



## **Pascal Biosciences Announces Optimization of Cannabinoid-Derived Drug Candidates to Kill Glioblastoma Cells**

VANCOUVER, British Columbia and SEATTLE, Nov. 05, 2018 -- **Pascal Biosciences Inc. (TSX.V:PAS)** ("Pascal" or the "Company"), a drug discovery and development company, today announced the peer reviewed publication and upcoming presentation of their recently licensed cannabinoid-derived drug program for glioblastoma. Dr. Stella and colleagues are publishing their work today in the *European Journal of Medicinal Chemistry* (Vol.159), a peer reviewed journal with a high impact value. These results will be presented at the 23<sup>rd</sup> Annual Meeting of the Society for Neuro-Oncology in New Orleans, on Saturday, November 17, 2018 (Poster # DDIS-12).

The findings, titled: "Modified carbazoles destabilize microtubules and kill glioblastoma multiform cells," summarize research headed by Dr. Nephi Stella, founder and co-director of the University of Washington Center for Cannabis Research. This work details the discovery of compounds based on cannabinoids, and follows their chemical optimization into potent tumor killing agents.

"Our compounds kill tumor cells derived from patients with glioblastoma," said Dr. Stella. "I'm excited to see Pascal rapidly advancing this promising program, as it has great potential to help patients diagnosed with glioblastoma, brain metastases and other devastating cancers."

"This work is covered by intellectual property licensed by Pascal, resulting in the next generation of cannabinoid-based therapeutics for treating devastating brain cancers," said Dr. Patrick Gray, CEO of Pascal. "We are eager to begin clinical trials for our first therapeutic next year, and Dr. Stella's vast expertise will also advance our other cannabinoid programs." Pascal recently licensed the portfolio of cannabinoids and related compounds synthesized by Dr. Stella at the University of Washington and Dr. Philippe Diaz of the University of Montana. Pascal is advancing its lead candidate ST-403 into clinical trials, which are targeted to begin in 2019.

### **About ST-403 and Glioblastoma**

ST-403 is a mitosis inhibitor that blocks cell division. Drugs of this class disrupt microtubules, which are the structures that pull chromosomes apart during cell division. There are several mitotic inhibitors approved for cancer treatment, including paclitaxel and vinblastine, and they have substantial benefit on solid tumors when combined with other chemotherapeutics. However, unlike ST-403, none of these agents cross the blood brain barrier and therefore have no activity on glioblastoma or other brain cancers.

Glioblastoma multiforme is a devastating disease for patients with limited treatment options due to the high rate of recurrence and aggressive tumor growth. According to the National Brain Tumor Society, glioblastoma strikes about 15,000 patients each year in North America with a median survival rate of 12 to 17 months. Therapies to treat glioblastoma are limited to surgery, radiation and chemotherapy, and more recently tumor treating fields. The only chemotherapeutic approved for glioblastoma is temozolomide, which was developed over 50 years ago and extends survival by only two months. Temozolomide kills tumor cells by causing DNA damage, a mechanism that is different from ST compounds. Temozolomide is now off patent protection, but previously had sales over \$1B per year, so the commercial potential of ST-403 may be significant.

### **About Pascal Biosciences Inc.**

Pascal Biosciences is a biotechnology company focused on advancing innovative approaches for the treatment of cancer including cannabinoid-based therapeutics and targeted therapies. The company's leading cannabinoid portfolio comprises a small molecule therapeutic, ST-403, that is advancing into clinical trials for the treatment of glioblastoma, and an immunostimulatory molecule. In addition, Pascal Biosciences is developing a B-cell targeted antibody for acute lymphoblastic leukemia and an antibody for calcium channels expressed by the immune system. For more information, visit [www.pascalbiosciences.com](http://www.pascalbiosciences.com).

On Behalf of the Board of Directors  
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