MyFiziq to expand technology into cancer care

MyFiziq Limited (ASX: MYQ) ("**MyFiziq**" or "**Company**") is pleased to inform shareholders that the Company has developed an extension to its scanning technology into body surface area (**BSA**) calculation, and other serial measurements, to assist with oncology therapy decisions and prevention measures.

MyFiziq's Chief Science Officer, Dr Amar El-Sallam, has been working on a number of new and innovative measurements to be included into the Company's patented application as it navigates further use cases that can dramatically impact existing and new sectors the Company is working in.

Specialist oncology physicians use BSA based dosing as a useful way to mitigate patient size variation in medication regimens. Using BSA can help prescriber's dose more optimally to improve drug efficacy, minimize drug toxicity, and account for some changes in pharmacokinetics depending on patient factor. The ability to determine BSA accurately from a mobile device would be a significant step forward in assessing these calculations when working with cancer patients. Having identified this potential target market, the Company has been successfully testing a BSA measurement module and additional oncology-specific modules extensions to its existing technology and expects to commence trials with real subjects over the next 60 days.

The Company is working with medical doctor and oncology researcher, Dr Kate Barrett, MD to fully understand the best approaches in areas of clinical oncology – both in-hospital and through telemedicine. Dr Barrett will be the first oncologist to be given access to the new technology for closed trials and assessment.

BSA and 3D technologies

Substantial work has been performed in the use of 3D scanning technologies for a more accurate way of estimating BSA. The use of 3D surface anthropometry has shown extremely promising results with a total error in BSA measurement due to scanning measurement and software computational error is less than 1%. These outcomes are readily achievable and optimal in a clinical environment. Unfortunately, the cost, inconvenience, and accessibility to such machines, make this option otherwise less than optimal.

MyFiziq has developed a cost effective, convenient and personalized mobile device measurement capturing system that is the ideal replacement for the outdated BSA manual calculations and is showing promising results in the initial trials of digital BSA capture.

In physiology and medicine, BSA is the measured or calculated surface area of a human body. For many clinical purposes, BSA is a better indicator of metabolic mass than body weight because it is less affected by abnormal adipose mass (abdominal fat). Nevertheless, there have been several important critiques of the use of BSA in determining the dosage of medications with a narrow therapeutic index, such as chemotherapy.

Typically, there is a 4–10-fold variation in drug clearance between individuals due to differing the activity of drug elimination processes related to genetic and environmental factors. This can lead to significant overdosing and underdosing (and increased risk of disease recurrence). The inaccuracies around manual calculations of BSA are seen to be a distorting factor in clinical trials that may result in

potentially helpful medications being prematurely rejected. MyFiziq is working with the increased awareness and acceptance of digital health applications and the current trend to personalized medicine and medical treatment to counter these weaknesses and lag in patient care.

BSA is a similar calculation to body mass index (BMI). These calculations are notoriously inaccurate and leave clinicians and doctors exposed when calculating the correct dosages and therefore potential of doctors holding back dosage to err on the side of caution with initial treatments.

BSA plays a key role in several medical fields, including cancer chemotherapy, transplantology, burn treatment and toxicology. BSA is often a major factor in the determination of the course of treatment and drug dosage. A series of currently used yet-outdated formulae to simplify the process have been developed. Because easy-to-identify, yet general, body coefficient results of those formulae vary considerably. There are four widely used formulas; Mosteller, DuBois, Boyd, Gehan and Geroge. Mosteller and DuBios, which were developed in 1916 based on 9 subjects, are the two widely used formulas, however it has been reported that they can result in errors up to nearly 10% with a deviation of up to 35%. This explains the significantly higher cancer mortality rates observed in overweight and obese individuals[i],[ii],[iii],[iv],[v].The question arises as to whether the choice of a formula is valid and safe for patients. The MyFiziq technology has the potential to change the way these calculations are implemented and furthermore bring a higher level of efficiency and safety in patient care.

Dr Amar El-Sallam said:

"MyFiziq has collected one of the world's largest human shape and medical / body composition image libraries with over 7000 human subjects from Australia and around the world. I have used this deep and diverse data set to train and validate our accuracy in readiness for external review. This panoptic data set has afforded MyFiziq a unique opportunity to further develop its patented state of the art machine learning models to achieve highly accurate body shape and composition measurements. I have used this library when training our machine learning algorithm in conjunction with our unique dimensioning capabilities, whilst extending our technology into BSA.

