## ONO PHARMACEUTICAL CO., LTD.

President and Representative Director: Gyo Sagara,

Code No.: 4528 at the 1<sup>st</sup> section of the Tokyo / Osaka Stock Exchange INQUIRIES: Kinya Morimoto, Managing Director, Corporate Communications

# Ono Announces Carfilzomib Development and Commercialization Agreement with Onyx Pharmaceuticals for Japan

Ono Pharmaceutical Co., Ltd. (Osaka, Japan) today announced that it has entered into an exclusive agreement with Onyx Pharmaceuticals, Inc. (Emeryville, California, USA) to develop and commercialize two compounds from Onyx's proteasome inhibitor development program, carfilzomib and ONX 0912, in Japan. The compounds are both in clinical development by Onyx outside of Japan. Under the terms of the agreement, Ono has rights to commercialize these two compounds for all oncology indications.

Ono will pay Onyx an upfront payment of JPY 5 billion at closing of the agreement. In addition, Ono will provide development and sales-based payments related to the compounds that could potentially be approximately JPY 24 billion. The agreement also calls for double digit royalties on net sales in Japan.

Meanwhile Onyx retains commercialization rights in other countries in the Asia Pacific region, as well as in all other regions of the world, including USA and Europe.

Carfilzomib, a highly selective proteasome inhibitor, is currently being evaluated in multiple clinical trials for the treatment of patients with multiple myeloma and other cancers. ONX 0912, an oral proteasome inhibitor, is currently in Phase I testing for the treatment of recurrent solid tumors.

In USA, Onyx is preparing a new drug application (NDA) for carfilzomib, which it expects to submit to the Food and Drug Administration (FDA) by year-end 2010. Given this potential timeline, Onyx is engaged in planning and executing prelaunch activities.

"This strategically important transaction underscores the growing interest and excitement surrounding carfilzomib. Ono is an ideal partner in Japan given their focus on highly innovative new pharmaceutical products and their reputation for scientific excellence." said N. Anthony Coles, M.D., president and chief executive officer of Onyx. "Onyx is committed to reaching all patients with multiple myeloma who could potentially benefit from promising therapies such as carfilzomib and ONX 0912, as quickly as possible. This partnership allows us to benefit from Ono's drug development experience in Japan for the advancement of carfilzomib, while we focus on execution in the U.S. and Europe."

"Ono is actively engaged in the development and the commercialization of innovative drugs in cancer and related areas, including Emend® for chemotherapy induced nausea and vomiting and an antibody anticancer drug, as well as drugs for cancer anorexia / cachexia and for opioid-induced constipation, and recognizes the tremendous need for new treatment options for multiple myeloma. This agreement facilitates our strategic expansion of our development pipeline in the oncology area with these exciting new compounds from a proven class of drugs. The promising activity and tolerability observed to date indicate that carfilzomib may be an important new treatment option for myeloma patients, and we look forward to collaborating with Onyx to bring this drug to patients in Japan, as quickly as possible." said Gyo Sagara, Ono's President, Representative Director and CEO.

# About Ono's pipeline in cancer and its related areas

Product / Compound	Indication	Development Stage in Japan (Partner)
Emend® Capsule	Chemotherapy induced nausea and vomiting	Launched in December, 2009 (In-licensed from Merck & Co., Inc.)
ONO-7847 / MK-0517 (Injection)	Chemotherapy induced nausea and vomiting	Phase III (In-licensed from Merck & Co., Inc.)
ONO-4538 / BMS-936558 (MDX-1106)	Anticancer drug	Phase I (Co-development with Bristol-Myers Squibb)
ONO-7643 / RC-1291	Cancer anorexia / cachexia	Phase I (In-licensed from Sapphire Therapeutics (U.S.), Inc.*)
ONO-3849	Opioid-induced constipation	Phase I (In-licensed from Progenics Pharmaceuticals, Inc.)
ONO-7746	Chemotherapy induced Thrombocytopenia	Phase I overseas (In-licensed from Nissan Chemical Industries, Ltd.)
Salirasib	Pancreatic cancer	Plan to commence Phase I in 2 <sup>nd</sup> half of 2011 (In-licensed from Concordia Pharmaceuticals Inc.)

\*Currently Helsinn Therapeutics (U.S.), Inc.

