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TWO CENTERS OF EXCELLENCE OF THE GLOBAL VIRUS NETWORK INDEPENDENTLY VERIFY AN ANTIMICROBIAL TECHNOLOGY THAT KILLS SARS-COV-2 ON SURFACES FOR MORE THAN SIX WEEKS

Global Virus Network Also Advances The Study Of The Oral Polio Vaccine As A Preventive Measure Against SARS-CoV-2

Baltimore, Maryland, USA, June 4, 2020: The <u>Global Virus Network (GVN)</u>, a coalition comprised of the world's preeminent human and animal virologists from 53 Centers of Excellence and 10 Affiliates in 32 countries, announced that two of its Centers of Excellence, the Peter Doherty Institute for Infection and Immunity in Melbourne, Australia and the Rega Medical Research Institute of KU Leuven, Belgium, demonstrated that a quaternary ammonium sulfide biocide compound inactivates SARS-CoV-2 (the coronavirus that causes COVID-19) on surfaces and provides continuous residual viricidal activity for at least 46 days. The announcement was made today by Dr. Christian Bréchot, President of the GVN.

The <u>Doherty</u> and <u>Rega</u> Institutes both used state-of-the-art high containment virology facilities to independently conduct extensive tests on a <u>BIOPROTECT™</u> formulation by ViaClean Technologies to study its effects on SARS-CoV-2 infectivity on various surfaces. The standard ASTM E1053 test methodology was adapted to assess SARS-CoV-2 viricidal efficacy of

under the direction of Prof. Johan Neyts, definitively demonstrated that the BIOPROTECT[™] formulation eliminates SARS-CoV-2 by both reducing its ability to be infectious and by destroying its genomic material.

"Our studies on numerous antiseptic agents for surfaces contaminated with SARS-CoV-2 show that the BIOPROTECT™ formulation's long-lasting activity is far superior to conventional decontamination agents in general use," said Prof. Damian Purcell, Head of the Molecular Virology Laboratory in the Department of Microbiology and Immunology at The Peter Doherty Institute for Infection and Immunity at The University of Melbourne. The Doherty Institute's comprehensive report is expected to be available next week.



The tests were conducted in both "wet" and "dry" conditions. In the wet test, SARS-CoV-2 was coated on stainless steel disks which were then treated with a wet solution of the BIOPROTECT[™] formulation. In the dry test, the BIOPROTECT[™] formulation was first applied to stainless steel samples which, 46 days later, were then exposed to a high titer of SARS-CoV-2. Proving the longevity of the BIOPROTECT[™] formulation on treated surfaces, tests revealed that the presence of the BIOPROTECT[™] formulation maintained the ability to inactivate SARS-CoV-2 to negligible levels. Furthermore, test results conducted were designed to conform with the United States Environmental Protection Agency (EPA) and equivalent standards of regulatory agencies in Europe and Australia, to ensure the acceptability and credibility of the results.

"We tested BIOPROTECT[™] formulation and found that it eliminated 99.7% of the SARS-CoV-2 present, 46 days after the tested material was treated with BIOPROTECT[™] formulation," said Dr. Johan Neyts, Professor of Virology at the Rega Institute for Medical Research, KU Leuven. "This product is unique and its long-lasting ability to eliminate SARS-CoV-2 far exceeds conventional disinfectants, which makes it very helpful in the battle against COVID-19." The Rega Institute's report is accessible <u>here.</u>

"The results of the tests conducted by the Doherty and the Rega Institutes clearly demonstrate that BIOPROTECT™ eradicates SARS-CoV-2 on surfaces and provides continuous residual antimicrobial protection for an extended period of time," said Dr. Bréchot. "It is clear that effective antimicrobials will be extremely important in containing the COVID-19 pandemic, given the time it will take to implement mass vaccination and fully develop novel therapies. In this context, we are not aware of any microbicide surface treatment that continuously prohibits the growth and surface transmissibility of SARS-CoV-2 for an extended period of time. This represents a significant breakthrough in inhibiting the spread of COVID-19 by preventing surfaces from being contaminated by the virus and stopping the spread of the virus through contact with contaminated surfaces. Identifying and exploring innovative solutions, as well as fostering and facilitating collaboration between academic and industrial partners, be it large pharmaceutical firms or small biotech companies, is one of several ways the GVN can make a consequential contribution to the fight against COVID-19."

