



## FOR IMMEDIATE RELEASE

Medical Diagnostic Laboratories, L.L.C., Fights Tick- and Mosquito-borne Epidemic with New Comprehensive Testing for Vector-borne Disease.

Hamilton, NJ., March 18, 2019 – Medical Diagnostic Laboratories, L.L.C., (MDL), a Genesis Biotechnology Group<sup>®</sup> (GBG) company and CLIA-certified, CAP-accredited laboratory specializing in high-complexity, state-of-the-art, automated DNA-based molecular analyses, has expanded its testing to include a comprehensive program for the detection of vector-borne diseases.

Unfortunately, new tick- and mosquito-borne diseases continue to emerge, increasing in prevalence year after year. The Centers for Disease Control and Prevention (CDC) has reported that the number of disease cases from mosquitoes, ticks, and fleas has tripled from 2004 to 2016. Ticks and mosquitos that carry bacterial, parasitic, and viral pathogens continue to increase in number, species, and geographic range. Currently, tick-borne diseases are widely distributed throughout the United States, with major concentrations in the Northeast, Upper Midwest, and across the middle of the Midwest and Atlantic states.

To combat this growing medical issue, MDL has renewed their efforts to provide the most comprehensive vector-borne disease test menu. Their multi-phase implementation will offer a comprehensive platform blending direct (molecular testing) and indirect (serological) testing methods. This important information helps providers determine their patients' exposure risk, the pathogen(s) associated with often-overlapping symptomatology, the most effective antimicrobial treatment for active infections, and appropriate prophylactic treatment for exposure. Phase Two, expected to launch in Q2 2019, will feature tick identification. MDL will also offer immune status testing using flow cytometry to evaluate CD3-/CD8-/CD57+ natural killer cells and other immune markers to help assess treatment response for acute and Post-treatment Lyme disease Syndrome patients.

Testing will detect a variety of pathogens associated with tick-borne disease including *Borrelia* species (US and European strains of Lyme disease and Relapsing fever), *Rickettsia* species (Spotted Fever and Typhus Fever), *Ehrlichia* species (Ehrlichiosis), *Francisella tularensis* (Tularemia), *Babesia* species (Babesiosis), Powassan virus and Bourbon virus. Mosquito-borne viruses will include Zika virus, Chikungunya virus, Dengue virus, Japanese Encephalitis virus, and Usutu virus.

This is not the first time that MDL has been on cutting-edge of clinical diagnostic testing for vector-borne disease. In 2001 they were the first lab to identify and report, in peer-reviewed scientific journals, co-infections of *Ixodes scapularis* (deer tick) with *Borrelia burgdorferi* and *Bartonella henselae*. According to Dr. Eli Mordechai, Chief Executive Officer (CEO), "Our laboratory has always poured resources into vector-borne research by developing and enhancing tests in concert with our national and international clinician clients. We're committed to leading the way in vector-borne diagnostics and partnering with healthcare providers to offer patients the best care possible".

## **About MDL**

MDL is a CLIA-certified infectious disease laboratory specializing in high-complexity, state-of-the-art, automated, DNA-based molecular analyses. Using unique molecular techniques, MDL provides clinicians from many specialties valuable information to assist in the diagnosis, evaluation, and treatment of viral, fungal, and bacterial infections. MDL is a member of the Genesis Biotechnology Group located in Hamilton, New Jersey, in "Einstein's Alley", the research and technology corridor of New Jersey.

## **About GBG**

GBG is a consortium of vertically-integrated corporate research entities, which facilitates the overall market implementation and delivery of biomedical science products and services related to diagnostics and drug discovery. Through the consolidation of research activities, and the collaboration of diverse groups of scientists with expertise in molecular biology, genetics, high throughput screening (HTS), pharmacology, molecular modeling, and medicinal chemistry, GBG is well-positioned to create and sustain complex research platforms in drug discovery and the design of surrogate biomarkers for chronic diseases.

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Scott Gygax, Ph.D. sgygax@mdlab.com 609.570.LYME www.mdlab.com