



# FORGING COMMERCIAL & CLINICAL PATHWAYS

TARGETING INFECTIOUS DISEASES WITH ORAL IMMUNOTHERAPIES – DECEMBER, 2021

JERRY KANELLOS, Ph.D. CEO

NASDAQ: IMRN

**ASX: IMC** 

## SAFE HARBOR STATEMENT



Certain statements made in this presentation are forward-looking statements and are based on Immuron's current expectations, estimates and projections. Words such as "anticipates," "expects," "intends," "plans," "believes," "seeks," "estimates," "guidance" and similar expressions are intended to identify forward-looking statements.

Although Immuron believes the forward-looking statements are based on reasonable assumptions, they are subject to certain risks and uncertainties, some of which are beyond Immuron's control, including those risks or uncertainties inherent in the process of both developing and commercializing technology. As a result, actual results could materially differ from those expressed or forecasted in the forward-looking statements.

The forward-looking statements made in this presentation relate only to events as of the date on which the statements are made. Immuron will not undertake any obligation to release publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this presentation except as required by law or by any appropriate regulatory authority.



### **COMPANY HIGHLIGHTS**



We are a <u>commercial</u> and <u>clinical-stage</u> biopharmaceutical company focusing on infectious diseases with oral immunoglobulin-based therapies

- Review of Strategic Plan
- Review of R&D Project Pipeline
  - Travelan US Drug Development Plan
  - NMRC Drug Development Plan
  - IMM-529 US Drug Development Plan
  - IMM-124E SARS-COV-2 R&D



## **DEVELOPMENT PIPELINE**

mmuron











Protectyn® - commercial product Australia

Travelan® - commercial product Australia

Travelan® - commercial product Canada

Travelan® - commercial product USA



i) Travelers' Diarrhea FDA drug registration USA



iii) COVID-19 research



Recurrent C. difficile infections



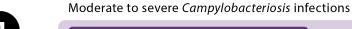
IMM-529





Research Center

Naval Medical



ETEC infections

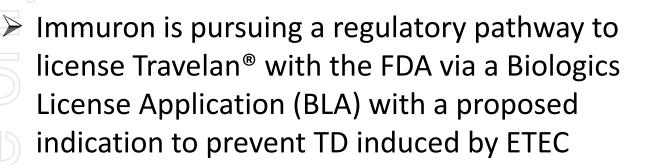


Evaluation of Shigella specific therapeutic drug candidates



## TRAVELAN®: PLAN FOR EXPANDED USE

#### WITH PARTIAL SUPPORT BY US DOD FOR DOSE FINDING



We are seeking financial support to fund part of this initiative and develop a dosing regimen acceptable for use by the military DRUG CANDIDATE
IMM-124E

Status with FDA: IND 14,933

IND 15675 / IND 17066



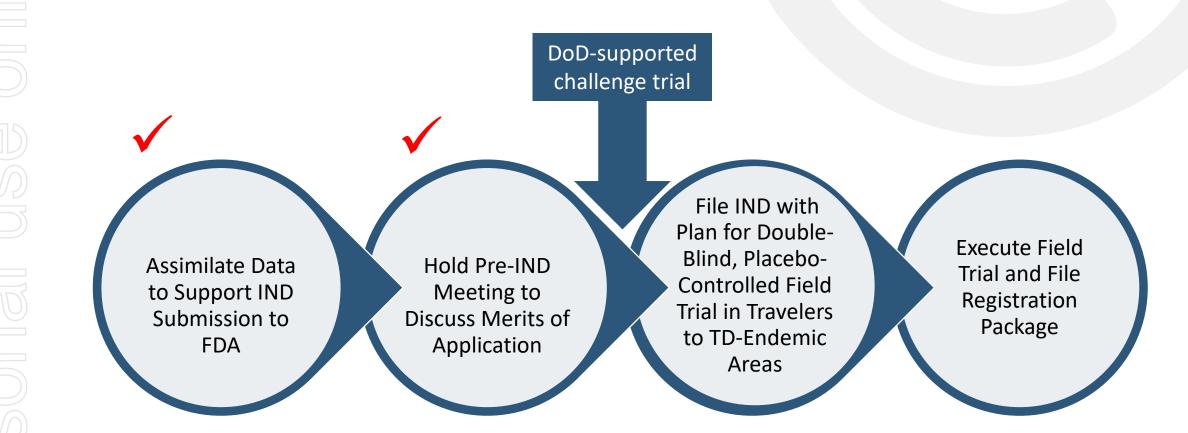
Plan to develop IMM-124E as an approved biologic in the USA targeting travelers' diarrhea



## TRAVELAN® DRUG DEVELOPMENT PLAN



Travelan® for FDA approval as biologic to reduce the risk of travelers' diarrhea (TD) in travelers to endemic areas:







