

Stockholm, Sweden

Press release June 11, 2020

Oncopeptides hosts a virtual symposium at the 25th European Hematology Association Congress on Challenges in Managing Patients with Myeloma

STOCKHOLM — June 11, 2020 — Oncopeptides AB (Nasdaq Stockholm: ONCO) announces today that the Company hosts a symposium at the EHA 25 Virtual Edition on June 13th, focusing on the "Challenges in Managing Patients with Myeloma". A panel of international experts will discuss disease assessment and treatment options in myeloma and share clinical experiences of managing patients that are difficult to treat.

Due to the COVID-19 pandemic, the annual hematology meeting will be virtual. Oncopeptides has developed a virtual booth to demonstrate its commitment to the multiple myeloma community, share the comprehensive drug development program and facilitate scientific dialogue and engagement.

The theme for the congress is "Unfolding the Future". The European Hematology Association (EHA) has accepted seven abstracts from Oncopeptides, providing clinical and preclinical data that further evaluate the Company's therapeutic peptide-drug conjugate platform. The abstracts are summarized below and can be accessed online at <u>www.ehaweb.org</u>. The posters will be available on-demand for registered participants only, from June 12-October 15, through the EHA Virtual Congress platform.

"There is currently no cure for multiple myeloma. The European Hematology Association's annual congress provides an excellent platform to address challenges in patient management, and discuss the potential value of future therapies", says Jakob Lindberg, CEO of Oncopeptides. "Our lead candidate melflufen has a unique mechanism of action and could potentially provide novel treatment options for patients with multiple myeloma".

Melflufen (INN melphalan flufenamide) is an investigational first-in-class anticancer peptide-drug conjugate that rapidly delivers an alkylating payload into tumor cells. Melflufen is in late stage clinical development for a potential treatment of patients with relapsed refractory multiple myeloma (RRMM). Below is a brief description of the abstracts.

 HORIZON (OP-106): Melflufen plus dexamethasone in relapsed/refractory multiple myeloma (RRMM) refractory to pomalidomide and/or an anti-CD38 monoclonal antibody – primary and subgroup analysis. Final Abstract Code: EP945. First author: Paul G Richardson.

The primary read-out of the data from the pivotal, phase II study HORIZON demonstrates clinical efficacy and a manageable safety profile of the peptide-drug conjugate melflufen in combination with dexamethasone in patients with RRMM, including patients with high-risk features and triple-class-refractory disease.

 HORIZON (OP-106): An exploratory analysis of time to next treatment in patients with relapsed/refractory multiple myeloma who received melflufen plus dexamethasone. Final Abstract Code: EP1029. First author: Maria-Victoria Mateos

The sub-analysis of the HORIZON clinical study is the first to provide important insights on time to subsequent treatment in patients with advanced RRMM (medium 5 lines of previous lines).

3. LIGHTHOUSE (OP-108): A phase 3 study of melflufen in combination with daratumumab versus daratumumab in patients with relapsed/refractory multiple myeloma. Final Abstract Code: PB2018. First author: Maria-Victoria Mateos

The planned randomized phase 3 trial LIGHTHOUSE will study the impact of melflufen, dexamethasone and subcutaneous daratumumab compared with subcutaneous daratumumab alone. The results will be important to confirm the preliminary efficacy, safety and tolerability results from phase 1/2 ANCHOR study, combining melflufen, dexamethasone and daratumumab supporting further regulatory milestones for Oncopeptides

4. Adverse event and outcome patterns in patients with advanced multiple myeloma in the US Final Abstract Code: PB2039. First author: Joshua Richter

This real-world data study provides evidence, that despite the introduction of additional treatment options for patients with advanced multiple myeloma, their prognosis remains poor and the need for additional treatment options is high

5. Melflufen is a highly effective anti-neoplastic agent in bortezomib-resistant multiple myeloma models. Final Abstract Code: EP915. First author: Konstantin Byrgazov

Melflufen is more efficacious in bortezomib-resistant myeloma cell lines than in their bortezomib-naive parental cells in vitro. Bortezomib-resistant myeloma cells lines overexpress Aminopeptidase B encoded by RNPEP gene, and myeloma patients with high RNPEP expression have shorter PFS on bortezomibcontaining therapies.

6. Melflufen efficacy in multiple myeloma with TP53 aberrations. Final Abstract Code: EP903. First author: Ana Slipicevic.

Melflufen can trigger myeloma cell death regardless of cells TP53 status and overcome the p53-deficiencymediated melphalan resistance. Melflufen response rate in the del(17p) patient subpopulation from the phase 2-study HORIZON is comparable to the general RRMM population suggesting that melflufen might be a therapeutic option for these difficult-to-treat patients.

7. Aminopeptidase expression in multiple myeloma associates with disease progression and sensitivity to melflufen. Final Abstract Code: EP897. First author: Juho Miettinen

Aminopeptidases play a role in multiple myeloma biology. Their expression levels are dysregulated during disease progression, and majority are increased in RRMM compared to NDMM patients.

Aminopeptidases LAP3 and TPP2 are identified as prognostic markers in myeloma patients, and inhibition of aminopeptidases reduces myeloma cell viability in vitro. Melflufen, an aminopeptidase substrate, is a highly efficient anticancer agent in myeloma cells resistant to other alkylators, bortezomib and selinexor.

For more information, please contact:

Jakob Lindberg, CEO of Oncopeptides E-mail: jakob.lindberg@oncopeptides.com Telephone: +46 8 615 20 40

Rein Piir, Head of Investor Relations at Oncopeptides E-mail: <u>rein.piir@oncopeptides.com</u> Cell: +46 70 853 72 92

This information was submitted for publication at 08:00, June 11, 2020.

About melflufen

Melflufen (melphalan flufenamide) is a first-in-class anti-cancer peptide-drug conjugate that rapidly delivers an alkylating payload into tumor cells. Melflufen is rapidly taken up by myeloma cells due to its high lipophilicity and is immediately cleaved by peptidases to deliver an entrapped hydrophilic alkylator payload. Peptidases play a key role in protein homeostasis and feature in cellular processes such as cell-cycle progression and programmed cell death. In vitro, melflufen is 50-fold more potent in myeloma cells than the alkylator payload itself due to the increased intracellular alkylator concentration. Melflufen displays cytotoxic activity against myeloma cell lines resistant to other treatments, including alkylators, and has also demonstrated inhibition of DNA repair induction and angiogenesis in preclinical studies.

About Oncopeptides

Oncopeptides is a pharmaceutical company focused on the development of targeted therapies for difficult-to-treat hematological diseases. The company is focusing on the development of the lead product candidate melflufen (melphalan flufenamide), a first-in-class anti-cancer peptide-drug conjugate that rapidly delivers an alkylating payload into tumor cells. Melflufen is in development as a new treatment for the hematological cancer multiple myeloma and is currently being evaluated in multiple clinical studies including the pivotal phase 2 HORIZON study and the ongoing phase 3 OCEAN study. Oncopeptides' headquarters is in Stockholm, Sweden with U.S. headquarters in Boston, Mass. The company is listed in the Mid Cap segment on Nasdaq Stockholm with the ticker ONCO.

More information is available on www.oncopeptides.com.