

Fermenta Biotech brings multiple routes to synthesise Molnupiravir for COVID-19 treatment

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Pioneers the development of its patented enzymatic route of synthesis for Molnupiravir an investigational 'orally active' therapeutic alternative for COVID-19



Fermenta Biotech Limited (FBL) has announced that it has successfully developed and filed patent application(s) for novel biocatalytic technology of manufacturing Molnupiravir.

The patented enzymatic route of synthesis possesses the technological advantage of being efficient and environment-friendly, with higher yields and lower solvent use as compared to existing reported manufacturing processes. Biocatalysis is defined as the use of natural substances that include enzymes from biological sources or whole cells to speed up chemical reactions.

Thane based FBL has also optimised these enzymatic steps to achieve a commercially viable technology and believes this process will be substantially cost-effective vis-à-vis chemical synthesis currently followed.

Developed by FBL's R&D team by utilising its proprietary CAL B Lipase immobilised enzyme platform allows for a cost effective biocatalysis which may create a highly affordable therapeutic alternative for the fight against COVID-19.

"With the more we understand of COVID 19 the less we fear it and it is through this understanding that we can potentially create impressive therapeutic developments" says Prashant Nagre, CEO, FBL as he expounds further on the experimental antiviral drug Molnupiravir.

Developed at Emory University in Atlanta by Drug Innovation Ventures at Emory (DRIVE). It was then acquired by Ridgeback Biotherapeutics, who later partnered with Merck & Co. to further develop the drug as they are encouraged by preliminary data from a Phase 2a trial of its COVID-19 oral antiviral treatment Molnupiravir. Molnupiravir, originally developed for the treatment of influenza, is 'orally active' unlike other potential options of treatment for COVID-19 viz. Remdesivir that are in the injectable format.