Contract Award from US Department of Defense

Jun 24, 2021

US$1.1 million awarded to advance Spectral MD's AI wound healing assessment technology for use in a far-forward military environment and to improve portability

LONDON, U.K. AND DALLAS, TX, U.S. Spectral MD Holdings, Ltd. (AIM: SMD), a predictive analytics company that develops proprietary AI algorithms and optical technology for faster and more accurate treatment decisions in wound care, announces today that it has been awarded a 2-year, US$1.1 million Sequential Phase II Small Business Technology Transfer (STTR) contract ("Contract") from the Defense Health Agency ("DHA") within the US Department of Defense ("DoD").

This Contract will support Spectral MD in advancing a new, multispectral imaging ("MSI") sensor intended to enable the development of a fully handheld version of DeepView™, Spectral MD's existing AI and MSI technology for early burn wound healing assessment, in a far-forward military environment. The developments achieved under this contract will also support the Company's improvements in portability and ease of use for the assessment of civilian burn and chronic wound applications such as Diabetic Foot Ulcers (DFU).

DeepView™ combines point-of-care optical imaging analyzed by artificial intelligence (AI) algorithms to rapidly assess wound viability in burns and chronic wounds. This Contract will assist the Company in providing the US military and other users the possibility of rapidly establishing an appropriate treatment plan near the site where injuries are sustained, such as the battlefield, and reduce unnecessary transport of casualties to brick-and-mortar hospitals. In the civilian setting, there is also a significant benefit to the patient and cost savings associated with an accurate and timely predictive wound healing diagnosis.

Spectral MD has previously received STTR Phase I and Phase II contract awards from the DHA for investigation into its technology's capabilities in providing real-time feedback to burn surgeons during burn excision surgery.

Jeff Thatcher, PhD, Chief Scientist at Spectral MD, said:

"These previous DHA STTR awards have been important in the improvement of MSI technologies in the current DeepView™ system. This new award is expected to follow this trend and fund the development towards a fully handheld DeepView™."

Wensheng Fan, CEO of Spectral MD, said:

"Working with the US military to enable DeepView's burn assessment capability in field hospitals is crucial to reaching wounded soldiers closer to the battlefield. DeepView™ is supported by multiple US federal agencies for both military and civilian uses. In addition, this development will also directly benefit the DFU indication by facilitating an expansion into remote care settings including the potential for home health."

Spectral MD has partnered with Louisiana State University Medical Science Center to conduct clinical studies for performance data collection for the new MSI imaging sensor under this STTR award.

About the Defense Health Agency STTR program

The DHA has a directive to conduct research and development aimed to deliver, "value to our beneficiary communities by shepherding innovative materiel and knowledge solutions from concept through final product development and into the hands of providers and Warfighters." The Defense Health Agency awards STTR grants to small businesses with strong research and development capabilities that partner with research institutions, such as universities, to develop medical technologies toward commercialization.

Market Abuse Regulation (MAR) Disclosure

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 as it forms part of UK domestic law by virtue of the European Union (Withdrawal) Act 2018 ('MAR'). Upon the publication of this announcement via Regulatory Information Service ('RIS'), this inside information is now considered to be in the public domain.

For further information please contact:

Spectral MD Holdings, Ltd.	investors.spectralmd.com
Wensheng Fan, Chief Executive Officer	via Walbrook PR
Wan Lung Eng, Chief Financial Officer	
SP Angel Corporate Finance LLP (NOMAD & BROKER)	Tel: +44 (0)20 3470 0470
Stuart Gledhill/Caroline Rowe (Corporate Finance) Vadim Alexandre/Rob Rees (Sales & Broking)	
Walbrook PR Ltd (Media & Investor Relations)	Tel: +44 (0)20 7933 8780 or spectralMD@walbrookpr.com
Paul McManus/Sam Allen Alice Woodings	Mob: +44 (0)7980 541 893 / +44 (0)7502 558 258 +44 (0)7407 804 654

About Spectral MD Holdings, Ltd. (www.spectralmd.com)

Using its DeepView® Wound Imaging Solution, an internally developed AI technology and multispectral imaging system which has designated FDA Breakthrough Device, the Spectral MD is able to distinguish between damaged and healthy human tissue invisible to the naked eye, providing 'Day One' healing assessments for burn wounds and diabetic foot ulcers (DFU).

Spectral MD has to date received substantial support from the US government with contracts from institutions such as Biomedical Advanced Research and Development Authority (BARDA), National Science Foundation (NSF), National Institute of Health (NIH) and Defense Health Agency (DHA) in support of the burns application for its DeepView® system.

The Company has one principal trading subsidiary, Spectral MD, Inc., and has set up a permanent establishment in the UK from which it will be growing its business in the UK and EU.

DeepView®

DeepView® is a predictive analytics platform that combines AI algorithms and medical imaging for wound prediction. It is non-invasive, non-radiation, non-laser and does not require the use of injectable dye. This integration can be characterised into four distinct components: DeepView® imaging, data extraction, AI model building and AI wound healing prediction.

- The DeepView® imaging technology consists of patented proprietary multi-spectral optics and sensors that can classify wound tissue physiology and capture the viability of various biomarkers within the skin. The imaging technology extracts appropriate clinical data, processes the image and displays a comparison of the original image next to an image with a colour overlay of the non-healing portions of the wound. The image acquisition takes 0.2 seconds and the output takes approximately 20 to 25 seconds.
- DeepView®'s proprietary optics are able to extract millions of data points or AI model features from each raw image. This information is then used to build and continually improve the AI model, which is trained and tested against a proprietary database of more than 53 billion pixels with ever-growing clinically-validated data points.
- The AI algorithm then produces a wound healing prediction in the form of an objective, accurate, and immediate binary wound healing prediction. This prediction is graphically represented to the clinician through a coloured overlay of the original image that annotates the non-healing portion of the wound.

DeepView® is designed to allow clinicians to make a more accurate, timely and informed decision regarding the treatment of the patient's wound. In the case of DFUs, a non-healing assessment would provide the physician with the appropriate justification to use an advanced wound care therapy on 'Day One' as opposed to waiting 30 days and potentially losing the patient to follow-up or risking patient noncompliance with standard wound therapy. The current clinical accuracy of DeepView® is 83 per cent. for DFUs. For burn wounds, the clinician can make an immediate and objective determination for appropriate candidates for surgery as well as determining what specific areas of the burn wound will require skin grafting. DeepView®'s current accuracy for burn wounds is 91 per cent., compared with current physician accuracy of 50 per cent. to 70 per cent. DeepView® demonstrates a much higher diagnostic accuracy for burn wounds and DFUs.