

116TH CONGRESS 1ST SESSION S. RES. 275

Calling for international ethical standards in genome editing research.

IN THE SENATE OF THE UNITED STATES

July 15, 2019

Mrs. Feinstein (for herself, Mr. Rubio, and Mr. Reed) submitted the following resolution; which was referred to the Committee on Foreign Relations

RESOLUTION

Calling for international ethical standards in genome editing research.

- Whereas genome editing enables scientists to make changes to the genome in organisms by removing, adding, or replacing genetic material;
- Whereas there is tremendous hope that genome editing technologies will lead to new therapies and cures for diseases;
- Whereas unintended effects during the development of new medical technologies can stop or delay the development of successful new therapies;
- Whereas pregnancies using genome-edited human embryos have not been shown to be safe;
- Whereas the Declaration of Helsinki of the World Medical Association—

- (1) was first adopted in 1964;
- (2) has been revised over time; and
- (3) has provided guidance to the international community on ethical principles for medical research involving human subjects;

Whereas there are media reports—

- (1) of experiments carried out overseas in 2018 using genome-edited human embryos in pregnancies;
- (2) that those experiments resulted in the live birth of 2 babies;
- (3) that the primary scientist responsible for those experiments recognized that the experiments were carried out too quickly and without necessary open dialogue with regulators, the scientific community, and the public; and
- (4) that an additional pregnancy with genome-edited human embryos is underway;
- Whereas the reported experiments in 2018 using genomeedited human embryos in pregnancies failed to meet the standards of human research ethics called for in the Declaration of Helsinki;
- Whereas the National Academies of Science, Engineering, and Medicine has concluded that more research and broadly inclusive public deliberation are needed before clinical trials of germline editing of human embryos and gametes should be permitted;
- Whereas the National Institutes of Health has declared support for an international moratorium on clinical application of germline genome editing and is working with other Federal agencies, international agencies, health and science organizations, patient communities, and the public to engage in a substantive debate about the benefits and risks of germline genome editing research;

Whereas the World Health Organization has created an expert advisory committee on developing standards for the governance and oversight of human genome editing;

Whereas an international commission has been convened by the National Academy of Medicine, the National Academy of Sciences, and the Royal Society of the United Kingdom to identify the scientific, medical, and ethical requirements that should be considered before heritable human genome editing should proceed; and

Whereas, as of July 2019—

- (1) the use of genome-edited human embryos for reproduction is prohibited in many countries; and
- (2) no international agreement exists as to whether clinical trials using genome-edited human embryos should proceed: Now, therefore, be it

1 Resolved, That the Senate—

- 2 (1) opposes the experiments that resulted in 3 pregnancies using genome-edited human embryos de-4 scribed in November 2018 media reports;
 - (2) recognizes that the question of whether to proceed with heritable genome editing touches on all of humanity;
 - (3) supports the international commission convened by the National Academy of Medicine, the National Academy of Sciences, and the Royal Society of the United Kingdom to develop an international framework regarding human germline editing; and

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1 (4) encourages the Secretary of State to work 2 with other nations and international organizations, 3 including the United Nations and the World Health 4 Organization, to forge an international consensus re-5 garding the limits of ethical clinical use of genome-6 edited human embryos.

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