What do experts have to say on dangers, merits of gene editing?

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Gene editing holds great promise for treating — and even curing — a variety of genetic diseases. In a medical first, the technique was used recently to treat a young girl's cancer. When done in a child or an adult, the edited gene dies with its bearer; it isn't passed to any offspring.

But the technology can also be used to repair a defective gene in a sperm or egg cell, or in an embryo that's only a few days old. In these cases, called germline editing, the new gene would be passed to future generations. This could change the genetic makeup of humans, in possibly unpredictable ways.

In April, an influential group of scientists recommended that scientists hold off germline editing until the implications are better known.

We asked experts for their take. Here's National Institutes of Health director Francis Collins said:

"The ethical arguments against human germline engineering are significant. A most compelling one is that medical research should always seek to balance benefits and risks, with individuals who are participating in research giving fully informed consent. But the individuals whose lives are potentially affected by germline manipulation could extend many generations into the future. They can't give consent to having their genomes altered from what nature would have made possible.

There's also a concern about human hubris. Who gets to decide what's an improvement on the genome?"

Read full, original post: Experts debate: Are we playing with fire when we edit human genes?