

Positive Efficacy Data with RECCE antibiotics in Kidney and UTI infection animal model

Highlights:

- **Positive efficacy demonstrated against *E. Coli* (Gram-negative) in Kidney and UTI (bladder) infection model in rats.**
- **Data demonstrates potential of RECCE[®] 327 in new indications and to form part of a broader anti-infective treatment model in pre-sepsis.**
- **Provisional Patent Family 4 Submission, expiry January 2040.**

SYDNEY Australia, 14 February 2020: Recce Pharmaceuticals Ltd (ASX: RCE), the company developing a new class of broad-spectrum synthetic antibiotics, is pleased to announce positive efficacy data in a rat infection model for its RECCE[®] 327 antibiotic in the treatment of Kidney and Urinary Tract Infections (UTIs) caused by *Escherichia coli* (*E. Coli*), which can often progress to sepsis.

This new data demonstrates the potential of RECCE[®] 327 in new indications to form part of a broader anti-infective treatment model in pre-sepsis, expanding its patent protection and claims to include a provisional Patent Family 4 submission.

The purpose of the study was to determine whether RECCE[®] 327 has the potential to form part of a broader anti-infective treatment model, by tackling a leading initial cause of sepsis¹ (Kidney and UTI *E. Coli* (Gram-negative) infections), whilst in its pre-sepsis 'early stage', localised form.

E. Coli is a Gram-negative bacterium, responsible for 80-90 percent of UTIs². UTIs can spread from the kidneys, going on to cause sepsis and septic shock, leading to death. More than half the cases of so called 'urosepsis' among older adults are caused by a UTI³.

¹ <https://www.healthline.com/health/sepsis>

² <https://www.intechopen.com/books/-i-escherichia-coli-i-recent-advances-on-physiology-pathogenesis-and-biotechnological-applications/the-pathogenesis-of-i-escherichia-coli-i-urinary-tract-infection>

³ <https://www.sepsis.org/sepsisand/urinary-tract-infections/>



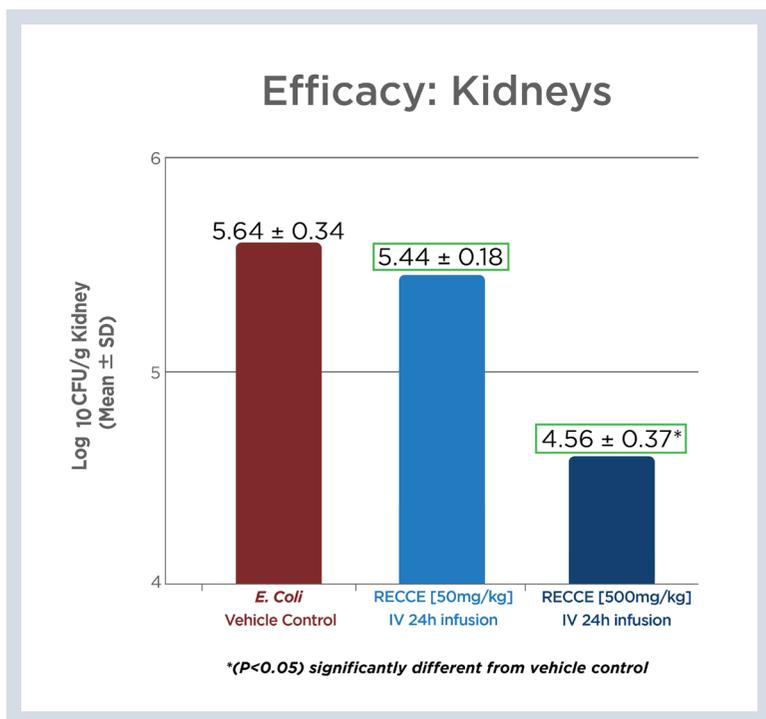
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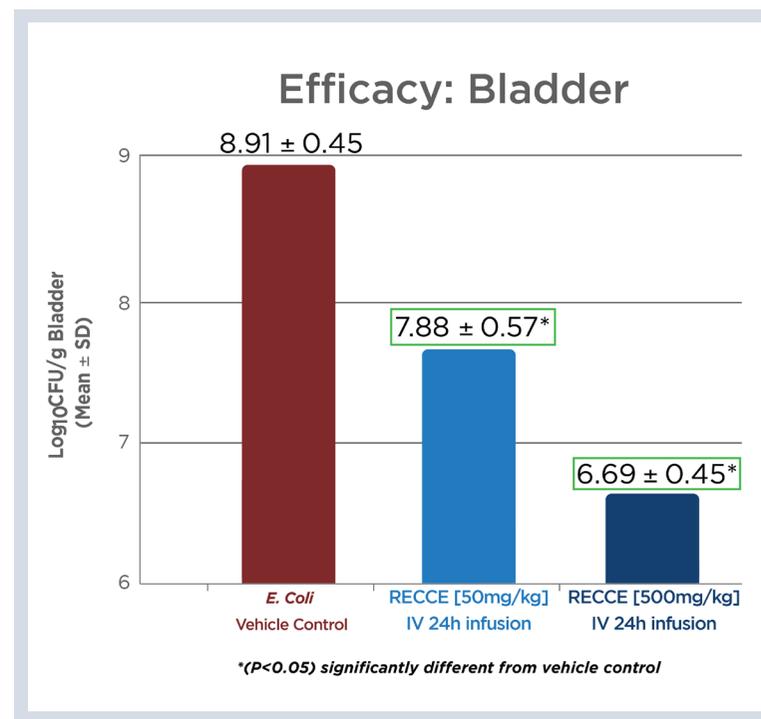
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Bacterial load in rat Kidneys following treatment with RECCE® 327



Bacterial load in rat Bladder following treatment with RECCE® 327



Study Conclusions:

Following a single 24-hour intravenous infusion, RECCE® 327 showed dose dependent antibacterial effect in the kidneys at 50 and 500 mg/kg, with 500 mg/kg showing significant activity when compared to vehicle control (*p*<0.050); the same administration showed significant dose dependent antibacterial effect in the bladder at both 50 and 500 mg/kg when compared to the vehicle control (*p*<0.050). Rats treated with RECCE® 327 were observed for any adverse clinical signs and remained apparently normal through the study.

For further information please visit recce.com.au or contact:



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Recce Pharmaceuticals Chairman Dr John Prendergast said:

“These data support the use of RECCE® 327 across the full therapeutic road map for pre-sepsis and sepsis conditions, now including the treatment of primary infection by *E. coli* in kidney and UTIs. This further justifies the exciting potential of RECCE® 327 as a new class of antibiotics as we continue to gather new data ahead of our first-in-human clinical studies.”

The US National Centre for Biotechnology Information (NCBI) estimates about 150 million people worldwide develop UTIs each year, 11m of which in the USA alone; costing the US US\$5 billion annually ⁴.

⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5559502/>

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® 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® 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® technologies targeting synergistic, unmet medical needs.

For further information please visit recce.com.au or contact:



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