

midge medical partners with the Institut Pasteur de Dakar to offer an easy and affordable innovative detection solution for Marburg Virus

Marburg Virus (MARV) has been wreaking havoc in Africa, with 5 deaths reported from Tanzania in the last 24 hours. Earlier this year, Equatorial Guinea reported an outbreak of MARV with 9 fatalities. This Ebola-like hemorrhagic virus is characterized by symptoms of high fever, followed by bleeding and organ failure. Something that can help the frontline medical workers in their crusade against the virus would be an easy, portable and affordable means of detecting the virus early and increasing the odds and chances of survival.

In the midst of these outbreaks, Berlin-based startup midge medical promptly responded to a request from the Institut Pasteur de Dakar (IPD) to adapt their existing minoo system to better support detection efforts. A partnership with IPD was established for the mutual benefit from the respective experiences in field diagnostics and digital medtech. Within a month, midge medical integrated an isothermal molecular MARV test into their existing platform and delivered a prototype test for field testing in Africa. IPD staff were trained to run the test and the system was verified to work with clinical samples from the recent outbreak. minoo test station is a small battery-driven, multi-use device for molecular diagnostics; data measured are transferred to a cellular phone, connecting to the backend to analyze the test data and subsequently display the test result to the user. Sample handling steps are comparable to rapid tests known for Corona.

midge medical sells a CE-IVD marked SARS-CoV-2 test kit running on the minoo instrument. In initial responses to the prototype Marburg test on the minoo station, the easy to use, simplicity and protocol of the test earned praise amongst the local teams. IPD staff with field experience participating in the training responded with the following comments in the user questionnaire at the end of the training. "What's fascinating about minoo is that you get the result directly on your phone" & "The device is easy to use and is perfectly adapted to field conditions", and "The minoo system, responds to the urgent need for sensitive, rapid, and ready-to-use molecular tests." midge medical hopes to continue collaborating with the IPD to adapt and develop its device for urgent needs of virus surveillance and detection in outbreak investigations in Africa.