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## SHARIAH FRAMEWORK FOR THE APPLICATION OF SOMATIC GENE THERAPY

### BACKGROUND

ISCIIID 2021

Invention. Innevation & Gesign Expo 2021

Somatic gene therapy is one type of a medical procedure that uses DNA in the therapeutic treatment of a patient's disease which involves adding functional genes to cells other than egg or sperm cells (reproductive cells). Somatic Gene Therapy enables to correcting a genetic defect and any abnormality that exists in the somatic (i.e., body) cells of a patient such as by replacing the defective genes with the correct functional genes. It gives very en B-thalesemia, Cystic Fibrosis (CF), anemia, etc. By targeting the somatic cells, the genome is changed that will not be passed and inherited to future offspring but only confined to the individual patient.

## **NOVELTY/UNIQUENESS**

It is designed as a result of a thorough and in depth study of the position of Somatic Therapy from the Gene Shari'ah perspective. This model framework is very unique in itself as it is developed to embrace Shariah holistic approach in this new medical treatment via an in depth study on the position of Somatic Gene Therapy from the Shariah point of view. These include a detailed analysis of Quranic evidences and principles, Hadith of the Prophet PBUH, Analysis of the Maqasid Shariah and Qawaid Fiqhiyyah, as well as analysis of the benefits and harms which would resulted from the application of Somatic Gene Therapy. Various fatwas decreed by a variety of fatwa council worldwide were also analyzed.

### **PROBLEM STATEMENT**

This therapy has become regular therapeutic option available and has been actively pursued in many developing countries by Muslim, Non-Muslim medical doctors and scientist in the absence of clear Shariah Framework.

## **PUBLICATION AND IPR**

#### Somatic Gene Therapy: Ethical Consideration and Islamic Fighi Perspective,

Paper published in Journal of Engineering and Applied Sciences, Vol 13 (12), pp: 4353-4361, ISSN: 1816-949X, (SCOPUS Indexed)

#### An Insight Into The Legal Framework on Human Gene Therapy in Selected Countries

Paper published in IIOAB JOURNAL, Volume: 7 Supplement: 1 Pages: 577 584 , December 2017 (WOS Indexed)

## **USEFULNESS/BENEFITS**

This proposed model of Shariah Framework would serve as the ethical basis to govern for the application of Somatic Gene Therapy in Malaysia and beyond (particularly Muslim countries). This framework can also be used as reference for Muslim doctors, geneticist, scientists and Muslims at large.

#### Ethical Position of Somatic Gene Therapy in Human: A Proposed Model of Shariah Framework

Journal of Advanced Science and Technology Vol.29, No.7 (2020) pp.4539-4548 (SCOPUS Indexed)

# The Status of Germline Therapy: An Analysis from the Islamic Perspective

TEST Engineering & Management ISSN 0193-4120 pp.7341-7358. (Scopus indexed)

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