ArQule Announces Tivantinib Meets Primary Endpoint, Significantly Extending Time to Progression in Phase 2 Trial in Second-Line Hepatocellular Carcinoma

WOBURN, Mass.--(BUSINESS WIRE)-- ArQule, Inc. (NASDAQ: ARQL) today announced that treatment with tivantinib as single agent therapy produced a statistically significant 56 percent improvement in time-to-progression (TTP) in the intent-to-treat (ITT) population, the primary endpoint in a randomized, controlled Phase 2 clinical trial in previously treated patients with hepatocellular carcinoma (HCC) (hazard ratio = 0.64; log rank p-value = 0.04).

Adverse events were reported at similar rates in the treatment and placebo arms, except for a higher incidence of fatigue and hematologic events, including neutropenia and anemia, in tivantinib-treated patients. The incidence of hematologic events declined following dose reduction of tivantinib from 360 milligrams twice daily (BID) to 240 milligrams BID.

"These findings represent the first randomized data reported with a c-Met inhibitor administered as a single agent in HCC," said Dr. Brian Schwartz, chief medical officer of ArQule. "Second line treatment for HCC remains a challenge, lacking an approved agent. We look forward to presenting complete data from this trial at a peer-reviewed forum later this year, including secondary endpoint, sub-group and biomarker analyses."

The 107 patients in this trial had unresectable HCC and had experienced disease progression after first-line therapy or were unable to tolerate such therapy. At the start of the study, patients were randomized to receive tivantinib at 360 milligrams BID or placebo. As previously disclosed, due to the rate of neutropenia, the tivantinib dose was reduced to 240 milligrams BID for all patients. TTP was defined as the time from patient randomization until objective tumor progression using RECIST (Response Evaluation Criteria in Solid Tumors) 1.1 criteria evaluated by central radiological review.

About Hepatocellular Carcinoma (HCC)

Hepatocellular carcinoma (HCC) is the most common primary cancer of the liver. The incidence is increasing, and HCC has risen to become the fifth most common malignancy worldwide and the third leading cause of cancer-related death, exceeded only by cancers of the lung and stomach.[1] The estimated incidence is about 500,000-1,000,000 new cases per year, causing 600,000 deaths globally per year. Chronic hepatitis B and C are recognized as the major factors worldwide increasing the risk of HCC, with risk being even greater in the presence of co-infection with these viruses[2]. Cirrhosis is also a risk factor for development of HCC.

About c-Met and Tivantinib (ARQ 197)

Tivantinib is an orally available, selective inhibitor of c-Met, a receptor tyrosine kinase, which is currently in Phase 2 and Phase 3 clinical trials. In certain healthy adult cells, c-Met is present in low to normal levels to support natural cellular function and renewal, but in some cancer cells, c-Met is inappropriately and continuously activated. When thus abnormally activated, c-Met plays multiple roles in human cancer, including cancer cell growth, survival, angiogenesis, invasion and metastasis.

Pre-clinical data have demonstrated that tivantinib inhibits c-Met activation in a range of human tumor cell lines and shows anti-tumor activity against several human tumor xenografts. In clinical trials to date, treatment with tivantinib has been well tolerated and has shown clinical activity in the tumors studied.

About ArQule, Inc. and Daiichi Sankyo, Co., Ltd.

On December 19, 2008, ArQule and Daiichi Sankyo, Co., Ltd. signed a license, co-development and co-commercialization agreement to co-develop tivantinib in the U.S., Europe, South America and the rest of the world, excluding Japan, China (including Hong Kong), South Korea and Taiwan, where Kyowa Hakko Kirin Co., Ltd. has exclusive rights for development and commercialization.

Investor Conference Call

ArQule will host an investor conference call today at 9:00 a.m.

Date:	Tuesday, January 17, 2011
Time:	9:00 a.m. Eastern Time

Conference Call Dial-In Numbers
Domestic: (877) 868-1831
International: (914) 495-8595
Confirmation code: 44134741
Webcast: http://investors.arqule.com/events.cfm

A replay of the conference call will be available beginning approximately two hours after its completion for seven days and can be accessed by dialing toll-free 1-855-859-2056 and 1-404-537-3406 from outside the U.S. For archived calls, the access code is 44134741.

About ArQule

ArQule is a biotechnology company engaged in the research and development of next-generation, small-molecule cancer therapeutics. The Company's targeted, broad-spectrum products and research programs are focused on key biological processes that are central to human cancers. ArQule's lead product, in Phase 2 and Phase 3 clinical development, is tivantinib, an oral, selective inhibitor of the c-MET receptor tyrosine kinase. The Company's pipeline consists of ARQ 621, designed to inhibit the Eg5 kinesin motor protein, and ARQ 736, designed to inhibit the RAF kinases. ArQule's current discovery efforts, which are based on the ArQule Kinase Inhibitor Platform (AKIP™), are focused on the identification of novel kinase inhibitors that are potent, selective and do not compete with ATP (adenosine triphosphate) for binding to the kinase.

This press release contains forward-looking statements regarding the Company's clinical trials with tivantinib and its agreement with Daiichi Sankyo Co., Ltd. These statements are based on the Company's current beliefs and expectations, and are subject to risks and uncertainties that could cause actual results to differ materially. Positive information about pre-clinical and early stage clinical trial results does not ensure that later stage or larger scale clinical trials will be successful. For example, tivantinib may not demonstrate promising therapeutic effects in such trials; in addition, it may not demonstrate an appropriate safety profiles in later stage or larger scale clinical trials, including among patients with underlying cirrhosis and compromised liver function, as a result of known or as yet unanticipated side effects. The results achieved in later stage trials may not be sufficient to meet applicable regulatory standards or to justify further development. Problems or delays may arise during clinical trials or in the course of developing, testing or manufacturing tivantinib that could lead the Company or its partners to discontinue development. Even if later stage clinical trials are successful, unexpected concerns may arise from analysis of data or from additional data. Obstacles may arise or issues may be identified in connection with review of clinical data with regulatory authorities, and regulatory authorities may disagree with the Company's view of the data or require additional data or information or additional studies. In addition, the planned timing of initiation and completion of clinical trials for tivantinib is subject to the ability of the Company or Daiichi Sankyo, its partner, to enroll patients, enter into agreements with clinical trial sites and investigators, and overcome other technical hurdles and issues related to the conduct of the trials for which each of them is responsible that may not be resolved. Drug development involves a high degree of risk. Only a small number of research and development programs result in the commercialization of a product. Positive pre-clinical data may not be supported in later stages of development. Furthermore, ArQule may not have the financial or human resources to successfully pursue drug discovery in the future. Moreover, Daiichi Sankyo has certain rights to unilaterally terminate the tivantinib license, co-development and co-commercialization agreement. If it were to do so, the Company might not be able to complete development and commercialization of tivantinib on its own. For more detailed information on the risks and uncertainties associated with the Company's drug development and other activities, see the Company's periodic reports filed with the Securities and Exchange Commission. The Company does not undertake any obligation to publicly update any forward-looking statements.

[1] Hepatocellular carcinoma: Epidemiology, risk factors and pathogenesis. World Journal of Gastroenterology 14(27): 4300-08, 2008.

[2] Chiaramonte M, Stroffolini T, Vian A, et al.: Rate of incidence of hepatocellular carcinoma in patients with compensated viral cirrhosis. Cancer 85 (10): 2132-37, 1999.

ArQule, Inc.
William B. Boni VP, 781-994-0300
Investor Relations/Corp. Communications
www.ArQule.com

Source: ArQule, Inc.