Ryen MacDonald, J Infect Dis Ther 2018, Volume 6
DOI: 10.4172/2332-0877-C3-044

Contribution of broad spectrum dengue diagnostic technology in the effort to fight dengue global disease burden

Ryen MacDonald
CTK Biotech, USA

The increasing burden of dengue virus infection continues to impact populations across the globe, highlighting the importance of multi-parameter dengue diagnostic technologies. Market and literature reviews show that since 2016, there is a soaring demand for early diagnosis of dengue infection, disease discrimination from other flaviviruses such as Zika, and development of accurate serological standards. As a point-of-care IVD company developing and manufacturing dengue antigens, antibodies, and IVD assays for the past decade, CTK Biotech has first-handedly witnessed the extreme limitations in undersourced and remote areas. Thus, as a company, CTK aims to address the issues of quality, ease-of-use, and pricing in an array of dengue products. For early detection of actively replicating virus, CTK offers a real-time PCR test that distinguishes between dengue and related viruses Zika and Chikungunya, and a serotyping assay that identifies dengue types 1-4. For qualification of dengue infection status, they have developed an IgM/IgG antibody test that determines an early or late stage active infection, and an IgG antibody test that identifies past infection only. These products were clinically evaluated in endemic regions, which include Brazil, Venezuela, Colombia, Peru, Mexico, Malaysia, India, and Bangladesh. Because serological standardization and controls for dengue diagnostics remain a challenge, CTK has developed recombinant dengue murine-human chimeric IgM and IgG antibodies, and are currently developing a quantification method using WHO standards for IgG and IgM. As each technology has its advantages, CTK is committed to the fight against dengue infection and aims to contribute from every angle.

Biography

Ryen MacDonald completed her PhD in Neurosciences from McGill University and works as a Product Manager for CTK Biotech Inc, Inc located in San Diego, California.

rmacdonald@ctkbiotech.com

Notes: