

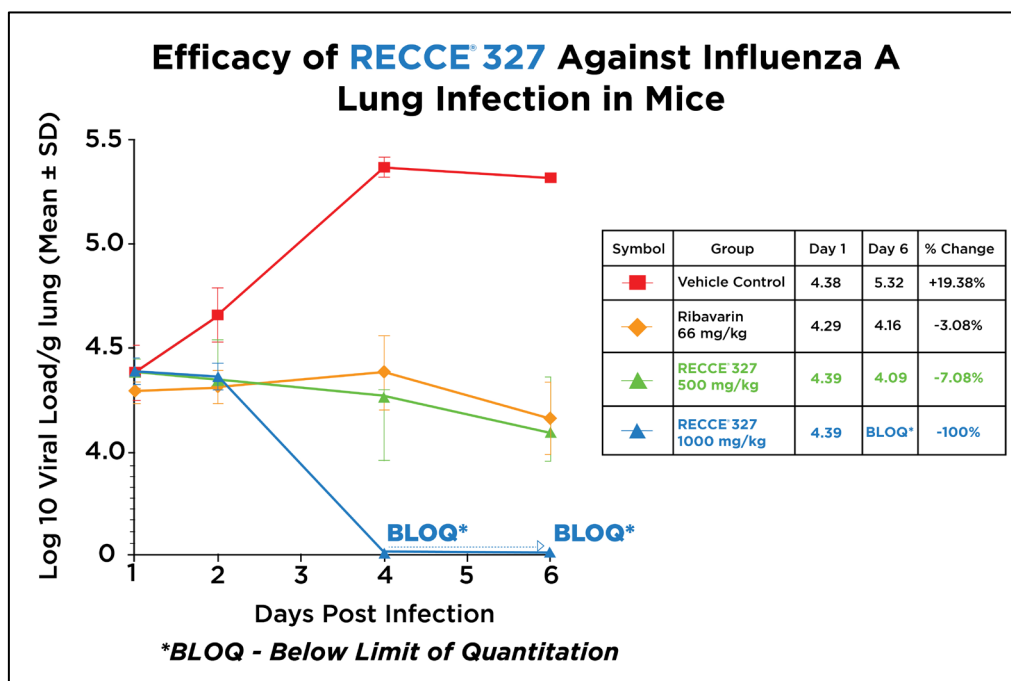
## Positive Data on RECCE® 327 Against Influenza A Respiratory Virus Infection

### Highlights:

- Dramatic reduction in viral load in the lungs of mice treated with RECCE® 327 as compared to the approved antiviral drug treated and vehicle control untreated groups
- RECCE 327's unique mechanism of action reinforces efficacy against both bacterial cells and enveloped viruses

**Sydney Australia, 20 April 2020:** Recce Pharmaceuticals Ltd (**ASX: RCE**), the company developing a new class of broad-spectrum synthetic antibiotics, today announced positive efficacy data showing significant *in vivo* anti-viral activity against the Influenza A virus in mice treated with its lead compound RECCE® 327.

Data showed a significant dose-dependent decrease in the viral growth rate and viral load in lungs of mice infected with Influenza A following treatment with RECCE® 327 compared to the vehicle control group, and group treated with an approved antiviral drug Ribavirin, also known as tribavirin.



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Day	Vehicle control			Ribavirin 66 mg/kg i.p.			RECCE® 327 500 mg/kg iv bid			RECCE® 327 1000 mg/kg iv bid		
	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N
1	4.38	0.1	3	4.29	0.06	3	4.39	0.09	3	4.39	0.1	3
2	4.66	0.1	3	4.31	0.08	3	4.35	0.03	3	4.37	0.1	3
4	5.37	0	3	4.38	0.18	3	4.27	0.03	3	<b>BLOQ</b>	NA	3
6	5.32	NA	1	4.16	0.17	3	4.09	0.02	3	<b>BLOQ</b>	NA	3

NA – Not Applicable

**BLOQ – Below Limit of Quantitation**

The study was conducted by an independent Contract Research Organisation to assess the dose-dependent efficacy of RECCE® 327 and *in vivo* anti-viral activity against Influenza A, a respiratory lung infection, in mice. RECCE® 327 treatment groups were dosed twice-daily for 5 days and the Ribavirin treatment group was dosed once daily for 5 days (optimised dosing for latter). Viral pathogenesis in the mice was evaluated by body weight loss, survival and viral load in lungs.

The results demonstrated **RECCE® 327 showed a significant dose-dependent decrease in viral load in the lungs** compared to the vehicle control and Ribavirin – a drug that decreases relapse rates by accelerating viral clearance early in the treatment course<sup>1</sup>.

Four (4) groups of 12 mice infected with Influenza A showed those treated with RECCE® 327 fared better in almost all instances than those who received the Ribavirin treatment, an approved antiviral drug, or vehicle control group. RECCE® 327 continued to show efficacy at different dose levels with significant reduction in viral count in the lungs when compared with the vehicle control. As dosage increased from 500mg/kg to 1,000mg/kg, the viral count fell below the limit of quantitation (BLOQ) on Days 4 and 6 post-infection.

Influenza A viruses are enveloped viruses and causative agents of respiratory disease. The genome of the Influenza A viruses comprises single-stranded ribonucleic acid (RNA) molecules – similar to that of coronaviruses, where the genome also comprises single-stranded RNA.

Michele Dilizia, Executive Director of Regulatory Affairs, said: “These data reinforce RECCE® 327’s unique, universal Mechanism of Action, seen against bacterial cells and

<sup>1</sup> Drug Bank CA - <https://www.drugbank.ca/drugs/DB00811>

#### Executive Director

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further now, viral particles. The universal Mechanism of Action sees continued potency against mutating bacterial cells, and it is exciting to see the potential here as well, against viral particles, which are also notorious for their mutation.”

Dr John Prendergast, Non-Executive Chairman said: “The increasing potential to be effective against not only a broad range of superbug bacteria, but viral pathogens as well, reinforces the company’s expanding infectious disease capabilities and global positioning”.

This announcement has been approved for release by Recce Pharmaceuticals’ Executive Director James Graham

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## About Recce Pharmaceuticals Ltd

Recce Pharmaceuticals Ltd (ASX: RCE) is pioneering the development and commercialisation of a New Class of Synthetic Antibiotics with Broad Spectrum activity designed to address the urgent global health problem of antibiotic resistant superbugs.

Recce antibiotics are unique – their potency does not diminish even with repeated use, which is a common failure associated with existing antibiotic use and the resulting emergence of resistant superbugs.

Patented lead candidate RECCE<sup>®</sup> 327, wholly owned and manufactured in Australia, has been developed for the treatment of blood infections and sepsis derived from *E. coli* and *S. aureus* bacteria – including their superbug forms.

The FDA has awarded RECCE<sup>®</sup> 327 *Qualified Infectious Disease Product* designation under the *Generating Antibiotic Initiatives Now* (GAIN) Act – labelling it for Fast Track Designation, plus 10 years of market exclusivity post approval.

Recce wholly owns its automated manufacturing, ready to support first-in-human clinical trials. Recce's anti-infective pipeline seeks to exploit the unique capabilities of RECCE<sup>®</sup> technologies targeting synergistic, unmet medical needs.

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