Can engineered "designer" T cells outsmart chronic hepatitis B?

More than 350 million people worldwide are persistently infected with human hepatitis B virus (HBV) and at risk to develop liver cirrhosis and hepatocellular carcinoma making long-term treatment necessary. While a vaccine is available and new antiviral drugs are being developed, elimination of persistently infected cells is still a major issue. Recent efforts in adoptive cell therapy are experimentally exploring immunotherapeutic elimination of HBV-infected cells by means of a biological attack with genetically engineered "designer" T cells.