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DelMar Pharmaceuticals Presents Poster at AACR's Ovarian Cancer Special Conference on the Mechanistic Rationale for VAL-083 Overcoming Treatment Resistance in Ovarian Cancer

VANCOUVER, British Columbia, and MENLO PARK, Calif., Oct. 3, 2017 /PRNewswire/ - DelMar Pharmaceuticals (Nasdaq: DMPI) ("DelMar" and "the Company"), a biopharmaceutical company focused on the development of new cancer therapies, today announced the presentation of a poster at the American Association for Cancer Research (AACR) Special Conference: Addressing Critical Questions in Ovarian Cancer Research and Treatment, being held October 1-4, 2017 in Pittsburgh, PA. The poster entitled "Distinct mechanism of action of DNA damaging agent dianhydrogalactitol (VAL-083) suggests combination therapy with PARP inhibitors," and focuses on the unique mechanism of action of the Company's lead agent, VAL-083.

Data presented in the Company's poster demonstrates how its lead asset VAL-083 targets the DNA of cancer cells in a mechanistically different fashion than platinum (Pt)-based chemotherapeutic agents or PARP Inhibitors, and how these differences position VAL-083 as a potential new therapeutic option in the treatment of ovarian cancer.

Platinum-based chemotherapy is the standard-of-care in the treatment of advanced ovarian cancer. Treatment with platinum-based chemotherapy often leads to initial efficacy but subsequent emergence of multiple resistance mechanisms that limit the long-term utility of these agents (cisplatin and carboplatin).

Dysfunctional p53 tumor-suppressor protein, seen in a majority of advanced ovarian cancers, is a primary resistance mechanism that diminishes the therapeutic cytotoxicity of many DNA targeting drugs, particularly Pt-agents. In addition, deficiencies in the mismatch repair (MMR) pathway are correlated with platinum resistance.

DelMar's data demonstrates that VAL-083 can overcome platinum resistance because its cytotoxic activity is independent of both the MMR pathway and the p53 status of a cancer cell.

Recently, PARP inhibitors have been shown to offer benefit as maintenance therapy in platinum-sensitive ovarian cancer, demonstrating improvements in progression free survival. However, an overall survival benefit has not been reported and recent literature cites PARP inhibitor-resistance as an emerging unmet need in the treatment of ovarian cancer.

Defects in the non-homologous end joining (NHEJ) pathway have been implicated in tumor resistance to PARP inhibitors. DelMar's data indicates that VAL-083's activity remains unaffected by defects in the NHEJ repair pathway and provides a mechanistic rationale for VAL-083 to overcome PARP inhibitor-resistance in the treatment of cancer.

DelMar's poster also provides preclinical data demonstrating that VAL-083 displays synergy and/or super-additivity when combined with Pt-based agents (cisplatin and oxaliplatin) and PARP inhibitors (olaparib, veliparib and talazoparib). This supports a rationale for combination therapy with VAL-083 in front-line (platinum agents + VAL-083) or recurrent (PARP inhibitors +VAL-083) disease.

With a significant body of emerging preclinical evidence and historic clinical data suggesting reversal of platinum resistance by VAL-083, DelMar has recently obtained an Investigational New Drug Application (IND) allowance from the U.S. Food and Drug Administration (FDA) to initiate the REPROVe phase 1/ 2 trial of this agent in patients with recurrent platinum resistant ovarian cancer.

About the VAL-083 REPROVe Trial

On September 18th, 2017, DelMar announced that the FDA had accepted the Company's IND for an open label multi-center Phase 1/2 Study of VAL-083 in Patients with **Recurrent Platinum Resistant Ovarian** Cancer (VAL-083 REPROVe Trial).

The Phase 1 portion of the trial is planned to enroll approximately 24 patients with Pt-resistant ovarian cancer to evaluate the response to treatment with VAL-083. Ovarian cancer patients enrolled in the trial will have been previously treated with at least two lines of Pt-based chemotherapy and up to two other cytotoxic regimens, and whose cancer has recurred within six months of prior Pt-based chemotherapy.

The primary efficacy of the trial will be overall response rate (ORR) based on Response Evaluation Criteria In Solid Tumors (RECIST) criteria. RECIST is a set of published rules that define when tumors in cancer patients improve ("respond"), stay the same ("stabilize"), or worsen ("progress") during treatment.

