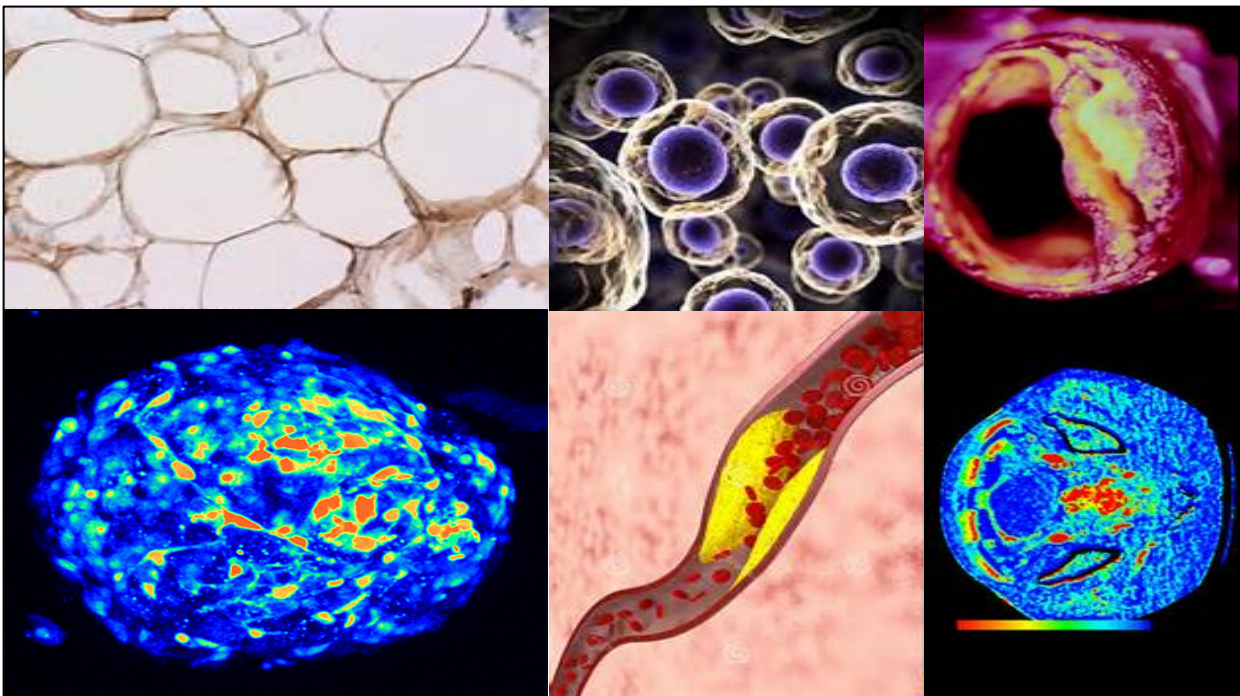


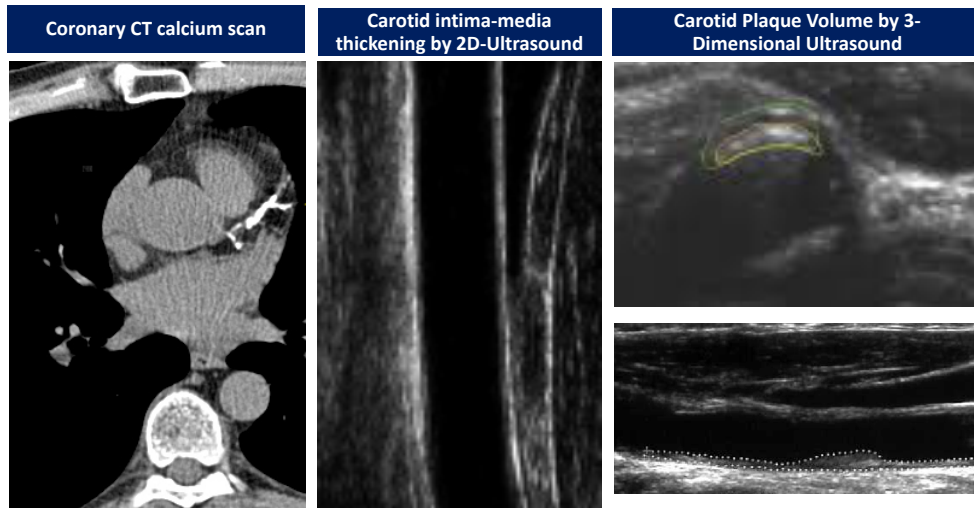
MOLECULAR SUBTYPING OF CARDIOMETABOLIC SYNDROME AND PREDICTING OBESITY-RELATED HEALTH RISK