# About the Proteasome Inhibitor Development Program of Onyx

The proteasome has been validated as an important clinical target in cancer, and Onyx is developing next-generation proteasome inhibitors with a high degree of selectivity, with the goal of increasing therapeutic efficacy and reducing side effects.

The lead product candidate in this program is carfilzomib. Carfilzomib, a highly selective proteasome inhibitor, has shown encouraging results in a broad clinical trial program in multiple myeloma. Onyx recently announced top-line results from the Phase IIb study of single-agent carfilzomib in heavily pretreated patients with relapsed and refractory multiple myeloma. In this study, carfilzomib achieved an overall response rate (partial response or greater) of 24 percent and a median duration of response of more than seven months in patients.

Onyx has also initiated a large randomized international Phase III clinical trial, known as the ASPIRE trial. In this study, the combination of carfilzomib, lenalidomide, and low dose dexamethasone in patients with relapsed multiple myeloma is being investigated. Onyx has an agreement with the U.S. FDA on a Special Protocol Assessment (SPA) and received Scientific Advice from the European Medicines Agency (EMA) on the design and planned analysis for the ASPIRE trial. An additional Phase III clinical trial, known as the FOCUS trial, is planned to evaluate carfilzomib in patients with advanced myeloma and serve as the basis for a European registration. Carfilzomib is also being studied in advanced solid tumors.

ONX 0912 is distinct from carfilzomib, although the compound is based on the same chemistry that is employed to selectively target the proteasome. Upon completion of the current Phase I study in advanced refractory or recurrent solid tumors, ONX 0912 is expected to be explored in hematologic malignancies.

#### About Multiple Myeloma

Multiple myeloma is the second most common hematologic cancer and results from an abnormality of plasma cells, usually in the bone marrow. Worldwide, more than 180,000 people are living with multiple myeloma and approximately 86,000 new cases are diagnosed annually<sup>1)</sup>. In Japan approximately 13,000 people living with multiple myeloma,<sup>2)</sup> and in the United States, more than 50,000 people are living with multiple myeloma and approximately 20,000 new cases are diagnosed annually<sup>3)</sup>.

International Agency for Research on Cancer, GLOBOCAN 2002 database
Patient Survey 2008 of the Ministry of Health, Labour and Welfare
National Cancer Institute, Surveillance Epidemiology and End Results, 2007 Facts and Figures

#### About lenalidomide

Lenalidomide (its trade name is Revlimid<sup>®</sup>) is a derivative of thalidomide and was approved for the treatment of "recurrent or refractory multiple myeloma" in Japan. It is generally used in combination with dexamethasone for the multiple myeloma treatment.

## **About Onyx Pharmaceuticals, Inc.**

Onyx Pharmaceuticals, Inc. is a biopharmaceutical company committed to improving the lives of people with cancer. The company, in collaboration with Bayer HealthCare Pharmaceuticals Inc., is developing and marketing Nexavar® (sorafenib) tablets, a small molecule drug that is currently approved for the treatment of liver cancer and advanced kidney cancer. Additionally, Nexavar® is being investigated in several ongoing trials in a variety of tumor types. Beyond Nexavar®, Onyx has established a development pipeline of anticancer compounds at various stages of clinical testing, including carfilzomib, a proteasome inhibitor, that is currently being evaluated in multiple clinical trials for the treatment of patients with relapsed or relapsed/refractory multiple myeloma and solid tumors.. ONX 0801, an alpha-folate receptor targeted inhibitor of the thymidylate synthase, and ONX 0912, an oral proteasome inhibitor, are currently in Phase I testing. For more information about Onyx, visit the company's website at <a href="https://www.onyx-pharm.com">www.onyx-pharm.com</a>.

Nexavar<sup>®</sup> (sorafenib) tablets is a registered trademark of Bayer HealthCare Pharmaceuticals.

Caution: Ono announced, on May 13, 2010, the 1<sup>st</sup>-2<sup>nd</sup> quarter (the first 6 months) and annual consolidated financial forecast for the fiscal year ending March 31, 2011, but has revised it based on the prospects that upfront payments associated with licensing agreements including the payment to Onyx announced today will be more than expected and the progress of other expense spending. Please see the "Revision of Consolidated Financial Forecast" announced today for more details.