Has Big Genomics lived up to its hype?

“Success in sight: The eyes have it!” Thus the scientific journal Gene Therapy greeted the news, in 2008, that an experimental treatment was restoring vision to 12 people born with a congenital disorder that slowly left them blind. Healthy genes were injected to replace the faulty mutations in the patients’ retinas, allowing an 8-year-old to ride a bike for the first time. A mother finally saw her child play softball. Every patient, the researchers reported, showed “sustained improvement.” Five years in, a book declared this “breakthrough” — a good-gene-for-bad-gene swap long pursued as a silver bullet for genetic conditions — as The Forever Fix.

Recently, two of the three research teams running these trials quietly reported that the therapy’s benefit had peaked after three years and then begun to fade. The third trial says its patients continue to improve. But in the other two, all the patients tracked for five years or more were again losing their sight.

Not all gene therapy ends in Greek-caliber tragedy. But these trials serve as a sadly apt parable for the current state of human genetics. This goes especially for the big-data branch of human genetics called Big Genomics. In five years of talking to geneticists, biologists, and historians, I’ve found that the field is too often distinguished by the arc shown here: alluring hope, celebratory hype, dark disappointment.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: Weighing The Promises Of Big Genomics