# Smartphone Device and App Detect Hepatitis and HIV in Minutes

December 12, 2014

Students and faculty at Stanford University have developed a new smartphone device that can detect the hepatitis B virus (HBV), as well as HIV, influenza, cardiovascular and autoimmune disorders, cancer, and the hepatitis C virus (HCV), via an on-the-go app, HCP Live reports.

The new device works by analyzing a drop of blood. The machine identifies magnetically tagged biomarkers and then displays a patient's test results on their smartphone in less than 10 minutes. Results can then be sent back to doctors via email or via the cloud on the device's supporting app.

Stanford researchers based their technology on the 2007 Nobel Prize-winning principle of magnetoresistance. They hope their product can be used in developing nations, where this type of testing can often take months to go through.

The team recently won a $120,000 cash prize from the Nokia Sensing XChallenge for their invention. Stanford was one of five research teams out of 90 to win the global competition for breakthrough medical detection technologies.

The group, now called Eigen Lifescience, is trying to raise another $25,000 on their Facebook page to support further research efforts.