

SPECTRAL AND TORAY EXPAND COLLABORATION TO INCLUDE NEW GEOGRAPHIC TERRITORIES

TORONTO, Canada – May 5, 2008 – Spectral Diagnostics Inc. (TSX: SDI) today announced that it has expanded its relationship with Toray Medical Co. Ltd. for the marketing and sale of Spectral's Endotoxin Activity Assay (EAA™), the only FDA cleared assay for the measurement of endotoxin. Under the terms of the new collaboration agreement, Spectral will have access to Toray's distributors in new geographic territories including China, India, Russia and Canada for the sales and promotion of EAA™ in combination with its Toraymyxin blood purification device, which removes endotoxin from the bloodstream. These distributors will also market and sell the EAA™ diagnostic as a stand-alone product.

"Through our existing agreements, we have been establishing the value of our EAA™ diagnostic in combination with Toray's blood purification device in Japan and Europe," said Dr. Paul Walker, President and CEO of Spectral Diagnostics. "This expansion of our collaboration with Toray will strengthen our presence in additional geographic territories – a key component in the global commercialization strategy for our EAA™ product. The arrangement further highlights the benefits of using EAA™ to identify patients most likely to benefit from anti-endotoxin therapies."

Toray and Spectral will work together to commercialize EAA™ and Toraymyxin through the distributors, including holding jointly sponsored marketing events. Various distribution agreements related to this arrangement are expected to be finalized over the remainder of Spectral's 2008 fiscal year.

About Toraymyxin

Toraymyxin, a blood purification device, absorbs the bacterial toxin (endotoxin) that causes sepsis and septic shock using a special fiber. It consists of a plastic cylindrical container filled with a special fiber composite immobilized with the antibiotic polymyxin B, which has high affinity for endotoxin. In 1993, Toray received approval for manufacturing and marketing of the product from the "Health and Welfare Ministry of Japan," and Toray Medical has been marketing it since 1994.

About Toray

Toray Medical Co., Ltd. is a subsidiary company of Toray Industries, Inc., a leading diversified chemicals corporate group that has been technology-focused since its foundation in 1926. The company's operations are underpinned by technological expertise in organic synthetic chemistry, polymer chemistry, and biochemistry. These innovative technologies have yielded "advanced materials" that Toray is now exploiting to provide customers with comprehensive solutions through Fibers and Textiles, Plastics and Chemicals, IT-related Products, Carbon Fiber Composite Materials, Environment and Engineering, Life Science and Other Business divisions. In FY2006, Toray had

consolidated sales of 1,546 billion yen (approx \$13 billion US), and over 33,000 employees worldwide. For further information, please check www.toray.co.jp.

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. 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.