



## **Neurothera Labs Granted U.S. Patent for Cannabinoid Technology to Overcome Antimicrobial Resistance such as MRSA**

*Proprietary Cannabinoid-Enhanced Platform Targets Antibiotic Resistance Using Approved Antimicrobials*

February 2, 2026 - Vancouver, British Columbia, Canada- Neurothera Labs Inc. (TSXV: NTLX) (“**Neurothera**” or the “**Company**”), a clinical-stage biotech company and a majority-owned subsidiary of SciSparc Ltd. (Nasdaq: SPRC) (“SciSparc”), today announced that the United States Patent and Trademark Office has granted a U.S. patent for its proprietary combination of antimicrobials and cannabinoids. This patent covers innovative compositions and methods of potentiating antimicrobials, specifically designed to enhance the efficacy of existing antibiotics against resistant bacterial strains.

This patent grant in the United States joins previously granted patents for the same family in the U.S., Europe, further strengthening the global intellectual property protection of Neurothera's proprietary antimicrobial-potentiating platform.

The patented technology combines well-established antibiotics—many of which have been on the market for decades—with cannabinoids such as THC ( $\Delta^9$ -Tetrahydrocannabinol) and CBD (Cannabidiol), and in certain embodiments, N-acylethanolamines like palmitoylethanolamide (PEA). This synergistic approach, which used the Company’s combination of antimicrobials and cannabinoids, demonstrated in pre-clinical studies, enhances antimicrobial activity, potentially restoring the effectiveness of antibiotics that are ineffective as monotherapy against resistant Gram-positive pathogens, such as Methicillin-resistant *Staphylococcus aureus* (“MRSA”). When administered in combination with cannabinoids, the platform leverages the extensive long-term safety data of these antibiotics to help minimize risk, potentially offering an effective, safe, and affordable therapeutic solution.

Prolonged and widespread antibiotic use has driven the emergence of resistant bacterial strains through genetic mutations and selective pressure. MRSA remains a leading global threat, evading multiple antibiotic classes. According to a comprehensive analysis in [The Lancet](#) (September 2024), MRSA directly caused approximately 130,000 deaths worldwide in 2021—more than double the approximately 57,000 deaths in 2019—and showed the largest increase in attributable mortality among resistant pathogens. Bacterial antimicrobial resistance (“AMR”) overall directly caused 1.14 million deaths and was associated with 4.71 million deaths in 2021 worldwide, with a global median methicillin resistance rate of 27.1% in *S. aureus* bloodstream infections in 2023 ([WHO Global Antimicrobial Resistance Surveillance Report, 2025](#)).

This patent family is based on preclinical studies conducted to evaluate the antimicrobial effects of cannabinoids when combined with antibiotics in well-established, regulatory-compliant models.

The global antibiotics market is projected to reach approximately **\$58 billion in 2026**, according to a report published by Mordor Intelligence entitled “*Antibiotics Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)*”, driven by the escalating challenge of antimicrobial resistance. However, with superbugs like MRSA fueling the crisis—evidenced by a 30% rise in healthcare-acquired infections in the U.S. over recent years—the Company believes the need for innovative solutions that enhance existing antibiotics' efficacy while improving safety is critical.

The "antimicrobial-sparing" effect shown in pre-clinical studies using Neurothera's proprietary combination may eliminate the constant requirements for new antibiotics to combat resistant microbial strains, helping mitigate serious side effects such as resistance development, organ toxicity, and gastrointestinal issues, all while capitalizing on the proven safety profiles of long-marketed antibiotics.

According to the World Health Organization, pharmaceutical companies have increasingly shied away from developing new antibiotics due to a combination of prolonged development timelines, high costs, and the swift emergence of bacterial resistance, which collectively undermine profitability. The process of bringing a novel antibiotic to market typically spans 10 to 15 years, involving rigorous clinical trials and regulatory hurdles that drive up expenses. Compounding this, bacteria can develop resistance to new antibiotics within just a few years of introduction, leading to restricted usage to preserve efficacy and resulting in limited sales potential compared to chronic disease treatments. As a result, major pharmaceutical firms have largely exited the field, leaving innovation to smaller entities despite the growing threat of antimicrobial resistance.

### **About Neurothera Labs Inc.**

Neurothera Labs Inc. (TSXV: NTLX) is a clinical-stage pharmaceutical company focused on developing novel therapeutics for central nervous system disorders and other underserved health conditions through collaborations and innovative combinations.

#### **For further information, please contact:**

Michal Efraty IR Manager

Neurothera Labs Inc.

Telephone: +972-3-7617108

Email: [michal@efraty.com](mailto:michal@efraty.com)

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*“This press release contains “forward-looking statements” within the meaning of applicable Canadian securities laws. Words such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates,” “potential,” and similar expressions are intended to identify forward-looking statements. Forward-looking statements in this press release include statements regarding the potential efficacy and safety of the Company's cannabinoid-antimicrobial combination platform, the strength of the Company's intellectual property portfolio, and the Company's ability to develop and commercialize its product candidates.*

*Forward-looking statements are based upon management's current expectations and are subject to significant risks and uncertainties that could cause actual results to differ materially, including: the Company's product candidates are based on preclinical studies only and may not translate to safe or effective outcomes in human clinical trials; uncertainties in the regulatory pathway for cannabinoid-based therapeutics; risks that patents may not provide meaningful protection or may be challenged or circumvented; the Company's reliance on SciSparc Ltd. as majority shareholder; the need for substantial additional capital; and risks inherent in the antibiotics market. For a more detailed description of risks, reference is made to the Company's filings at [sedarplus.ca](http://sedarplus.ca) and, with respect to SciSparc Ltd., filings at [sec.gov](http://sec.gov). Statistical data from third-party sources, including *The Lancet* and the World Health Organization, has not been independently verified by the Company. This press release does not constitute an offer to sell or solicitation of an offer to buy any securities. Forward-looking statements speak only as of the date made. The Company assumes no obligation to update forward-looking statements except as required by applicable Canadian securities laws."*