SENATE COMMUNITY AFFAIRS COMMITTEE INQUIRY INTO LEGISLATIVE RESPONSES TO RECOMMENDATIONS OF THE LOCKHART REVIEW

Summary

There is no justification for altering the Prohibition of Human Cloning Act 2002. Since there is no actual evidence that human embryonic stem cell research would result in successful therapies, and given the numerous therapeutic successes achieved with the use of adult stem cells, retention in whole or part of the Research Involving Human Embryos Act 2002 cannot be justified on ethical, economic or scientific grounds, and consequently, the Act should be rescinded.

Prohibition of Human Cloning Act 2002

We argue that the Act should be retained without change, on the following grounds:

(1) Community standards hold that it is not justifiable to create or take an embryonic human life, with the intention of destroying that life.

(2) As a consequence of deliberate strategies by stem cell biologists, there is a general misconception that cloned embryos are not embryos, and therefore creating them for research does not violate research ethics. That is incorrect, since all embryos created naturally or by cloning or by IVF are living human beings capable of further development.

(3) Furthermore, the International Society for Stem Cell Research's 2004 redefinition of 'cloning' as somatic cell nuclear transfer (SCNT) has confused people into thinking that cloning and SCNT are different scientifically and ethically, when in fact these are two terms for the same process.

(4) Australia's position prohibiting all forms of human cloning is consistent with that of many other countries; with the United Nations Declaration on Human Cloning, which Australia supported; and with the resolution of the European Parliament endorsing the United Nations Declaration.

(5) Parliament passed the law in 2002, knowing it was possible that scientists somewhere in the world would attempt human cloning. The reported human cloning carried out in the UK and South Korea, does not change the situation in Australia.

(6) It is considered that nothing in the human cloning experiments conducted in the UK and South Korea (since discredited), has improved the likelihood of this leading to successful therapies.

(7) Since there was no substantive evidence of any significant scientific developments since 2002, the Lockhart Committee recommendations to allow human cloning appear to be based on the Committee's assessment of potential benefits of the suggested changes. (It is surprising, if not ironic, that the Committee members with legal backgrounds, who otherwise would require

justification beyond reasonable doubt, agreed to an essentially speculative assessment.)

(8) The emotive claims made by some scientists that Australia 'would fall behind' if it did not allow human cloning experiments, cannot be justified on scientific or economic grounds.

(9) There is no scientific justification for allowing human cloning research, as there is no actual evidence that it can be used successfully in therapies (see below), and there is a viable alternative in adult stem cell research (which is not human cloning).

Research Involving Human Embryos Act 2002

We consider that the Act should be rescinded, on the following grounds:

(1) As in (1) above, community standards hold that it is not justifiable to create or take an embryonic human life, with the intention of destroying that life.

(2) It is considered that the passing of the 2002 legislation was not justified, because it was based on misguided emotive hypotheses, viz.

- It resulted from the exaggerated claims made by scientists that research involving human embryos would result in cures for diseases such as Parkinson's Disease, Alzheimer's Disease and para- and quadriplegia.
- These scientists had a vested interest in undertaking such research, and succeeded in convincing certain media outlets, disease and disability advisory groups, and relatives of people afflicted with those diseases.
- State Governments accepted the claims, and were instrumental through COAG in having the Federal legislation drawn up. In particular, the NSW, Victorian and Queensland State Premiers lobbied strongly in its favour, and the NSW Government partly met the costs of bringing out disabled ex-Superman actor, Christopher Reeve, from the USA to promote this cause.
- Emotion-charged speeches, without scientific foundation, influenced many Federal politicians to support the legislation.
- The Act was passed despite strong opposition on the grounds:- that such research was unethical, involving the destruction of developing human life; that the use of embryonic stem cells in disease treatment would fail because of immune rejection problems; that it created false hopes for patients, since there had not been any demonstrated benefit to human patients from embryonic stem cells; and that there was no need to use embryonic stem cells, as there were better alternatives, namely, adult stem-cells. Adult stem cells could perform all the roles and functions that had been attributed to embryonic stem cells, and could be taken from living humans, children or adults, without harming them. There were over 300 published papers documenting the success of adult stem cells. No one person had to be destroyed to obtain these cells. Furthermore, the use of adult stem cells would overcome the problem of immune rejection.

(3) Human embryonic stem cells research has so far not resulted in any successful treatment for any disease. Nor is there any evidence that it appears likely to. This applies internationally. It is noted that when embryonic stem cells have been implanted in animal trials, they have often grown into tumours.

(4) The Lockhart Committee issues paper stated that since the Act came into force, the Licensing Committee had issued nine licences, which authorised the use of 1,740 excess human embryos. However, it was noted from the public licensing database (ref. (1)), that stem cell therapy was mentioned as a justification for only 150 of these. This is surprising given that the public and parliamentary debate was focussed on the potential of human embryonic stem cells for therapy. The justification given for the other authorised excess embryo use, included:- about half for improving the culture of human embryos for IVF; making stem cell lines

with improved properties; making stem cell lines to characterise and study growth and directed differentiation; and 175 for training technicians in embryo biopsy.

(5) On the other hand, there have been numerous advances in the use of adult stem cells for therapy since 2002 (ref. (2)). For example, Professor Mackay-Sim of Griffith University demonstrated that nasal stem cells could develop into heart cells, liver cells, kidney cells, muscle cells, brain cells and nerve cells. German researcher, Dr Peter Wernet, discovered a type of umbilical cord blood stem cell that is pluripotent, i.e. capable of being turned into almost any type of cell in the body.

(6) In light of the lack of success with human embryonic stem cell research, but the substantial advances made in the use of adult stem cells, it would be wasteful of human and economic resources, besides being unethical, to continue supporting embryonic stem cell research.

(7) Therefore, it is considered that the Act should be rescinded, and that current licences only be allowed to continue until their expiry dates.

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References:

(1) Source: www.nhmrc.gov.au/embryos/monitor/database/index.htm
(2) Source: www.stemcellresearch.org/facts/ASCpluripotency.pdf