

## Immuron New U.S. Department of Defense Award & Clinical Trial Update

### Highlights:

- **New US Department of Defense award to develop two new oral therapeutics targeting *Campylobacter* and *Shigella***
- **Uniformed Services University P2TD clinical study update**

Melbourne, Australia, December 3, 2025: Immuron Limited (ASX: IMC; NASDAQ: IMRN), an Australian based and globally integrated biopharmaceutical company, announces a new research agreement funded by a U.S. Department of Defense sub award with the Naval Medical Research Command (NMRC) and the Walter Reed Army Institute of Research (WRAIR), Silver Spring, MD, USA.

As previously announced on August 16, 2024, the Naval Medical Research Command and the Walter Reed Army Institute of Research, in collaboration with Immuron, are progressing the development of novel vaccines targeting *Campylobacter jejuni* and *Shigella sonnei*. Under a recently executed collaborative research agreement with the Henry M. Jackson Foundation, new vaccine preparations against these pathogens have been developed and formulated at the military research institutes and subsequently provided to Immuron. Utilizing its proprietary technology platform, Immuron will produce two hyper-immune bovine colostrum products for pre-clinical evaluation, with the objective of advancing a combined colostrum-based therapeutic specifically designed for the US military.

The company also advises that the Uniformed Services University topline results from its clinical trial evaluating the effectiveness of enterotoxigenic *E. coli* (ETEC) hyperimmune bovine colostrum in maintaining gut health during deployment and travel are anticipated to be announced at the end of next week. As disclosed on October 31, 2025, the Uniformed Services University completed the P2TD study (NCT04605783), in which IMM-124E—the active ingredient in Travelan®—was delivered in 600 mg powder sachets and administered twice daily in a randomized, placebo-controlled trial.

Infectious diarrhea is the most common illness reported by travelers visiting developing countries and among US troops deployed overseas. Diarrhea morbidity decreases daily performance, affects judgment, decreases morale and declines operational readiness. The first line of treatment for infectious diarrhea is prescription of antibiotics. Unfortunately, in the last decade, several enteric pathogens have an increasing resistance to commonly prescribed antibiotics. In addition, travelers' diarrhea is now recognized by the medical community to result in post-infectious sequelae, including post-infectious Irritable Bowel Syndrome and several post-infectious autoimmune diseases.

The global burden of diarrheal diseases outweighs any of the more complex diseases seen in gastroenterology clinics. Every year, there are an estimated 1.5 billion episodes of diarrhea worldwide.

These episodes result in the deaths of approximately 2.2 million people, mostly children in developing countries (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2699001/>). A preventative treatment that protects against enteric diseases, specifically shigellosis, is a high priority objective for the US Army. *Shigella* spp are estimated to cause 80 –165 million cases of disease worldwide, resulting in 600,000 deaths annually and is particularly prevalent in both sub-Saharan Africa and South Asia.

This release has been authorised by the directors of Immuron Limited.

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#### 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 infectious diseases.

#### About Travelan®

Travelan® is an orally administered passive immunotherapy that prophylactically reduces the likelihood of contracting travelers' diarrhea, a digestive tract disorder that is commonly caused by pathogenic bacteria and the toxins they produce. Travelan® is a highly purified tabletized preparation of hyper immune bovine 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.

#### Travelers' diarrhea (TD)

TD is generally defined as the passage of  $\geq 3$  unformed stools per 24 hours plus at least one additional symptom (such as nausea, vomiting, abdominal cramps, fever, blood/mucus in the stools, or fecal urgency) that develop while abroad or within 10 days of returning from any resource-limited destinations ([Leung et al., 2006](#)). Diarrhea continues to be the most frequent health problem among travelers to destinations in lower- and middle-income regions ([Steffen, 2017](#)). Deployed US military personnel, essentially representing a long-term traveller population, are particularly affected given their population dynamics and the context in which they seek care and treatment ([Connor et al., 2012](#)). Diarrhea is the leading infectious disease threat to the overall health and preparedness of deployed US armed forces, with diarrheagenic *E. coli*, *Campylobacter* spp., and *Shigella* spp. among the most commonly reported etiologies ([Riddle et al., 2006](#)).

#### Immuron Platform Technology

Immuron's proprietary technology is based on polyclonal immunoglobulins (IgG) derived from engineered hyper-immune bovine colostrum. Immuron has the capability of producing highly specific immunoglobulins to any enteric pathogen and our products are orally active. Bovine IgG can withstand the acidic environment of the stomach and is resistant to proteolysis by the digestive enzymes found in the Gastrointestinal (GI) tract. Bovine IgG also possesses this unique ability to remain active in the human GI tract delivering its full benefits directly to the bacteria found there. The underlying nature of Immuron's platform technology enables the development of medicines across a large range of infectious diseases. The platform can be used to block viruses or bacteria at mucosal surfaces such as the Gastrointestinal tract and neutralize the toxins they produce.

IMM-124E (Travelan®)

IMM-124E was developed using Immuron's platform technology. IMM-124E is produced from the colostrum of birthing cattle that have been immunised during pregnancy with a vaccine containing the outer antigens of multiple human derived ETEC. A total of 13 ETEC strains are used in the vaccine to produce high levels of antibodies against selected surface antigens from the most common strains of ETEC.

The resultant hyperimmune colostrum IMM-124E from ETEC vaccinated cows contains significant levels of polyclonal antibodies specific for ETEC antigens LPS, CFA-I and Flagellin ([Sears et al., 2017](#)).

The antibodies produced in IMM-124E have been found to have a stronger binding and neutralizing activity (than the antibodies of unvaccinated cattle) against a wide range of LPS antigens including both the variable O-polysaccharide region and the preserved oligosaccharide core 'R' region of LPS from the 13 serotypes used in the ETEC vaccine.

IMM-124E is manufactured into a tablet form referred to as Travelan®.

### References

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### FORWARD-LOOKING STATEMENTS:

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