

APPLICATION NOTE

Quantitative Metabolomics Services

A direct, accurate approach to quantifying up to 1,019 biologically relevant polar and lipid metabolites.

Quantitative metabolomics is a direct, absolute approach to measuring the metabolites in a biological specimen. By integrating state-of-the-art LC/MS technology with Biocrates' Quant 500 XL kit, Panome Bio provides standardized, accurate, and reproducible quantification of up to 1,019 biologically relevant metabolites from 39 biochemical classes. Whether coupled with prior Next-Generation Metabolomics data or conducted independently, quantitative metabolomics provides in-depth insights into biochemical pathways.

Neutral Lipids

- Cholesteryl esters
- Monoglycerides
- Diglycerides
- Triglycerides

Small molecules

- Amino acids
- Bile acids
- Hormones
- Carboxylic acids
- Nucleobases
- Fatty acids
- Many more

Polar Lipids

- Phosphatidylcholines
- Phosphatidylethanol-amines
- Sphingomyelins
- Ceramides
- Phosphatidylserines
- Many more

Highlights:

Quantitative Metabolite Panel:

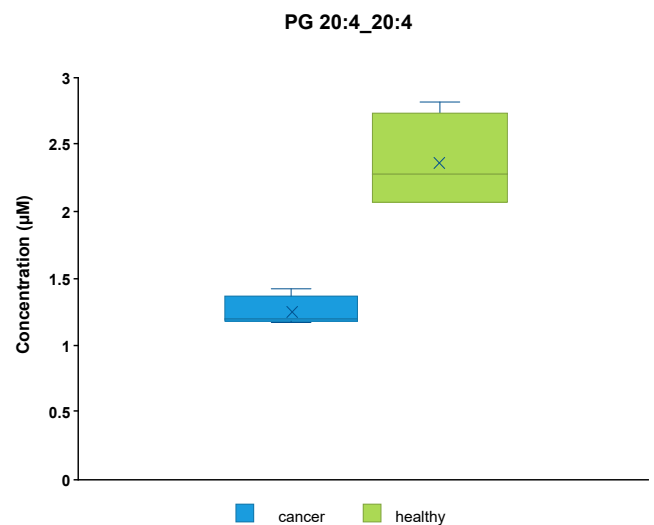
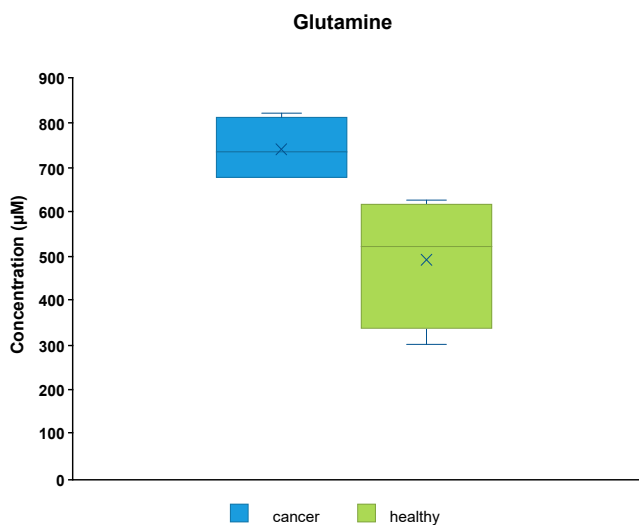
- 1,019 metabolites
- 39 biochemical classes
- Polar and lipid metabolites
- Biologically relevant
- Single run

Standardized, Accurate, and Reproducible:

- Results quantified based on internal standards and calibration curves
- Results proven to be accurate and reproducible through cross-lab verification

Data Interpretation:

- Table of absolute values delivered
- Custom data analysis report personalized to address study objectives



In this study, our quantitative metabolomics services differentiated between the metabolic profiles of 4 colorectal cancer patients and 4 healthy controls. Above, the serum concentrations of glutamine and phosphatidylglycerol 20:4_20:4, two of the metabolites that showed a significant difference ($p < .05$) between groups, are shown.

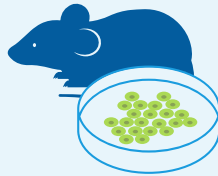
Applications

Research & Development



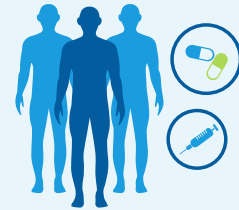
- Compound prioritization and optimization
- Bioprocessing optimization
- Discovery validation

Preclinical Studies



- Dose selection
- Toxicology testing
- Mode of action identification

Clinical Trials



- Patient selection
- Safety and efficacy assessment
- Patient stratification
- Response prediction

Working with Panome Bio™



Panome Bio is the only Biocrates-certified contract research organization in the United States. Our services deliver accurate, comprehensive quantitative metabolomic data and analysis, providing detailed biochemical insights to fit your specific needs. Contact us to learn more.

Contact Us



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