

## **US Defense Reports Immuron's Travelan® demonstrates broad reactivity to *Vibrio cholera* strains from Southeast Asia indicating broad potential for prevention of traveler's diarrhea**

### **Key Highlights:**

- **Major goal of study was to evaluate Travelan®'s ability to bind and react to a variety of infectious *Vibrio cholera* strains from Southeast Asia**
- **Pathogenic bacteria evaluated in study were obtained from infected personnel deployed in Bangladesh, Cambodia and Thailand**
- **Results reported demonstrate Travelan® is able to bind, and is reactive to all 71 strains of *Vibrio cholera* tested**
- **Research program, sponsored by U.S. Department of Defense (DoD), was conducted by Department of Enteric Diseases, Armed Forces Research Institute of Medical Sciences (AFRIMS) in Bangkok, Thailand**

Melbourne, Australia, September 4, 2019: Immuron Limited (ASX: IMC; NASDAQ: IMRN), an Australian biopharmaceutical company focused on developing and commercializing oral immunotherapeutics for the prevention and treatment of gut mediated pathogens, today announced positive results from a recent study on the immuno-reactivity of its commercially available and over-the-counter gastrointestinal and digestive health supplement Travelan® to infectious *Vibrio cholera* strains from Southeast Asia.

The study, sponsored by the U.S Department of Defense and funded through the Defense Health Agency, was performed at the Department of Enteric Diseases (DED), Armed Forces Research Institute of Medical Sciences (AFRIMS), an overseas laboratory of the Walter Reed Army Institute of Research (WRAIR) located in Bangkok, Thailand. The goal was to investigate the breadth of Travelan®'s immunological reactivity against pathogenic *Vibrio cholera* bacterial isolates. Clinical isolates were collected from infected personnel located in Bangladesh, Cambodia, and Thailand, enabling researchers to gauge Travelan®'s potential against bacterial strains typically seen in the field. When compared to a placebo control, researchers found that the polyclonal antibodies comprising Immuron's Travelan® product were reactive to all 71 clinical isolates from these infected individuals. The ability of Travelan® to bind these bacteria highlights the broad-spectrum recognition by Travelan® of surface antigens on potentially debilitating and even life-threatening bacteria.

"These latest results, reported by our colleagues, adds additional data covering the inter- and intra-species reactivity of Travelan," said Dr. Robert Kaminski, Chief, Subunit Enteric Vaccines and Immunology, Department of Enteric Infections, Bacterial Diseases Branch, WRAIR. "Last year we reported that the antibodies in Travelan bound to 180 different isolates of *Campylobacter* spp, *ETEC*,

and *Shigella* spp. The current study adds an additional 71 different clinical isolates of *Vibrio cholera* to the list. This work clearly demonstrates that Travelan is immune-reactive with all *ETEC* strains tested including strains that are not present in the immunising vaccines and cross-reactive with every *Campylobacter*, *Shigella* and *Vibrio cholera* isolate tested. These results, together with the findings reported from the Travelan® shigellosis challenge studies in non-human primates studies suggest Travelan may be an effective immunoprophylactic for travelers' diarrhea caused by *Campylobacter* spp, *Shigella* spp and *Vibrio cholera*. “

“The response we have recently received from the investment community to our collaboration with the U.S. DoD has been quite extraordinary, and in my opinion, this is indicative of the high significance the investment community places on this collaborative effort,” said Dr. Gary Jacob, CEO of Immuron. “The work completed by our research collaborators at the WRAIR has provided the company with a comprehensive characterization profile of our flagship product which clearly demonstrates the potential effectiveness of Travelan® and the Immuron technology platform to neutralize pathogenic gastrointestinal bacterial infections, and offers significant potential as a preventive treatment for U.S. military personnel and civilians stationed or traveling in locations where such infections may be debilitating.”

