

# A Comparative Study of U.S. and Chinese Students' Attitudes Toward Gene Therapy: Key Advantages and Disadvantages

Zongyu Li, Yinghui Zhang, Ziyi Wang

## Abstract

Gene therapy has received intense attention in recent years because of its promising potential to treat a wide range of diseases. However, gene therapy is controversial in that it entails benefits as well as risks. That is, some have promoted its medical and social benefits, whereas others have expressed concerns over ethical dimensions. Medical professionals across the world have explored the potential of gene therapy to prevent and manage a wide range of diseases, including heart disease, diabetes mellitus, arthritis, and Alzheimer's disease, all of which express some genetic propensity toward the expression of disease. On the other hand, some have identified it to have catastrophic consequences unforeseen at this time, considering it against the natural process of life and death. Given such concerns, some countries, including the U.S. and China, have started to devise protocols to address the safe, ethical, and profitable development of gene therapy options. However, the development of such protocols is difficult because of a broad range of stakeholders and their diverse interests and concerns. Gene therapy appears to be here to stay, so the key objective seems to be the development of a protocol that can satisfy all stakeholders, including the proponents and opponents of the new technology. In this context, this research identifies students as one of the most important stakeholders since they will be future policymakers, scholars, regulators, medical professionals, and patients. The study therefore examines the attitudes of students toward gene therapy, including their general attitudes and views on advantages and disadvantages of gene therapy. In addition, the attitudes of U.S. and Chinese students are compared since their cultural differences may influence their attitudes. According to the results, Chinese students had more favorable attitudes toward gene therapy than U.S. students. Chinese students found the potential of gene therapy to cure deadly diseases as the most important reason behind their favorable attitudes toward gene therapy, whereas U.S. students reported its ability to improve the quality of life. For disadvantages, Chinese students reported the high cost of gene therapy, whereas U.S. students, ethical issues. These results have important implications for policymakers and regulators.

Keywords: Gene Therapy, Attitudes, High School Students, U.S., China