

ASX/Media Release

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Botanix joins forces with The University of Queensland to Accelerate Development of BTX 1801

Key highlights

- Botanix awarded Innovation Connections Grant from the Australian Government and forms research collaboration with UQ's Institute for Molecular Bioscience
- Research collaboration to further explore the antimicrobial activity of cannabidiol and Permetrex[™] skin delivery technology
- Botanix is developing BTX 1801, a novel antimicrobial with the potential to address unmet needs in serious skin infections with significant market opportunities
- Studies facilitate the identification of the preferred type of skin infection to target for BTX
 1801 in preparation for clinical studies targeted for 4Q CY2018

Philadelphia PA and Sydney Australia, 19 July 2018: Medical dermatology company Botanix Pharmaceuticals Limited (ASX: BOT, "Botanix" or the "Company") is pleased to announce it has signed a research agreement with The University of Queensland's (UQ) Institute for Molecular Bioscience. The research collaboration is part of an *Innovation Connections Grant* awarded to Botanix and UQ by the Federal Government's department of AusIndustry to investigate the antimicrobial activity of Botanix's pipeline product, BTX 1801.

Matt Callahan, Founder and Executive Director of Botanix said: "We are pleased to be working in partnership with Professor Matt Cooper and Dr. Mark Blaskovich's team at UQ's Institute for Molecular Bioscience (IMB). Prof Cooper and Dr. Blaskovich are leading experts in the field of antimicrobial drug discovery and development. Their extensive expertise in the mechanisms of antimicrobial resistance, combined with their state-of-the-art research facilities and library of antimicrobial resistant microorganisms will help facilitate the rapid advancement of BTX 1801 into clinical trials."

"We are also very pleased that the potential of BTX 1801 has been supported by AusIndustry through the *Innovation Connection Grant* program. This demonstrates Botanix's ability to secure non-dilutive funding to progress its product pipeline in parallel to the development of its lead acne and atopic dermatitis products."

The research collaboration will include an assessment of the impact of BTX 1801 against a diverse panel of antibiotic resistant organisms and more than 100 clinical isolates of methicillin-resistant Staphylococcus aureus (MRSA). Staphylococcus aureus are a common cause of skin infections, such as Acute Bacterial Skin and Skin Structure Infections (ABSSSI). This research forms a critical part in establishing which skin infection Botanix will target first.



ABSSSI are a common type of skin infection that include cellulitis, erysipelas, major skin abscesses and wound infections. 82% of pathogens identified in ABSSSI patients comprise methicillin-resistant staph aureus (MRSA) or methicillin sensitive staph aureus (MSSA). In the US alone, more than 3 million patients are hospitalised each year, which in combination with outpatients, leads to an estimated 30 million days of treatment and comprises a market worth approximately US\$10bn¹.

Dr. Mark Blaskovich, Principal Investigator and Program Coordinator at IMB said: "We welcome this opportunity to work in collaboration with Botanix to investigate the antimicrobial properties of BTX 1801. Antibiotic resistance is a significant global concern and we are excited about the potential prospects of BTX 1801 in this field. The partnership is also testament to the university engaging with industry to embed research discovery into the problem-solving process, so together we can bring solutions to market more quickly and with greater impact."

Interview with Dr Mark Blaskovich

Watch an interview with Dr Mark Blaskovich, discussing the Botanix and UQ research collaboration with The Capital Network's Executive Director Lelde Smits - https://youtu.be/ieMDa1OK1EQ



About BTX 1801

Botanix is developing BTX 1801, a novel antimicrobial with the potential to address unmet needs in serious skin infections with significant market opportunities. Data from the pre-clinical testing indicated PermetrexTM improves the killing power of cannabidiol, achieving close to 100% bacteria killing effect (at low concentrations) of antibiotic resistant strains of the most common skin infection bacteria – Methicillin-resistant Staphylococcus aureus (known as MRSA). The development of new and

¹ AMR conversion generic units to branded pricing



novel antimicrobials is now the subject of a globally coordinated effort and the market opportunity for new antimicrobials is significant and many unmet patient needs remain.

In conjunction with key opinion leaders, Botanix is focused on completing a market review to identify the preferred type of skin infection to target initially for BTX 1801, with the intention to execute a rapid development pathway.

About UQ Institute for Molecular Bioscience (IMB)

IMB is a multidisciplinary life sciences research institute. Our 500 scientists use world-leading infrastructure to drive discoveries from genome to drug design, disease discovery application and sustainable futures. Our research is framed through centres focused on superbugs, pain, heart disease, inflammation, solar biotechnology and the genomics-disease interplay.

The mission of IMB's Centre for Superbug Solutions is to help doctors accurately diagnose and treat multidrug resistant bacterial infections, achieved through efforts to:

- Develop new antibiotics to tackle the rise in drug -resistant bacteria;
- Help unite industry, government, clinical and academic leaders in the fight against antimicrobial resistance;
- Engage and inform the public about effective antibiotic use and how they can support our efforts;
- Work with health professionals to track, diagnose, and contain infections;

About Botanix Pharmaceuticals

Botanix Pharmaceuticals Limited (ASX:BOT) is a clinical stage medical dermatology company based in Perth, Australia and Philadelphia, PA. The Company's focus is the development of safe and effective topical treatments for acne, psoriasis, atopic dermatitis and other skin conditions. The active ingredient contained in Botanix products is a synthetic form of a widely studied natural compound. Treatment targets include inflammation, deterioration of the of the skin barrier, skin cell proliferation, pruritus (itch), excess sebum production and bacterial infection.

Botanix has an exclusive license to use a proprietary drug delivery system (PermetrexTM) for direct skin delivery of active pharmaceuticals in all skin diseases. Botanix is working with multiple parties to test the application of PermetrexTM on both a fee-for-service and traditional license basis.

Botanix pursues a rapid clinical development strategy aimed at accelerating product commercialisation. The patient treatment duration of clinical studies is generally completed within a 4 to 12 week timeframe.

The Company completed its first acne patient studies with BTX 1503 in January 2018 and has commenced a Phase 2 clinical trial in June 2018 with completion expected in mid-2019. The Phase 1b BTX 1204 atopic dermatitis patient study concluded in June 2018 and preparation is underway for a Phase 2 clinical trial. A further Phase 1b BTX 1308 psoriasis patient study is also scheduled to commence in 3Q CY2018.



To learn more please visit: https://www.botanixpharma.com/

For more information, please contact

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