

## **Carotid-femoral pulse wave velocity is the best biomechanical marker for risk prediction**

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Aortic stiffness increases markedly with advancing age and is associated with widening of pulse pressure, an increase in pulse wave velocity, earlier return of reflected waves to the proximal aorta and increased risk for target organ damage and adverse outcomes. Various measures of arterial stiffness and wave reflection have been proposed as potential surrogate measures of aortic stiffness. Carotid-femoral pulse wave velocity is a direct measure of aortic wall stiffness that is easily measured with modest requirements for special equipment and training and has been shown to predict events and reclassify cardiovascular disease risk in models that include standard cardiovascular disease risk factors. Therefore, carotid-femoral pulse wave velocity has emerged as the best biomechanical marker for risk prediction.