A new finger prickle rapid Ebola test co-developed by Tulane University researchers is as accurate as traditional lab testing for the disease, according to an independent study published in the British medical journal The Lancet.

Instead of taking days for lab results, the Corgenix Medical Corp., uses a drop of blood to deliver a diagnosis in as little as 15 minutes, allowing public health workers to isolate and treat patients immediately. The study results confirm that the test can be used in the field and deliver a high level of accuracy, said Robert Garry, professor of microbiology and immunology at the Tulane University School of Medicine.

“Rapid diagnostic tests can answer critical medical questions quickly in any geographical location, including areas that are miles away from any source of electricity,” Garry said. “This study clearly demonstrates that the test can be used in a much broader way than current World Health Organization (WHO) guidelines specify, adding to the inherent value of the test.”

The Food and Drug Administration and WHO have approved the test for limited emergency use. Developers are pushing for more field testing so that regulators approve widespread use of the test to prevent the spread of the disease.

Partners In Health conducted the study in Sierra Leone. Researchers tested 106 individuals. The rapid test detected Ebola in all 28 patients who tested positive for the virus by traditional lab tests; 71 of 77 patients who tested negative via lab test were also negative by the rapid diagnostic, but researchers noted that the lab benchmark test had imperfect sensitivity because it used refrigerated blood samples. The rapid tests are designed to use fresh blood coming directly from a person's fingertip, not from older, stored blood that can reduce its accuracy compared to clinical laboratory testing.

Corgenix developed the Viral Hemorrhagic Fever Consortium.