- Overweight leads to the “cardiometabolic syndrome” which predisposes individuals to life-threatening diseases such as diabetes, cardiovascular insufficiency, fatty liver, dementia and cancer.
- To identify how obesity impacts pro-inflammatory immune cell function, leading to metabolic diseases such as diabetes is critical in the management of obesity-related health risks.
- Fat tissue acts as an endocrine organ producing bioactive soluble factors (adipokines) which contribute to regulation of inflammatory balance and hepatic production of hepatokines controlling insulin sensitivity and the pathogenesis of diabetes and target organ damage.



- We customize an effective assessment of obesity-related health risks supported by a Laboratory Diagnostic Test (LDT) using a protein expression profiling method based on a fully automated, multianalyte assay with algorithmic analysis.
- Our LDT determines the blood level of key factors including:
 - Adipokines and incretins (Leptin, adiponectin, visfatin, omentin, vaspin, progranulin, apelin, chemerin, BP4, adipsin, GLP-1, Resistin, BNP, Ghrelin, GIP, PDEF).
 - Hepatokines (FGF21, LECT2, ANGPTL3/8, Fetuin, SEPP1, DPP-4)
 - Inflammatory mediators including (IL-6, MCP-1, PAI-1, CTRP-4, TNFalpha, sICAM-1, sVCAM-1, IL-8, IL-10, IFN- γ and IP-10 or CXCL10, and C-reactive protein).

Target Organ Damage: Cardiovascular Examination



- Offered LDT may help:
 - Identifying pathogenic and pathophysiological subtypes of cardiometabolic syndrome patients.
 - Predicting carotid plaque volume and risk of stroke and other adverse cardiovascular events.
 - Treating patients according to their specific disease and not according to the kind of disease they suffer.
 - Monitoring patient response to therapy.

PATIENT CLASSIFICATION

		SUBTYPE 1 Non-Correlated Vascular Damage and Endocrine Dysfunction				SUBTYPE 2 Correlated Vascular Damage and Endocrine Dysfunction								
PATHOLOGIC SUBTYPES	SUBTYPE 1A	High Vascular damage and Low Endocrine dysfunction		SUBTYPE 1B		Low Vascular damage and High Endocrine dysfunction		SUBTYPE 2A	Low Vascular damage and Endocrine dysfunction		SUBTYPE 2B	High Vascular damage and Endocrine dysfunction		
	SUBTYPE 1	SUBTYPE 2	SUBTYPE 1	SUBTYPE 2	SUBTYPE 1	SUBTYPE 2	SUBTYPE 1	SUBTYPE 2	SUBTYPE 1	SUBTYPE 2	SUBTYPE 1	SUBTYPE 2		
PATHOPHYSIOLOGICAL SUBTYPES	SUBTYPE 1A	Clinical-Analytical Divergence		Clinical-Analytical Divergence		Clinical-Analytical Divergence		SUBTYPE 2A	Clinical-Analytical Concordant Type		SUBTYPE 1A	Clinical-Analytical Divergence		
	SUBTYPE 1A	SUBTYPE 2A	SUBTYPE 1A	SUBTYPE 2A	SUBTYPE 1A	SUBTYPE 2A	SUBTYPE 1A	SUBTYPE 2A	SUBTYPE 1A	SUBTYPE 2A	SUBTYPE 1A	SUBTYPE 2A	SUBTYPE 1A	SUBTYPE 2A
SUBTYPE 1A	High analytical changes with Low clinical changes		SUBTYPE 2A	Low analytical and clinical changes		SUBTYPE 1A	High analytical changes with Low clinical changes		SUBTYPE 2A	Low analytical and clinical changes		SUBTYPE 1A	High analytical changes with Low clinical changes	
SUBTYPE 1B	Low analytical changes with High clinical changes		SUBTYPE 2B	High analytical and clinical changes		SUBTYPE 1B	Low analytical changes with High clinical changes		SUBTYPE 2B	High analytical and clinical changes		SUBTYPE 1B	Low analytical changes with High clinical changes	

- This test was developed and its clinical performance features determined by PBM. It has not been cleared or approved by the FDA. It should not be regarded as investigational or for research.
- Final diagnosis and optimal patient management are the responsibility of the referring physician or health care provider.