



*Presidenza del Consiglio dei Ministri*

**NATIONAL BIOETHICS COMMITTEE**

**THE THERAPEUTIC USE OF STEM CELLS**

(27th October 2000)

*abstract*

The opinion deals with the possible uses of human stem cells for therapeutic purposes, the aim of the document being the contribution to the search for new ways to treat diseases that are currently classed as difficult to treat and often incurable. It includes a section on the various sources from which it is possible to isolate stem cells, a description of the therapeutic uses of these cells and of "somatic cell nuclear transplantation", with an examination of the technical problems and risks, and lastly, it draws attention to the ethical problems raised by this issue.

In the opinion, the NBC acknowledges the positive aspects linked to the use of stem cells collected from the umbilical cord, or from adults, and emphasizes that the ultimate goal would be to reprogram mature cells from a patient and return them to the same patient in the form of regenerated tissue: as such, these autologous cell or tissue transplants do not induce an immune response and are not rejected. Furthermore, the Committee deems ethically licit the use of stem cells deriving from miscarried fetuses or from voluntarily aborted fetuses (exclusively for study, research or therapeutic purposes), provided that, the free and informed consent of the woman is ensured, as well as the exclusion of any form of causative relationship and collaboration between those involved in carrying out the first phase of the abortion itself, and the second phase of research and collection; and providing that, all forms of commercialization and patentability are prohibited.

Regarding the procuring and use of human embryonic stem cells, the opinion records a difference of viewpoint concerning the embryo being conferred the moral status of a person. One part of the Committee does not deem it morally licit to use embryos for research purposes or, prospectively, for therapeutic purposes (including those cryopreserved embryos not intended for implantation into the uterus), as today, this use would involve their being destroyed. While, another part of the Committee deems their use legitimate, if it is limited to an embryo no longer intended for implantation and on condition that it has been consciously donated for this purpose either by the woman herself or by the couple. However, it is recommended that careful assessment and rigorous verification should be carried out case by case, regarding the suitability for implantation, the consent for donation, and the therapeutic purposes of the experimentation. Nevertheless, the Committee is unanimous in its appraisal of the somatic nuclear transplant technique for human reproductive purposes "reproductive cloning", deeming it ethically illicit.

This opinion on the issue of research and use of stem cells is accompanied by a personal note supporting the current of thought that is against the collection of stem cells from embryos, as it inevitably involves their being destroyed.