

Precision Medicine for Obesity

As clinicians treating obesity are acutely aware, identifying effective treatments for obesity often involves trial and error. Outcomes with current interventions (including medications, endoscopy, and surgery) are highly variable because of the underlying heterogeneity and complexity of the disease. However, emerging research from Mayo Clinic has recently defined four underlying phenotypes of obesity which can be determined from a fasting blood sample, and clinically applied to help select the most effective treatments.

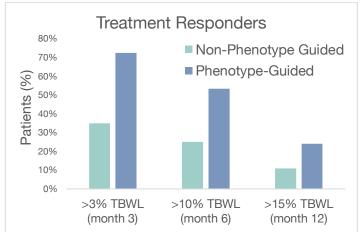
Obesity classification based on pathophysiology

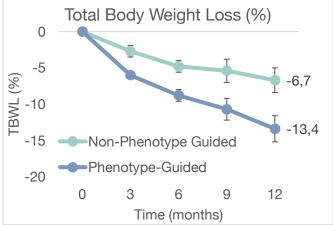
In 509 patients with obesity vs. normal body weight controls, research has identified several obesity phenotypes^{1,2.} Phenotypes were established with an unsupervised machine learning approach using gold standard measures of obesity pathophysiology.



Clinical application of phenotyping at Mayo Clinic: 2X more weight-loss

Clinical experience at Mayo Clinic Weight Management Center shows that a phenotype guided approach (n=55) results in a higher percentage of responders and total body weight loss (TBWL) compared to non-phenotype guided (standard of care) approach (n=175) when patients are treated with FDA-approved obesity pharmacotherapy.





¹Acosta A, Camilleri, et al., Gastroenterology. 2015

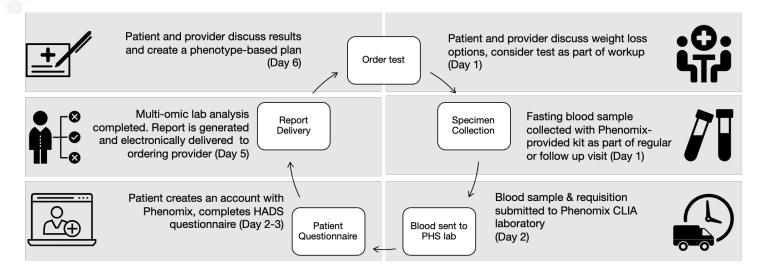
²Camilleri M and Acosta A., Gastrointest Endosc, 2015



Biomarker assessment of obesity phenotypes

PhenoTest is a fasting, "multi-omics" blood test which measures a combination of genes, metabolites, proteins, and hormones in the body that are related to obesity. Together, these biomarkers can be used to identify the obesity phenotype with sensitivity and specificity >90% using a proprietary Al-driven algorithm developed and exclusively licensed from Mayo Clinic.

How it works



Easy-to-interpret results to guide weight-loss interventions

- CLIA laboratory test
- Targeted analysis of:
 - Genomics
 - Metabolomics
 - Proteins/hormones
- Report includes:
 - Predicted phenotype composition
 - Annotated treatment considerations
 - Analytical test results
- Web-based portal facilitates ordering and report delivery





Ready to learn more?

We are currently enrolling select clinics in our early access program. To receive the latest news from Phenomix (including availability of the test) or for more information about the program, please e-mail info@phenomixsciences.com.

We are here to revolutionize the treatment of obesity by guiding 'the right intervention for the right patient'