Unlike existing BSA methods, the average accuracy achieved at MyFiziq for BSA alone is 97% with a repeatability of 97% across all body shapes, this will have significant impact in the area of clinical ecology. This is a significate step forward for the company and clinicians using BSA.

I will be looking to expand the use case of our technology, as BSA is also used to provide more precise measures of hemodynamic parameters such as cardiac index, stroke volume index, systemic vascular resistance index and pulmonary vascular resistance index. In addition, BSA is used to adjust creatinine clearance when comparing it with normal values to assess for the presence and severity of kidney disease. All of these indications add a further layer of depth to the company's IP and global importance."

About Dr Kate Barrett, MD

As a dynamic medical leader with over 10 years of experience in clinical, academic, and corporate oncology, Dr Barrett, has a clear focus on systems-level matters regarding the total welfare of cancer patients. Her commitment to-and experience with- providing compassionate patient-centric navigation of cancer treatment options is also coupled with a powerful entrepreneurial drive. This has lead Dr. Barrett to envision blueguide incorporated, a best-practices consulting business, which she founded, and drives for the better care and outcome for her patients. Dr Barrett was trained at world-renowned oncology academic institutions in Canada, the United States & Australia. Dr Barrett has written and presented award-winning cancer research at congresses across the globe in areas spanning the laboratory bench to clinical practice.

Furthermore, Dr Barrett has published both primary and secondary investigative papers in high-impact international oncology journals in partnership with institutional, biopharmaceutical and governmental systems, Dr. Barrett aspires to support and generate relevant, effective research results and problem-responsive patient solutions. She assists with personal navigation among increasingly complex cancer care environments.

Dr Kate Barrett said:

"Up to 80% of individuals with advanced cancer undergo weight loss and wasting – the signs and symptoms of which are seen as prognostic paraments in cancer patients. The ability to make accurate and consistent evaluations through a handheld device will simplify the process on several levels in clinical and preventative medicine. Not only will it be easier to track and document BSA calculations for chemotherapies, pain medications, and other supportive drugs across the healthcare team, it will enable an improved visualization of individual trends such that we can prevent and support concerning changes readily. Further, cumulative data collected both on- and off- trial will enable physicians and researchers to identify trends, collaborate on intervention, and adapt accordingly. Improving the analytics of body measurements, particularly given the dynamic nature that exists in the highly-diverse cancer population, allows for an opportunity to optimize 'virtually deployable anywhere' technology to further understand physiological changes for that individual cancer patient, and ultimately the predicative / preventative power in therapeutics.[vi]"

About Blueguide

Blueguide is a private patient service dedicated to maximizing advanced technology, expert physicians, and emerging evidence to expand and navigate personalized cancer treatment options. Cancer patients and their families receive actionable and effective information regarding second consultations, clinical trials, cutting-edge diagnostics or genetic sequencing tests, as well as awareness of differences in hospital protocols and treatment tools at various institutions. With foremost compassion, individual case management centers on communication, connections and relationships while addressing patient concerns in the context of emerging clinical cancer research and available therapeutic resources.

*This announcement has been approved by the board of MyFiziq Limited.

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About MyFiziq:

MyFiziq has developed and patented a proprietary dimensioning technology that enables its users to check, track, and assess their dimensions using only a smartphone privately and accurately.

Our goal is to assist our partners by empowering their consumers with this capability. This in return gives our partners the ability to assess, assist, and communicate outcomes with their consumers when navigating day to day life. Whether this is a personal journey to better health, understanding the risk associated with their physical condition, tracking the changes they are experiencing through training, dieting, or under medical regimes. or simply wanting to be correctly sized for a garment when shopping online. The MyFiziq technology delivers this seamlessly, privately, and cost-effectively in under one minute.

Our partner benefits from our (SAAS) Software as a service pricing solution, that reduces with scale. Integration is made easy with the MyFiziq modular system, based on multiple (SDK's) software development kits, allowing a partner to select the functions, measurements, and displays to suit their individual needs.

MyFiziq has developed this capability by leveraging the power of Computer Vision, Machine Learning, and patented algorithms, to process these images on secure, enterprise-level infrastructure, delivering an end-to-end experience that is unrivaled in the industry. MyFiziq simplifies the collection of measurements and removes the human error present in traditional methods.

For more information please visit: www.myfiziq.com

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