AROME Science Inc.

Semi-Targeted Metabolomics: Best of Both Worlds
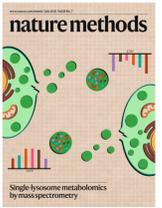
Where targeted precision meets untargeted exploration

DESIGN Your Study

- Research goals
- Sample design
- Quality control

Blueprint for Discovery

DEVELOP Your Sample Prep

- Collection
- Quenching
- Extraction

Sample Integrity, Data Reliability

DISCOVER

The Metabolome: Decoded & Connected

1 Glycocholic acid
Chemical formula: $C_{26}H_{43}NO_6$
Exact mass: 465.3090 Da

2 Phenylalanocholic acid
Chemical formula: $C_{33}H_{49}NO_6$
Exact mass: 555.3560 Da

3 Tyrosocholic acid
Chemical formula: $C_{33}H_{49}NO_7$
Exact mass: 571.3509 Da

4 Leucocholic acid
Chemical formula: $C_{30}H_{51}NO_6$
Exact mass: 521.3716 Da

Amino acid conjugates
Duodenum bile-acid cluster
Acetyl-taurocholic acids
Tauroursodeoxycholic acid
Taurocholic acid
Acetyl-tauroursodeoxycholic acids

GF
Both
SPF

Quinn R.A., Melnik A.V., at al. Nature 2020

DATA ACQUISITION Methodology
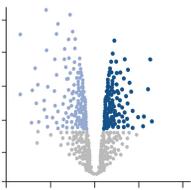
LC-MS
GC-MS

More Metabolites, More Biology

DISSEMINATE

- FAIR principles
- Metadata
- Repositories

FAIR Data, Furthering Science

DECODE Biomarker ID

Statistical signatures

Pathway analysis

From Compounds to Biomarkers with Context

DETERMINE The Metabolites
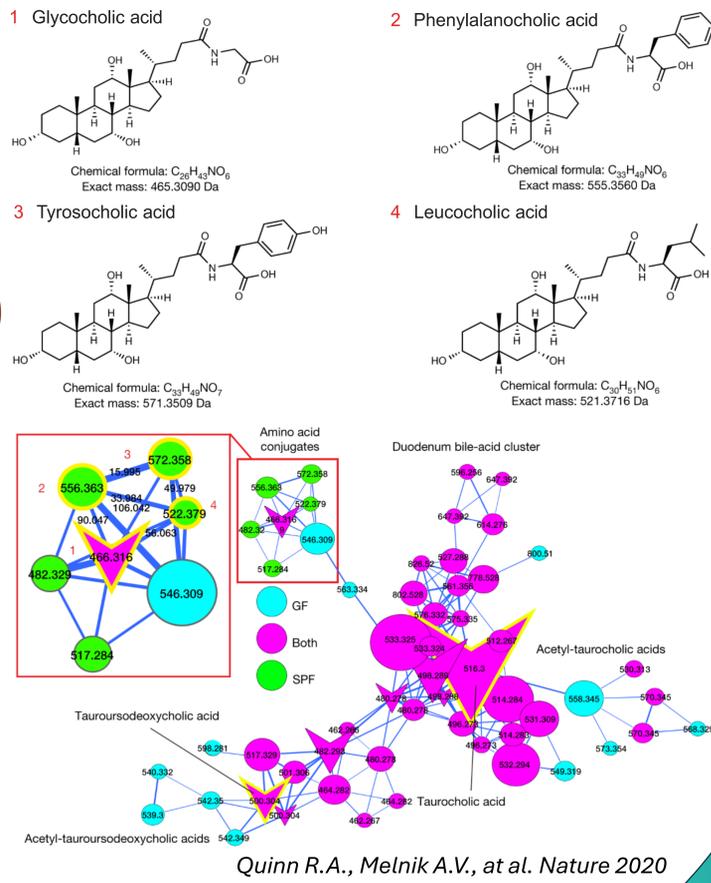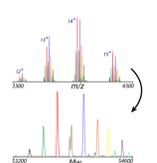
- Libraries
- Bioinformatics
- Networks

DECONVOLUTE the Data

Peak Detection
Normalization

Raw Data to Ready Insights
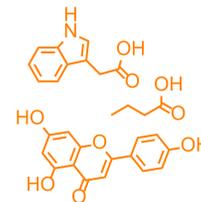
Why We're Different:

Superior Coverage
Optimal balance of targeted precision and discovery potential.

Accelerated Timeline
Faster results for critical decisions.

Tailored Flexibility
Custom solutions instead of one-size-fits-all.

Enhanced Insights
Transform complex data into actionable insights.

Cross-Disciplinary
Diverse applications from pharma to agriculture.

https://www.arome-science.com/semi-targeted-metabolomics/