Charleston
LABORATORIES
Novel Innovation, Reducing Opioid Side Effects Patient by Patient

Charleston Laboratories and Daiichi Sankyo Announce Collaboration to Develop and Commercialize Novel, Fixed-Dose Combination Hydrocodone Products for Pain and Opioid-Induced Nausea and Vomiting (OINV) in the US

Charleston Laboratories to receive $200m split evenly between cash upfront and a near term milestone, with additional $450m in milestone payments connected to filing and approval of its novel fixed-dose hydrocodone products in the United States

Charleston Laboratories and Daiichi Sankyo will collaborate on development and commercialization; Charleston will supply all products and retain an option to co-promote in the United States

Jupiter, FL, Tokyo, Japan, and Parsippany, NJ -- (August 07, 2014) – Charleston Laboratories Inc., through its wholly owned subsidiary LOCL Pharma, Inc., and Daiichi Sankyo announced today that the parties have entered into a strategic collaboration for the development and U.S. commercialization of Charleston Laboratories' novel hydrocodone combination products, including CL-108, being studied for the treatment of moderate to severe acute pain as well as the reduction of Opioid-Induced Nausea and Vomiting (OINV).

CL-108 combines 12.5 mg of immediate-release promethazine with 7.5 mg of hydrocodone and 325 mg of acetaminophen. Charleston recently completed a 465-patient phase 3 trial studying the effects of CL-108 as a treatment for moderate to severe acute pain and the reduction of OINV, where CL-108 demonstrated high statistical significance ($P<0.01$) in both primary endpoints relative to pain reduction and the symptoms of OINV[1].

Hydrocodone is the most widely prescribed medication in the United States, with more than 131 million prescriptions annually.[2] Opioid-induced nausea affects up to 30 percent of these patients, with approximately 15 percent experiencing vomiting.[3] These unwanted side effects can result in poor pain control related to difficulties with compliance or return visits to the physician or the hospital for further treatment.[4] As a consequence, OINV poses a significant burden for patients and prescribers, while contributing significant costs to the healthcare system.[5]

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[1] B Schachtel, N Younes, J Zhou, E Schachtel, E Hersh. (May 2, 2014). Demonstration of the safety and efficacy of CL-108 for moderate-to-severe pain with reduction of opioid-induced nausea and vomiting. *Journal of Pain*. Abstract online at http://charlestonlabs.com/charleston-laboratories-inc-announces-publication-abstract-cl-108-phase-3-study-aps-2014/.

[2] United States. US Dept. of Health and Human Services. FDA. "Drug Safety and Risk Management Advisory Committee (DSaRM)" FDA, Jan 2013. Web. 17 Jul. 2014.

[3] Smith, Howard S., Joshua M. Smith, & Pya Seidner. "Opioid-induced nausea and vomiting." Annals of Palliative Medicine [Online], 1.2 (2012): 121-129. Web.

[4] Gupta, Ajay K. Shazia Arshad and Neil R. Poulter. "Compliance, Safety, and Effectiveness of Fixed-Dose Combinations of Antihypertensive Agents: A Meta-Analysis" American Heart Association. Hypertension. Ann Palliat Med 2012;1(2):121-129 55 (2009): 399-407. Web. 30 July. 2014.

[5] Kwong WJ, Diels J, Kavanagh S. Cost of Gastrointestinal Events After Outpatient Opioid Treatment for Non-Cancer Pain. The Annals of Pharmacotherapy 2010 April, Volume 44, p630-640.

With this collaboration, Under the terms of the agreement, Daiichi Sankyo, Inc., the U.S. subsidiary of Tokyo-headquartered Daiichi Sankyo Co., Ltd. (TSE: 4568), will be the exclusive commercialization partner for CL-108 in the United States. Charleston Laboratories will be responsible for manufacturing activities for CL-108 and will receive the right to co-promote this and other hydrocodone products in the United States.

Under the terms of the agreement, which is pending HSR clearance, Charleston Laboratories will receive $200 million split evenly between an upfront cash payment and a near-term milestone, and up to an additional $450 million in milestone payments connected to FDA filing and approval of its novel fixed-dose hydrocodone products in the United States. In addition, Charleston Laboratories will receive escalating, tiered, double-digit share of the gross operating margin from the products, and will be responsible for supplying all product.

“We are proud to partner with Charleston Labs on this exciting and unique fixed-dose combination tablet, which will seek to simultaneously address severe pain and opioid-related nausea and vomiting to benefit patients,” said Dr. Mahmoud Ghazzi, Global Head of Development and Executive Vice President at Daiichi Sankyo.

“CL-108 represents an opportunity at the intersection of innovation and patient need,” said Ken Keller, President, U.S. Commercial of Daiichi Sankyo, Inc. “Daiichi Sankyo has proven success in the U.S. primary care arena, a key market for pain management, and we look forward to the potential of CL-108.”

“From our inception, it has been our goal to identify an industry-leading partner that is patient-focused, with a shared appreciation for the importance of educating healthcare providers on the significant issue of Opioid-Induced Nausea and Vomiting,” said Ryan Baker, Founder and Chief Operating Officer of Charleston Laboratories. “Daiichi Sankyo has successfully commercialized several medicines in the United States, and we feel they are the ideal strategic fit for Charleston’s lead asset, CL-108.”

“Charleston is extremely pleased to enter into this exclusive US license agreement with Daiichi Sankyo,” said Paul Bosse, Founder, President and Chief Executive Officer of Charleston Laboratories. “We look forward to applying our strong clinical and regulatory capabilities toward the goal of improving patient well-being. This agreement highlights Charleston’s tenacity and our long-term commitment to build a preeminent pain company that benefits patients and shareholders alike.”

Wilson Sonsini Goodrich & Rosati acted as legal counsel to Charleston Laboratories.

About Charleston Laboratories, Inc.

Charleston Laboratories, Inc. is a privately held, specialty pharmaceutical company focused on the research and development of novel pain products to significantly reduce the burdensome side effects related to opioid analgesics and other products. Charleston's product pipeline currently seeks to address

unmet needs in Opioid-Induced Nausea and Vomiting (OINV), Postoperative Nausea and Vomiting (PONV), Chemotherapy-Induced Nausea and Vomiting (CINV), Radiation-Induced Nausea and Vomiting (RINV), and Migraine-Induced Nausea and Vomiting (MINV). Charleston Laboratories intends to enter into discovery and commercialization alliances with partners motivated to introduce novel pain therapies that reduce the burdensome side effects related to opioid analgesics and other products. For more information, please visit www.charlestonlabs.com.

About Daiichi Sankyo

Daiichi Sankyo Group is dedicated tbo the creation and supply of innovative pharmaceutical products to address the diversified, unmet medical needs of patients in both mature and emerging markets. While maintaining its portfolio of marketed pharmaceuticals for hypertension, hyperlipidemia and bacterial infections, the Group is engaged in the development of treatments for thrombotic disorders and focused on the discovery of novel oncology and cardiovascular-metabolic therapies. Furthermore, the Daiichi Sankyo Group has created a "Hybrid Business Model," which will respond to market and customer diversity and optimize growth opportunities across the value chain. For more information, please visit: www.daiichisankyo.com.

Daiichi Sankyo, Inc., headquartered in Parsippany, New Jersey, is a member of the Daiichi Sankyo Group. For more information on Daiichi Sankyo, Inc., please visit www.dsi.com.

(1) Kwong WJ, Diels J, Kavanagh S. Cost of Gastrointestinal Events After Outpatient Opioid Treatment for Non-Cancer Pain. The Annals of Pharmacotherapy 2010 April, Volume 44, p630-640.

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