Geron Provides Update on Imetelstat Clinical Development Program

September 10, 2012

Company to Host Conference Call Today at 8:30 a.m. ET

MENLO PARK, Calif., September 10, 2012 - Geron Corporation (Nasdaq: GERN) today announced that, on the basis of an unplanned interim analysis, it is discontinuing its randomized Phase 2 study of imetelstat in metastatic HER2-negative breast cancer because median progression-free survival (PFS) in the imetelstat arm was shorter than in the comparator arm. The Company also announced that it is continuing its randomized Phase 2 study of imetelstat in advanced non-small cell lung cancer (NSCLC). However, although a separate interim analysis of the NSCLC study suggested a modest trend of efficacy in favor of the imetelstat arm, the pre-specified success criteria in this trial are unlikely to be met, and, as a consequence, it is doubtful that Geron will take imetelstat forward into Phase 3 development for NSCLC.

The study in metastatic HER2-negative breast cancer was a randomized, controlled trial of 166 patients in which imetelstat was evaluated in combination with paclitaxel, compared to paclitaxel alone. The primary efficacy endpoint was an estimate of PFS.

In this trial, a scheduled periodic review conducted by Geron's Internal Safety Monitoring Committee reported a greater number of deaths and number of patients discontinuing paclitaxel in the imetelstat arm compared to the control arm. Based on these observations, an unplanned interim analysis of efficacy was performed that showed a median PFS of 6.2 months for patients receiving treatment with imetelstat in combination with paclitaxel, compared to 8.0 months for patients receiving paclitaxel alone (hazard ratio = 1.62; p = 0.028). Although the absolute number of deaths was higher in the imetelstat arm (16 vs. 10), there was no statistically significant difference in overall survival. Based on these findings, Geron has discontinued this trial.

The clinical trial protocol allowed for reductions or delays in the dosing of paclitaxel consistent with the approved labeling, and there were an increased number of such occurrences in the imetelstat arm of the study. A series of analyses suggested that reductions of paclitaxel dose intensity in the imetelstat arm were likely responsible for the difference in PFS.

To understand the potential effect of imetelstat in the metastatic HER2-negative breast cancer study independent of reduced paclitaxel dosing, and to ensure that treatment with the drug was not accelerating disease progression in the NSCLC trial, Geron conducted an unplanned interim safety and efficacy analysis of the data from its randomized Phase 2 trial in NSCLC where imetelstat is administered as a single agent. The advanced NSCLC study of 116 patients is evaluating imetelstat maintenance treatment following platinum-based induction chemotherapy compared to observation. In this study imetelstat is administered at a higher dose and frequency than in the HER2-negative metastatic breast cancer study.

The interim analysis of the NSCLC study suggested a modest but not statistically significant trend in PFS in favor of the imetelstat arm (hazard ratio = 0.78). The Kaplan-Meier curves separated just before the median, resulting in no meaningful difference in median PFS between the two arms; median PFS for the imetelstat treated arm was 2.8 months, compared to 2.6 months for the observation-only arm. Thus, no evidence was found that imetelstat was accelerating disease progression in this study, which is continuing as planned.

The data from the interim analysis of the NSCLC trial also suggested that imetelstat was not contributing to the increased risk of disease progression independent of reduced paclitaxel dosing in the metastatic breast cancer study. Therefore, at this time, the Company is not aware of any factors responsible for the shorter PFS in the imetelstat treatment arm of the metastatic breast cancer study other than the reduced paclitaxel dose intensity.

Geron's plans for further development of imetelstat in hematologic malignancies have not been adversely impacted by these results. The Company is evaluating imetelstat in two hematologic malignancies: essential thrombocythemia (ET) and multiple myeloma. Using biomarkers, these two studies are designed to evaluate whether inhibiting telomerase will selectively reduce the proliferation of the malignant progenitor cells responsible for these diseases. In the ET trial, the Company is also evaluating clinical and hematological responses. Geron continues to expect to release top-line results from these studies in the fourth quarter of this year.

Geron ended the second quarter of 2012 with $122 million in cash and investments.

Conference Call

At 8:30 a.m. EDT on September 10, 2012, Geron's management will host a conference call to discuss the results from the solid tumor trials and potential plans for the imetelstat program.

Participants can access the conference call via telephone by dialing 866-356-4123 (U.S.); 617-597-5393 (international). The passcode is 28820246. A live audio-only webcast is also available at http://www.media-server.com/m/p/69y4uoer. The audio webcast of the conference call will be available for replay approximately one hour following the live broadcast for 30 days.

About Geron

Geron is a biopharmaceutical company developing first-in-class therapies for cancer. The Company has two lead product candidates in clinical development, imetelstat and GRN1005. Imetelstat is a telomerase inhibitor that is being evaluated in three ongoing Phase 2 clinical trials: advanced non-small cell lung cancer, essential thrombocythemia and multiple myeloma. GRN1005 is a peptide-drug conjugate that is designed to transport a proven anti-cancer drug, paclitaxel, across the blood-brain barrier by targeting low-density lipoprotein receptor-related proteins (LRPs), specifically LRP-1. GRN1005 is being evaluated in two Phase 2 clinical trials: brain metastases arising from breast cancer and brain metastases arising from non-small cell lung cancer. For more information about Geron, visit www.geron.com.

Use of Forward-Looking Statements

Except for the historical information contained herein, this press release contains forward-looking statements made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that statements in this press release regarding Geron's plans or expectations for or of: dates to obtain top-line data or other results from any of the Phase 2 clinical trials; and clinical development plans or success of imetelstat and GRN1005, constitute forward-looking statements. These statements involve risks and uncertainties that can cause actual results to differ materially from those in such forward-looking statements. These risks and uncertainties, include, without limitation: (a) regarding dates for the availability of top-line data or other results - delays in enrollment, delays caused by institutional review boards or regulatory agencies, shortage of supply, dependence on clinical trial collaborators and safety issues; and (b) regarding the development of imetelstat and GRN1005 - those risks and uncertainties inherent in the development of potential therapeutic products, including without limitation, successful clinical trial results and the protection of Geron's intellectual property rights. Additional information and factors that could cause actual results to differ materially from those in the forward-looking statements are contained in Geron's periodic reports filed with the Securities and Exchange Commission under the heading "Risk Factors," including Geron's quarterly report on Form 10-Q for the quarter ended June 30, 2012. Undue reliance should not be placed on forward-looking statements, which speak only as of the date they are made, and the facts and assumptions underlying the forward-looking statements may change. Except as required by law, Geron disclaims any obligation to update these forward-looking statements to reflect future information, events or circumstances.

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