

Scenario 2

Gene Fix

GENE dreams, the Eutopian biotechnology company that brought you the "BABY BODY microchip", has just announced the release of a "new and even better" technology to ensure the health of your newborn child.

Previously, GENE dreams could diagnose genetic conditions but if the parents did not want a baby with that condition then the embryo would be discarded. GENE dreams has now perfected gene therapy techniques that will allow parents to correct gene alterations detected by their "BB microchip". The mutations detected, if untreated, could cause deafness, short stature or a predisposition to breast or colon cancer in the child. Instead of an abortion, "Baby Body gene fix" will allow a quick and easy correction of the mutation.

The DNA microarray "BB Chip" would screen embryos generated by IVF techniques even before they are in the mother's womb. If a gene mutation is found, an adenovirus would be used to insert a correct copy of the mutant gene into the embryo. Every cell in the baby's body will contain the new gene and it will be passed on to their children, ensuring healthy children for generations to come. GENE dreams claims that this technology is very safe and has had a success rate of 99% in their trials. A leaked document, however, has shown that of the 50 babies born so far after using this technology, two have developed a rare genetic condition called retinoblastoma.

GENE dreams commented vigorously that "it is the right of every parent to choose whether or not to have a baby with or without a disability and to desire the best possible health outcomes for their children". A spokeswoman commented that up to 4% of babies from normal conceptions are also born with a disability, and that there was no need for alarm due to the 2 reported cases of retinoblastoma. She said that they have developed the technology to ensure choice for parents willing to pay the modest price of Eut\$20 000 per gene therapy treatment, and that it should appeal particularly to religious groups opposing abortion, since it provides treatment rather than discarding embryos.

Issue

Would you approve the use of the "Baby Body gene fix" technology in Eutopia?

Your response should include arguments for and against this technology.

Questions

Here are some questions for you to consider in responding to the issue.

1. Should deafness and short stature be discriminated against?
2. How would you feel if you'd paid the \$20,000 and your child was born with retinoblastoma?
4. Who should pay? What if you cannot afford to pay?
5. Who has the right to decide which 'conditions' are acceptable and which are not?
6. What are the long term impacts of inserting modified genes into humans? Are there potential side effects?
7. What are the social implications of screening embryos for non life threatening conditions?
8. Have you examined the four principles of bioethics?