Onxeo Announces Preclinical & Clinical Data from Three Studies Supporting the Potential For Belinostat in Multiple Orphan Oncology Indications

Findings provide key validation; help identify target indications for optimal development

Data demonstrating safety and efficacy to be presented at ASCO Annual Meeting 2015 on Sunday, May 31

Paris (France), Copenhagen (Denmark), May 28, 2015 – Onxeo S.A. (Euronext Paris, NASDAQ Copenhagen: ONXEO)**,** an innovative company specializing in the development of orphan oncology drugs, today announced preclinical & clinical data from three studies supporting of the potential of belinostat in multiple orphan oncology indications, including results from its Phase I/II trial of belinostat in combination with standard chemotherapy in patients with soft tissue sarcomas (STS).

Judith Greciet, Chief Executive Officer of Onxeo, said, *"As a pan-HDAC inhibitor, belinostat has shown anti-tumor activity in several orphan oncology diseases, and has the potential to significantly enhance its value for the Company. Results from our Phase I/II study confirm that belinostat in combination with chemotherapy was well tolerated and, importantly, response rates were observed in some patients with advanced soft tissue sarcomas. Furthermore, we show encouraging data from two analyses of belinostat in combination with chemotherapy in small cell lung cancer and thymic epithelial tumors that affirm this combination warrants further evaluation in additional orphan oncology indications. Collectively, these data provide a key additional information on belinostat at a time when the Company is identifying new target indications, and will help us optimally advance the compound's development."*

Results of the Phase I/II trial will be presented during a poster session and further reviewed during a separate poster discussion session, both on Sunday, May 31, at the 2015 American Society of Clinical Oncology (ASCO) Annual Meeting, being held May 29-June 2 in Chicago, IL.

In addition, findings from the two study analyses of belinostat are to be published in conjunction with the Annual Meeting.

Abstract 10516 (Poster 160) – A phase I/II clinical trial of belinostat (PXD101) in combination with doxorubicin in patients with soft tissue sarcomas (STS).[1]

Lead author:	Joanna Vitfell-Rasmussen, M.D., University of Copenhagen Herlev Hospital
Poster Session:	Soft Tissue
Date, Time, Location:	Sunday May 31, 8:00 – 11:30 a.m. CDT; S Hall A, McCormick Place
Poster Discussion Session:	Sunday May 31, 4:30 – 5:45 p.m. CDT; S404, McCormick Place

The completed Phase I/II, open-label, multi-center, dose-escalation study (NCT00878800) evaluated the safety and efficacy of belinostat in combination with standard chemotherapy doxorubicin in a total of 41 patients and found the combination was well-tolerated and exhibited anti-cancer activity in 12 of 20 patients with advanced soft tissue sarcomas at the maximum tolerated dose (MTD).

The Phase I dose-escalation portion of the study assessed 25 patients with advanced solid tumors across four cohorts of increasing doses and found the MTD to be the highest tested dose level of 1000 mg/m^2 intravenously-administered belinostat combined with 75 mg/m^2 doxorubicin.

Common drug-related events included fatigue (95%), nausea (76%) and alopecia, or hair loss (63%), and one dose-limiting toxicity of Grade 3 rash was observed. Dose-normalized area under the curve and maximum concentration appeared relatively consistent across the different cohorts, indicating that belinostat exhibited linear pharmacokinetics across the dose range, and that doxorubicin had no effect on belinostat exposure. Two patients receiving the MTD exhibited partial responses, for a response rate of 8% (95% CI).

The Phase II portion, which assessed efficacy of the combination at MTD in 20 patients with soft tissue sarcomas including four patients from the Phase I portion, demonstrated two patient responses, 9 patients with stable disease and a response rate of 13% (95% CI). Of the two responses, one patient had a partial response at cycle 4 of treatment and the second patient had a complete response at cycle 2. These two responses resulted in stopping of the trial after enrolling 20 patients, meeting a pre-determined stopping rule that the Phase II trial would be stopped if no more than 2 responses (complete or partial) were seen among the 20 patients within the first two treatment cycles.

Abstract e13581 – *UGT1A1* genotype effects on PK, PD and toxicities of belinostat administered by 48 h continuous infusion.[2]

Lead Author:	Andrew K.L. Goey, Genitourinary Malignancies Branch, Center for Cancer Research, National Cancer Institute
Publication Only:	Pharmacology

This is the first study to simultaneously evaluate the genotype effects of UGT1A1, a gene that plays a major role in the metabolism of belinostat, on the drug interactions and toxicities of belinostat in combination with other chemotherapies.

In a Phase I trial of 25 patients with small cell lung cancer and other cancers of neuroendocrine origin and in a separate Phase I/II trial of 26 patients with thymic epithelial tumors, belinostat was administered by 48-hour continuous infusion across various dose levels (400-1000 mg/m^2 per 24 hours) in combination with either cisplatin and etoposide, or cisplatin, doxorubicin and cyclophosphamide, respectively. Patients in both trials were genotyped for *UGT1A1* variants associated with reduced function.

The genotype UGT1A1 was associated with systemic exposure to belinostat and with incidence of toxicities in the Phase I trial, particularly at doses greater than 400 mg/m^2 per 24 hours. The Phase I/II trial showed these associations to be less profound. Based on these results, genotype-based dose adjustments of belinostat may be desirable regardless of whether belinostat is used as a single-agent or in combination.

