308325 - Is Gene Therapy Prohibited in Islam?

the question

Just want to know if germ-line gene therapy, which is the introduction of new DNA into gamete cells (sperm or egg) or embryo to prevent or treat genetic disorders permissible or not. Also while this is mostly at research level and a lot of research suggests that it can cause harm as well but it can also work towards treating disease. Considering both these scenarios of harm and cure is it permissible to research into it?

Summary of answer

There is nothing wrong with using gene therapy to prevent or treat genetic disorders if it is free of harm or if any harm is minor and may be overlooked in comparison to the interest that is served and the expected benefits.

Detailed answer

Praise be to Allah.

Gene Therapy and Its Ethical Considerations in Islam

There is nothing wrong with using gene therapy to prevent or treat genetic disorders if it is free of harm or if any harm is minor and may be overlooked in comparison to the interest that is served and the expected benefits.

There is nothing wrong with researching and studying that , and striving to develop it in order to get rid of harmful side effects.

Guidelines on genetic engineering

In a symposium of the Islamic Organisation for Medical Sciences in Kuwait, on the topic of

“Heredity, Genetic Engineering, the Human Genome and Gene Therapy: an Islamic Perspective,” held in partnership with the Islamic Fiqh Council in Jeddah, the regional office of the World Health Organisation in Alexandria, and the Islamic World Educational, Scientific and Cultural Organization (ISESCO), 23-25 Jumada Al-Akhirah 1419 AH/13-15 October 1998 CE, in which a number of senior jurists, doctors, pharmacists, specialists in biological sciences and scholars in other human sciences, the recommendations made by the symposium included the following:

Thirdly: genetic engineering:

- The symposium studied the topic of genetic engineering and the fears and concerns that have surrounded it since its inception in the 1970s, if it is implemented without guidelines, because it is a two-edged sword that may be used for good or ill.
- The symposium determined that it is permissible to use it to prevent, treat or alleviate disease, whether it is gene surgery which replaces one gene with another, or inserts the gene into the patient’s cells, or inserts a gene into another living being so as to obtain a large quantity of the secretions of that gene for use as treatment for some diseases.
- At the same time, the use of genetic engineering on reproductive cells should be prevented, because of the shar‘i reservations concerning that.
- The symposium affirms the necessity of governments providing such services to those of their citizens who need them but have limited income, because of the high costs involved in producing them.
- The symposium thinks that it is not permissible to use genetic engineering for evil purposes or to cross the genetic border between different species with the aim of creating hybrid beings for the purpose of entertainment or scientific curiosity.
- The symposium also thinks that it is not permissible to use genetic engineering as a routine practice for the purpose of changing the genetic structure, in what is known as eugenics (aiming to improve the genetic quality of a human population). Any attempt to tamper with genes in order to change a person’s character or interfere with his fitness to be responsible for his actions is prohibited according to Islamic teachings.
- The symposium does not see anything wrong, from an Islamic perspective, with using

genetic engineering in the fields of agriculture and animal husbandry.

- But the symposium does not ignore the voices which have recently warned against the possibility of long-term harm that could affect humans, animals, crops or the environment.

- The symposium thinks that companies and factories which produce food products of animal or plant origin should disclose to the public which of their products are prepared using genetic engineering, so that people will know what they are buying. The symposium also recommends complete awareness in monitoring the results of consuming such products and following the advice and statements of the US Food and Drug Administration (FDA), the World Health Organisation (WHO) and the UN Food and Agriculture Organisation (FAO) regarding this matter."(Majallat Majma`Al-Fiqh Al-Islami, issue no. 11, Vol. 3, p. 533)

For more details, please see the following answers: 267083 , 119830 , 111969 ,

And Allah knows best.