

## **CARDIOVASCULAR RISK FACTORS - IT'S TIME TO FOCUS ON VARIABILITY**

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### **Abstract**

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Until recently, intraindividual visit-to-visit variability of cardiovascular risk factors has been dismissed as random fluctuation. This simplistic concept was challenged by demonstrating that visit-to-visit blood pressure variability, independent of average blood pressure, was a powerful risk factor for stroke. Subsequently, variability of other cardiovascular risk factors such as cholesterol, glycemia, and body weight was documented to increase risk independent of their absolute values. Variability of these risk factors has been demonstrated to be a powerful predictor for all-cause and cardiovascular mortality, stroke, coronary artery disease, heart failure, end-stage renal disease, and dementia. With the notable exception of heart rate, cardiovascular risk factors must now be defined by 2 components: the magnitude and duration of sustained risk factor elevation and, equally important, the variability of the same risk factor over time.

### **Keywords**

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*blood pressure; body weight; cholesterol; glycemia; heart rate; mortality*