Stem cell research continues to be one of the most promising fields of biomedical research that offers the opportunity to greatly improve the health of European citizens. We call on the European Parliament and European Commission to oppose the 'One of Us' Citizens' Initiative that is seeking a ban on all financing of activities that presuppose the destruction of human embryos, including stem cell research. Such a ban would have a negative impact on research involving human embryos for regenerative medicine, reproductive health and genetic disease.

We ask the Commission and Parliament to maintain the provisions of the current framework for funding stem cell research in Horizon 2020. These provisions were recently approved by the European Parliament after much debate on 13 December 2013. Horizon 2020 allows ground breaking and important research using all forms of stem cells, subject to it meeting fundamental ethical principles. Any roll back of this agreement would be a major step backwards for research across regenerative medicine, reproductive health, genetic disease and delay the development of much needed treatments for a host of untreatable conditions.

- Regenerative Medicine: Stem cell research has the potential to lead to the development of treatments for incurable neurodegenerative conditions such as Parkinson's, motor neurone diseases, multiple sclerosis, as well as chronic conditions such as type 1 diabetes, cardiovascular conditions, spinal cord damage, stroke and blindness. Many of these conditions will increase in prevalence with an ageing population. It is too early to tell which type of stem cell will be safest and most effective for clinical use. Scientists must be able to continue research in all avenues of stem cell research (including human embryonic stem cells, adult and induced pluripotent stem cells) in order to develop life-improving therapies.
- <u>Reproductive health research:</u> Banning all funding for research related to the destruction of
  embryos will significantly impede research in various aspects of reproductive health, such as
  fertility, recurrent miscarriage and severe developmental disorders. Europe leads the world
  in Assisted Reproductive Technology.
- <u>Genetic disease research:</u> Banning all funding for research related to the destruction of embryos will significantly impede research on various aspects of genetic disease, such as on chromosomal abnormalities and pre-Implantation Genetic Diagnosis (PGD).

Further background is provided below. It should be noted that the EU only funds research activities involving existing human embryonic stem cell lines derived from 7 day old embryos from assisted reproduction which will not be implanted. Consent has been provided for the use of these embryos and they would otherwise have been destroyed. Any research funded by the EU must already undergo strict national and European ethical review and is only conducted in those countries which permit these research activities. At present, embryos which are not suitable for IVF can also be used, with consent, for training the next generation of embryologists. Preventing such training would impact the ability of fertility clinics to deliver vital services safely to patients.

Europe is currently a global leader in these competitive research areas, and clinical trials are already underway resulting from stem cell research. Any move to restrict research using embryos will threaten this position, and prevent researchers developing vital treatments for patients.

## Signatories to the statement





































































