



A Novel Recombinant Protein based Diagnostic Kit for Hepatitis E

TECHNOLOGY AVAILABLE FOR TRANSFER

UNMET NEED & OPPORTUNITY

Hepatitis E virus (HEV) is an epidemic infection which is ideally self-limiting, but in the severe cases it can be fatal. The CAGR of the global Hepatitis E diagnostic market is at 3.80% over the period between 2016 and 2024. HEV infections are responsible for over 50% of acute viral hepatitis cases in areas like India and mainland China. There are multiple diagnostic kits in the market, cost of which is very high. The present technology is a sensitive test for detecting HEV infection compared to other commercially available assay kits. Need was felt for a cost effective diagnostic kit for accessibility for low income groups. Further a diagnostic kit based on indigenous genotype of Hepatitis virus would be more preferably for diagnosis in indigenous population.

ADVANTAGES

1. Detects both genotype 1& 4
2. Cost effective as compared to imported kits (~50%)
3. Being swine virus and not human virus it is safe for experimental and clinical handling

References

1. <https://marketresearch.biz/report/hepatitis-e-diagnostic-tests-market/>
2. <https://www.marketwatch.com/press-release/hepatitis-e-diagnostic-tests-market-key-playersanalysis-and-forecast-2018-to-2027-2019-01-19>
3. <https://www.who.int/hepatitis/publications/hepE-positionpaper/en/>
4. <https://www.avivasysbio.com/hepatitis-e-virus-antibody-igm-elisa-kit-human-okca00014.html>

TECHNOLOGY

The technology is based on the use of Open Reading Frame-2 from Swine HEV for diagnostic kit development against Hepatitis E virus. A modification of around 2% in the gene sequence has been made in the present technology which resulted in an enhanced protein production of HEV for better protein identification in the sera sample of the affected patient thereby leading to enhanced efficacy of the diagnostic kit. The kit has been compared with 6 comparable kits.

LICENSING OPPORTUNITY

BCIL is looking for a suitable industrial partner for commercialization of diagnostic kit for Hepatitis E virus detection.

STAGE OF DEVELOPMENT

The diagnostics kits are market ready (Pilot Scale)

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