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Eisai Co., Ltd.

EISAI ENTERS RESEARCH COLLABORATION WITH VERASTEM, INC. FOR SMALL MOLECULE WNT INHIBITORS

--Partnership Based on Open Innovation That Leverages Eisai's Natural Product Chemistry-Based Drug Discovery Platform--

Eisai Co., Ltd. (Headquarters: Tokyo, President & CEO: Haruo Naito, "Eisai") announced today that its U.S. subsidiary Eisai Inc. has entered into a research collaboration with U.S. biopharmaceutical company Verastem, Inc. (Headquarters: Massachusetts, Chairman, President & CEO: Christoph Westphal, "Verastem") for the generation of small molecule Wnt inhibitors that target cancer stem cells. Based on this agreement, Eisai will synthesize analogs of VS-507 (salinomycin) with the aim of generating novel Wnt inhibitors.

VS-507 is a polyether natural product with a complex chemical structure that is currently being developed by Verastem as a Wnt inhibitor. Past research has shown that VS-507 inhibits Wnt signaling by blocking the phosphorylation of the Wnt coreceptors LRP5 and LRP6 and inducing their degradation. Under the terms of the research collaboration, Eisai will synthesize analogs of VS-507 by leveraging the natural product chemistry-based drug discovery platform it used to generate the anticancer agent Halaven® (eribulin mesylate) from the polyether macrolide natural product Halichondrin B. Verastem will utilize its proprietary Wnt signaling and cancer stem cell assays to evaluate the resulting analogs. Verastem will own any novel compounds generated, while Eisai earns a royalty on product sales and has a right of first negotiation to obtain commercialization rights.

The identification of proteins involved in cancer has become possible due to advances being made in cancer genetics research. The integration of Eisai and Verastem's complementary platform technologies is expected to have significant synergistic effects in the development of novel compounds that regulate Wnt signaling.

Eisai defines oncology as an area of therapeutic focus and is committed to developing novel anticancer agents and treatments for supportive care. Through this research collaboration, Eisai seeks to make further contribution to address the diversified needs of, and increase the benefits provided to, cancer patients and their families as well as healthcare providers.

[Please refer to the following notes for further information on cancer stem cells, Wnt signaling and Verastem, Inc.]

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[Notes to editors]

1. **Cancer Stem Cells**

   Cancer stem cells are cancer cells that possess characteristics associated with normal stem cells. Stem cells have two key features, namely self-renewal capacity (the ability to divide and give rise to new stem cells identical to the original stem cell) and multilineage differentiation potential (the ability to differentiate into various types of cells). Some researchers advocate the cancer stem cell theory, which puts forth the idea that cancer is caused by cancer stem cells that possess the same characteristics as stem cells. Cancer stem cells were first identified in acute myeloid leukemia in 1997, and have since been discovered in solid tumors and various other types of cancer.

2. **Wnt Signaling**

   Wnt is a glycoprotein with a molecular weight of approximately 40,000. It is stored in all types of living organisms from threadworms and drosophila to mammals, and has been reported to regulate the proliferation, differentiation and motility of cells during early development and axis formation, organogenesis, and after birth. Pathways known to comprise the Wnt signaling pathway include the Wnt/β-catenin pathway, which is associated with cell differentiation and dorsal formation, the Wnt/PCP pathway, which is involved in planar cell polarity and motility during gastrulation, the Wnt/Ca2+ pathway, which plays a role in embryonic isolation, and the pathway involved in the regulation of muscle regeneration. The Wnt/β-catenin pathway is the most well-known of all the Wnt signaling pathways. β-catenin acts as a Wnt signaling mediator to induce gene expression which results in the regulation of cell proliferation and differentiation.

3. **About Verastem, Inc.**

   Headquartered in Massachusetts in the United States, Verastem, Inc. is a biopharmaceutical company focused on discovering and developing drugs to treat breast and other cancers by targeting cancer stem cells, an underlying cause of tumor recurrence and metastasis. For more information on Verastem, Inc., please visit www.verastem.com.