## RATIONALE OF PHASE 2 TO BE SUPPORTED BY US DOD

- Travelan® efficacy studies were performed using two different doses (200 mg and 400 mg) 3 times a day
- Such a regimen is cumbersome for military troops deployed in austere environments and military field studies have shown that compliance is low with products dosed more than once per day<sup>1</sup>
- We propose herein to test the efficacy of one large dose per day in a controlled human infection model (CHIM) trial using ETEC H10407 to inform the decision to move forward with a once per day dosing regimen in a Phase 3 study

1Srivastava K, Arora A, Kataria A, Cappelleri JC, Sadosky A, Peterson AM. Impact of reducing dosing frequency on adherence to oral therapies: a literature review and meta-analysis. Patient Prefer Adherence. 2013;7:419-434 https://doi.org/10.2147/PPA.S44646





## STUDY DESIGN & TIMELINE OF THE PHASE 2

- > Randomized (1:1), double-blind, placebo-controlled trial in 60 healthy, adult subjects
  - Admission to inpatient facility (<u>two repetitive cohorts</u>)
  - Once daily dosing of Travelan®/placebo
  - Challenge with 2x10<sup>7</sup> CFU of <u>ETEC strain H10407</u> after two days of dosing
  - Follow subjects in an inpatient setting for primary endpoint of moderate-severe diarrhea
  - All subjects treated with antibiotics (ciprofloxacin) 5 days post-challenge (or earlier)
  - Discharged when symptoms resolved/resolving and no longer shedding challenge organism

Product	N	
Travelan® (IMM-124E), one dose (1.2 mg)	30	
Placebo	30	





# A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL EVALUATING THE EFFICACY OF NON-ANTIBIOTIC OTC PRODUCTS IN TRAVELERS' DIARRHEA (TD) PREVENTION (P4TD)

#### **CURRENT STATUS – PLAN TO COMMENCE ENROLMENT APRIL 2022**

#### Primary Objective:

To evaluate the clinical efficacy of Travelan®, Florastor® and Bimuno® vs. placebo for maintenance of GH as measured by the combined endpoint of incidence of GH deficiencies (defined as 3 or more unformed stools in a 24-hour period OR 2 or more unformed stools and one or more associated symptoms in a 24-hour period) or antibiotic treatment for diarrhea per subject report, focusing on a 10 day window of prophylaxis during travel.

#### STUDY DESIGN

This is a randomized (1:1:1:1 allocation), double-blind, placebo controlled multicenter clinical trial comparing three dietary supplements, Travelan®, Florastor® and Bimuno®, individually against placebo to determine efficacy for maintenance of GH. A total of 1320 subjects (330/arm) will be enrolled from the following populations: active duty US and UK military personnel, US DoD beneficiaries and US civilians deploying or traveling to intermediate or high GH disruption risk destinations.



# THE EFFICACY OF NON-ANTIBIOTIC OTC PRODUCTS IN TRAVELERS' DIARRHEA (TD) PREVENTION (P4TD)



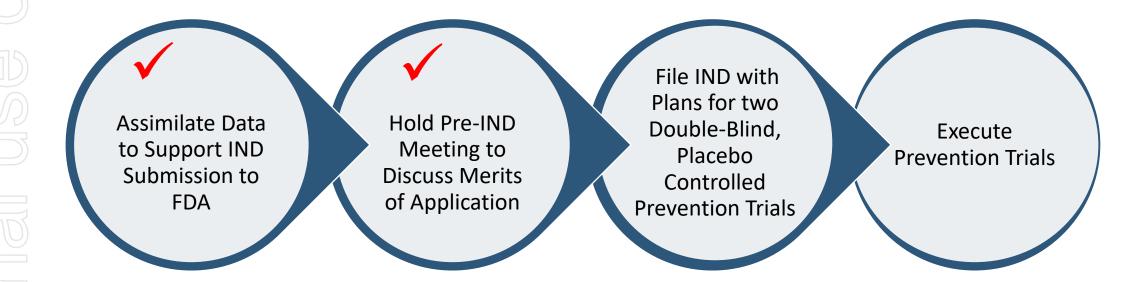
- The study products used in the clinical trial are considered dietary supplements
   not medicines approved by the FDA
- Clinical Trial Design approved by IRB not FDA
- Each product will be purchased commercially and packaged in sachets similar to placebo subjects will be instructed to take 1 sachet twice a day with meals.
- Travelers and deployed personnel will be enrolled prior to departure and will begin taking the study product 3 days prior to arrival at destination, continuing for 10 days during travel.
- Enrollment will occur over a 24-month period



## NMRC CAMPETEC DRUG DEVELOPMENT PLAN



Two Human Clinical Trials Planned: To evaluate the efficacy of the New Drug in Infectious Diarrhea Caused by ETEC and Moderate To Severe Camylobacteriosis





