ANGIOCHEM PUBLISHES DATA ON ANG4043, A BRAIN-PENETRANT ANTI-HER2 MONOCLONAL ANTIBODY FOR TREATMENT OF BRAIN METASTASES

Results in *Molecular Cancer Therapeutics* Demonstrated Significant Prolonged Survival in Mice with Intracranial HER2+ Tumors After IV Injections of ANG4043

Montreal, Canada, December 9, 2014 – Angiochem, a clinical stage biotechnology company creating and developing drugs that cross the blood-brain barrier, today announced the publication in *Molecular Cancer Therapeutics* demonstrating that ANG4043, a peptide-monoclonal antibody (mAb) conjugate, entered the brain at therapeutic concentrations, resulting in significantly prolonged survival in mice. The antibody is directed against HER2, which is the protein targeted by Herceptin®. Because the mAb is conjugated to Angiopep-2, it is recognized by the LRP1 receptor and takes advantage of a receptor-mediated transcytosis mechanism to cross the BBB. This proprietary technology has been clinically validated with ANG1005, a peptide-paclitaxel conjugate currently in Phase II studies. The data published today shows that Angiochem's technology to cross the BBB is applicable to biologics such as mAbs.

In the publication entitled "ANG4043, a Novel Brain-penetrant Peptide-mAb Conjugate, is Efficacious against HER2-positive Intracranial Tumors in Mice," Angiochem researchers show that ANG4043 binds LRP1 receptors while retaining the pharmacological properties of the native anti-HER2 mAb, including high affinity HER2 binding and anti-proliferative activity in HER2-expressing cells. In vivo, ANG4043 achieves therapeutic brain concentrations in healthy mice and in mice bearing intracranial HER2+ tumors, which are targeted by ANG4043. In this HER2+ intracranial tumor model, treatment with ANG4043 (15 mg/kg IV, twice-weekly) increased median survival time by 78% (80 days compared to 45 days for control).

"To the best of our knowledge, the data reported in this publication represent the first known peptide-monoclonal antibody conjugate for oncology that has been shown to cross the BBB using a clinically-validated technology. For biologics and more specifically for mAbs, brain penetration is the major obstacle for the treatment of CNS diseases," said Jean Paul Castaigne, M.D., President and CEO of Angiochem. "These data build upon previously reported Phase 2 clinical data with ANG1005, our peptide-paclitaxel drug conjugate, demonstrating indication of efficacy in primary and secondary brain tumors."

Jean Lachowicz, Ph.D., CSO at Angiochem, continued, "LRP-1 receptor-mediated transcytosis, can be leveraged to create brain penetrant mAbs, as demonstrated in the study published today, as well as Angiopep antibody-drug conjugates, which have been successfully generated by Angiochem. While our current data has focused on demonstrating the potential of Angiochem's technology in oncology, its applicability extends beyond oncology to include neurodegenerative diseases as well."

About ANG4043

ANG4043 was created by conjugating the Angiopep-2 to an anti-HER2 mAb to bring an effective anticancer therapy to treat HER2+ brain metastases from breast cancer. In a series of in vivo

experiments, ANG4043 has demonstrated that it reaches the brain, targets HER2+ tumors, induces intracranial tumor shrinkage, and significantly increases survival in mice that have been intracranially implanted with HER2+ tumor cells.
Overall study results of ANG4043 further validate the potential of the applicability of Angiochem technology to create brain-penetrant mAbs.

About Angiochem

Angiochem is a clinical-stage biotechnology company discovering and developing new breakthrough peptide drug conjugates that leverage the LRP-1 mediated pathway to cross the BBB for treating neurological diseases. These new compounds have the potential to address significant medical needs, many of which are insurmountable due to the fundamental physiological challenge posed by the BBB. Angiochem is developing a focused product pipeline, including small molecules and biologics, for the potential treatment of brain malignancies and other CNS indications. Angiochem maintains headquarters in Montreal, Canada. For additional information about the Company, please visit http://www.angiochem.com.

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