

RNA extraction kit Agappe Chitra Magna launched commercially for detection of COVID 19 (21st May 2020)

The commercial launch of Agappe Chitra Magna, a magnetic nanoparticle-based RNA extraction kit for use during testing for detection of COVID-19 was announced by Dr. VK Saraswat, NITI Aayog member and President of Institute body of Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) at a programme attended by Prof. Ashutosh Sharma, Secretary, DST, Govt of India, Dr Asha Kishore, Director SCTIMST, Dr HK Varma, Head Biomedical technology and scientists of the institute, through video conference.

The RNA extraction kit was developed by the Institute and manufactured by Agappe Diagnostics Ltd. It is the first indigenous kit based on magnetic nanoparticles- based extraction kit in the market and is different from the imported kits based on magnetic particle based- technologies. The innovators have filed a patent for the same. Internationally, it is reported that only 1 or 2 companies (others merged) manufacture magnetic nanoparticle- based RNA extraction kits.

“The commercial launch of the kit is a major step to make India self-reliant in detecting COVID 19 and can help increase the rate of testing and bring down its costs, a crucial step for combating the pandemic. It can also be an example of rapid commercialization and implementation of a state of the art technology for the world to emulate,” said Dr. Saraswat while announcing the launch.

“This is an example where scientists and industry worked in tandem with a purpose to serve an urgent need. The innovative process of conjugating the RNA with magnetic nanoparticles and increasing their concentration in one place by applying a magnetic field is a breakthrough that allowed the high sensitivity of RT-LAMP test from SCTIMST. Multidisciplinary lateral thinking and industry involvement right from the beginning allowed the technology to be developed into a product that was suited to meet the need of the hour,” said Professor Sharma.

“ Promotion of indigenous medical technologies is the primary mandate of the Institute and in vitro diagnostics and development of point of care devices is a segment that we recently forayed into. The molecular medicine division headed by Dr Anoop Kumar, Senior Scientist, has been working on such diagnostic platforms and we are excited at the prospect of having developed the magnetic nanotechnology-based RNA extraction technology that will reduce our import dependence and facilitate cost effective confirmatory testing of Covid -19” said Dr Asha Kishore

The launch programme was organized by SCTIMST in collaboration with Agappe Diagnostics Ltd at the Biomedical Technology Wing of SCTIMST, and it was followed by the first sale of the product by Mr Thomas John, Managing Director, Agappe Diagnostics, to officials from Amrita Institute of Medical Sciences, Kochi.

It is estimated that India would require about 8 lakh RNA extraction kits per month during the next six months, and Agappe Chitra Magna RNA Isolation Kit priced around Rs. 150 per test is expected to reduce the cost of testing and the country's dependence on imported kits which cost around Rs 300 per test. Agappe Diagnostics has a manufacturing capacity of kits for performing 3Lksh tests per month.







