

Personalized Treatment Regimen Following Pulse Wave Analysis

61-Year-Old Male with Hypertension and Comorbidities*

Patient Medical History

- Smoker
- History of heart attack and placement of two coronary stents
- Current Rx regimen
 - Metoprolol XL 200 mg daily
 - Hydralazine 100 mg twice daily
 - Lisinopril 20 mg daily
 - Furosemide 20 mg daily
 - Atorvastatin 40 mg daily

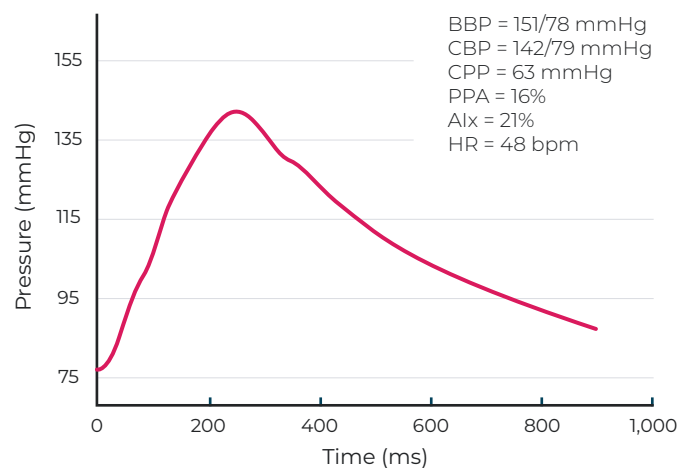
Initial Digital Vascular Biomarker Assessment

Brachial Blood Pressure	151/78 mmHg
Central Systolic Blood Pressure	142 mmHg
Augmentation Index	21%

Initial Assessment Interpretation

In the initial pulse wave measurement (Fig. 3), this male patient's central pressure profile indicates a pulse pressure amplification of 16% (less than the desired value of 30%). This male patient also has hypertension, however his augmentation index is lower than the threshold risk level of 50 mmHg**.

Figure 3. Central Aortic Blood Pressure Waveform



BBP indicates brachial blood pressure systolic/diastolic; CBP, central blood pressure systolic/diastolic; CPP, central pulse pressure; Aix, augmentation index; HR, heart rate; bpm, beats per minute.

*Townsend RR et al. Journal of Clinical Hypertension. 2015; 17:7, 503-513.

**Roman et al. Hypertension. 2007;50:197-203

Follow up Digital Vascular Biomarker Assessment

Brachial Blood Pressure	145/82 mmHg
Central Systolic Blood Pressure	128 mmHg
Augmentation Index	19%

Follow up Assessment Interpretation

After eight months on this male patient's central pressure profile indicates that pulse pressure amplification has increased from 16% to 40%. The central systolic pressure of 128 mmHg is closer to the desired value of 124 mmHg and the Alx was lowered slightly from 21% to 19%. In the 8-month treatment interval, this patient's heart rate is now 65 beats per minute (increased from 48 beats per minute).

Figure 4. Pulse Waveform Analysis at 8 months

