

# Blockchain Will Cure Cancer

Physicians and scientists will be the actual agents behind a cure for cancer. But in their potential to disrupt the very nature of medical research and treatment, blockchain-based solutions are extremely likely to light the way. It is important when examining any new technology to consider the ways in which it may change the world. Join me here as we briefly look at how blockchain can help lead us to a world without cancer.

Cancer is a significant public health issue in the United States and around the world. In the United States alone, an estimated [1.7 million new cancer cases](#) were diagnosed in 2018. This number is expected to increase drastically as time goes on.

Several barriers exist to finding a cure for cancer. Key among them are data challenges, difficulty quickly assessing the effectiveness of new treatments, and the financing required to fund research and treatment. Fortunately, blockchain technology is already providing avenues for addressing these barriers and bringing us closer to a cure for cancer.

## It's in the Data¶

At its core, the path to curing cancer lies in accessing and evaluating as much data about the disease as possible. Blockchain solutions for medical data are [already being proposed and tested](#). The primary benefits of using blockchain technology for storing and processing medical data lie in the portability and patient ownership of that data. On their own, these benefits are as helpful to cancer patients as they are to other medical patients.

The particular usefulness of blockchain for cancer data lies in the ability of patients to volunteer their medical records to be used in research. This data will need to be anonymized and, of course, regulatory hurdles are likely to exist, but aggregating medical data from potentially millions of patients around the world will allow physicians and researchers access to unprecedented levels of information about the disease they seek to cure.

[BreastWeCan.org](#) is one fledgling organization seeking to increase the base of data upon which further cancer research can be built. By encouraging women to upload their mammogram scans and other breast cancer images onto a blockchain, the company hopes to allow an AI to then study these images and share what it learns.

## Better knowledge sharing means more effective treatments¶

Information about cancer treatment and the results thereof is essential to finding a cure. From clinical trials to variation in responses to existing treatments among patients, information is the key. Blockchain technology can help in this respect by encouraging patients to share their treatment experiences and encouraging physicians to collaborate in their treatment attempts.

One U.S. company has piloted a blockchain-based system for evaluating patient responses to cancer treatment. Encouraging patients and oncologists to provide information with an "Onco" coin, [OncoPower](#) will allow oncologists access to "de-identified ... details like co-morbidity, specific cancer type, lines of therapy, and actual drugs used for treatment."

OncoPower's promise lies in the ability to anonymize medical data, put it on a blockchain, and make it accessible to the medical community. This will encourage collaboration and knowledge-sharing amongst health care practitioners and researchers, increasing the visibility of various health outcomes and leading to faster iteration when it comes to experimental treatments.

Another exciting treatment approach by [Hypertrust Patient Data Care](#) in Germany focuses on the immutable and verifiable aspects of blockchain to ensure that the supply chain for very sensitive immunotherapy treatments can be made as reliable as possible. Hypertrust tracks medication from "needle to needle" and leverages the transparency of a blockchain to improve patient outcomes.

## Targeted Financing¶

One thing that blockchain technology does incredibly well is to provide opportunities for decentralized governance and transparency. In the case of financing cancer research, blockchain could prove to be the silver bullet needed to ensure that funding goes where it will be most useful.

While it does not appear that cancer fundraising has made its way onto a blockchain just yet, the ability of donors to contribute to cancer research in a tangible and trackable way is likely to increase donations and empower engagement within the scientific community. Putting cancer funding on a blockchain and encouraging the scientific community to engage in that blockchain's governance could provide a catalyst for encouraging efficient, transparent, and collaborative research efforts.

## Looking Ahead¶

Blockchain technology is still in early stages, and it may be too soon to know precisely in which ways it may change our world. Developments in the medical applications of blockchain technology are very encouraging. Cancer has evaded a cure for many years, and the advent of new ways for scientists and physicians to learn, collaborate, and experiment may be just what the medical community needs.