SPECTRAL ANNOUNCES RESULTS OF FIRST INTERIM ANALYSIS BY DATA SAFETY AND MONITORING BOARD

Enrolment in the EUPHRATES trial is continuing with no safety issues

TORONTO, Canada – February 4, 2013 – Spectral Diagnostics Inc. (TSX: SDI) (OTCQX: DIAGF), a Phase III company developing the first theranostic treatment for patients with septic shock, today announced that the first interim analysis has been conducted on the initial 76 randomized patients in its EUPHRATES trial.

The Data Safety and Monitoring Board (DSMB), consisting of experts in the fields of critical care medicine, infectious disease, nephrology, biostatistics and regulatory affairs, reviewed the totality of the data set for evidence of safety concerns, such as adverse events and/or adverse device effects, related to the use of the Toraymyxin cartridge.

The results from the first interim safety analysis by the DSMB state that there are no safety issues to date concerning the application of the Toraymyxin cartridge to patients in the EUPHRATES trial. In addition, the results state that the EUPHRATES clinical protocol appears to be defining the correct target patient population for this study.

“We are making consistent progress with our pivotal Phase III trial,” said Dr. Paul Walker, Chief Executive Officer of Spectral Diagnostics. “We remain committed to our protocol which randomizes only patients in septic shock who are endotoxemic, as they are at greatest risk for a poor outcome and therefore most likely to benefit from our theranostic approach.”

There have been 191 patients who have met clinical entry criteria so far. As predicted, approximately 50% of these patients have an elevated level of endotoxin, which is associated with a high rate of mortality in septic shock patients.

The combined 28-day mortality rate remains stable at 35% for patients randomized either to the standard of care with SHAM hemoperfusion event, or to the Toraymyxin cartridge plus standard of care. This was also commented on by the DSMB as a positive sign and provides further evidence that the correct patient population is being studied. For those patients with low levels of endotoxin who were not randomized to the trial, the 28-day mortality rate is approximately 25% to date.

The DSMB encourages the continued enrolment of patients into the EUPHRATES trial.

Spectral continues to initiate new sites to the EUPHRATES trial in Canada and the United States. The Company anticipates that it will have 45-50 sites enrolling patients by the end of June, 2013.

Spectral remains on track to achieve the trial’s next milestone, which will be a second planned interim analysis after 184 randomized patients have been followed for 28 days. At the second analysis, the DSMB will advise Spectral on the trial’s safety, efficacy or futility, with stopping rules in place for efficacy and futility. A sample size recalculation will be done if necessary. Management expects to disclose information from the second interim analysis in the first half of 2014.

About Spectral Diagnostics

Spectral is a Phase III company seeking U.S. FDA approval for its lead theranostics product for the treatment of septic shock. Toraymyxin is a therapeutic hemoperfusion device that removes endotoxin, which can cause sepsis, from the bloodstream. Directed by the Company's Endotoxin Activity Assay (EAA™), the only FDA-cleared diagnostic for the risk of developing sepsis, Spectral's EUPHRATES trial is the world's first theranostics trial in the area of sepsis.

Spectral is listed on the Toronto Stock Exchange under the symbol SDI, and on the OTQ QX under the symbol DIAGF. For more information please visit www.spectraldx.com

Forward-looking statement

Information in this news release that is not current or historical factual information may constitute forward-looking information within the meaning of securities laws. Implicit in this information, particularly in respect of the future outlook of Spectral and anticipated events or results, are assumptions based on beliefs of Spectral's senior management as well as information currently available to it. While these assumptions were considered reasonable by Spectral at the time of preparation, they may prove to be incorrect. Readers are cautioned that actual results are subject to a number of risks and uncertainties, including the availability of funds and resources to pursue R&D projects, the successful and timely completion of clinical studies, the ability of Spectral to take advantage of business opportunities in the biomedical industry, the granting of necessary approvals by regulatory authorities as well as general economic, market and business conditions, and could differ materially from what is currently expected.

The TSX has not reviewed and does not accept responsibility for the adequacy or accuracy of this statement.

For further information please contact:

Anthony Businskas
Executive Vice President and CFO
416-626-3233 ext. 2200

Adam Peeler
Investor Relations
416-815-0700 ext. 225
apeeler@tmxequicom.com