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New testing kit fast tracks Ebola diagnosis

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Singapore: Japanese researchers at the Nagasaki University announced that they have developed a new diagnostic technique that can detect the deadly Ebola virus infection in 30 minutes. This would aid in quick diagnosis and would allow doctors to treat the infection before it progresses.

Professor Jiro Yasuda, lead researcher, said that the process was also much cheaper than the diagnostic kits currently in use in West Africa.

Prof Yasuda explained that the team had engineered a "primer", which amplifies only those genes specific to the Ebola virus found in a blood sample or other bodily fluid. These primers are then used to synthesize the viral DNA and the DNA specific to the virus is amplified in 30 minutes, if Ebola is present.

He added that the test provided a visual confirmation of infection as the by-products from the process caused the liquid to become cloudy, if the virus was present.

Currently, conventional PCR analysis is used to detect the virus which has a long reaction-time of 2 hours. Prof Yasuda said that the new method was very cost effective and can be used in countries where expensive testing equipment is not available.