DelMar plans to request a meeting with FDA following completion of the Phase 1 portion of the REPROVe trial. If successful, data from this trial would lead to a confirmatory Phase 2 study of approximately 60 patients, which if successful, and subject to feedback from the FDA may position DelMar to potentially file an application for accelerated approval or to advance to a pivotal Phase 3 trial.

Further details regarding the VAL-083 REPROVe Ovarian Cancer trial can be found on clinicaltrials.gov: <https://www.clinicaltrials.gov/ct2/show/NCT03281681?term=val-083&rank=3>

About VAL-083

VAL-083 (dianhydrogalactitol) is a "first-in-class", DNA-targeting agent that introduces interstrand DNA cross-links at the N7-position of guanine leading to DNA double-strand breaks and cancer cell death. VAL-083 has demonstrated clinical activity against a range of cancers including GBM in historical clinical trials sponsored by the U.S. National Cancer

Institutes (NCI).

VAL-083 has been granted an orphan drug designation by the U.S. FDA Office of Orphan Products for the treatment of glioma, medulloblastoma and ovarian cancer, and in Europe for the treatment of malignant gliomas. VAL-083 is currently being studied in multiple clinical trials as a potential new treatment for glioblastoma multiforme (GBM), the most common and aggressive form of brain cancer.

DelMar has demonstrated that VAL-083's mechanism of action is distinct from multiple chemotherapies widely used in the treatment of cancer and that this unique mechanism may offer opportunities to overcome treatment resistance thereby offering new treatment options to cancer patients. Further details regarding these studies can be found at <http://www.delmarpharma.com/scientific-publications.html>.

About DelMar Pharmaceuticals, Inc.

DelMar Pharmaceuticals is focused on the development and commercialization of new therapies for cancer patients who have limited or no treatment options. By focusing on understanding tumor biology and mechanisms of treatment resistance, the Company identifies biomarkers to personalize new therapies in indications where patients are failing or have become intolerable to modern targeted or biologic treatments.

The Company's current pipeline is based around VAL-083, a "first-in-class", small-molecule chemotherapeutic with a novel mechanism of action that has demonstrated clinical activity against a range of cancers including central nervous system, ovarian and other solid tumors (e.g. NSCLC, bladder cancer, head & neck) in U.S. clinical trials sponsored by the NCI.

Based on DelMar's internal research programs and these prior NCI-sponsored clinical studies, the Company is conducting clinical trials to support the development and commercialization of VAL-083 across multiple oncology indications to solve significant unmet medical needs.

Delmar has initiated a pivotal, randomized Phase 3 Study in Temozolomide-Avastin Recurrent GBM (STAR-3). Outcomes in DelMar's recent Phase 1-2 clinical trials suggest that VAL-083 may offer a clinically meaningful survival benefit for this patient population.

VAL-083 is also being studied in two collaborator-supported, biomarker driven, Phase 2 clinical trials for MGMT-unmethylated GBM. These trials are designed to position VAL-083 as a potential therapeutic alternative for the majority of GBM patients whose tumors exhibit high expression of MGMT, a biomarker correlated with resistance to the current standard-of-care chemotherapy. Overcoming MGMT-mediated resistance represents a significant unmet medical need in the treatment of GBM.

The VAL-083 REPROVe trial is designed to evaluate VAL-083 in platinum-resistant ovarian cancer. Resistance to platinum-based chemotherapy represents a significant unmet medical need in the treatment of ovarian cancer.

Further information on DelMar's clinical trials can be found on clinicaltrials.gov:
<https://www.clinicaltrials.gov/ct2/results?cond=&term=val-083&cntry1=&state1=&recrs>

For further information, please visit <http://delmarpharma.com/>; or contact DelMar

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Safe Harbor Statement

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. Such forward-looking statements include, among other things, statements regarding the expected use of proceeds. Any forward-looking statements contained herein are based on current expectations, but are subject to a number of risks and uncertainties. The factors that could cause actual future results to differ materially from current expectations include, but are not limited to, risks and uncertainties relating to the Company's ability to develop, market and sell products based on its technology; the expected benefits and efficacy of the Company's products and technology; the availability of substantial additional funding for the Company to continue its operations and to conduct research and development, clinical studies and future product commercialization; and, the Company's business, research, product development, regulatory approval, marketing and distribution plans and strategies. These and other factors are identified and described in more detail in our filings with the SEC, including, our current reports on Form 8-K.



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