

**SPECTRAL ANNOUNCES
PUBLICATION DEMONSTRATING TORAYMYXIN™
SIGNIFICANTLY REDUCES MORTALITY FROM SEPSIS IN
PROSPECTIVE CONTROLLED TRIAL**

TORONTO, Canada – June 18, 2009 – Spectral Diagnostics Inc. (TSX:SDI), a company developing products for the treatment of sepsis, today announced that findings demonstrating the Toraymyxin™ cartridge, a blood purification device that absorbs endotoxin from the bloodstream, when added to conventional therapy, significantly improved hemodynamics and organ dysfunction and reduced 28-day mortality in patients with severe sepsis and septic shock. The article entitled “Early Use of Polymyxin B Hemoperfusion in Abdominal Septic Shock: The EUPHAS Randomized Controlled Trial,” was published in the *Journal of the American Medical Association (JAMA)*. Spectral has exclusive rights to Toraymyxin™ in the United States and plans to initiate a trial in the U.S. in the latter half of 2009.

“The degree of reduction in mortality demonstrated by Toraymyxin™ in the EUPHAS trial is an unprecedented result for sepsis therapies and indicates that this product has the potential to fulfill an unmet need for the approximately 100,000 patients that develop severe sepsis or septic shock in the U.S. each year,” said Dr. Paul Walker, President and CEO of Spectral Diagnostics. “Our Endotoxin Activity Assay (EAA™) has the ability to identify patients who could benefit from this therapy and monitor its effect. Together, this diagnostic and therapeutic have the potential to provide a more effective treatment for patients with severe sepsis and septic shock caused by endotoxemia.”

The objective of this study was to determine whether Toraymyxin™, when added to conventional medical therapy, improves clinical outcomes and mortality compared with conventional therapy alone, in a targeted patient population with severe sepsis and/or septic shock associated with intra-abdominal infections.

- 28 day mortality was 32% (11/34 patients) in the Toraymyxin™ group and 53% (16/30 patients) in the conventional therapy group.
- Mean Arterial Pressure (MAP) increased (76 to 84 mm Hg; P = 0.001) in the Toraymyxin™ group but not in the conventional therapy group (MAP, 74 to 77 mm Hg; P = 0.37).
- Vasopressor requirement decreased (inotropic score, 29.9 to 6.8; P < 0.001) at 72 hours in the Toraymyxin™ group but not in the conventional therapy group (inotropic score, 28.6 to 22.4; P = 0.14).
- Sequential Organ Failure Assessment scores improved in the Toraymyxin™ group but not in the conventional therapy group (change in SOFA, –3.4 vs –0.1; P < 0.001).

The abstract and full text of the article is available online at www.jama.ama-assn.org and appears in *JAMA*. 2009; Vol. 301 No. 23, 2445-2452.

About Spectral Diagnostics

Spectral is a leader in the battle against sepsis. Spectral's lead product is its Endotoxin Activity Assay (EAA™), the only FDA cleared assay for the measurement of endotoxin. With the growing awareness for the role of endotoxemia in sepsis and the increasing number of therapies being developed for this indication, Spectral is well-positioned to drive the adoption of the EAA™, which can be used to identify patients, enable therapeutics and monitor treatment. In March 2009, Spectral obtained the exclusive development and commercial rights in the U.S. for Toraymyxin™, a therapeutic for the treatment of sepsis that removes endotoxin from the bloodstream. Spectral will seek FDA approval for Toraymyxin™ and intends to commercialize the product together with EAA™. Spectral is listed on TSX under the symbol SDI.

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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.