

Stem cells show promising results in treating malaria

Human stem cells engineered to produce renewable sources of mature, liver-like cells can be grown and infected with malaria to test potentially life-saving new drugs, according to researchers at the Massachusetts Institute of Technology.

The advance comes at a time when the parasitic mosquito-borne disease, which kills nearly 600,000 people every year, is showing increased resistance to current treatment, especially in Southeast Asia, according to the World Health Organization.

The liver-like cells, or hepatocytes, in the MIT study were manufactured from stem cells derived from donated skin and blood samples.

The resulting cells provide a potentially replenishable platform for testing drugs that target the early stage of malaria, when parasites may linger and multiply in the liver for weeks before spreading into the bloodstream.

Sangeeta Bhatia, a biomedical engineer and senior author of the MIT report, told the Thomson Reuters Foundation that the breakthrough study not only showed that these liver-like cells could host a malaria infection but also described a way to mature the young cells so that an adult-like metabolism, necessary for drug development, could be established.

Read full, original article: [Stem cells offer promising key to new malaria drugs: U.S. research](#)