FOR IMMEDIATE RELEASE

U.S. FOOD AND DRUG ADMINISTRATION'S ONCOLOGIC DRUG ADVISORY COMMITTEE RECOMMENDS CHEMGENEX VALIDATE A DIAGNOSTIC PRIOR TO APPROVAL OF OMAPRO™ IN CHRONIC MYELOID LEUKEMIA PATIENTS WITH T315I MUTATION

MELBOURNE, Australia, and MENLO PARK, California U.S.A. (23 March 2010) – ChemGenex Pharmaceuticals Limited (ASX: CXS) announced today that the U.S. Food and Drug Administration's (FDA) Oncologic Drugs Advisory Committee (ODAC) voted 7-1 that a validated test to identify the T315I mutation should be reviewed by the FDA prior to approval of OMAPRO™ (omacetaxine mepesuccinate).

ChemGenex has been working with the FDA on the T315I diagnostic matter and the FDA has confirmed that it will meet with ChemGenex to review the diagnostic strategy on 9 April 2010.

The question posed to the ODAC panel by the FDA was not regarding the safety and efficacy of OMAPRO, but was stated as the following:

> "Should a well characterized *in vitro* diagnostic to identify patients with the T315I mutation be required and reviewed by the FDA and correlated to clinical trial results prior to approval of omacetaxine for the proposed indication?"

"We are encouraged by the positive comments from some members of the ODAC panel about the benefits of OMAPRO and the unmet medical need for CML patients with the T315I mutation," said Adam R. Craig, M.D., Ph.D., Senior Vice President and Chief Medical Officer, ChemGenex. "We have a meeting scheduled next month with members of the FDA's drug and diagnostic teams and will continue to work with the agency as it considers our new drug application for OMAPRO."

"Over the past several months, ChemGenex has been working closely with the FDA on a diagnostic strategy to allow for approval of OMAPRO. We are committed to making OMAPRO available to patients as soon as possible," added Greg Collier, Ph.D., Chief Executive Officer and Managing Director, ChemGenex.

ChemGenex is seeking FDA approval for OMAPRO™ (omacetaxine mepesuccinate) for the treatment of adults with chronic myeloid leukemia (CML) who have failed prior therapy with imatinib and have the Bcr-Abl T315I mutation. T315I is a common mutation that renders CML resistant to all currently approved tyrosine kinase inhibitors (TKIs).

ChemGenex will host a webcast conference call today with the following access information:

Date/Time Australia: Tuesday, 23 March - 11:00am AEDST
Dial-in Australia: +1-800-288-277, Passcode: 5527539

Date/Time USA/Canada: Monday, 22 March - 8:00pm EDT / 5:00pm PDT
Dial-in USA/Canada: (800) 882-3610, Passcode: 5527539

All other International callers, dial +1-412-380-2000 Passcode: 5527539.

Webcast: To access the archived recording, visit the ChemGenex website at www.chemgenex.com.

A replay of this call will be available until 30 March 2010 by dialing (877) 344-7529 U.S./Canada and +1-412-317-0088 for International participants. When prompted, enter Conference Number 438881.

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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subject to a number of uncertainties that could change the results described in the forward-looking statements. Investors should be aware that there are no assurances that results will not differ from those projected.