GVN Also Advances The Concept Of The Oral Polio Vaccine As A Preventive Measure Against SARS-CoV-2

The GVN has also advanced a concept developed by Dr. Robert Gallo, The Homer & Martha Gudelsky Distinguished Professor in Medicine, Co-Founder & Director of the Institute of Human Virology at the University of Maryland School of Medicine and Co-Founder & Chairman of the International Scientific Leadership Board of the Global Virus Network, and by Dr. Konstantin Chumakov, Associate Director for Vaccines at the Food & Drug Administration specific protective effects of OPV have been demonstrated several times against a broad set of different virus outbreaks in the 1960's and 70's. More recent studies confirmed these observations and revealed that other live vaccines produce pronounced non-specific protective effects, whereas inactivated vaccines do not. Data from randomized clinical studies showed that OPV immunization campaigns reduced all-cause mortality despite the complete absence of poliovirus circulation. The emerging body of evidence suggests that besides inducing specific humoral and cellular immune responses, OPV may activate multiple branches of the immune system, including training innate immunity and thus increasing resistance to a broad spectrum of pathogens, including SARS-CoV-2. The Institute of Human Virology at the University of Maryland School of Medicine, a GVN Center of Excellence, submitted a proposal to the National Institutes of Health (NIH) for an 11,000-person clinical trial to demonstrate and establish the efficacy of OPV against SARS-CoV-2.

"The GVN is playing a very meaningful role in the battle against SARS-CoV-2 by coalescing the world's foremost virologists and COVID-19 specialists to collaboratively share their expertise, findings and research, and by bringing together academia and industry to collaborate on the development and advancement of novel technologies, therapeutics and vaccine candidates for COVID-19," said Dr. Gallo. "I am pleased the GVN was able to identify laboratories to independently verify the efficacy of BIOPROTECT™, bring the potential benefit of OPV to the forefront of the scientific community and spearhead OPV clinical studies in China, Iran, Russia and the United States."

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About the Global Virus Network (GVN)

The Global Virus Network (GVN) is essential and critical in the preparedness, defense and first research response to emerging, exiting and unidentified viruses that pose a clear and present threat to public health, working in close coordination with established national and international institutions. It is a coalition comprised of eminent human and animal virologists from 53 Centers of Excellence and 10 Affiliates in 32 countries worldwide, working collaboratively to train the next generation, advance knowledge about how to identify and diagnose pandemic viruses, mitigate and control how such viruses spread and make us sick, as well as develop drugs, vaccines and treatments to combat them. No single institution in the world has expertise in all viral areas other than the GVN, which brings together the finest medical virologists to

GVN is a non-profit 501(c)(3) organization. For more information, please visit www.gvn.org. Follow us on Twitter @GlobalVirusNews

About the Peter Doherty Institute

Located in the heart of Melbourne's Biomedical Precinct, the Doherty Institute is named in honor of Patron, Laureate Professor Peter Doherty, winner of the 1996 Nobel Prize in Physiology or Medicine for discovering how the immune system recognizes virus-infected cells. Under the expert guidance of Director, University of Melbourne Professor Sharon Lewin, a leader in research and clinical management of HIV and infectious diseases, the Doherty Institute has more than 700 staff who work on infection and immunity through a broad spectrum of activities. This includes discovery research; diagnosis, surveillance and investigation of infectious disease outbreaks; and the development of ways to prevent, treat and eliminate infectious diseases.

About the Rega Institute of Medical Research

The Rega Institute was founded in 1954 by Professor Piet De Somer and named after the 18th century philanthropist and professor Josephus Rega of Leuven. It hosts part of the Department of Microbiology and Immunology. Since its inception, the Rega Institute hosts also the Section of Medicinal Chemistry of the Department of Pharmaceutical Sciences and it is thus a true interdepartmental and interdisciplinary research institute. The Rega Institute has always been a jewel in the crown of research and innovation at KU Leuven on the basis of publications, citations and prestigious scientific prizes of its members.

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