FOR IMMEDIATE RELEASE

ChemGenex Pharmaceuticals Announces Omapro™ to be Reviewed by the FDA's Oncologic Drugs Advisory Committee for the Treatment of Adults with Chronic Myeloid Leukemia who have Failed Prior Therapy with Imatinib and who have Developed the Bcr-Abl T315I Mutation

MELBOURNE, Australia, and MENLO PARK, California USA (17 December 2009) – ChemGenex Pharmaceuticals Limited (ASX:CXS) announced today the U.S. Food and Drug Administration (FDA) has notified the company that the Oncologic Drugs Advisory Committee (ODAC) will conduct a public advisory meeting on 10 February 2010 to review the Company's NDA for Omapro™ (omacetaxine mepesuccinate) for injection. The proposed indication for Omapro is for the treatment of adults with chronic myeloid leukemia (CML) who have failed prior therapy with imatinib and who have developed the Bcr-Abl T315I mutation. The Advisory Committee provides advice and recommendations to the FDA on regulatory issues.

ChemGenex submitted the NDA on 9 September 2009. The NDA was accepted by the FDA on 10 November 2009 and granted Priority Review.

About Omacetaxine

Omacetaxine is a first-in-class cetaxine with demonstrated clinical activity as a single agent in a range of hematological malignancies. Omacetaxine has a novel mechanism of action, specifically binding to the ribosomal A-site cleft and inhibiting protein translation of short-lived oncoproteins that are upregulated in leukemic cells (particularly Cyclin-D1, Mcl-1 and c-Myc).

Omacetaxine mepesuccinate is administered subcutaneously and acts differently from TKIs. It may have a therapeutic advantage for patients who have failed TKIs. Omacetaxine is currently in global phase 2/3 clinical trials for subsequent indications within CML and has been granted Orphan Drug designations by the U.S. Food and Drug Administration (FDA) and European Medicines Agency (EMEA) as well as Fast Track status by the FDA.

About ChemGenex Pharmaceuticals Limited

ChemGenex is an oncology focused biopharmaceutical company developing small molecules with new mechanisms of action to treat malignancies with significant unmet medical needs. A New Drug Application has been accepted by the U.S. Food and Drug Administration and a Marketing Authorisation Application has been validated by the European Medicines Agency for CML patients who have failed imatinib therapy and have the Bcr-Abl T315I mutation. ChemGenex has established a corporate alliance with Hospira to develop and commercialize omacetaxine in Europe, the Middle East and parts of Africa, and is seeking to establish commercial partnerships in the rest of the world.

ChemGenex plans to commercialize omacetaxine itself in North America. ChemGenex trades on the Australian Stock Exchange under the symbol "CXS" For additional information on ChemGenex Pharmaceuticals, please visit the company's website at http://www.chemgenex.com.

Omapro™ is a trademark of ChemGenex Pharmaceuticals Limited.

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