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Enzon Pharmaceuticals Announces New Data On PEG-SN38 At EORTC-NCI-AACR

Enzon's PEGylation Technology Potentially Enables New Cancer Therapeutic

BRIDGEWATER, N.J., Nov 09, 2006 (BUSINESS WIRE) -- Enzon Pharmaceuticals, Inc. (Nasdaq: ENZN) today announced new data providing preclinical proof-of-principle in breast, colorectal and pancreatic cancers for PEG-SN38, a pegylated form of SN38 which is the active moiety of Camptosar(R). The data was presented at the 18th EORTC-NCI-AACR (European Organization for Research and Treatment of Cancer-National Cancer Institute-American Association for Cancer Research) annual meeting being hosted in Prague, Czech Republic November 7-10, 2006.

"To date, SN38 has not been successfully clinically developed by others in the industry. However, we believe that our PEGylation technology has the ability to transform it into an effective and viable compound that could provide important benefits for patients." said Jeffrey H. Buchalter, Enzon's chairman and chief executive officer. "We are encouraged by promising preclinical studies in the potential of PEG-SN38 in breast, colorectal and pancreatic cancers and plan to continue to collect important data to move forward with its development."

In addition, the Company also announced data demonstrating a potential correlation between a particular biomarker and sensitivity to Oncaspar(R) in solid tumors and lymphomas.

PEG-SN38 (EZN-2208) in Breast, Colorectal and Pancreatic Cancers (Abstract #145)

This study evaluated the pharmacokinetics and therapeutic efficacy of PEG-SN38 in xenograft models of human breast, colorectal and pancreatic cancers. According to the study:

-- PEG-SN38 demonstrated potent in vitro cytotoxicity against several human cancer cell lines and anti-tumor activity in xenograft models of human breast, colorectal and pancreatic cancers.

-- Treatment with a single or multiple small doses of PEG-SN38 led to complete cures of animals in the breast cancer model.

-- In colorectal and pancreatic models, PEG-SN38 demonstrated significantly better therapeutic efficacy, at their respective maximum tolerated doses and equivalent dose levels, than Camptosar.

-- In mice, PEG-SN38 provided a long circulation half-life and exposure to the parent drug, SN38.

Oncaspar in Solid Tumors and Lymphomas (Abstract #160)

This study evaluated the utility of Oncaspar in solid tumors and lymphomas as well as assessed the correlation of Oncaspar activity with cellular levels of asparagine synthetase (ASNS). In particular, the study examined in vitro and in vivo efficacy of Oncaspar in pancreatic, ovarian and lymphoma cells with varying expression of ASNS. According to the study:

-- Oncaspar displayed potent cytotoxicity against several pancreatic, ovarian, and lymphoma cell lines during in vitro studies.

-- The combination of Oncaspar and Gemzar(R) were additive in the low ASNS-expressing pancreatic model during in vivo studies; however, in the high ASNS-expressing pancreatic model, treatment with Oncaspar at various doses was ineffective.

-- Overall, efficacy of Oncaspar correlates with cellular ASNS in some cell lines and hence ASNS could potentially serve as a biomarker in clinic.

Abstracts are available on the Company website: www.enzon.com

About PEG-SN38

SN38 is the active metabolite of the cancer drug irinotecan, a chemotherapeutic pro-drug marketed as Camptosar(R) in the U.S. Camptosar is a validated topoisomerase I inhibitor. Unmodified SN38 is insoluble and can only be used to treat cancer by administering the pro-drug, Camptosar. A pro-drug is a compound that is converted into the active drug in the body. Only a small percentage of Camptosar is converted into SN38 in cancer cells and the unpredictability of conversion in each patient

can result in adverse side effects. Through the use of its Customized Linker TechnologyTM, Enzon designed PEG-SN38 (EZN-2208), a PEGylated conjugate of SN38, to offer therapeutic advantages over unmodified SN38 and Camptosar. EZN-2208 is designed to deliver the active drug to tumor cells without the need for conversion. The PEGylated version allows for parental delivery, increased solubility, higher exposure, and longer apparent half-life. Preclinical studies have shown that these features lead to greater efficacy over Camptosar.

About Oncaspar(R)

Oncaspar is a PEG-enhanced version of the naturally occurring enzyme L-asparaginase. L-asparaginase is an enzyme that depletes the amino acid asparagine, which certain leukemic cells are dependent upon for survival. Oncaspar was initially approved by the U.S. Food and Drug Administration in February 1994 and is now indicated as a component of a multi-agent chemotherapeutic regimen for the first-line treatment of patients with acute lymphoblastic leukemia. Through its proprietary PEGylation technology, Enzon designed Oncaspar to offer therapeutic advantages over unmodified L-asparaginase. Oncaspar provides a more convenient, patient-friendly dosing regimen that allows for administration every 14 days, versus twice weekly for unmodified L-asparaginase. Enzon's specialized oncology sales force markets Oncaspar in the United States.

About Enzon

Enzon Pharmaceuticals, Inc. is a biopharmaceutical company dedicated to the development and commercialization of therapeutics to treat patients with cancer and adjacent diseases. Enzon's specialized sales force markets Abelcet(R), Oncaspar (R), Adagen(R), and Depocyt (R) in the United States. In addition, Enzon also receives royalties on sales of PEG-INTRON(R), marketed by Schering-Plough Corporation, and MACUGEN(R), marketed by OSI Pharmaceuticals and Pfizer Inc. Enzon's product-driven strategy includes an extensive drug development program that leverages its proprietary technologies, including a Customized Linker TechnologyTM PEGylation platform that utilizes customized linkers designed to release compounds at a controlled rate. Enzon complements its internal research and development efforts with strategic initiatives, such as partnerships designed to broaden its revenue base or provide access to promising new technologies or product development opportunities. The Company also engages in contract manufacturing opportunities with third parties to improve its efficiency. Further information about Enzon and this press release can be found on the Company's web site at www.enzon.com.

Forward Looking Statements

There are forward-looking statements contained herein, which can be identified by the use of forward-looking terminology such as the words "believes," "expects," "may," "will," "should", "potential," "anticipates," "plans" or "intends" and similar expressions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results, events or developments to be materially different from the future results, events or developments indicated in such forward-looking statements. Such factors include, but are not limited to the timing, success and cost of clinical studies; the ability to obtain regulatory approval of products, market acceptance of, and continuing demand for, Enzon's products and the impact of competitive products and pricing. A more detailed discussion of these and other factors that could affect results is contained in our filings with the U.S. Securities and Exchange Commission, including our transition report on Form 10-K for the six-month period ended December 31, 2005 and our quarterly reports on Form 10-Q. These factors should be considered carefully and readers are cautioned not to place undue reliance on such forward-looking statements. No assurance can be given that the future results covered by the forward-looking statements will be achieved. All information in this press release is as of the date of this press release and Enzon does not intend to update this information.

SOURCE: Enzon Pharmaceuticals, Inc.

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