

NOT FOR DISSEMINATION IN THE UNITED STATES

**SPECTRAL INCREASES PRIVATE PLACEMENT FINANCING TO
\$19.5 MILLION**

- Special meeting postponed to Friday, February 26, 2010 -

TORONTO, Canada – February 3, 2010 – Spectral Diagnostics Inc. (TSX:SDI), a company developing products for the treatment of sepsis, today announced that it has increased its previously announced brokered private placement by an additional \$5.5 million, bringing the total amount to be raised to \$19.5 million (the “Financing”). The net proceeds of the Financing will be used to advance Toraymyxin™, a treatment for severe sepsis, towards regulatory approval and commercialization in the United States.

“This additional funding demonstrates the strong interest and support we were able to attract from new and existing investors based on the potential of the Toraymyxin™ therapy,” said Mr. Anthony Businskas, Executive Vice-President and CFO of Spectral. “With the completion of this financing, we will have sufficient funds to advance Toraymyxin™, combined with our EAA™ diagnostic, into the pivotal trial in the US, while retaining significant commercial opportunity for our shareholders.”

About Toraymyxin™, Endotoxin and Sepsis

Spectral’s Endotoxin Activity Assay (EAA™) is the only FDA cleared assay for the measurement of endotoxin in the bloodstream. Toraymyxin™ is a therapeutic hemoperfusion device that removes endotoxin from the bloodstream. The anticipated US pivotal trial will use Spectral’s EAA™ to identify patients with severe sepsis who have elevated endotoxin in the blood and will most likely benefit from treatment with Toraymyxin™.

Sepsis affects approximately 750,000 patients in the US each year. It accounts for approximately 1 in 10 ICU admissions at an annual cost to the US healthcare system of \$17 billion. Sepsis is the 10th most common cause of death in the US, ahead of acute heart attacks and breast cancer.

Results of a randomized controlled trial (the EUPHAS trial) were recently published in the *Journal of the American Medical Association (JAMA)*. 2009; Vol. 301 No. 23, 2445-2452). The results demonstrated that Toraymyxin™ absorbs endotoxin from the bloodstream, and when added to conventional therapy, significantly improved hemodynamics and organ dysfunction, and reduced 28-day mortality in patients with severe sepsis and septic shock in comparison to those patients in the conventional therapy group.

Terms of the Financing

Under the terms of the Financing, the Company will issue 48,750,000 units of the Company (the "Units") at a price of \$0.40 per Unit to a group of investors, including GrowthWorks Atlantic Venture Fund Ltd. ("GrowthWorks Atlantic"), GrowthWorks Canadian Fund Ltd. ("GrowthWorks Canadian"), Mavrix Fund Management Inc. (collectively with GrowthWorks Atlantic and GrowthWorks Canadian, the "GrowthWorks Entities") and BioMS Medical Corp. ("BioMS"), for aggregate gross proceeds of \$19.5 million. Each Unit consists of one common share of the Company ("Common Share") and one half of one Common Share purchase warrant (each whole Common Share purchase warrant, a "Warrant") entitling the holder thereof to acquire one Common Share at a price of \$0.60 per Common Share for a period of four years from Closing.

BioMS will invest \$12 million to acquire 30,000,000 Units under the Financing, and following Closing will hold 30,000,000 Common Shares, representing approximately 39.6% of the issued and outstanding Common Shares, calculated on a non-diluted basis, after giving effect to the Proposed Transactions (as defined below). BioMS will also be issued 15,000,000 Warrants in the Financing. The GrowthWorks Entities will invest \$2.25 million in the Financing.

In connection with the Financing, and as partial consideration for services performed, at Closing, the Company will issue broker warrants to Desjardins Securities Inc., who acted as agent for the Financing, which will entitle them to acquire 1,462,500 Common Shares at an exercise price of \$0.40 per Common Share, and a further 731,250 Common Shares at an exercise price of \$0.60 per Common Share, in each case, for a period of four years from Closing.

At Closing, the Company has also agreed to issue 2,890,625 Common Shares to GrowthWorks Canadian at a deemed price of \$0.40 per Common Share as full repayment and final settlement of a non-interest bearing, unsecured convertible promissory note in the principal amount of \$1,156,250 dated June 19, 2006 issued by the Company to GrowthWorks Canadian (the "Promissory Note Conversion", and together with the Financing, the "Proposed Transactions").

Under the terms of the Financing, BioMS will be entitled to nominate up to two directors to the Spectral board for as long as the collective shareholdings of BioMS and its affiliates constitutes 10% or more of the issued and outstanding Common Shares (calculated on a non-diluted basis). GrowthWorks Canadian will also be entitled to nominate one director to the Spectral board for as long as the collective shareholdings of GrowthWorks and other GrowthWorks managed funds own in the aggregate not less than 10% or more of the issued and outstanding Common Shares (calculated on a non-diluted basis). Each of Spectral, BioMS, the GrowthWorks Entities, and Dr. Paul Walker have entered into a voting agreement to support the appointment of such BioMS and GrowthWorks Canadian nominees from time to time in accordance with the foregoing. Additionally, at Closing, such persons will enter into a 120 day lock-up agreement in respect of all Spectral securities owned or over which it has control or direction.

In connection with the Financing, BioMS and Spectral have also agreed to enter into a three year \$3 million services agreement at Closing, whereby BioMS will provide clinical, regulatory and capital market consulting services to Spectral.

The Closing of the Proposed Transactions is subject to the approval of the Toronto Stock Exchange, and other customary closing conditions. The Proposed Transactions are also subject to the majority approval of the shareholders of the Company ("Shareholders") at the special meeting (the "Special Meeting") which has been postponed to Friday, February 26, 2010. The record date for the purposes of determining Shareholders entitled to vote at the Special Meeting remains as the close of business on December 29, 2009. The transaction is currently expected to close in early March, 2010.

The board of directors of the Company unanimously supports the Proposed Transactions and recommends that Shareholders vote in favour of them. Further details of the transaction will be included in a proxy circular to be mailed to shareholders in due course. The material private placement agreements will also be filed on SEDAR at www.sedar.com.

The shares offered have not been and will not be registered under the United States Securities Act of 1933 and accordingly are not being offered for sale and may not be offered, sold or delivered, directly or indirectly within the United States, its possessions and other areas subject to its jurisdiction or to, or for the account of or for the benefit of a U.S. person, except pursuant to an exemption from the registration requirements of that Act.

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.