PRESS RELEASE

Onxeo Announces Publication of Preclinical Study Results Comparing Efficacy and Toxicity of olaparib and AsiDNA™ in Frontiers in Oncology

In-vivo Models Showed that Only AsiDNA™ Could Delay Resistance to Carboplatin without Increasing its Toxicity

Paris (France), November 13, 2019 – 6:00 pm CET – Onxeo S.A. (Euronext Paris, NASDAQ Copenhagen: ONXEO), ("Onxeo" or "the Company"), a clinical-stage biotechnology company specializing in the development of innovative drugs targeting tumor DNA Damage Response (DDR) in oncology, in particular against rare or resistant cancers, today announced the publication of the results of preclinical studies comparing the efficacy and toxicity of two DNA repair inhibitors: olaparib, a PARP inhibitor, and AsiDNA™, the Company's first-in-class DDR inhibitor, in the peer-reviewed journal, *Frontiers in Oncology*. In-vivo models showed that, while both DNA repair inhibitors were effective, only AsiDNA™ could delay resistance to carboplatin without increasing its toxicity.

Françoise BONO, Chief Scientific Officer of Onxeo, commented: *"The results of these in-vivo studies highlighted the distinctive characteristics of our clinical stage product candidate, AsiDNA™. Most importantly, these studies show AsiDNA's™ ability to delay resistance to carboplatin without increasing its toxicity, a critical property that has not previously been observed in anti-cancer agents, including olaparib. In addition, the studies confirmed the overall good safety profile of AsiDNA™. These translational studies, conducted in collaboration with the research laboratory of Marie Dutreix at the Institut Curie, were instrumental in our decision to prioritize the clinical development of AsiDNA™ in combination with chemotherapy. We now look forward to the preliminary data from our ongoing DRIIV-1b Phase 1b clinical study of AsiDNA™ in combination with a reference chemotherapy (carboplatin and paclitaxel), expected in a few weeks."*

The original research article, titled ***"Preclinical studies comparing efficacy and toxicity of DNA repair inhibitors, olaparib and AsiDNA, in treatment of carboplatin resistant tumors,"*** is currently available on the *Frontiers in Oncology* website.

Upcoming events

- November 12-13, 2019 Bryan, Garnier & Co European Healthcare Conference Paris, France
- November 12-15, 2019 Tides Europe 2019 Amsterdam, Holland
- January 29-31, 2020 PARP & DDR Inhibitors Summit 2020 Boston, MA, USA

About Onxeo

Onxeo (Euronext Paris, NASDAQ Copenhagen: ONXEO) is a clinical-stage biotechnology company developing innovative oncology drugs targeting tumor DNA-binding functions through unique mechanisms of action in the sought-after field of DNA Damage Response (DDR). The Company is focused on bringing early-stage first-in-class or disruptive compounds from translational research to clinical proof-of-concept, a value-creating inflection point appealing to potential partners.

platON™ is Onxeo's proprietary chemistry platform of oligonucleotides acting as decoy agonists, which generates new innovative compounds and broaden the Company's product pipeline.

AsiDNA™, the first compound from platON™, is a first-in-class, highly differentiated DNA Damage Response (DDR) inhibitor based on a decoy and agonist mechanism acting upstream of multiple DDR pathways. Translational research has highlighted the distinctive properties of AsiDNA™, notably its ability to abrogate tumor resistance to PARP inhibitors regardless of the genetic mutation status. AsiDNA™ has also shown a strong synergy with other tumor DNA-damaging agents such as chemotherapy and PARP inhibitors. The DRIIV-1 (DNA Repair Inhibitor-administered IntraVenously) phase I study has evaluated AsiDNA™ by systemic administration (IV) in advanced solid tumors and confirmed the active doses as well as a favorable human safety profile. The ongoing DRIIV-1b extension study is assessing the safety and efficacy of a 600 mg dose of AsiDNA™ in combination with carboplatin and then with carboplatin and paclitaxel, in patients with solid tumors who are eligible for such treatments.

OX401 is a new drug candidate from platON™, optimized to be a next-generation PARP inhibitor acting on both the DNA Damage Response and the activation of immune response, without inducing resistance. OX401 is undergoing preclinical proof-of-concept studies, alone and in combination with immunotherapies.

Onxeo's portfolio also includes **belinostat**, an HDAC inhibitor (epigenetics). Belinostat is already conditionally FDA-approved in the US as a 2nd line treatment for patients with peripheral T cell lymphoma and marketed in the US under the name Beleodaq® (belinostat IV form).

For further information, please visit www.onxeo.com.

Forward looking statements

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 section 5.7.1.4 "Risk Factors" ("*Facteurs de Risque*") of the 2018 registration document filed with the *Autorité des marchés financiers* on April 25, 2019 under number D.19-0282, which is available on the *Autorité des marchés financiers* website (www.amf-france.org) or on the Company's website (www.onxeo.com).

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