Abstract e18564 – Effect of treatment on the regression and growth rates of thymic epithelial tumors (TETs).[3]

Lead Author:	Mauricio Burotto, M.D., Center for Cancer Research, National Cancer Institute, National Institutes of Health
Publication Only:	Thymic Malignancies

The study used a mathematical model to characterize the effect of different therapies on the rate of tumor regression and the rate of tumor growth while a therapy is administered in thymic epithelial tumors (TETs), rare tumors with limited treatment options and limited standard measures of tumor response evaluation.

The assessment included data from a total of 74 patients across four trials: one Phase I/II trial of belinostat in combination with cisplatin, doxorubicin, cyclophosphamide (NCT01100944) and three, single-agent Phase II clinical trials evaluating belinostat (NCT00589290), cixutumumab (NCT00965250) or sunitinib (NCT01621568).

The study showed rates of tumor regression of belinostat combination treatment were significantly higher compared to the other three therapies, which implies a clinically higher objective response rate. However, there were no significant differences in tumor growth rate between the four therapies ($p = 0.83$), indicating that while belinostat with chemotherapy may be used as initial therapy to render some disease resectable, novel therapies that can slow tumor growth and can be tolerated for prolonged periods of time are needed to significantly prolong overall survival in TETs.

About Soft Tissue Sarcomas (STS)

Sarcomas are a group of solid tumors in the connective tissue of the body that are treated with surgery, chemotherapy, and/or radiation. Reported objective response rates are very low with complete responses being rare or absent in the trials that have led to the registration of anti-cancer treatments in this indication over the past six years. Currently, doxorubicin as a single agent or in combination with ifosfamide is the most commonly used chemotherapeutic regimen in patients with advanced STS.

About Belinostat (Beleodaq®)

Belinostat is a novel histone deacetylase (HDAC) inhibitor that has anti-cancer activity associated with the inhibition of cell proliferation, the induction of apoptosis (programmed cell death), the inhibition of angiogenesis and the induction of cellular differentiation.

Belinostat is designated as an orphan drug in Europe and the United States. In July 2014, belinostat (Beleodaq®) was granted accelerated approval in the U.S. by the Food and Drug Administration (FDA) for the treatment of patients with relapsed or refractory peripheral T-cell lymphoma (PTCL) in 2nd-line treatment after failure of standard chemotherapy. The initiation of a Phase III trial in collaboration with Onxeo's U.S. partner, Spectrum Pharmaceuticals, Inc. is planned for the first half of 2016 to expand the indication from 2nd to 1st line treatment of PTCL.

Beyond PTCL, belinostat's clinical profile supports further development in new and promising orphan oncology indications. Onxeo is currently reviewing potential indications in order to define the optimal development plan for belinostat.

About Onxeo

Onxeo has the vision to become a global leader and pioneer in oncology, with a focus on orphan or rare cancers, through developing innovative therapeutic alternatives designed to "make the difference". The Onxeo team is determined to develop innovative medicines that provide patients with hope and significantly improve their lives.

Key orphan oncology products at the advanced development stage are:

Livatag® (doxorubicin Transdrug™): Phase III in hepatocellular carcinoma
Validive® (clonidine Lauriad®): Phase II in severe oral mucositis: Positive preliminary top-line results
Beleodaq® (belinostat): registered in the US in peripheral T-cell lymphoma
For more information, visit the website www.onxeo.com

Disclaimer

This communication expressly or implicitly contains certain forward-looking statements concerning Onxeo and its business. Such statements involve certain known and unknown risks, uncertainties and other factors, which could cause the actual results, financial condition, performance or achievements of Onxeo to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Onxeo is providing this communication as of this date and does not undertake to update any forward-looking statements contained herein as a result of new information, future events or otherwise. For a discussion of risks and uncertainties which could cause actual results, financial condition, performance or achievements of Onxeo to differ from those contained in the forward-looking statements, please refer to the Risk Factors ("Facteurs de Risque") section of the 2014 Reference Document filed with the AMF on April 14, 2015, which is available on the AMF website (http://www.amf-france.org) or on the company's website (www.onxeo.com).

References

1. Vitfell-Rasmussen, J. et al. J Clin Oncol 33, 2015 (suppl; abstract 10516)
2. Goey, A. et al. J Clin Oncol 33, 2015 (suppl; abstract e13581)
3. Burotto, M. et al. J Clin Oncol 33, 2015 (suppl; abstr e18564)

Contact

Company
Judith Greciet, CEO
j.greciet@onxeo.com
Nicolas Fellmann, CFO
n.fellmann@onxeo.com
+33 1 45 58 76 00

Europe
Alize RP
onxeo@alizerp.com
Caroline Carmagnol
+33 6 64 18 99 59

U.S.
The Ruth Group
Lee Roth (investors)
lroth@theruthgroup.com
(646) 536-7012
Kirsten Thomas (media)
kthomas@theruthgroup.com
(646) 536-7014

To receive our press releases and newsletters, please register on: http://www.onxeo.com/en/newsletter/
Follow us on twitter @Onxeo_