An estimated 1.5 billion episodes of diarrhea occur worldwide each year, resulting in the deaths of approximately 2.2 million people, mostly children in developing countries throughout the world (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2699001/>). *Shigella* spp are estimated to cause 80 to 165 million cases of disease worldwide, resulting in 600,000 deaths annually and is particularly prevalent in both sub-Saharan Africa and South Asia. A preventive treatment that protects against enteric diseases, specifically shigellosis, is a high priority objective for the U.S. Army. The global burden of diarrheal diseases outweighs any of the more complex diseases seen in gastroenterology clinics throughout the world.

**ABOUT IMMURON:**

Immuron Limited (ASX: IMC, NASDAQ: IMRN), is an Australian biopharmaceutical company focused on developing and commercializing orally delivered targeted polyclonal antibodies for the treatment of inflammatory mediated and infectious diseases. Immuron has a novel and safe technology platform with one commercial asset Travelan® generating revenue. Immuron's lead clinical candidate, IMM-124E, is presently being developed as a drug to prevent Travelers' Diarrhea. Immuron's second clinical-stage asset, IMM-529, targets *Clostridium difficile* Infections (CDI), and is presently in a clinical trial in CDI patients. These products together with the Company's other preclinical immunotherapy pipeline products currently under development targeting immune-related and infectious diseases are anticipated to meet pressing needs in the global immunotherapy market.

For more information visit: <http://www.immuron.com>

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**COMPANY CONTACT:**

**Gary S. Jacob, Ph.D.**  
Chief Executive Officer  
Ph: +61 (0)3 9824 5254  
info@immuron.com

**AUS INVESTOR RELATIONS:**

**Peter Taylor**  
NWR Communications  
Ph: +61 (0)4 1203 6231  
peter@nwrcommunications.com.au

**USA INVESTOR RELATIONS:**

**Dave Gentry - CEO**  
RedChip Companies, Inc.  
US Ph: +1 (407) 491 4498  
dave@redchip.com

**About Travelan®**

Travelan® is an orally administered passive immunotherapy that prophylactically reduces the likelihood of contracting travelers' diarrhea. Travelan® is a highly purified tabletized preparation of hyper-immune bovine polyclonal antibodies and other factors, which when taken with meals bind to diarrhea-causing bacteria and prevent colonization and the pathology associated with travelers' diarrhea. In Australia, Travelan® is a listed medicine on the Australian Register for Therapeutic Goods (AUST L 106709) and is indicated to reduce the risk of Travelers' Diarrhea, reduce the risk of minor gastro-intestinal disorders and is antimicrobial. In Canada, Travelan® is a licensed natural health product (NPN 80046016) and is indicated to reduce the risk of Travelers' Diarrhea. In the U.S., Travelan® is sold as a dietary supplement for digestive tract protection.

**About Travelers' diarrhea**

Travelers' diarrhea is a gastrointestinal infection with symptoms that include loose, watery (and occasionally bloody) stools, abdominal cramping, bloating, and fever. Enteropathogenic bacteria are responsible for most cases, with enterotoxigenic *Escherichia coli* (ETEC) playing a dominant causative role. *Campylobacter* spp. are also responsible for a significant proportion of cases. The more serious infections with *Salmonella* spp. the bacillary dysentery organisms belonging to *Shigella* spp. and *Vibrio* spp. (the causative agent of cholera) are often confused with travelers' diarrhea as they may be contracted while travelling and initial symptoms are often indistinguishable.

**FORWARD-LOOKING STATEMENTS:**

This press release may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, each as amended. Such statements include, but are not limited to, any statements relating to our growth strategy and product development programs and any other statements that are not historical facts. Forward-looking statements are based on management's current expectations and are subject to risks and uncertainties that could negatively affect our business, operating results, financial condition and stock value. Factors that could cause actual results to differ materially from those currently anticipated include: risks relating to our growth strategy; our ability to obtain, perform under and maintain financing and strategic agreements and relationships; risks relating to the results of research and development activities; risks relating to the timing of starting and completing clinical trials; uncertainties relating to preclinical and clinical testing; our dependence on third-party suppliers; our ability to attract, integrate and retain key personnel; the early stage of products under development; our need for substantial additional funds; government regulation; patent and intellectual property matters; competition; as well as other risks described in our SEC filings. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based, except as required by law.