

Medgenics, Inc.
(“Medgenics” or the “Company”)

Medgenics Announces Successful closing of \$4m Convertible Debenture Issue

27 September 2010 - Misgav, Israel and London, UK -Medgenics (AIM: MEDG and MEDU), the company that has developed a novel technology for the manufacture and delivery of therapeutic proteins continuously in patients using their own tissue, is pleased to announce that it has successfully raised additional funds to finance further advances with its Phase I/II clinical trial for its product EPODURE (for the treatment of anaemia) and to initiate steps towards the launch of a Phase I/II trial for its product INFRADURE (for the treatment of hepatitis-C), through the private placement of \$4 million of new convertible debentures. This fund raise was in excess of the original \$3 million the Company had targeted and, the Directors believe, indicates support from both new and existing investors in the continued development of the Company.

The Company received confirmation on 24 September 2010 that the Kanter Family Foundation* and CIBC Trust Company (Bahamas) Limited, as trustee**, each purchased \$100,000 of debentures and each received warrants to purchase 375,000 common shares of US \$0.0001 each in the capital of the Company (“Common Shares”). In addition, Chicago Investments, Inc.*** purchased \$50,000 of debentures and received warrants to purchase 187,500 Common Shares. These three entities are “Related Parties” of Joel Kanter (a Director of the Company) for the purpose of the AIM Rules.

Andrew Pearlman, CEO, commented:

“The closing of this round with greater demand than we had anticipated clearly indicates there is great support for the Company’s ongoing development plans. The proceeds will allow us to move forwards with the ongoing Phase I/II trial for EPODURE, initiate work on the INFRADURE clinical trials and to further our progress with other applications of our biopump platform technology while maintaining dialogue with potential partners for new protein applications and moving forward with commercialization deals. We are at a very exciting stage of the Company’s development and we thank new and existing investors for their continued support”

The new convertible debentures are unsecured obligations of the Company, accrue interest at 4% per annum and mature and become repayable 12 months from the date of issuance. Holders of such debentures may convert them anytime into Common Shares, at an initial conversion price of 13p per Common Share. The debentures will automatically convert upon an underwritten public offering of Common Shares raising at least \$6 million and resulting in the Common Shares being listed on a U.S. national securities exchange or automated quotation system (a “US Listing”), at a conversion price equal to the lesser of 13p per Common Share and 75% of the public offering price of the Common Shares in such underwritten public offering. Purchasers of these new convertible debentures received warrants to purchase a number of Common Shares equal to 75% of the number of Common Shares into which the debentures could convert on the date of issuance. Such warrants are immediately exercisable, have a 5 year term and have an initial exercise price of 16p. If a further issuance of securities is made by the Company at a lower price, both the conversion price of the debentures and the exercise price of the warrants will be subject to downward

adjustment to such lower issue price and, if such issuance takes place prior to a US Listing occurring, the number of warrants held by each warrant holder will be increased to maintain the aggregate exercise price of his original warrants. Any Common Shares issued upon conversion of the debentures and exercise of the warrants will be deemed restricted stock under U.S. securities laws and cannot be sold or transferred unless subsequently registered under such laws or an exemption from the registration requirements is available.

No application will be made for the debentures or the warrants to be admitted to trading on the AIM market of the London Stock Exchange or any other stock exchange.

Notes:

* The Kanter Family Foundation, an Illinois not-for-profit corporation of which Mr. Joel Kanter, a non-executive director of Medgenics, is the President and is a Director.

** CIBC Trust Company (Bahamas) Limited (“CIBC”) is the trustee of a trust (“CIBC Trust”) established for the benefit of various descendants of (i) Helen and Henry Krakow, and (ii) Beatrice and Morris Kanter. Mr. Kanter is a discretionary beneficiary of the CIBC Trust. Sole voting and investment control of shares owned by the CIBC Trust is vested in CIBC as trustee of the CIBC Trust.

*** Chicago Investments, Inc. (“CII”). CII is a majority-owned subsidiary of Chicago Holdings, Inc. (“CHI”). CHI is majority owned by various trusts (together the “Kanter Trusts”) established for the benefit of various descendants of (i) Helen and Henry Krakow, and (ii) Beatrice and Morris Kanter. Joel Kanter is a discretionary beneficiary of some, but not all, of the Kanter Trusts. Sole voting and investment control of the Common Shares owned by CII is vested in Mr. Kanter’s brother, Joshua Kanter, as President of CII.

For the purposes of applicable US Securities Laws and regulations, Mr. Kanter disclaims all beneficial and pecuniary interest to the Common Shares held by CII and CHI and the CIBC Trust. Such disclaimer does not affect Mr. Kanter’s status as a discretionary beneficiary under the Kanter Trusts or the CIBC Trust.

For further information, contact:

Medgenics, Inc. Dr. Andrew L. Pearlman	Phone: +972 4 902 8900
Religare Capital Markets (Nominated Adviser) James Pinner Derek Crowhurst	Phone: +44 207 444 0800
SVS Securities plc (Joint Broker) Ian Callaway	Phone: +44 207 638 5600
Nomura Code Securities PLC (Joint Broker) Jon Senior	Phone: +44 207 776 1219

Notes to Editors:

About Medgenics:

Medgenics is a commercial-stage biopharmaceutical company developing its unique tissue-based Biopump platform technology to provide sustained-action protein therapy for the treatment of a range of chronic diseases. The first revenue generating commercial deal with a well known multinational pharmaceutical company was negotiated in late 2009 and we look forward to generating additional deals to further commercialise the Biopump platform technology.

Biopumps are made using needle biopsies taken from the lower layer of the patient's skin under local anaesthetic, and processed during 10-14 days to become 30 mm long tissue biofactories producing the required protein. The requisite number of Biopumps are injected under the patient's skin to provide sustained protein production and delivery for many months. The Company is developing the Biopump to provide substantially greater safety and reliability in protein treatment in a more cost effective manner than experienced with the existing injected protein therapies. Medgenics currently has three products in development based on this technology and addressing the indications of:

- anaemia - using EPODURE, a Biopump producing erythropoietin (EPO)
- hepatitis-C - using INFRADURE, a Biopump producing interferon-alpha (IFN-a)
- haemophilia - using a Biopump to produce clotting Factor VIII

The Company's Phase I/II clinical trial using EPODURE to treat anaemia in patients with chronic kidney disease, has demonstrated proof of concept of the Biopump. Designed to produce and deliver a therapeutic dose of EPO steadily for six months or more, EPODURE Biopumps have already provided effective anaemia treatment in patients for 6-12 months, even at the low administered dose.

Medgenics intends to develop its innovative products and bring them to market via multiple strategic partnerships with major pharmaceutical and/or medical device companies. In addition to treatments for anaemia, hepatitis-C, and haemophilia, Medgenics plans to develop and/or out-license a pipeline of future Biopump products targeting the large and rapidly growing global protein therapy market, which is forecast to reach US \$95 billion by the end of 2010. Other potential applications of Biopumps producing various proteins include multiple sclerosis, arthritis, paediatric growth hormone deficiency, obesity, and diabetes.