

Crescent Diagnostics

Specialty area(s): Osteoporosis diagnosis

Based in: London, UK,
and Limerick, Ireland

Founded in: 2004

Total investment received to date:

\$1m from Seroba BioVentures and private investors

Current methods of diagnosing osteoporosis rely on assessing the patient's bone mineral density and determining if there has been a loss of bone mass. But one UK-Irish start-up believes it is quality, not quantity, that counts.

Crescent Diagnostics' bone quality test (BQT) is based on the discovery – made by researchers at the University of Limerick in Ireland – that the protein structure in fingernails correlates to that of the bone, and can thereby offer an indirect and noninvasive assessment of a patient's bone health.

The BQT uses a laser technique, known as Raman spectrometry, to analyse the chemical structure of the bonds in the fingernail. According to Ernest Poku, CEO of London-based Crescent Diagnostics, the device does not require any training to operate and will be a "one-button" operation, unlike current methods for assessing bone health, such as

X-ray-based DEXA scans and ultrasound imaging. The BQT is also expected to be significantly more cost-effective than its X-ray and ultrasound counterparts and the compact size of the device – equivalent to that of a mobile phone – means it is suitable for use in doctors' offices.

A working prototype of the device is currently undergoing clinical trials and over 400 women have been assessed using the system. "Our data to date suggests that [the BQT's] ability to predict bone fracture risk is better than the DEXA or ultrasound," says Mr Poku, adding that the clinical trials will be expanded to include over a thousand women.

The company also believes that the test can be used to monitor a patient's response to drugs and is carrying out clinical trials, in collaboration with of a number of pharmaceutical companies, for this application.

Ernest Poku, CEO.

Tel: +44 20 7463 2096. Crescent Diagnostics Ltd. 1 Southbank House, Black Prince Road, London SE1 7SJ, UK. www.crescentds.com