

03-PRECISION IN BLOOD PRESSURE MEASUREMENT

The most common method of measuring blood pressure – the “cuff method” – is surprisingly inaccurate. Incorrect measurements lead to misdiagnosis and inappropriate treatment for hypertension, which is a major risk for cardiovascular disease. This device measures multiple physical parameters in a non-invasive manner to give a more accurate blood pressure measurement.



The technology works by taking multiple physical measurements at the carotid artery, located at the side of the neck, with a wearable device that is connected to the measurement software. This artery more closely resembles that of the aorta in the heart, and therefore gives more accurate indications of cardiovascular disease as compared to the “cuff method”, where blood pressure is measured at the arm. Furthermore, the physical parameters measured give information about the radius of the artery, which was previously only possible to measure using invasive methods. Artery narrowing is a critical indication of risk for heart attack and stroke. Collectively, the increased precision and accuracy in blood pressure and arterial size measurement provided by this technology will enable appropriate assessment of disease risk and monitoring. In addition, the device could be used in a pharmacological setting for determining the effectiveness of blood pressure medication.



Contact:

Ms Loreta Staškūnienė

Loreta.Staskuniene@ku.lt

Web:

<https://www.ku.lt/en/>