and Honorary Consultant in Fetal Medicine at University College London), **Professor Neil Marlow** (Neonatology, University College London), **Dr Maria Sheppard** (Bioethics, Queen Mary University of London), **Professor Richard Ashcroft** (Bioethics, Queen Mary University of London), **Professor John Martin** (Cardiology, University College London), **Dr Rebecca Spencer** (Clinical Research Fellow, Fetal Medicine, University College London)

Key results from the different components of the bioethics work are summarised below:

The **literature review**, looking at the ethical, legal, and regulatory environment for developing maternal growth factor therapy, did not identify any fundamental objection to a trial of this kind. Key issues included whether it is ethical to treat a healthy pregnant woman for the benefit of the fetus, whether it is ethical to treat a condition in an unborn baby that may result in the birth of a baby with a serious disability that would otherwise have died, and the psychological burden women would face when deciding whether or not to take part in a trial.

These questions were put to **key stakeholders**, including medical professionals and representatives of patient and disability organisations from across the EU and including Germany, Spain, Sweden, and the United Kingdom. Generally, stakeholders felt that it was ethical to give a treatment to a pregnant woman for the benefit of the fetus, but the psychological burden on women and the informed consent process may be challenging.

Finally, interviews were carried out with 24 **women/couples** with experience of a pregnancy affected by severe early onset FGR. There was a generally favourable view about the ethical and social acceptability of the EVERREST Project, and the use of maternal growth factor therapy. Most women had thought of the fetus as their 'unborn child', and would have been willing to accept risks to themselves if a treatment would have benefited this child. While decision-making in a complicated pregnancy was difficult, women had felt capable of making decisions about treatment options. Women were generally interested in participating in clinical trials, particularly where the trial could be of benefit to the unborn child.

These studies were reviewed by an **independent Ethics Advisory Committee** (EAC), including experts in bioethics, feminist ethics, disability studies, and philosophy from Europe and the United States of America. The EAC concluded in June 2014 that there are no fundamental ethical reasons why the trial should not take place.