## NMRC CAMPETEC DRUG DEVELOPMENT PLAN



#### **CURRENT STATUS**



➤ Completed ✓

#### CLINICAL STUDY

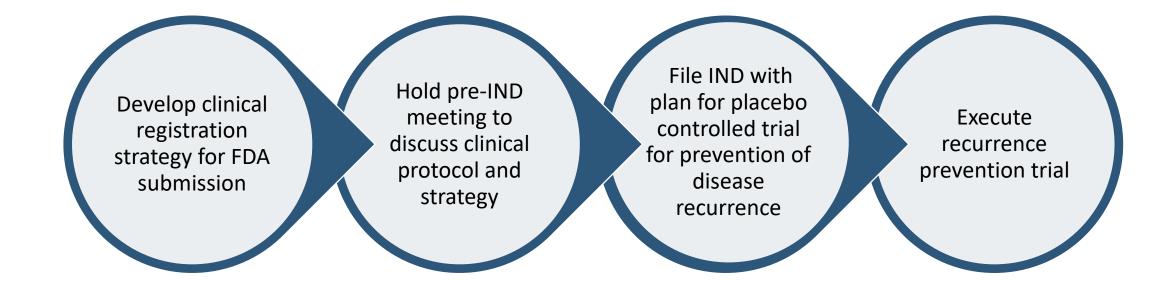
- ➤ IND Application In progress
- ➤ FDA Review and Approval of IND Q1 CY22
- ➤ ETEC Study Initiation at John Hopkins Q2 CY22



## **IMM-529 DRUG DEVELOPMENT PLAN**



Develop clinical protocol for FDA approval as drug to prevent recurrent *Clostridiodes difficile* Infection:





#### **IMM-529 DRUG DEVELOPMENT PLAN**



#### **CURRENT STATUS**

- COLOSTRUM PRODUCTION
  - ➤ Completed ✓
- DRUG SUBSTANCE
  - cGMP manufacture Q1 CY22
- DRUG PRODUCT
  - cGMP manufacture Q2 CY22
- CLINICAL DEVELOPMENT
  - ➤ Clinical Protocol Completed ✓
  - ➤ Clinical Sites & Principal Investigators Identified ✓
  - ➤ Engaging with suitable CROs to support Clinical Development In progress
- REGULATORY
  - ➤ Pre-IND Meeting on IMM-529 2H CY22



## IMM-124E SARS-COV-2 RESEARCH & DEVELOPMENT PROPOSAL



#### **CURRENT STATUS**

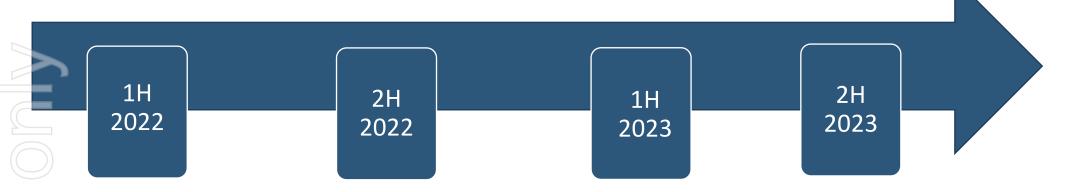
#### **RESEARCH & DEVELOPMENT**

- Monash Research Services Agreement Completed
- Research Agreement with Doherty Institute Executed
- The Aims of this work are as follows:
  - ► Testing of the neutralizing activity of the various fractions isolated by Monash University against the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in the cytopathic effect inhibition cell-based assay to be performed by The Doherty Institute Study initiated December 2021 ✓
  - ➤ R&D Work to be expanded to include variants of concern Draft protocols In progress
  - ➤ Murine mouse model for preclinical evaluation Draft protocols in development



## KEY MILESTONES EXPECTED TO DRIVE VALUE





- NMRC IND Submission (Q1 CY22)
- Initiate NMRC Phase 2
   ETEC challenge study
   (Q2CY22)
- IMM-124E IND Submission •
- IMM-529 cGMP Manufacture

- Topline Results
   NMRC ETEC Study
- Initiate NMRC Phase
   2 Campylobacter
   challenge study
- Initiate IMC Phase 2
  ETEC challenge study
  - Pre-IND Meeting on IMM-529
- IMM-529 IND Submission

- Topline Results NMRC Campylobacter Study
- Topline Results IMM-124E ETEC Study
- Initiate Phase 2CDI clinical study

 IMM-124E Infectious diarrhea pivotal field clinical study

#### Results from

US Grant application & COVID-19 Research Program expected YE2021



## **THANK YOU**





#### **Dr Jerry Kanellos – Chief Executive Officer**

- Over twenty years' experience in pharmaceutical and biotechnology industries.
- Former Chief Operating Officer of TransBio Ltd. Responsible for strategic identification, development and maintenance of global commercial partnerships, along with development, management and IP portfolio, R&D and technology transfer.
- Leadership roles in business development, project management, IP portfolio management, R&D, senior management.
- Consultant to academic institutes, private and publicly listed companies and government departments specializing in development and commercialization strategies.
- PhD in medicine from the University of Melbourne.

