



Sub-study (Tayside Only)



University
of Dundee



Cardiovascular Disease in Bronchiectasis

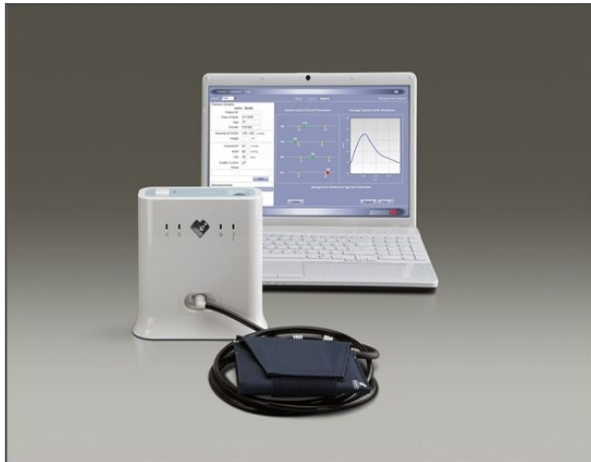
- Cardiovascular diseases are prevalent in patients with bronchiectasis, with MI and Heart Failure among the top ten comorbidities*
- Current risk prediction tools (ASSIGN, QRISK) underestimates cardiovascular risk in patients with bronchiectasis
- Early markers of cardiovascular risk such as **endothelial dysfunction** and **arterial stiffness** are not well studied in this group

Non-invasive assessments of Cardiovascular Risk

- **Pulse Wave Velocity (PWV)**

Measures the travel time (m/s) of a pulse of blood along the aorta using ultrasound, and every increase by 1m/s corresponded to an increase of 14-15% of total CV event and all-cause mortality

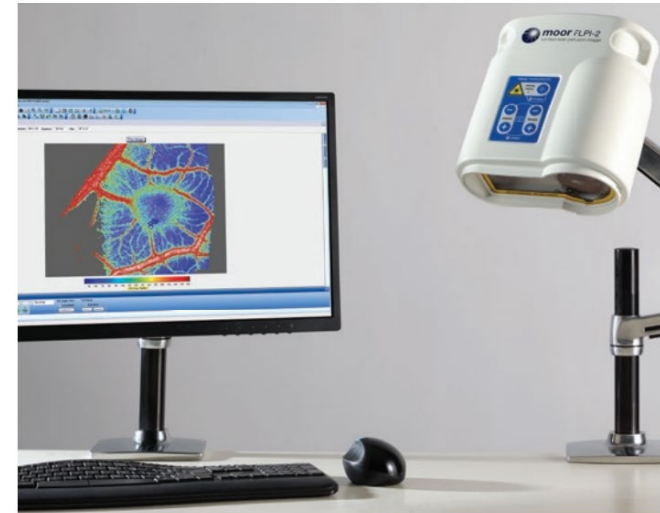
Closer predictor of CVD risk in patients with bronchiectasis when compared to QRISK2 score



- **Iontophoresis with Full-field Laser Perfusion Imaging (FLPI)**

Laser imaging of the skin blood flow changes to assess microvascular function

Chemicals are applied to the skin to provoke vasodilation, and the process is captured using laser imaging



Key points

- PWV and FLPI are non-invasive, although FLPI might leave a mild temporary rash on the skin
- measurements of waist and hip circumference
- Total estimated time would be 2 hours
- Takes place on visit 2 (randomisation), visit 5 (last day of IMP), and visit 6 (last visit)