

# Innovation and Accuracy in **Cardiovascular Imaging**

RF **QIMT**

MyLabGoldPlatform



MyLab50Family



MyLab40



MyLab25 Family



**GOLD  
PLATFORM**

MyLab Desk



ISO 13485:2003 ISO 9001:2000



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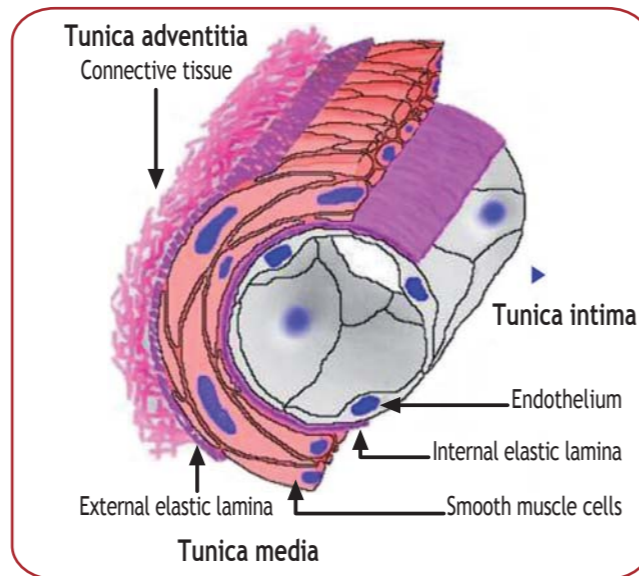


# Why IMT?

## An important issue in modern medicine

In addition to traditional parameters, such as cholesterol values and blood pressure, intima media thickness value (IMT) is useful in helping to understand arteriosclerosis, its severity and progression.

An accurate cardiovascular management at an early stage can provide an advantage to plan an efficient prevention and treatment regime.



- > An important part of the European and USA population has diabetes, hypercholesterolemia and/or hypertension\*
- > These people have a severe risk of cardiovascular disease
- > Damage to the cardiovascular system may be prevented by early warning/diagnosis with IMT measurement
- > Early detection, treatment and change in life-style may ensure different patients expectations

\* American Heart Association, World Health Organization

**Causes**  
Getting older, Environment, Lifestyle, Genetics

**Risk factors**  
Age, Diabetes, Hypertension, Hypercholesterolemia

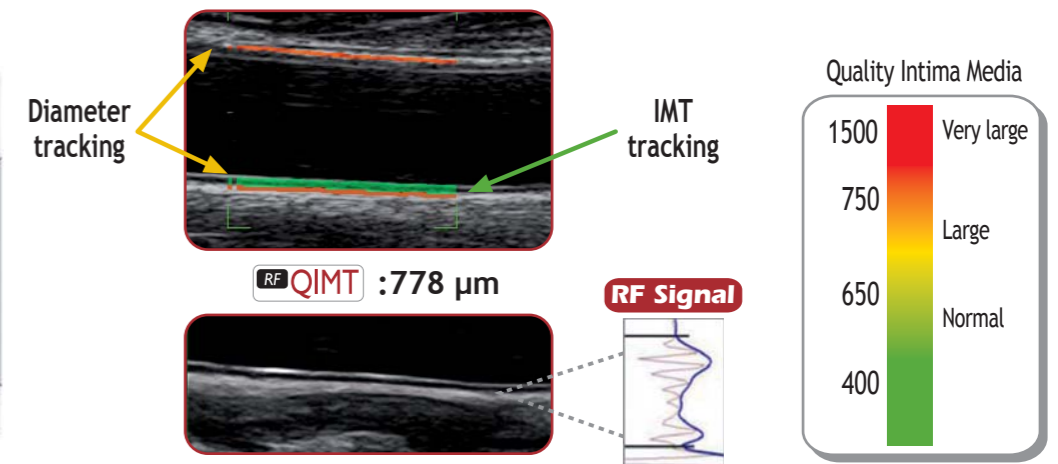
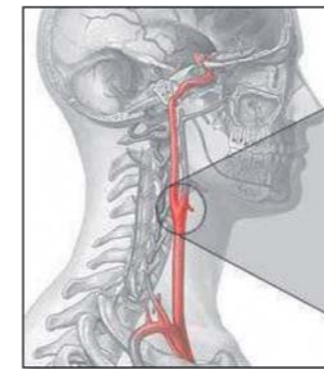
**Assessment**  
Ultrasound Imaging Quantification (IMT)

**Therapy**  
Lifestyle, Pharmacology, Surgery

## Early Detection

Limited Damages, Reduced Risks  
Efficient Clinical Planning  
Better Patient Expectations

# What is IMT?



## RF QIMT Highlights

- > **Quality**  
RFQIMT, Radiofrequency-based Quality Intima Media Thickness: very high accuracy (21 μm) compared to standard video-based processing
- > **Ease of use**  
Comprehensive user interface, measurement within 1 minute
- > **Real time**  
Measurement on real-time imaging and continuous feedback on the quality make diagnosis easier and faster
- > **Completeness**  
RFQIMT: clear visualization on the screen, extended measure output and complete report with normal values for IMT over age
- > **Innovation**  
Early detection of cardiovascular disease allows preventive health care, reduction in health care costs and improved quality of life

The IMT measurement (intima media thickness of the carotid) can be easily assessed through ultrasound imaging (fig. 1). The widening of the intima, precisely calculated by RF signal, may be an important factor to consider in case of diagnosis of arteriosclerosis or cardiovascular health decreasing (fig. 2).

IMT package allows physicians to assess this parameter and estimate the patient's arterial health in addition to standard parameters such as age, cholesterol, blood pressure, diabetes and smoking.

The result can be also compared to normal values related to age, based on the ARIC study (Atherosclerosis Risk in Communities) done in the United States based on a population study of 13,870 subjects.

The accurate RF-based cardiovascular management allows a precise evaluation of patients' vascular conditions, on which prevention, treatment and follow-up plans can be defined.

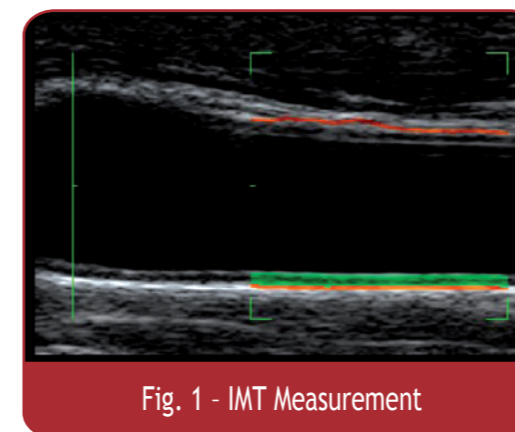


Fig. 1 - IMT Measurement

	QIMT μm	D mm
1>>	639	8.38
2>>	646	8.32
3>>	636	8.27
4>>	649	8.33
5>>	645	8.37
6>>	656	8.40
A	645	8.35
SD	6	0.05
W		14.71

Fig. 2 - Measure Output



Fig. 3 - IMT Report