

CHAPTER 4

ETHICAL, LEGAL AND SOCIAL ISSUES

- 1 At the outset, the BAC identified the ethical, legal and social issues for consideration. These are listed in **Annex D**.
- 2 The BAC acknowledged that ethical questions predominate, and are the fundamental matters to be grappled with. On the critical ethical issues, social norms, theological and philosophical perspectives form important considerations. In turn, the stance taken on these ethical concerns would shape the ambit of and create the foundation for the necessary laws and regulations.
- 3 In this light, the focus of the BAC was on the ethical issues of whether human stem cell research, reproductive and therapeutic cloning should be allowed, and if so, the extent thereof. The BAC recognised that upon reaching a position on the ethical issues, many legal and regulatory issues would arise. However, any detailed legal or regulatory framework is beyond the ambit of this report.
- 4 At the heart of the ethics of human stem cell research are the ethics of deriving ES cells from human embryos for research, sparking serious debates on the beginning of life, status of life and respect for life. The creation of human embryos by therapeutic cloning to obtain research material is particularly controversial partly because it has been mistakenly perceived as part of cloning of human beings ie. reproductive cloning.
- 5 Currently, there is no comprehensive legal framework in Singapore governing research on human embryos. However, there are guidelines, namely the ‘Guidelines for Private Healthcare Institutions Providing Assisted Reproduction Services’ (Regulation 4 of the Private Hospitals and Medical Clinics Regulations (Cap 248 Rg 1)). Under these guidelines, the use of human

embryos below 14 days created through IVF techniques but which are not used in assisted reproduction treatments is permissible, provided stringent regulatory stipulations are met.

- 6 There are diverse views held as regards the status to be accorded to a human embryo. On one end of the scale is the view that a human embryo has the moral status of a person from the moment of conception, and any activity, including research, which destroys the human embryo, is wrong. *A fortiori*, to create a human embryo only to sacrifice it for research purposes is not acceptable. In addition, any advance in therapeutic cloning is also viewed suspiciously as a slippery slope towards human reproductive cloning.
- 7 A moderate approach accepts that a human embryo deserves respect, with, however, a range of views on the form of such respect, the purposes for which human embryos should be created, and what protection should be accorded to the human embryo at different stages of embryonic development.
- 8 At the other end of the spectrum, an early embryo is considered to be a mere collection of cells. There is therefore no objection to any form of human embryonic stem cell research, including therapeutic cloning.
- 9 It is this controversy that the BAC has to resolve to map the path of human stem cell research, and reproductive and therapeutic cloning in Singapore.