



a family of products that contribute to quantitative assessment of
cardiovascular risk and atherosclerosis

- Software to aid analysis of longitudinal vascular ultrasound images, to determine vascular diameter and intima-media thickness, as well as their changes as depicted in brachial and carotid arterial ultrasound images

Quantitative analysis of endothelial

- function via measurement of Flow Mediated Dilatation (FMD) of brachial arteries

Quantitative analysis of Intima-Media

- Thickness (IMT) in carotid arteries

FDA approved for clinical use

Research version (for investigational

- use only) was used for epidemiologic and clinical studies since 1998

Supports multiple image formats:

- DICOM, AVI, TIF, CRI, JPEG, BMP, RAW

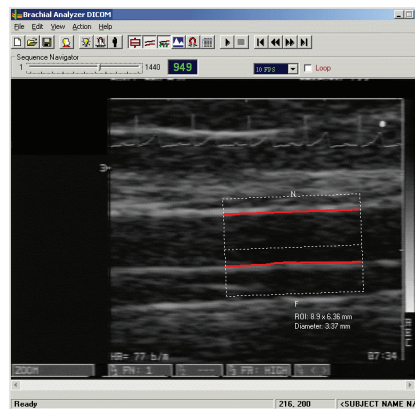
Comprehensive, configurable

- reporting in Microsoft-Excel or SAS formats

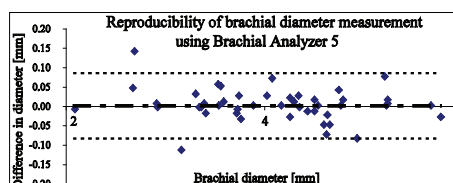
Efficient and intuitive user interface

- running under Microsoft Windows

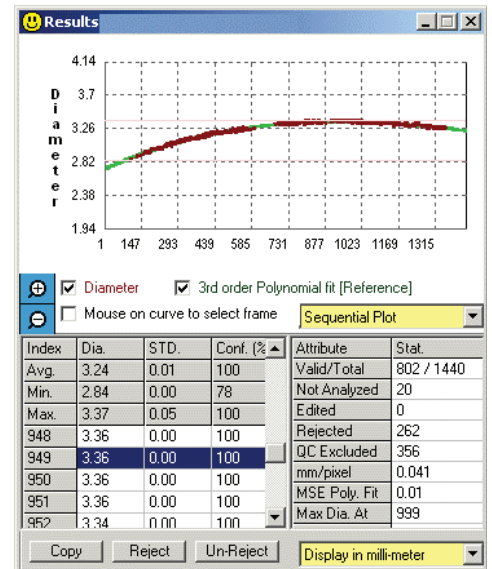
1 BRACHIAL ANALYZER 5



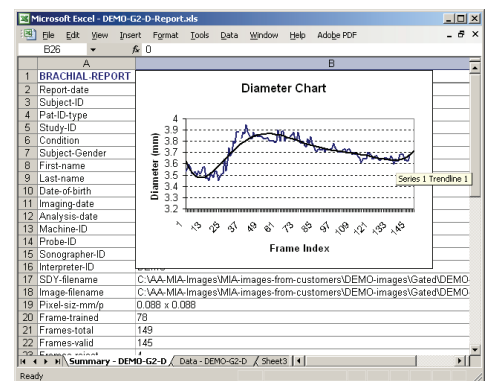
- Highly automated analysis of brachial ultrasound image sequences - each frame analyzed in fraction of a second
- ECG gated or non-gated sequences
- Continuous measurement of brachial diameters (M- to M-line) in all frames
- Adaptive analysis algorithms with built-in multi-stage quality control
- Widely used in epidemiologic studies
- Independently validated ... signed diameter errors: 0.034 ± 0.066 mm
- Bland Altman statistic:



FMD assessment - deflation diameter sequence chart example



Reports are compatible with Excel and SAS

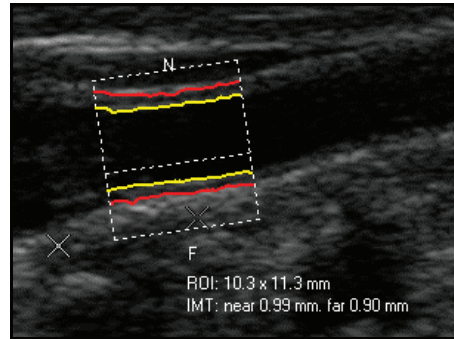


2 VASCULAR TOOLS 5 AND CARDIOVASCULAR DISEASE

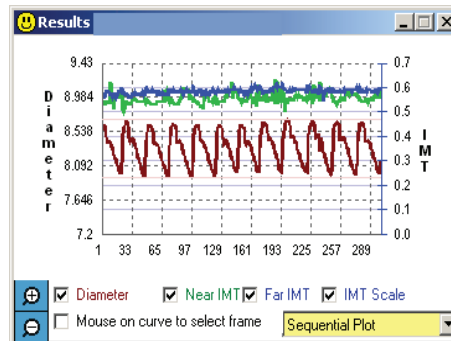
- Cardiovascular disease is the primary cause of death in the Western World
- Stroke and heart attack are frequently the first visible symptoms.
- Vascular Tools 5 contribute to quantitative assessment of cardiovascular risk, disease extent, and outcome
- Users
 - Cardiologists, Neurologists, Radiologists, Vascular Surgeons, Family physicians, Clinical trial researchers, Drug development researchers
 - Research use includes: Framingham Study, Muscatine Study, & studies at more than 70 leading research universities in the US, Europe, Asia

3 CAROTID ANALYZER 5

- Highly accurate and automated measurement of IMT and diameter of carotid arteries
- IMT measurement of near and far walls in carotid common, carotid internal, and carotid bifurcation
- Mean and maximum IMT reported for each frame



- Diameter and IMT measurement in image sequences



- Independently validated, signed error of mean IMT -0.007 ± 0.07 mm
- Signed error max IMT -0.07 ± 0.09 mm
- Carotid Analyzer 5 outperforms previously published approaches ... comparison of mean and max IMT measurement errors:

