

Supplementary Figure 1

General disease biomarkers for PA and MMA, from targeted metabolic assays

Propionylcarnitine (PL)

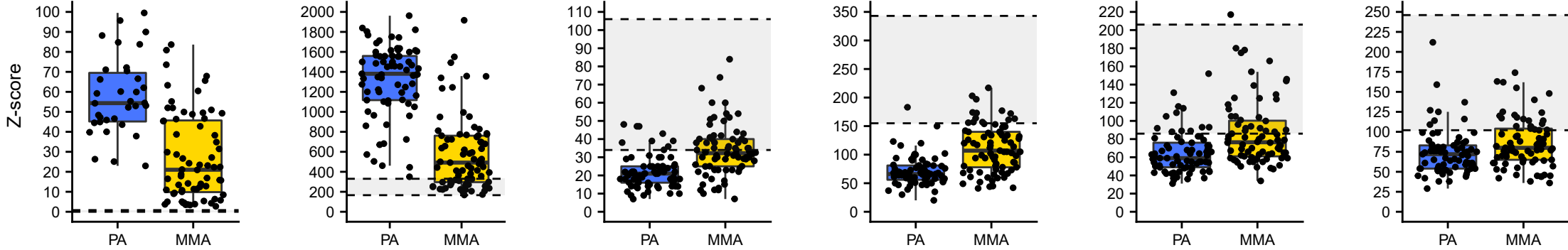
Glycine (PL)

Isoleucine (PL)

Valine (PL)

Leucine (PL)

Threonine (PL)



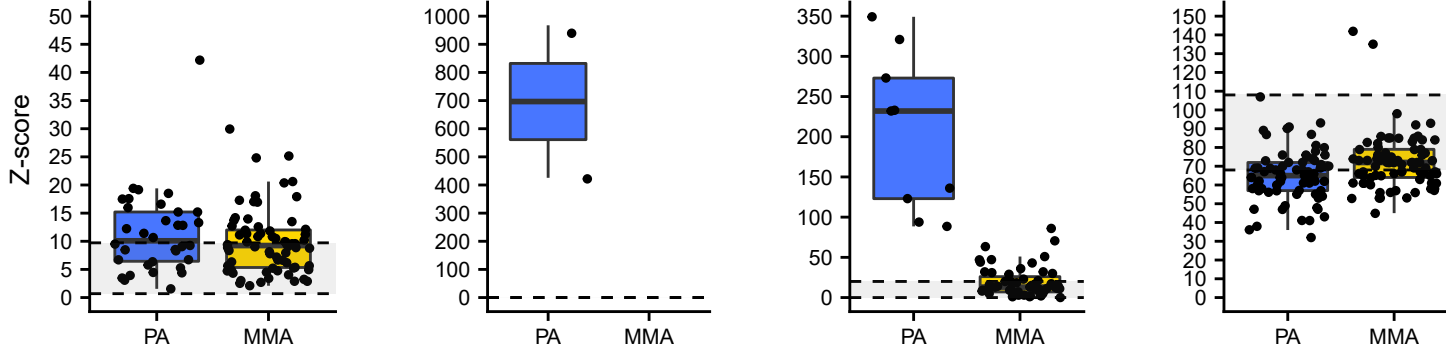
General disease biomarkers for PA, from targeted metabolic assays

Acetylcarnitine (PL)

Methylcitric acid (U)

3-OH-Propionic acid (U)

Histidine (PL)



General disease biomarkers for MMA, from targeted metabolic assays

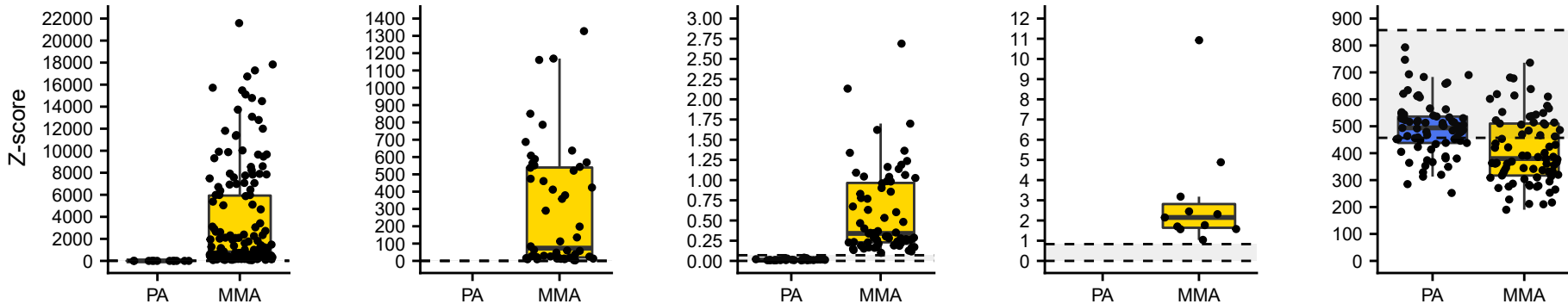
Methylmalonic acid (U)

Methylmalonic acid (PL)

Methylmalonylcarnitine (PL)

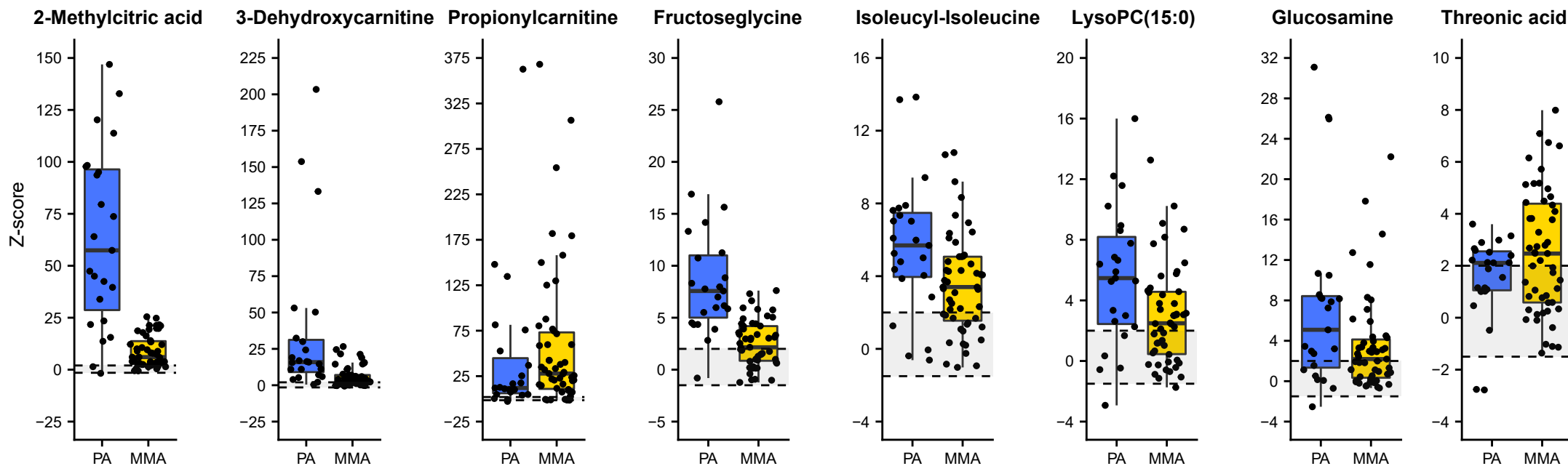
Methylcitric acid (PL)

Glutamine (PL)

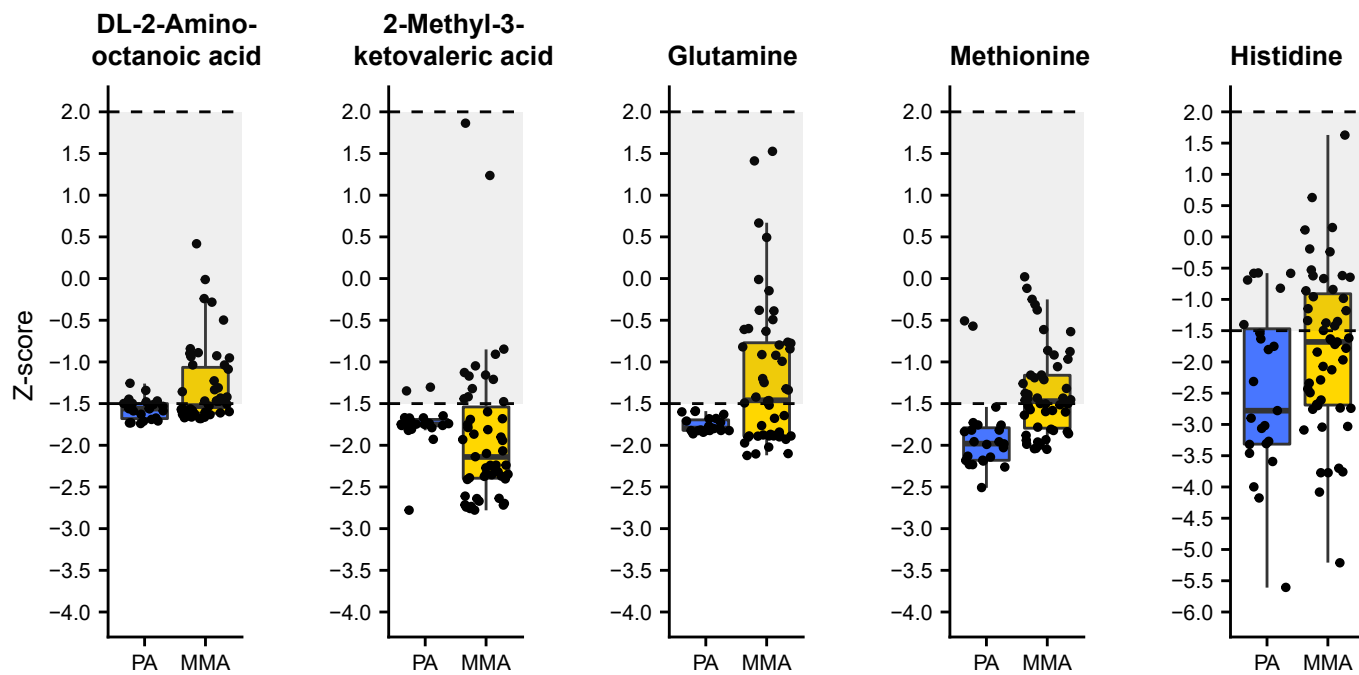


Supplementary Figure 2

General disease biomarkers for PA and MMA (increased), from DI-HRMS analysis

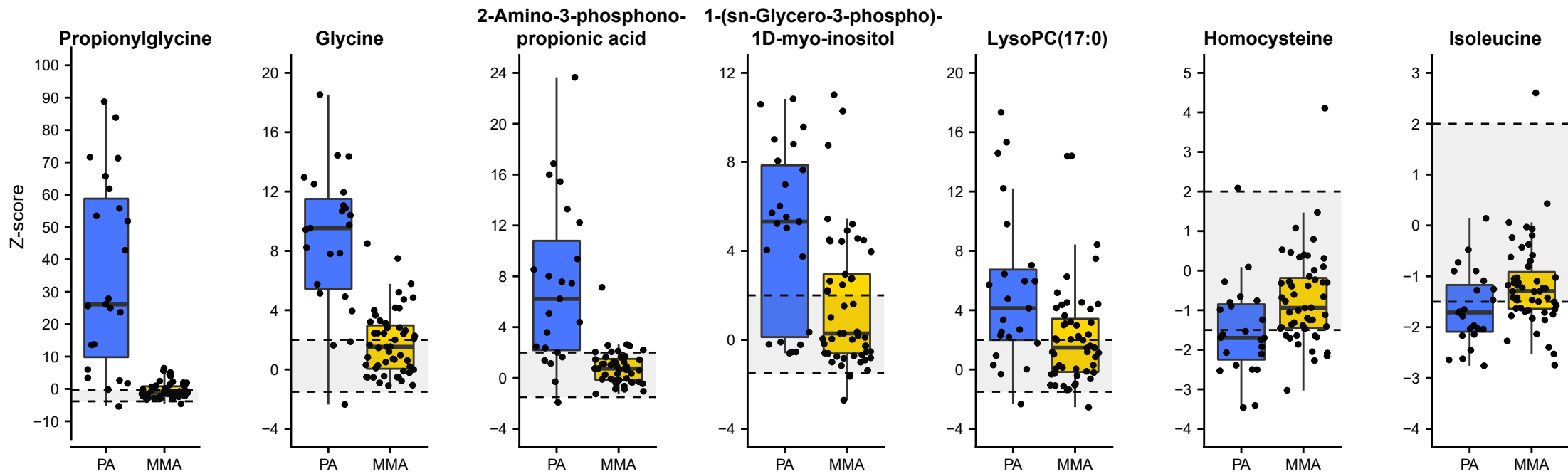


General disease biomarkers for PA and MMA (decreased), from DI-HRMS analysis

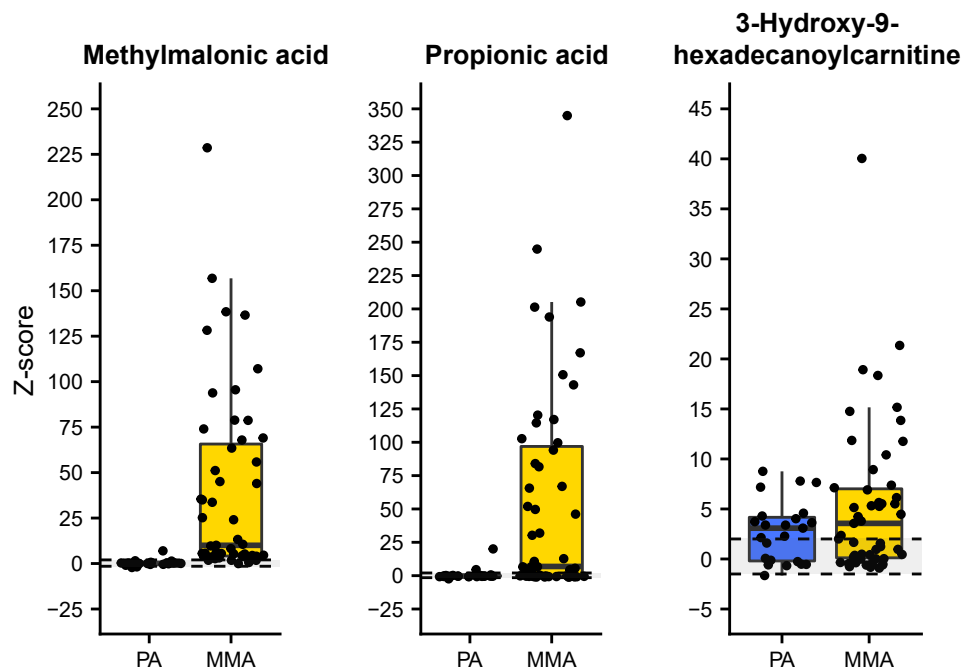


Supplementary Figure 3

General disease biomarkers for PA, from DI-HRMS analysis



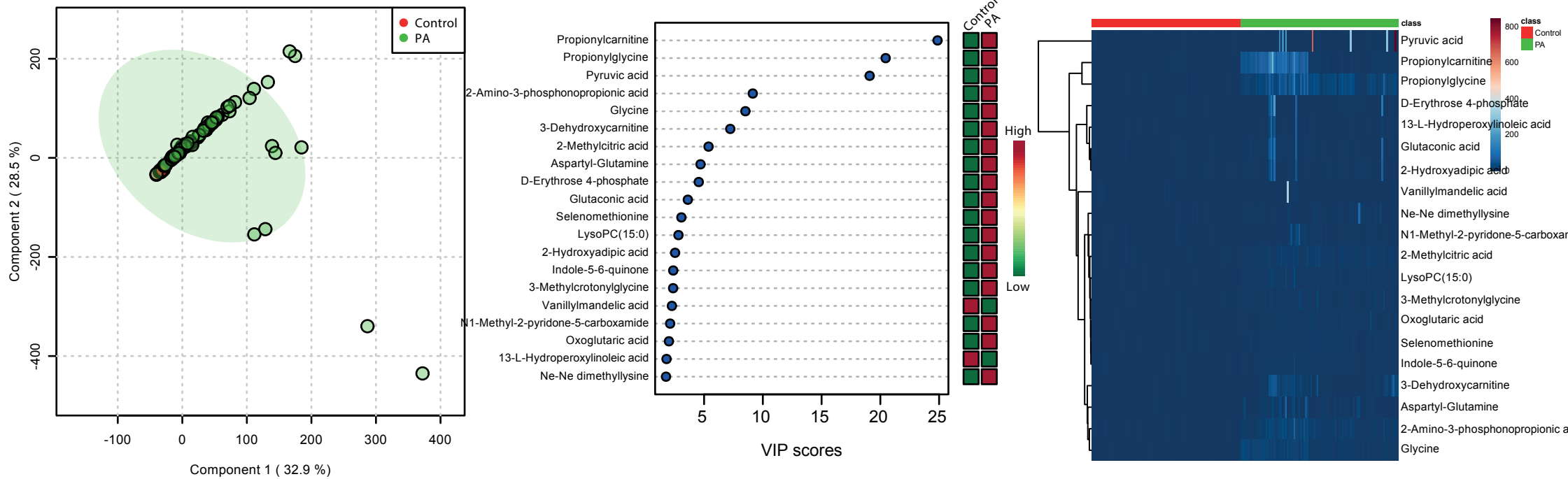
General disease biomarkers for MMA, from DI-HRMS analysis



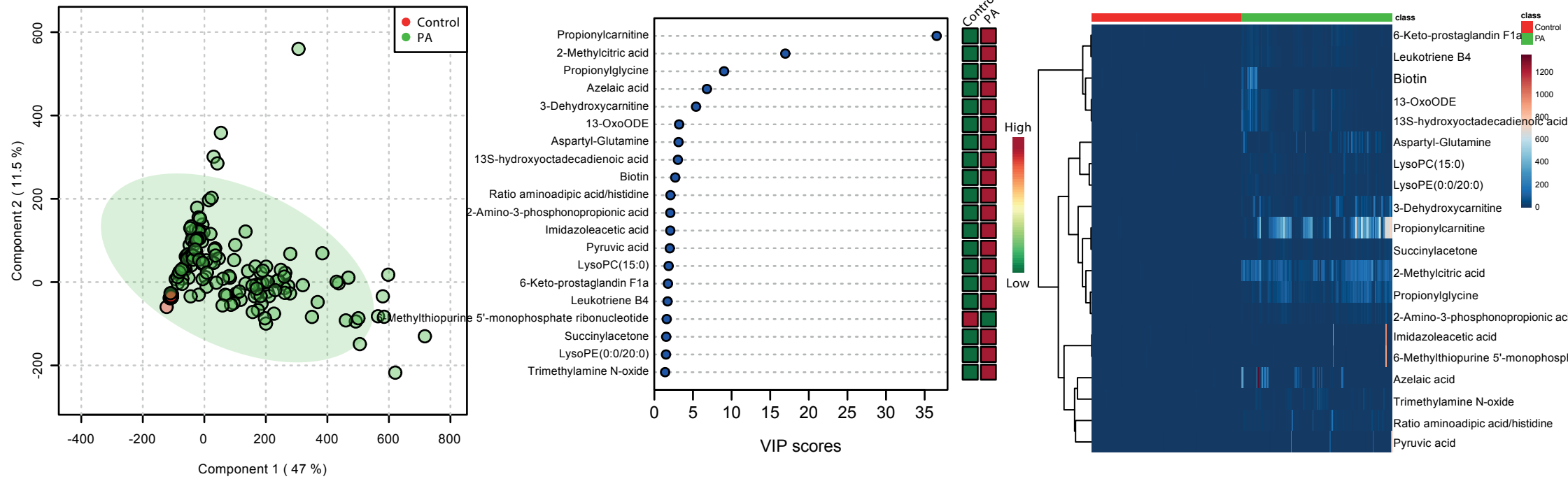
Supplementary Figure 4

PLS-DA, VIP-scores and heatmap for PA samples versus control samples

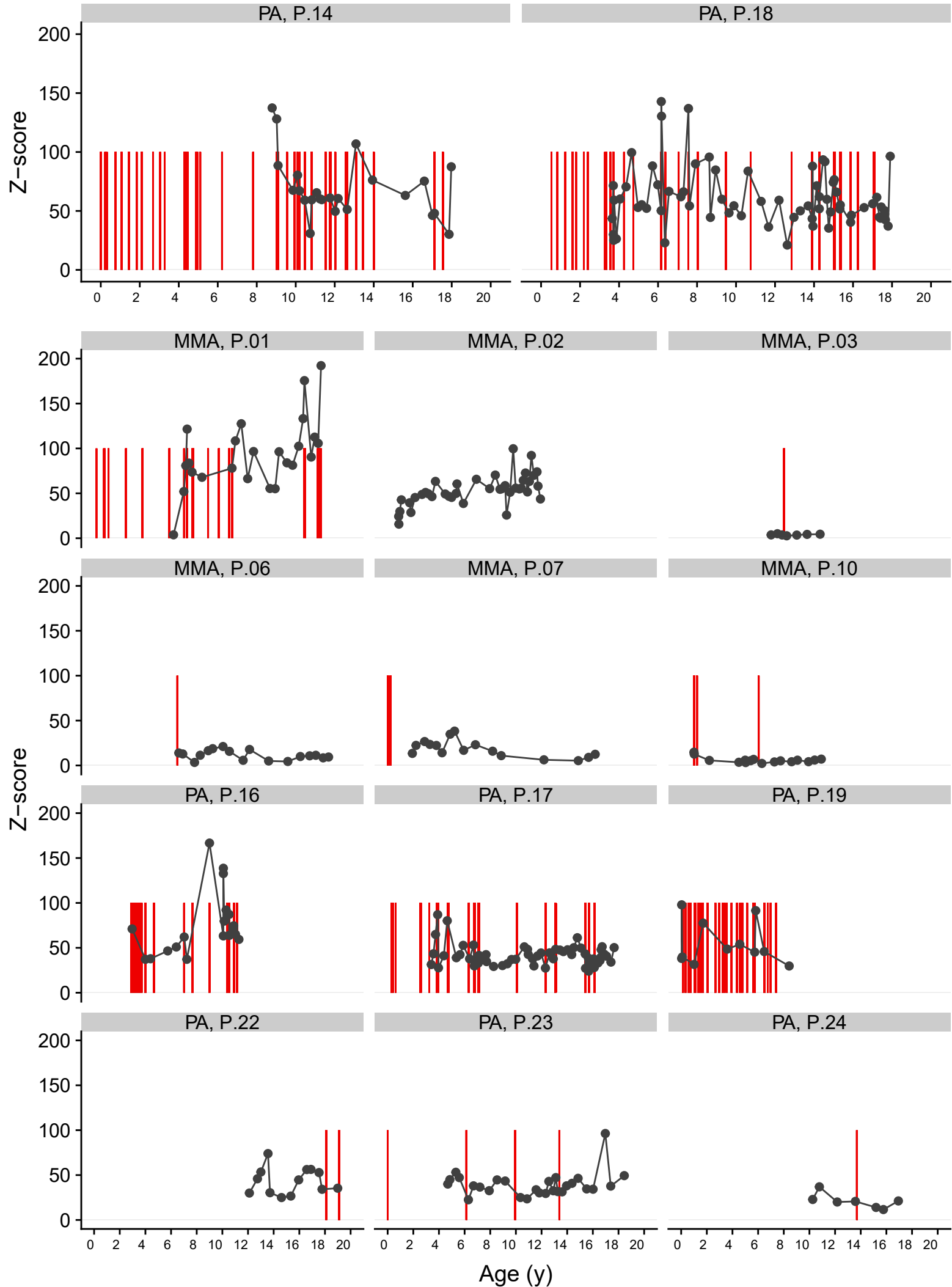
A) DBS



B) Plasma



Propionylcarnitine (PL)



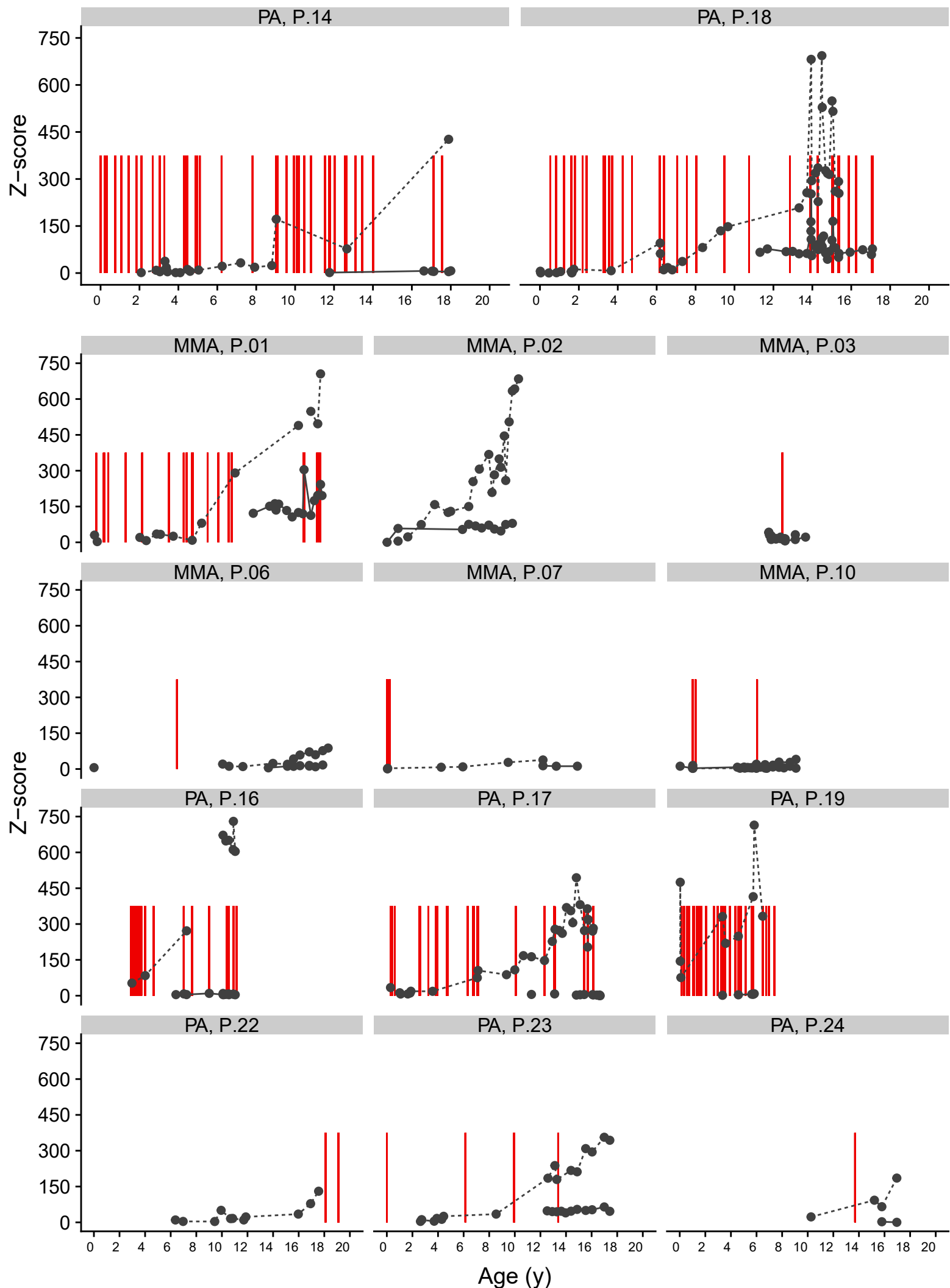
Supplementary Figure 6

Propionylcarnitine (DI-HRMS)

— Acute metabolic decompensations

— Dried blood spots

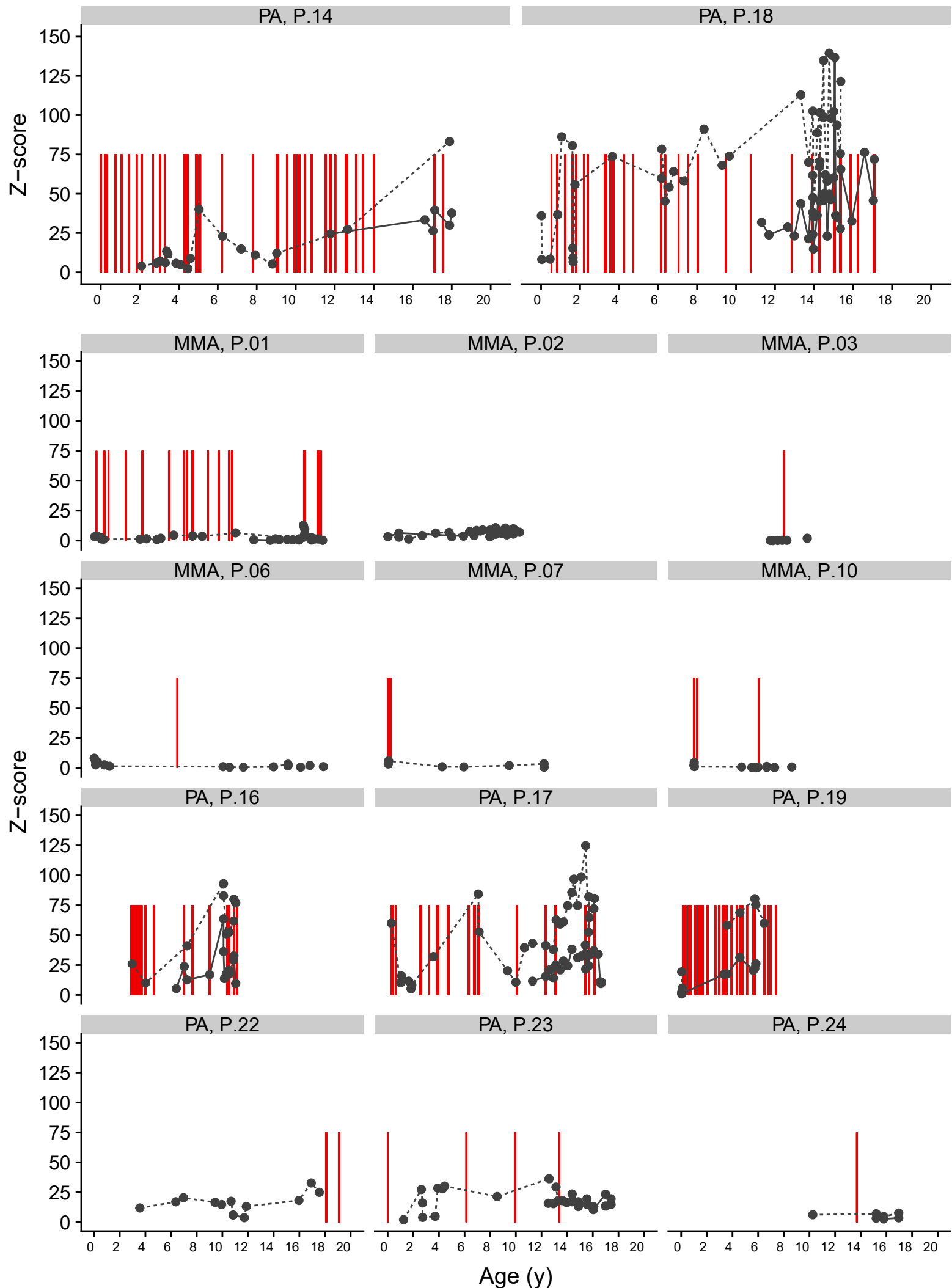
--- Plasma



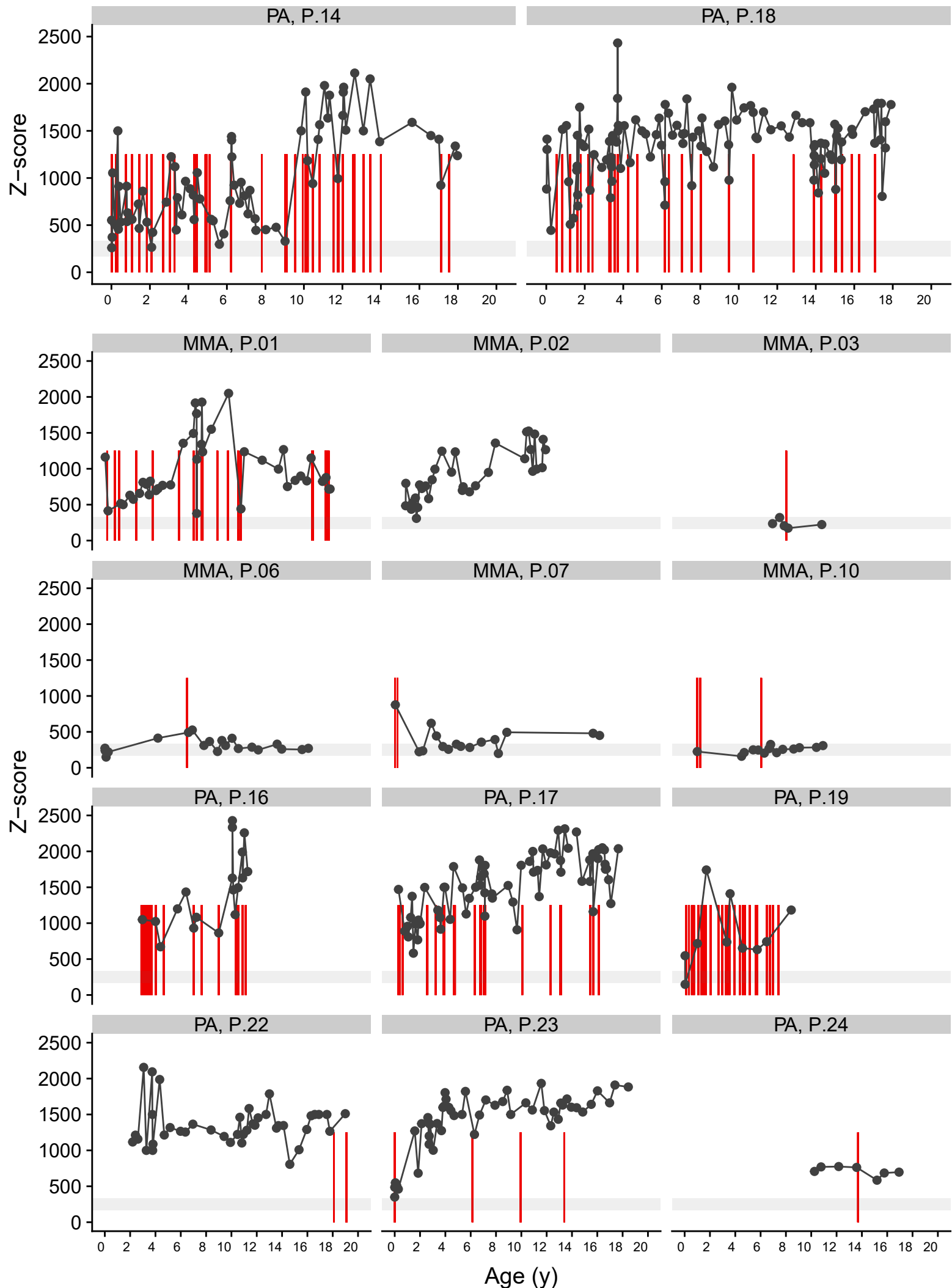
Supplementary Figure 7

Propionylglycine (DI-HRMS)

- Acute metabolic decompensations
- Dried blood spots
- Plasma



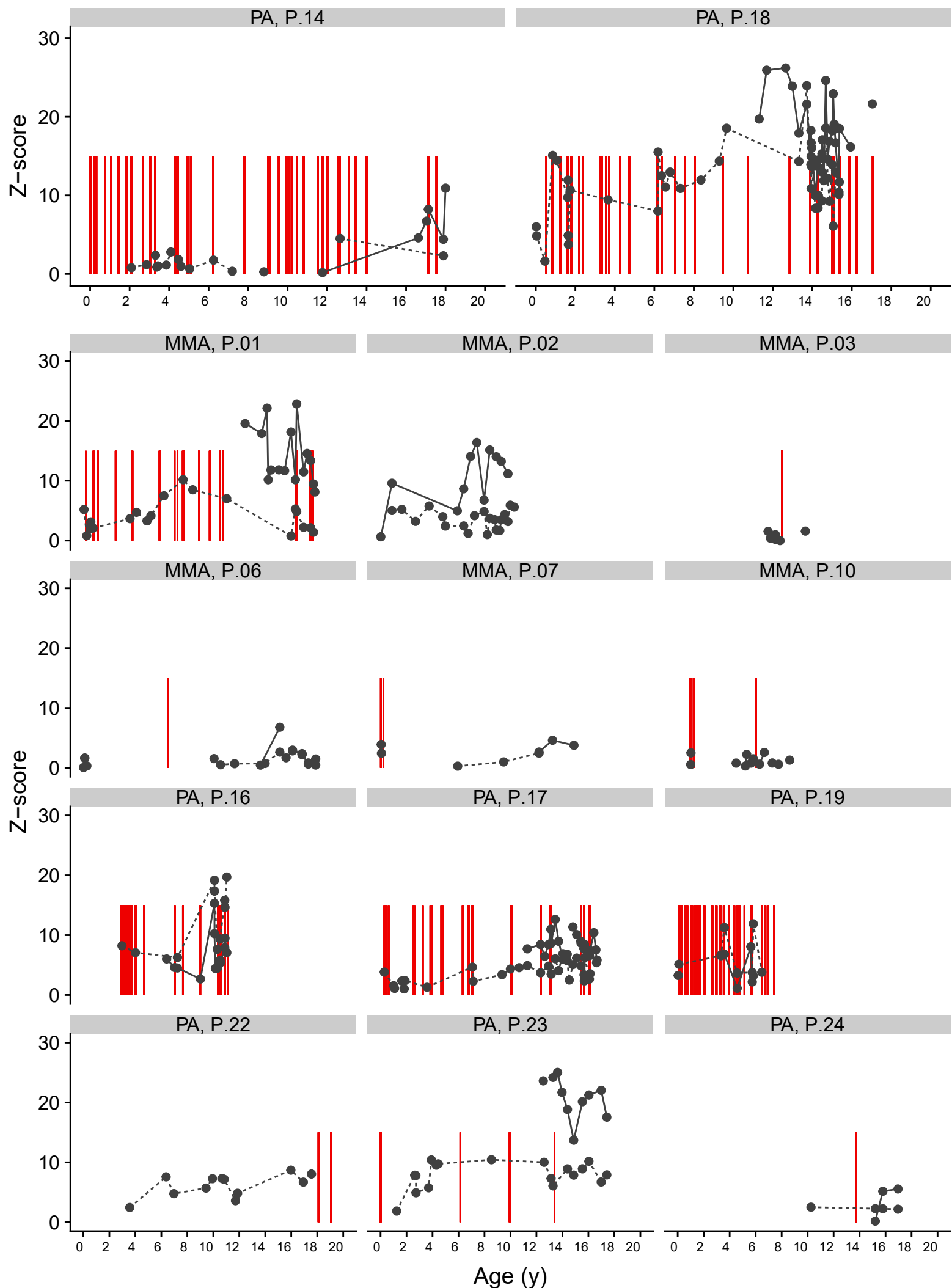
Glycine (PL)



Supplementary Figure 9

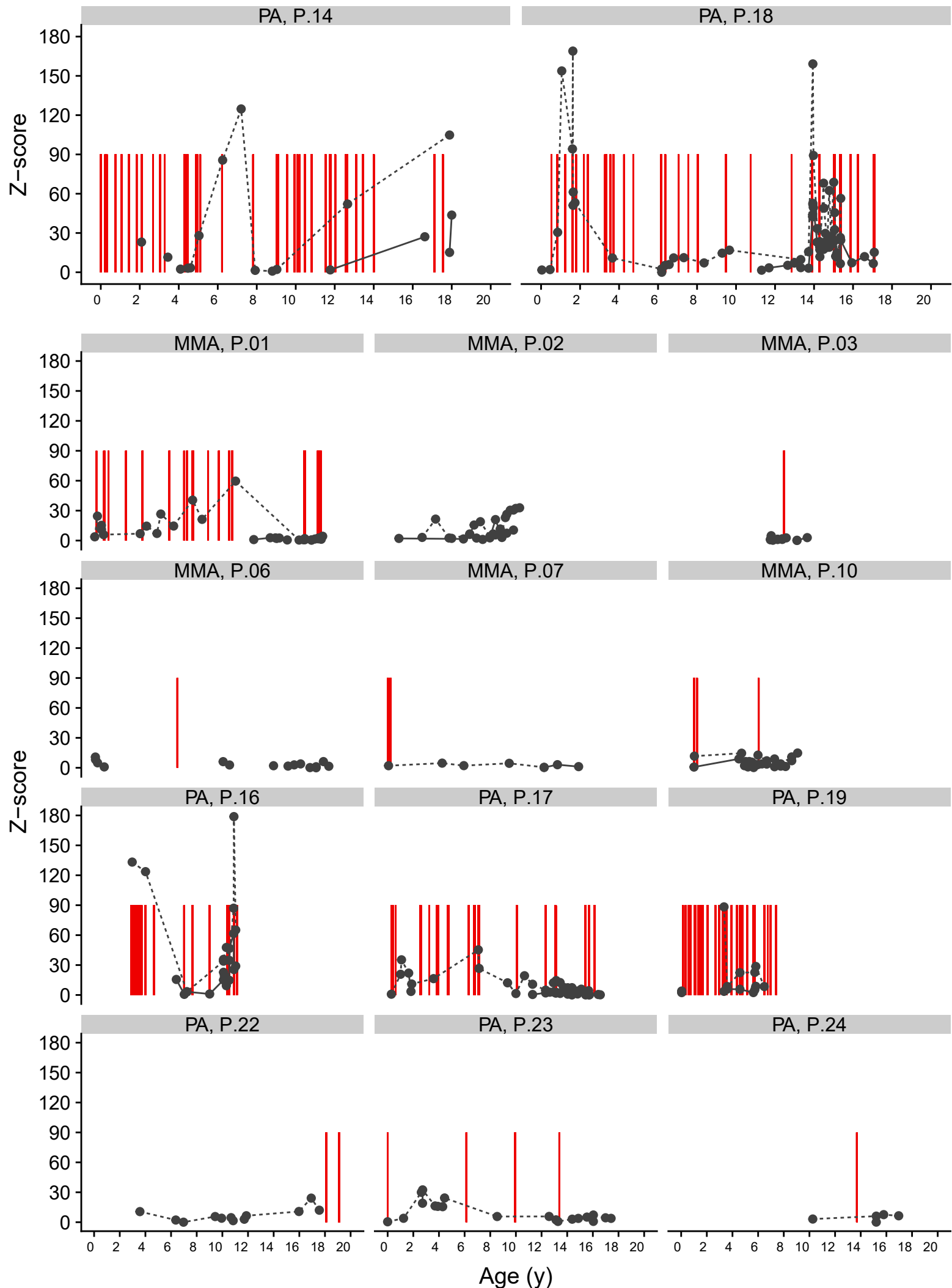
Glycine (DI-HRMS)

- Acute metabolic decompensations
- Dried blood spots
- - - Plasma



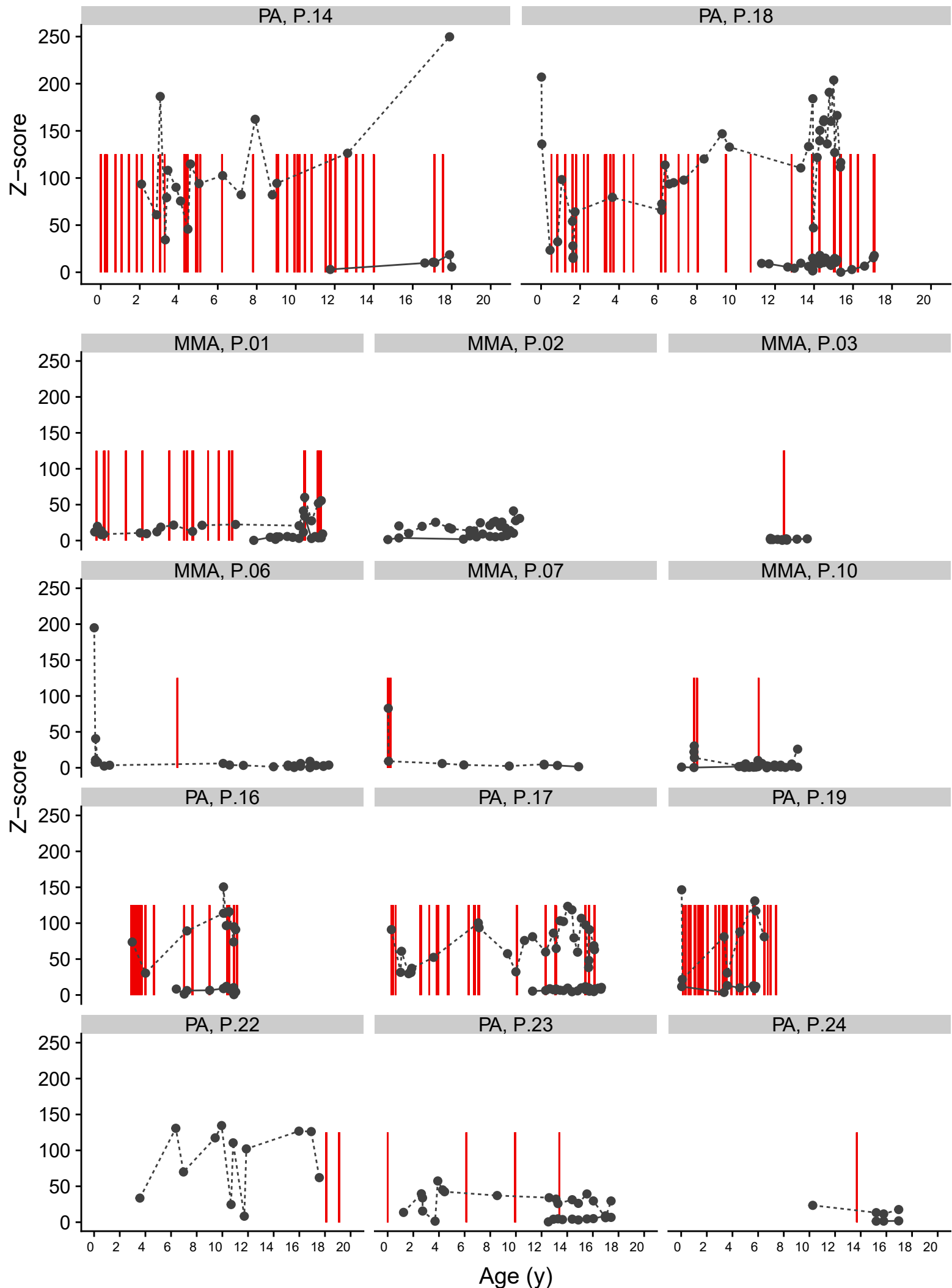
3-Dehydroxycarnitine (DI-HRMS)

- Acute metabolic decompensations
- Dried blood spots
- Plasma



2-Methylcitric acid (DI-HRMS)

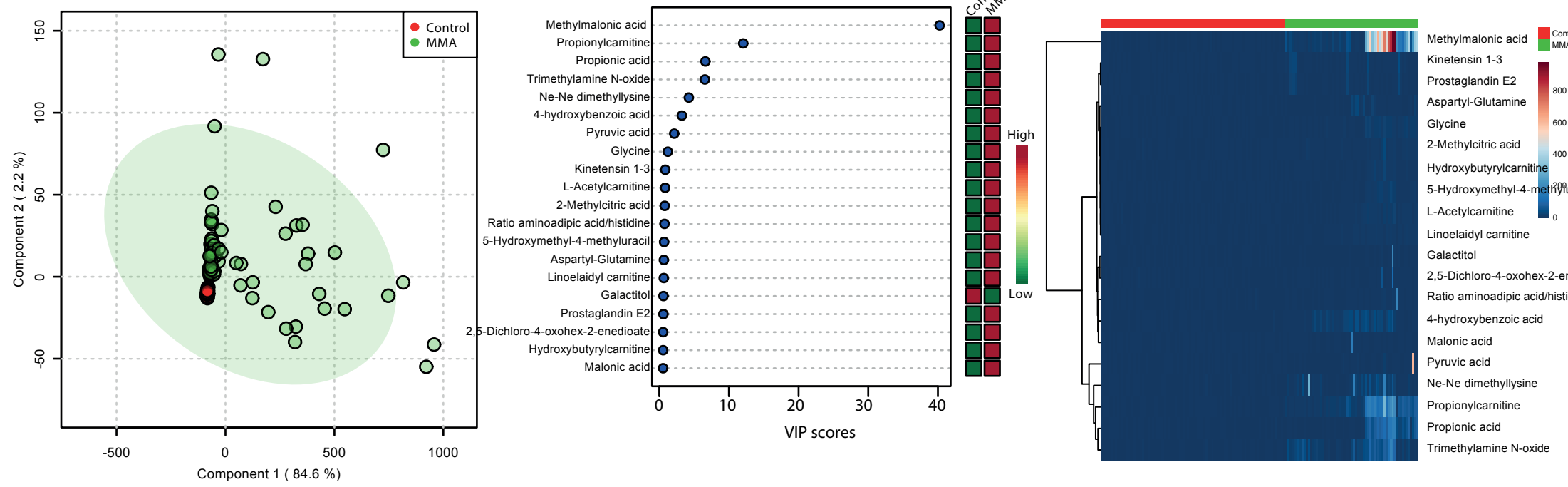
- Acute metabolic decompensations
- Dried blood spots
- Plasma



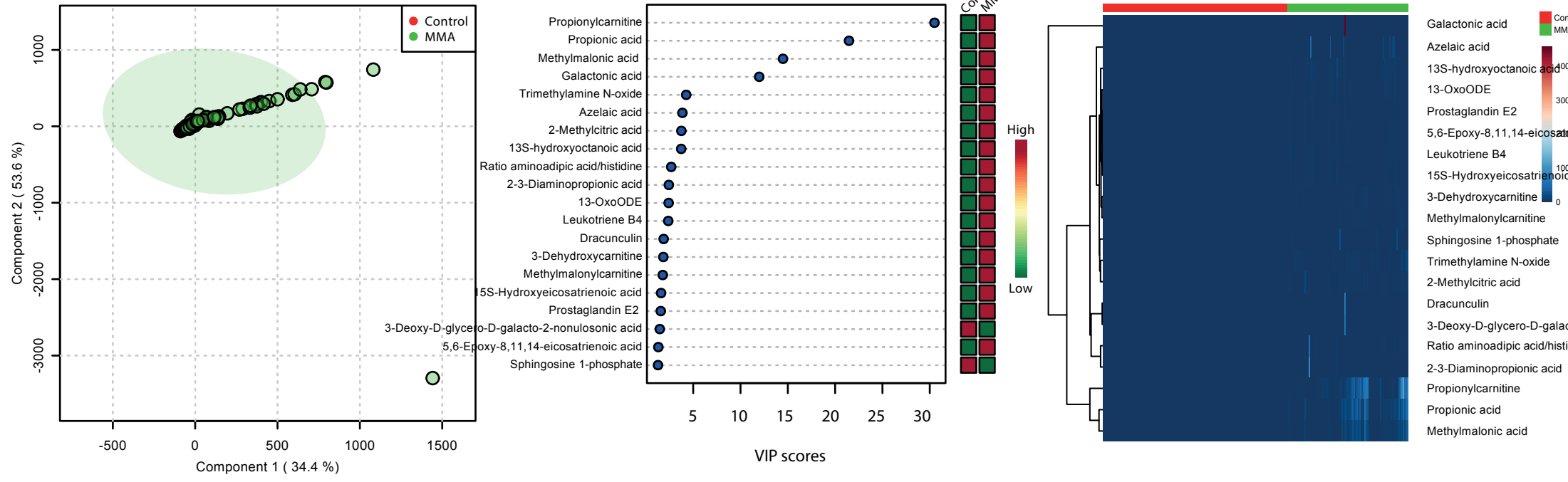
Supplementary Figure 12

PLS-DA, VIP-scores and heatmap for MMA samples versus control samples

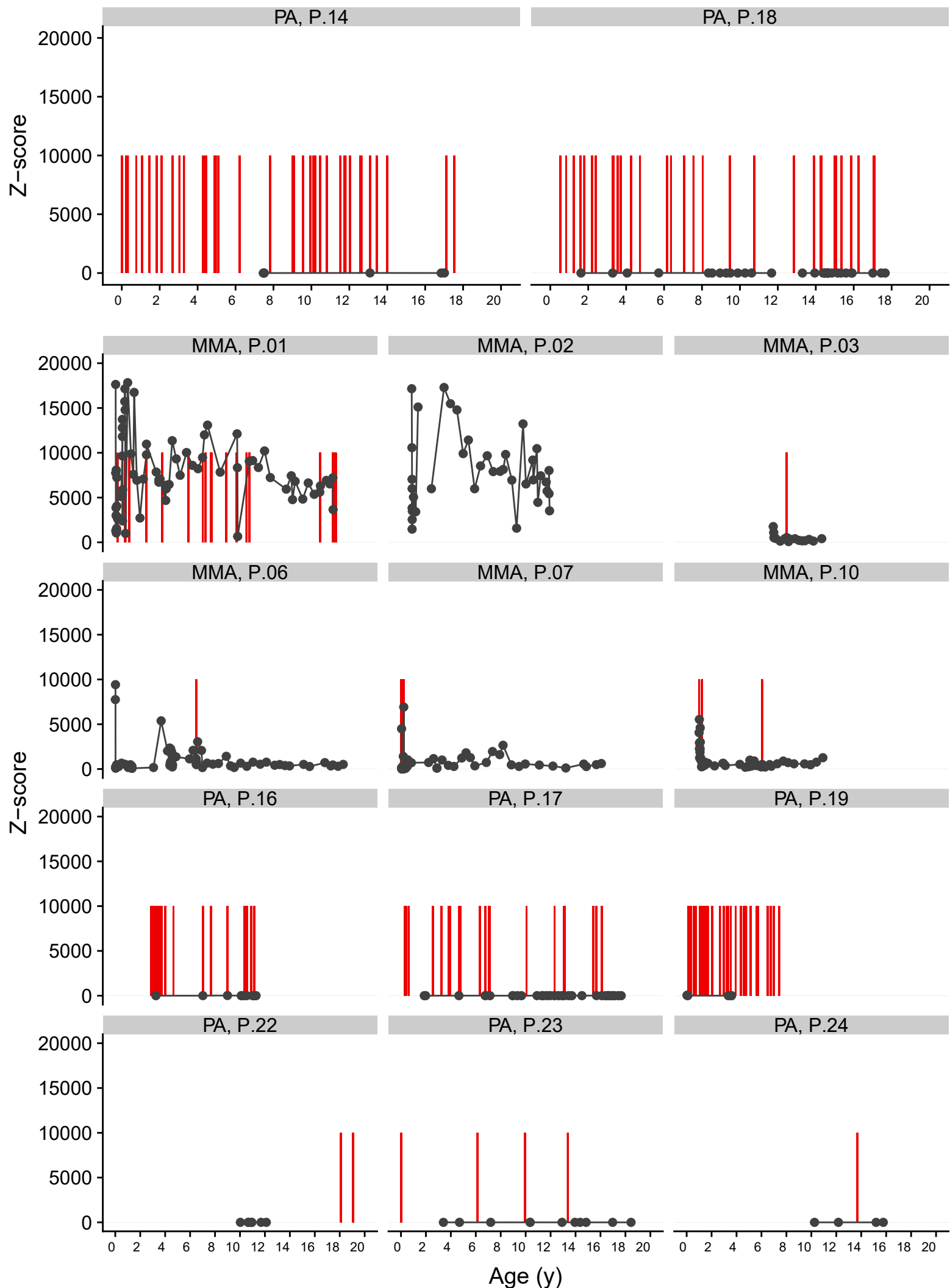
A) DBS



B) Plasma

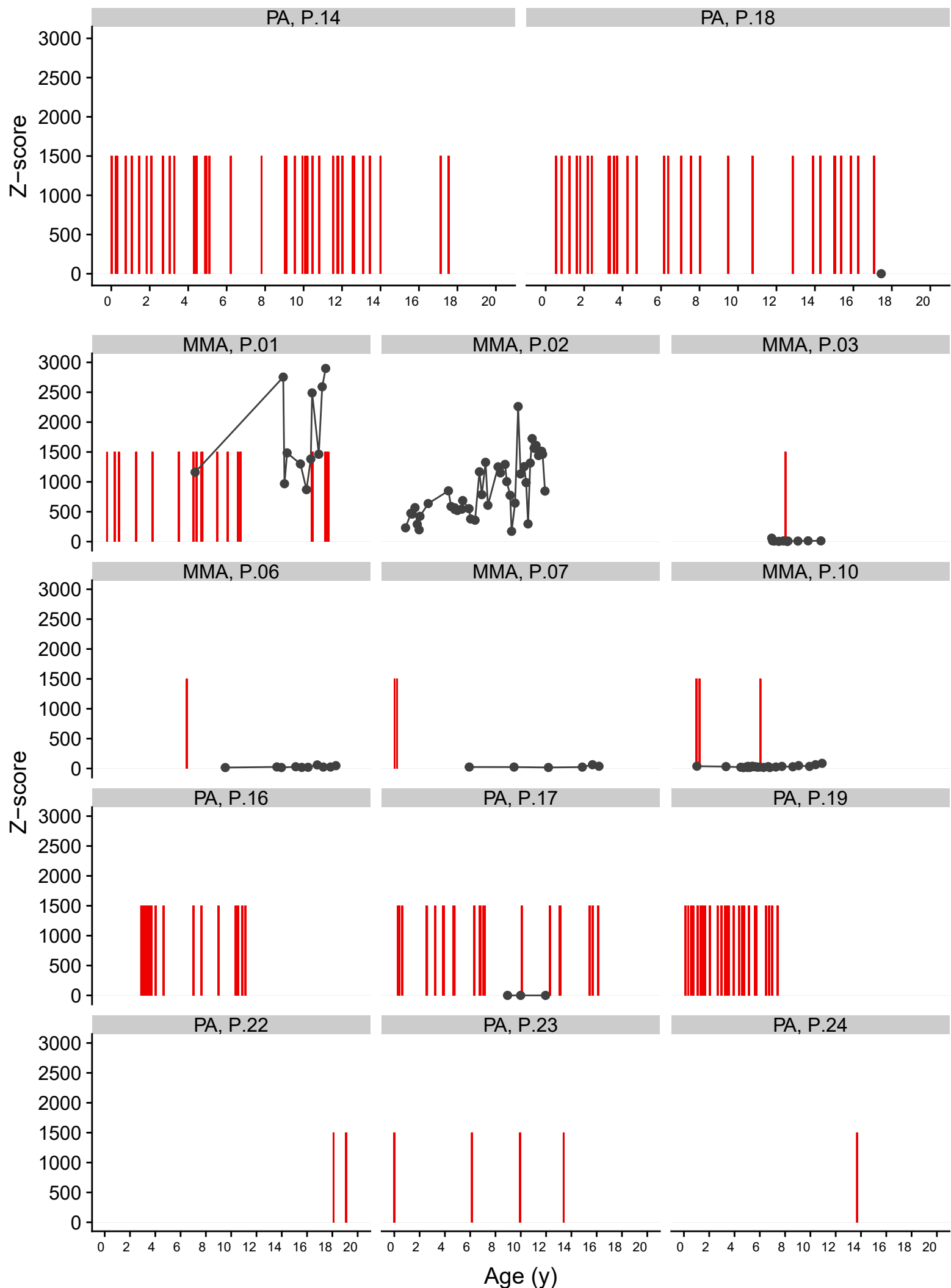


Methylmalonic acid (U)



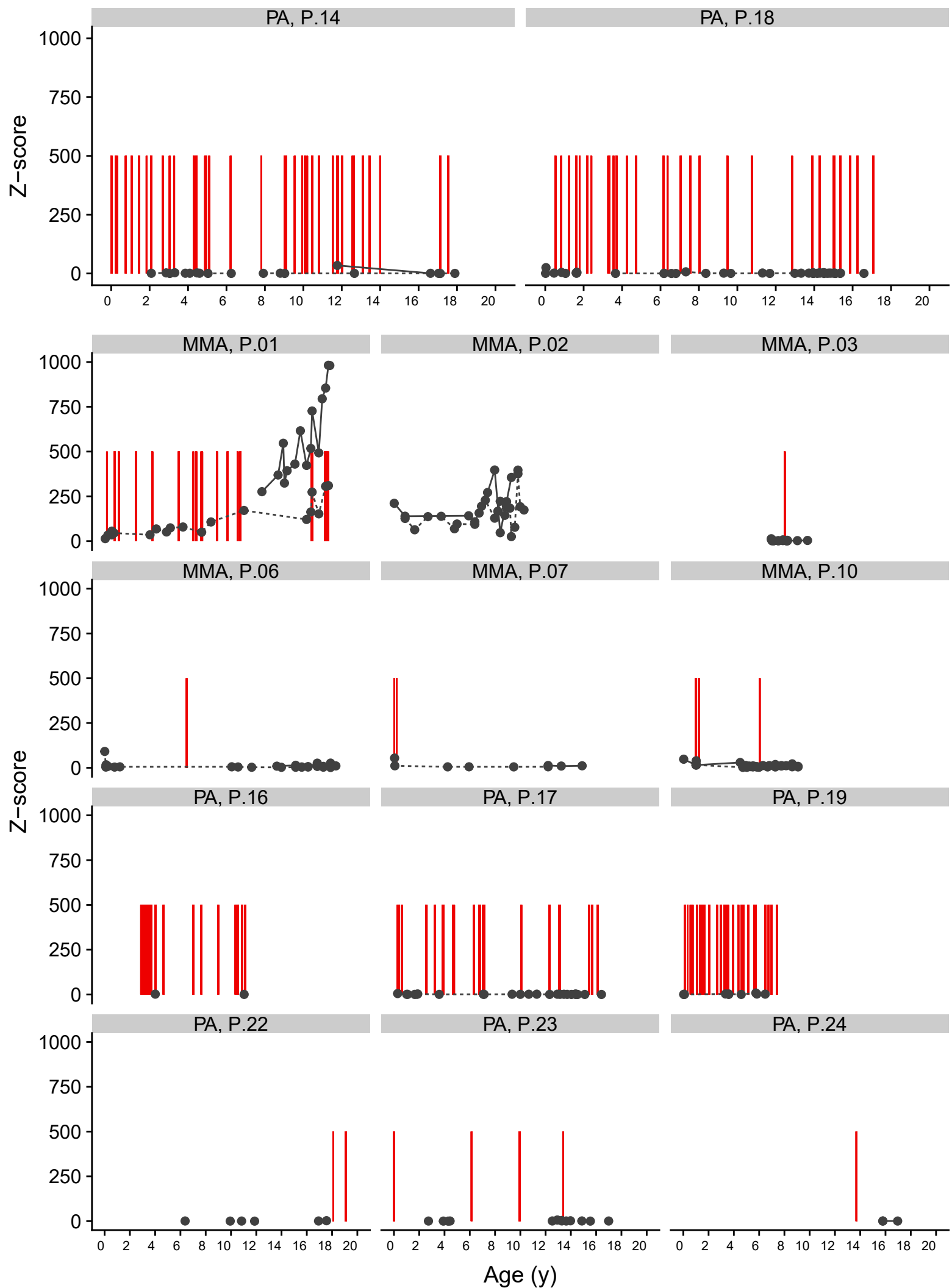
Methylmalonic acid (PL)

— Acute metabolic decompensations
— Plasma, targeted

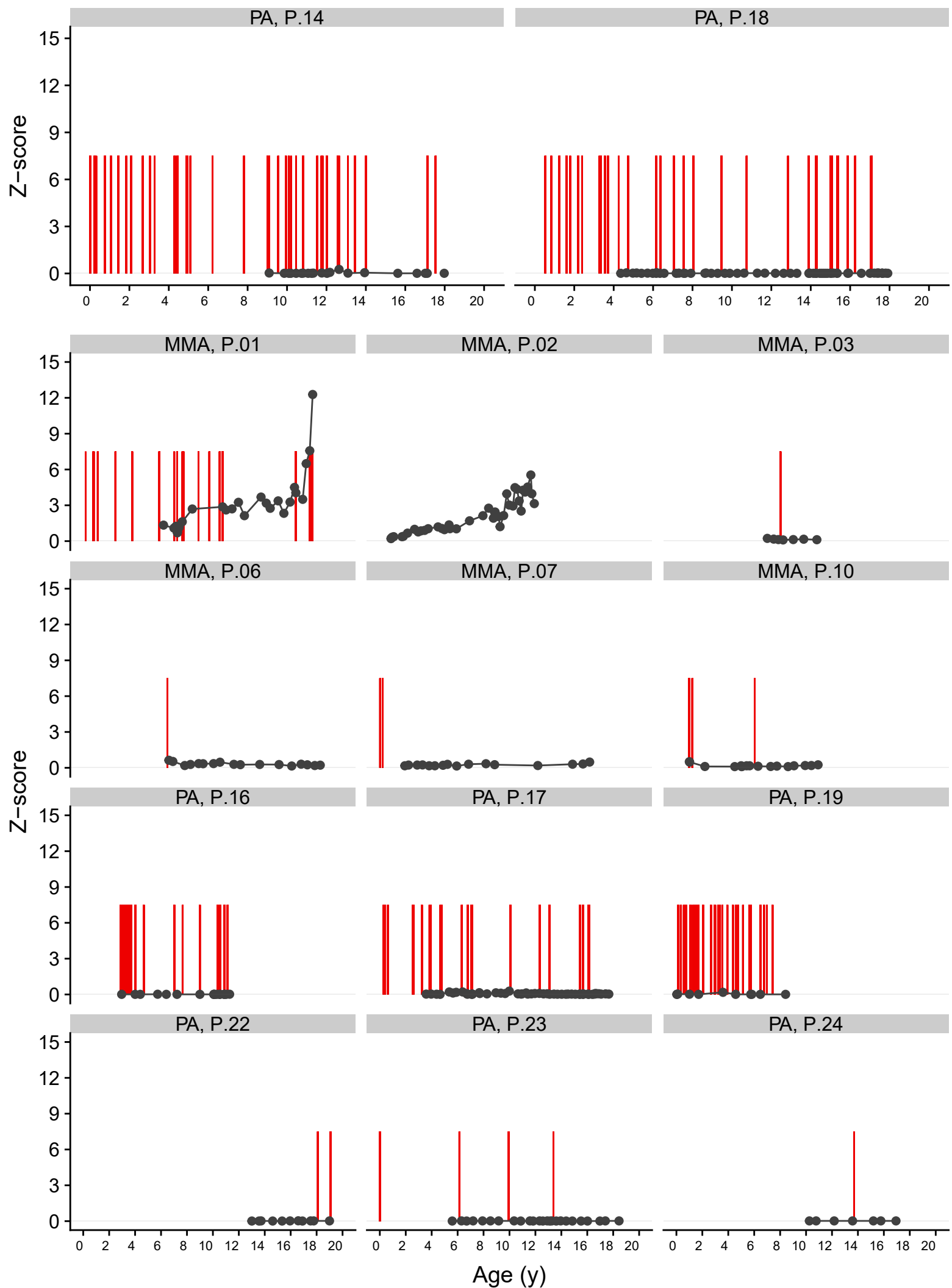


Methylmalonic acid (DI-HRMS)

— Acute metabolic decompensations
— Dried blood spots
- - - Plasma



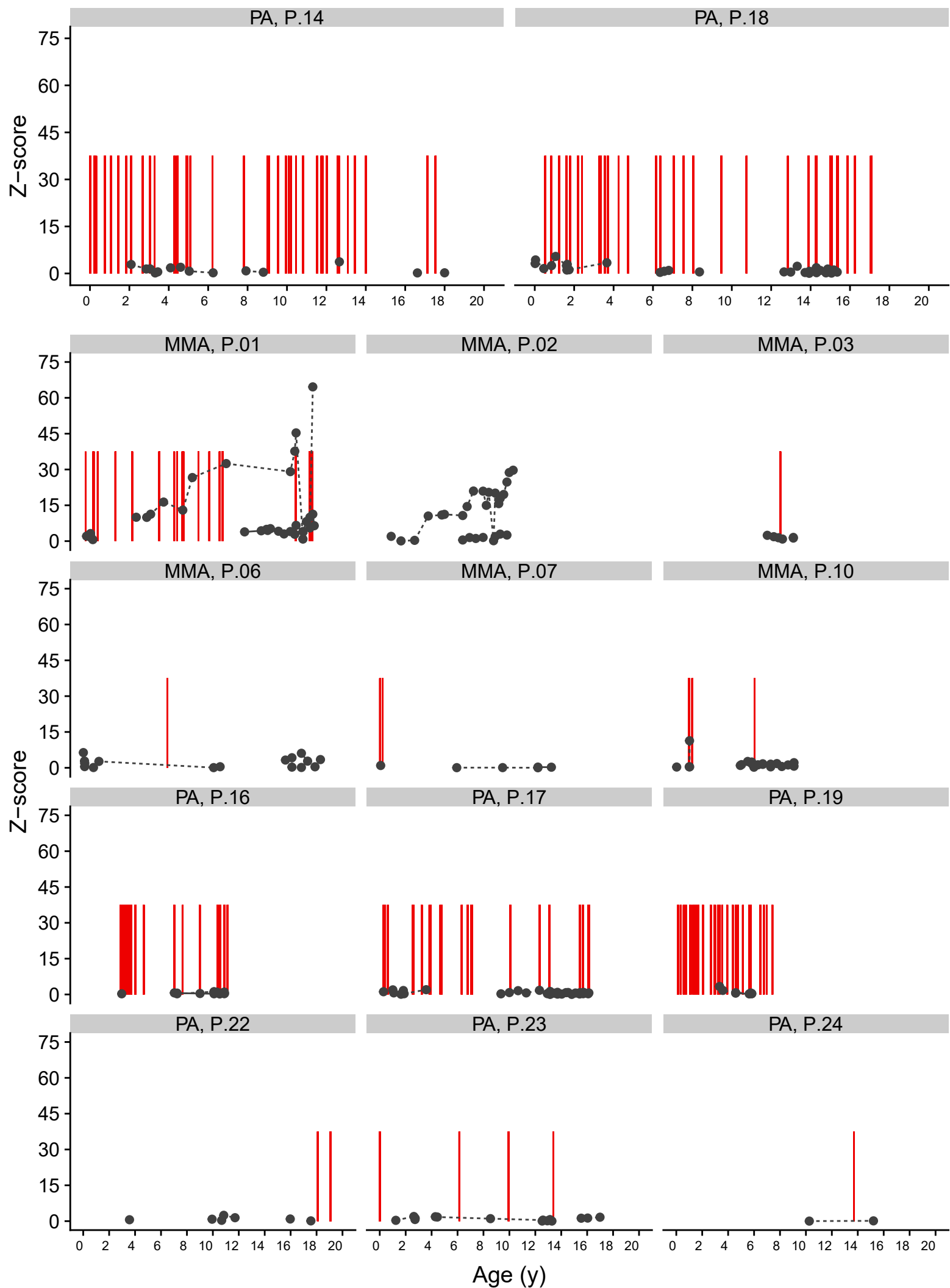
Methylmalonylcarnitine (PL)

— Acute metabolic decompensations
— Plasma, targeted

Supplementary Figure 17

Methylmalonylcarnitine (DI-HRMS)

- Acute metabolic decompensations
- Dried blood spots
- - - Plasma



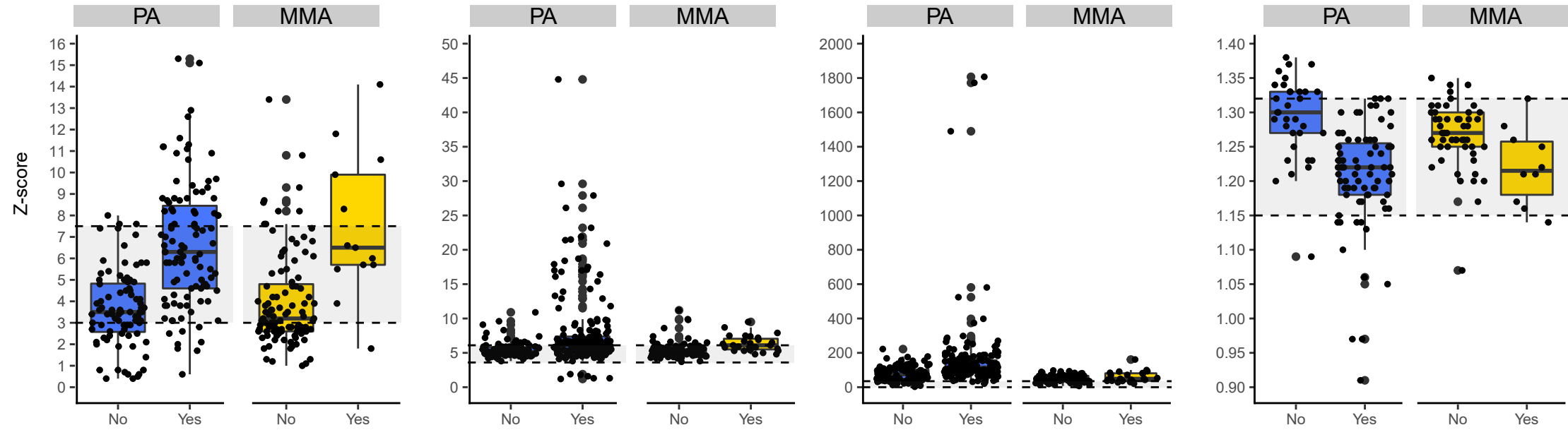
Biomarkers AMD for PA and MMA, from clinical chemistry

Urea (PL)

Glucose (PL)

Ammonia (PL)

Ionized calcium (PL)



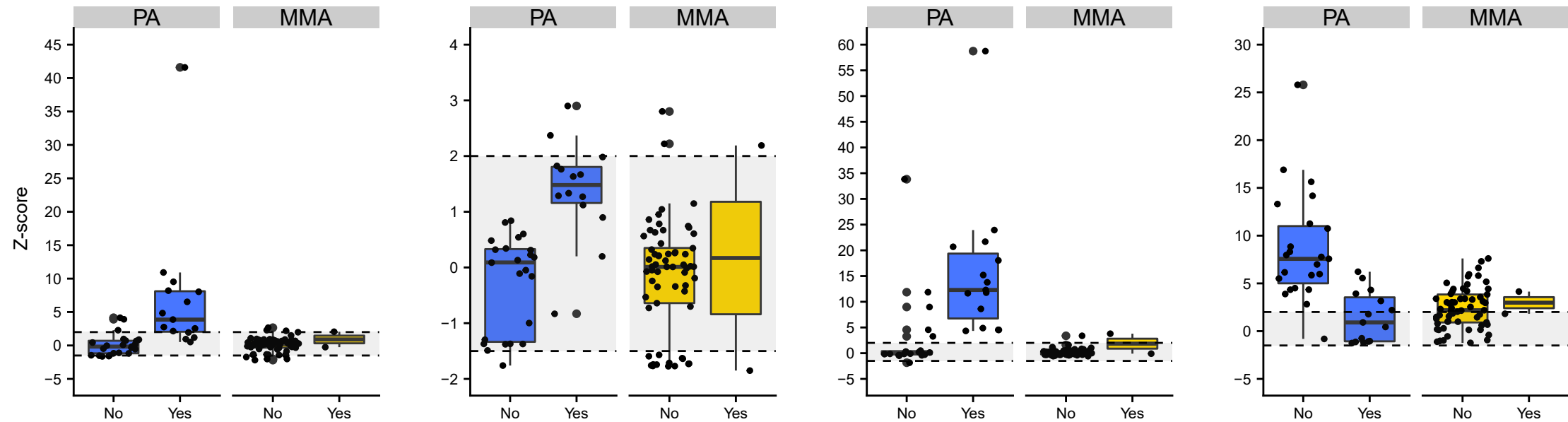
Biomarkers AMD for PA, from DI-HRMS analysis

Acetylcysteine (PL)

Cortisol (PL)

3-Hydroxyisovaleric acid (PL)

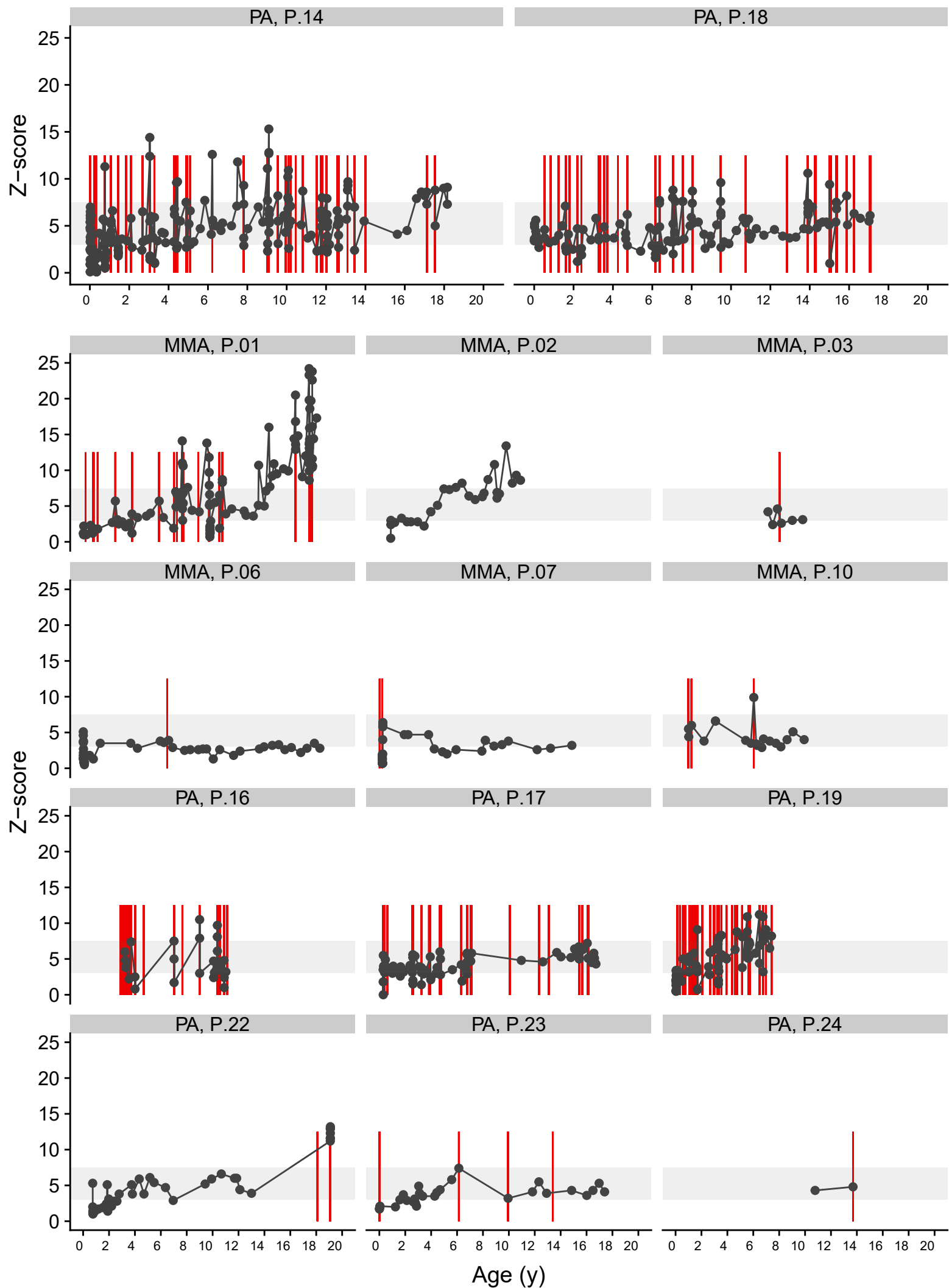
Fructoseglycine (PL)



Supplementary Figure 19

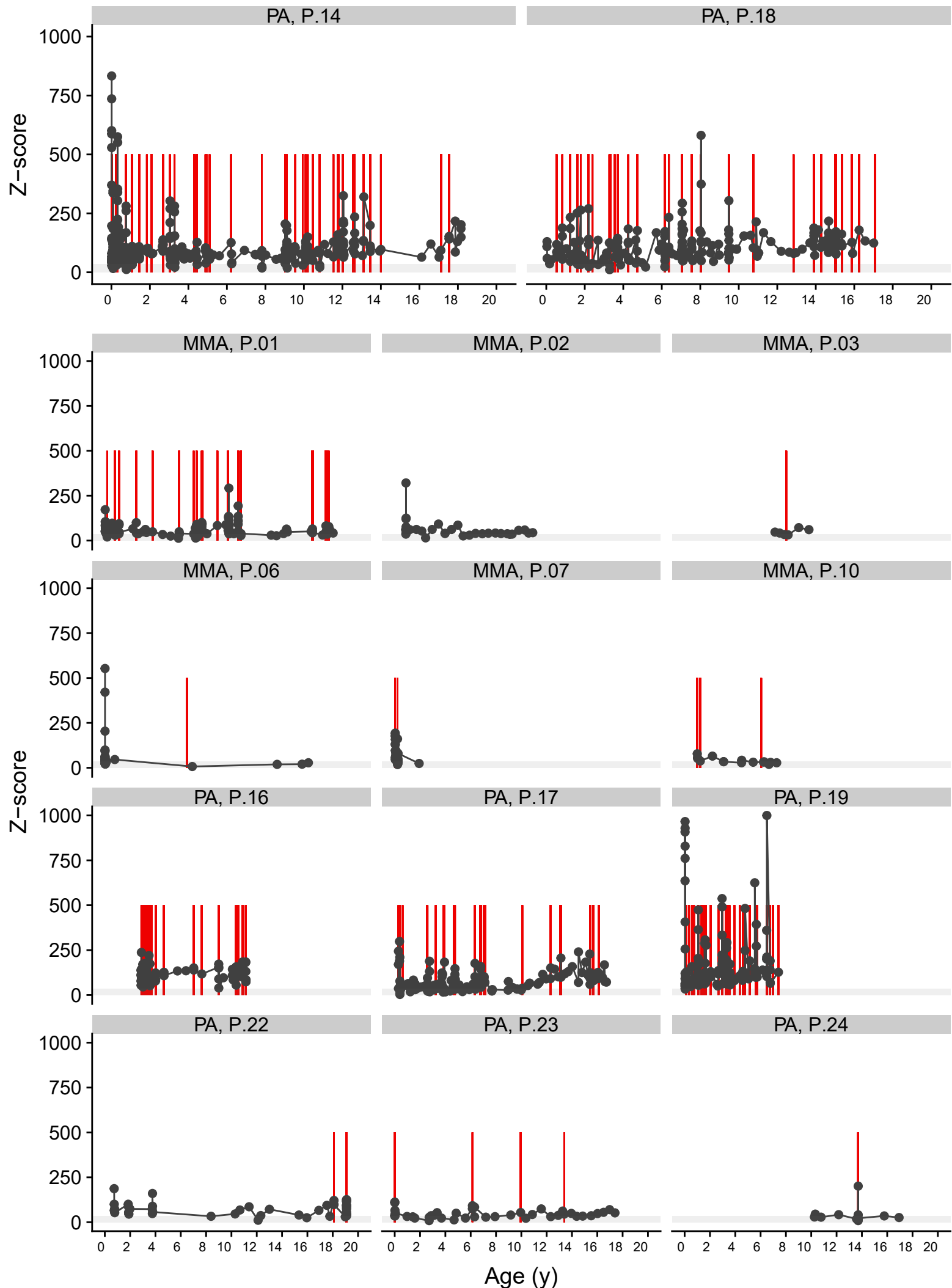
Urea (PL)

— Acute metabolic decompensations
— Plasma, targeted

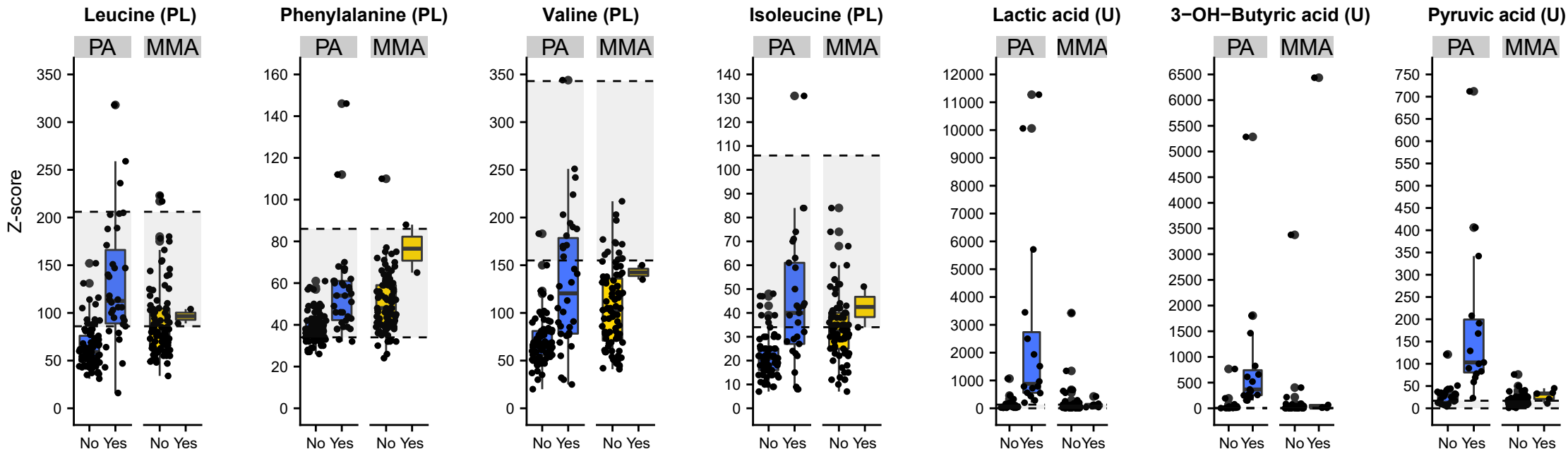


Ammonia (PL)

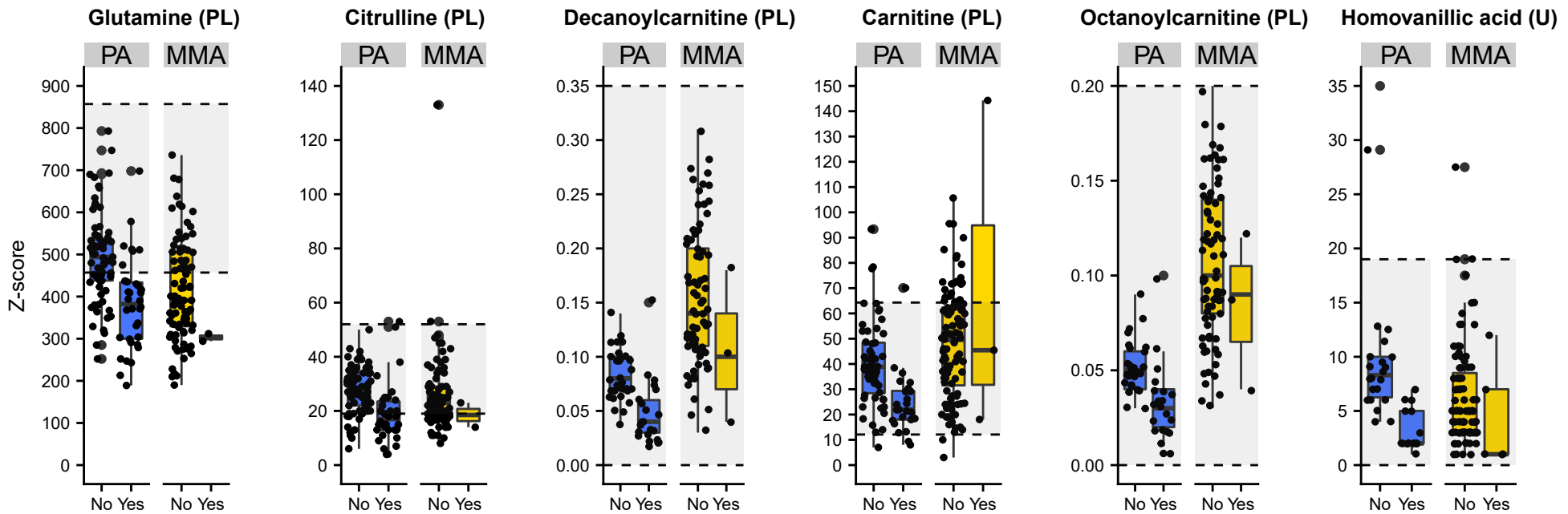
— Acute metabolic decompensations
— Plasma, targeted



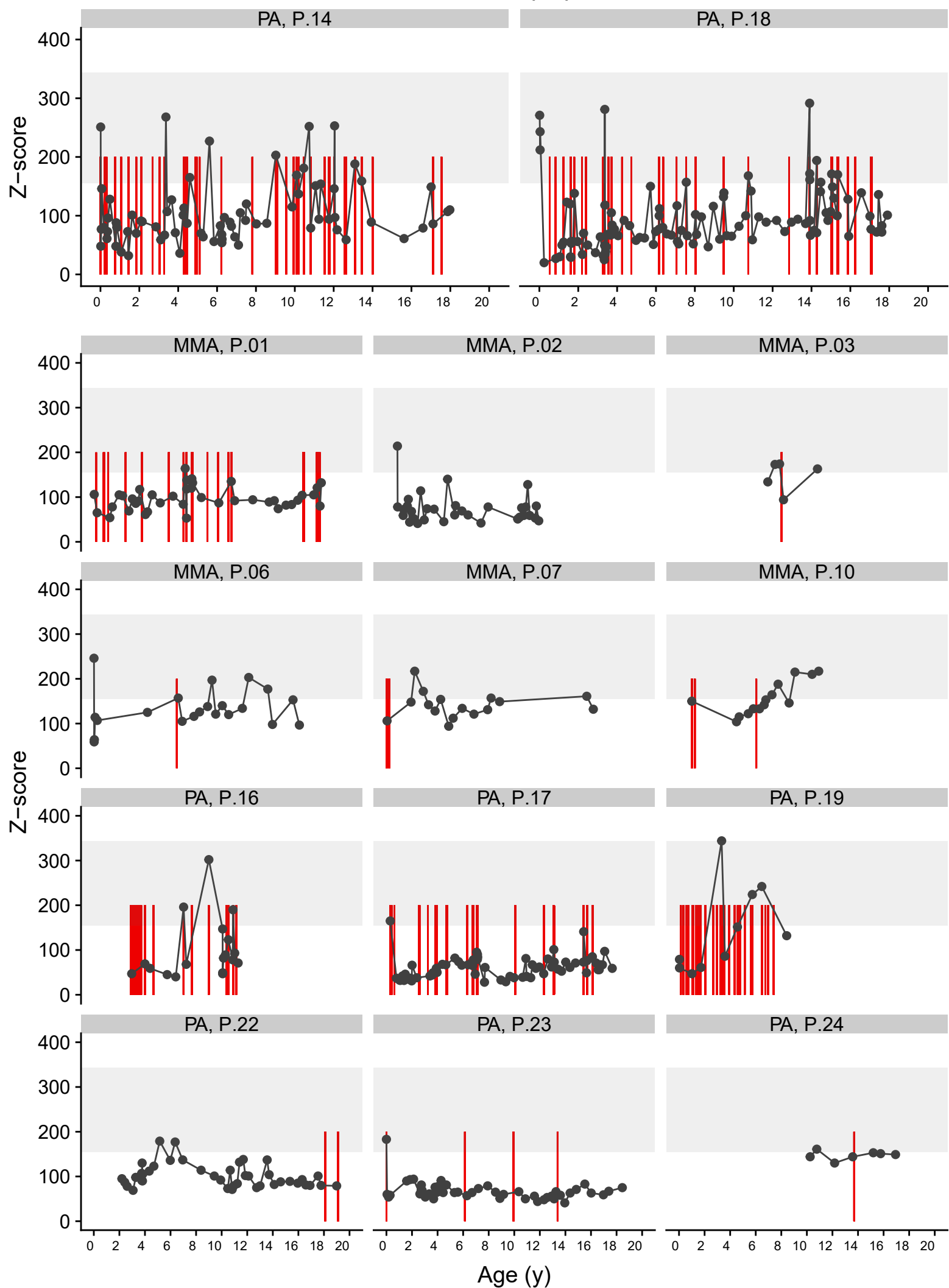
Biomarkers AMD for PA (increased), from targeted metabolic assays



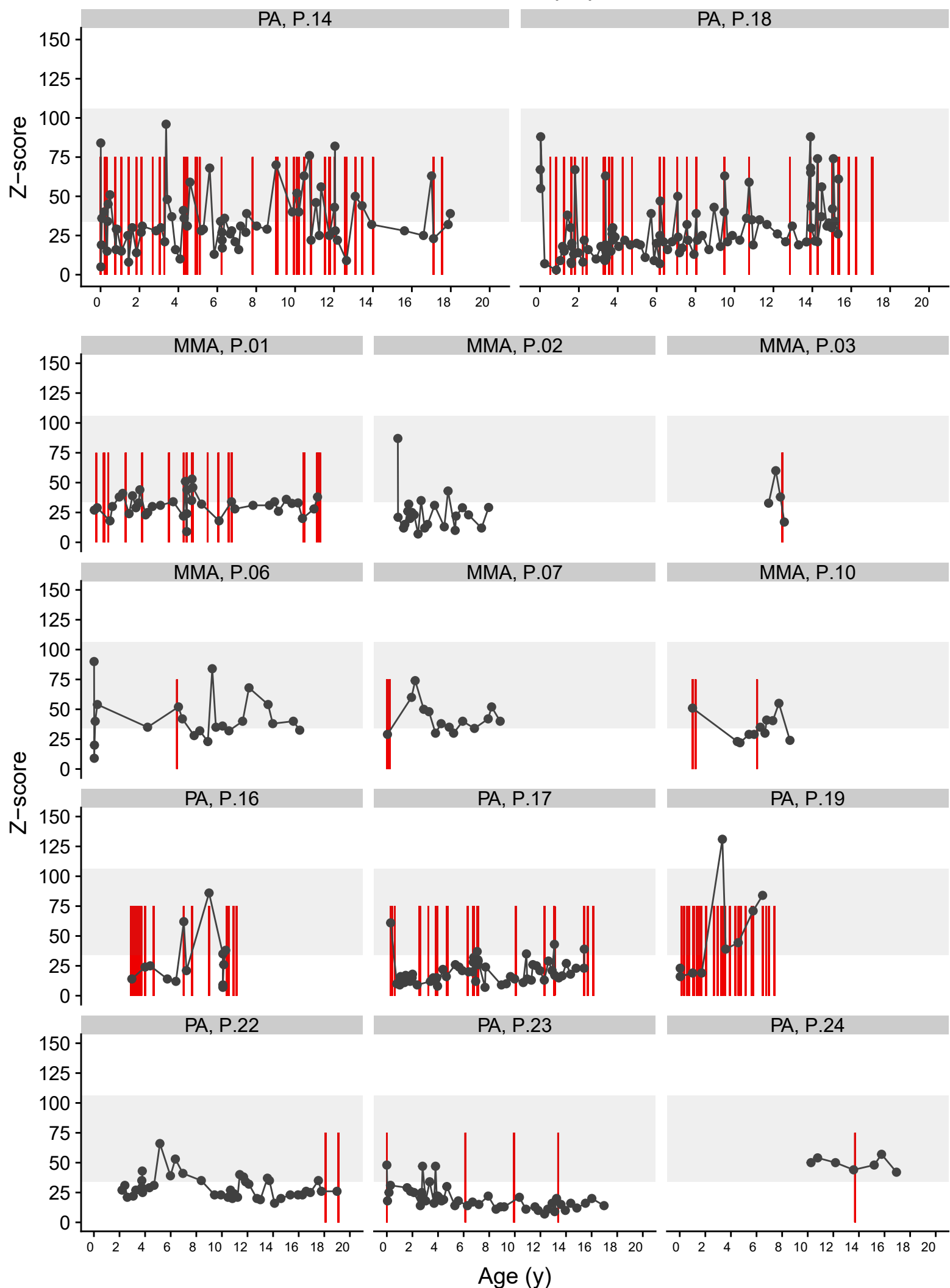
Biomarkers AMD for PA (decreased), from targeted metabolic assays



Valine (PL)

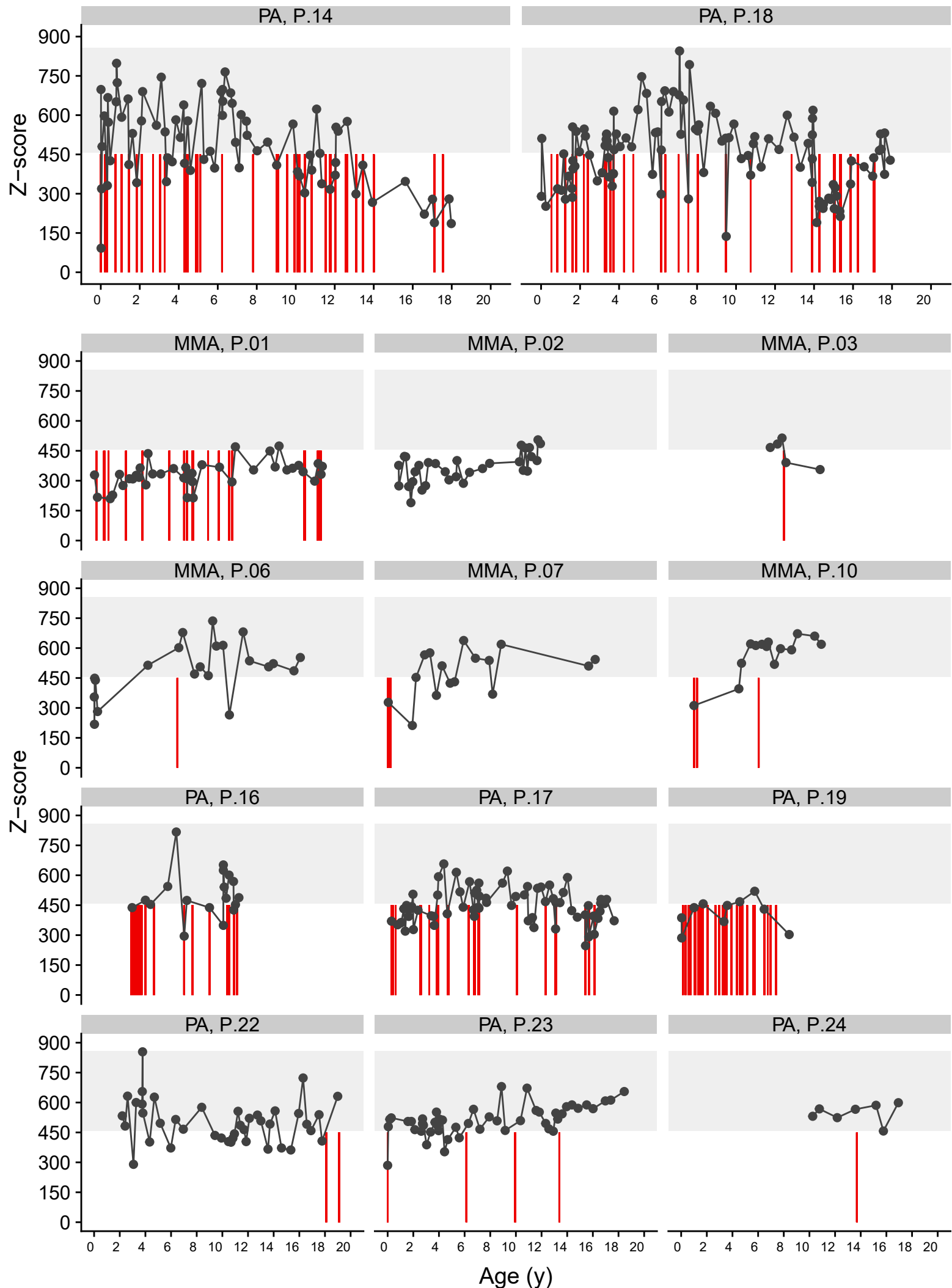


Isoleucine (PL)



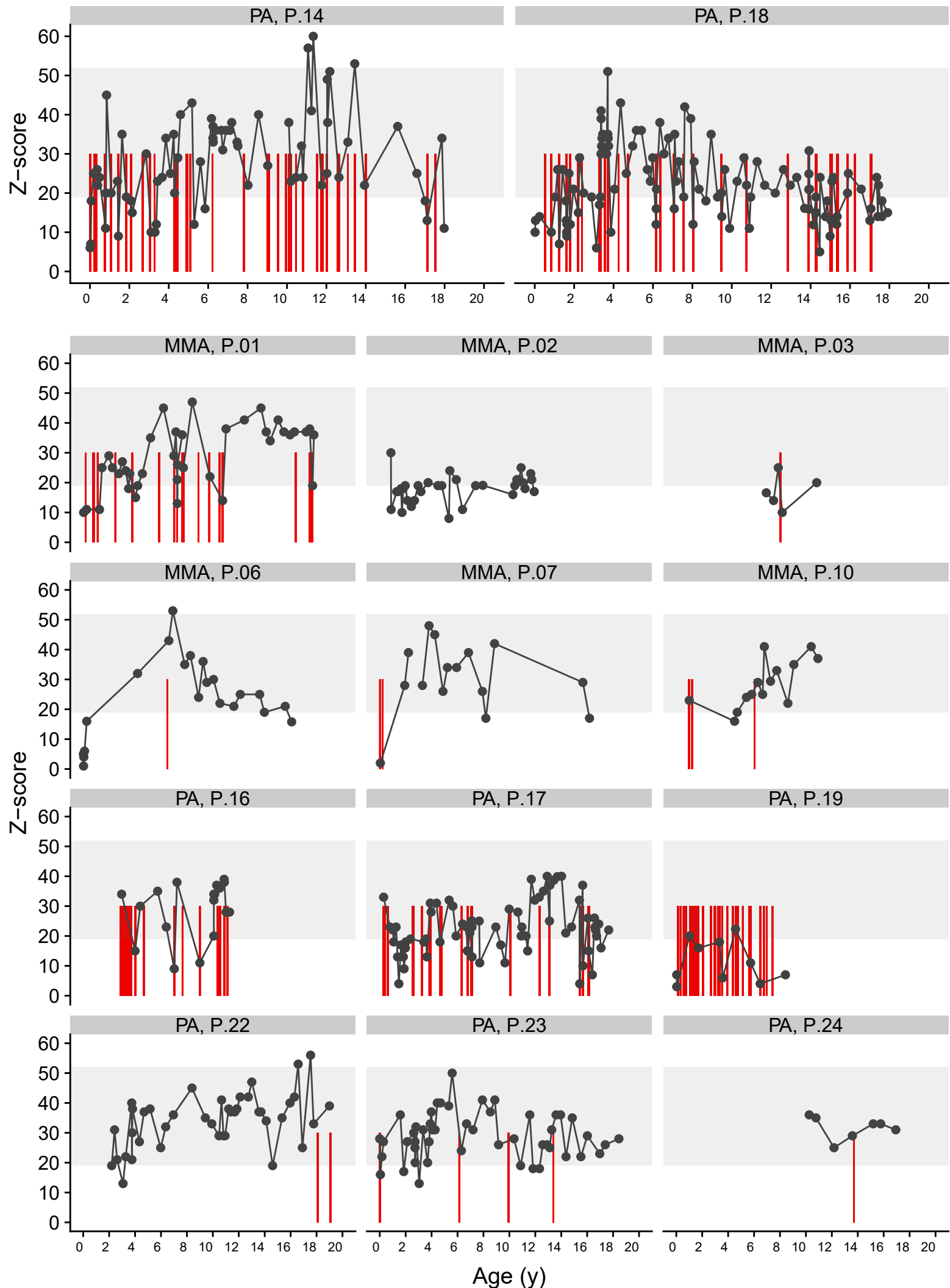
Glutamine (PL)

— Acute metabolic decompensations
— Plasma, targeted

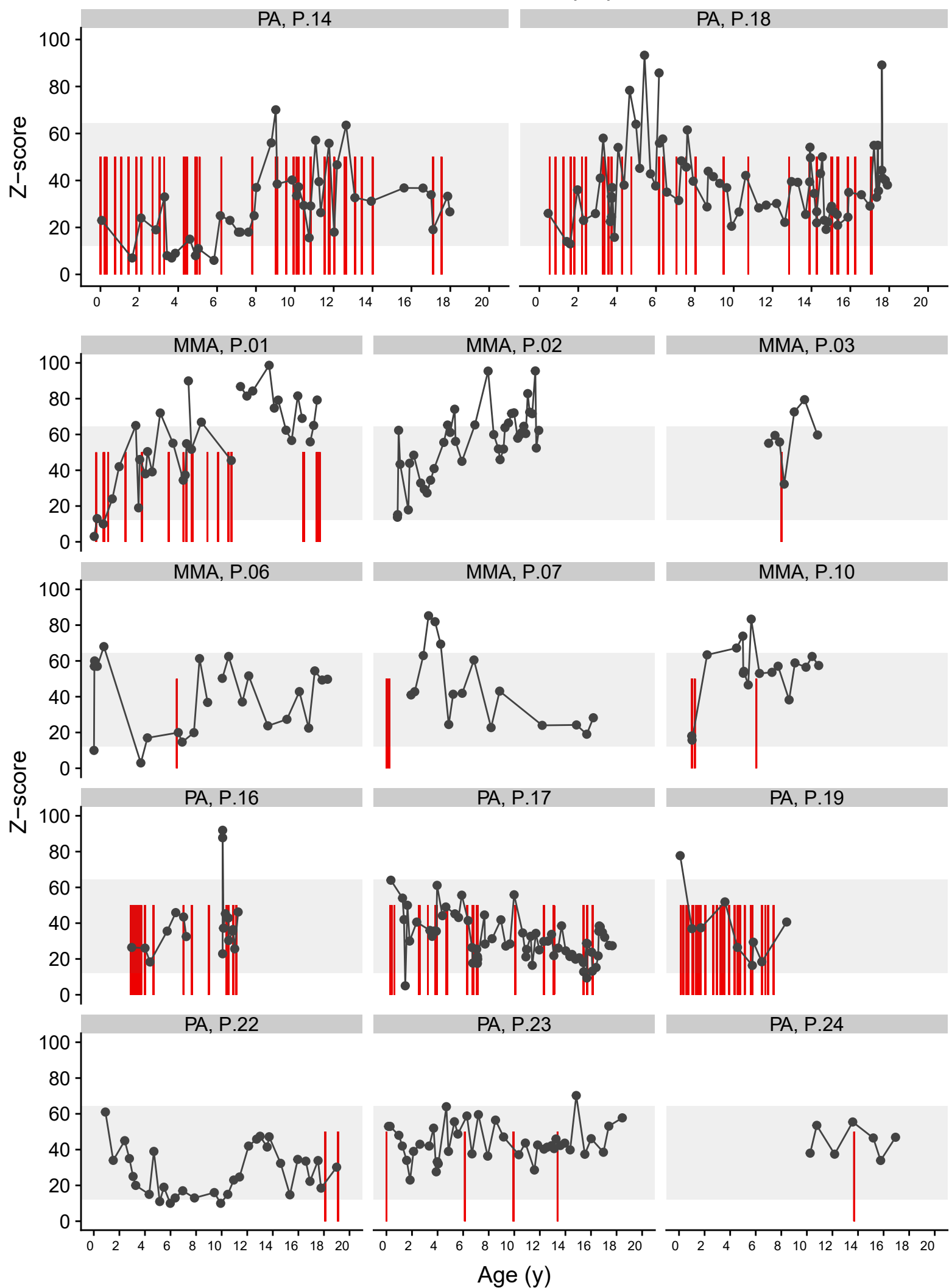


Citrulline (PL)

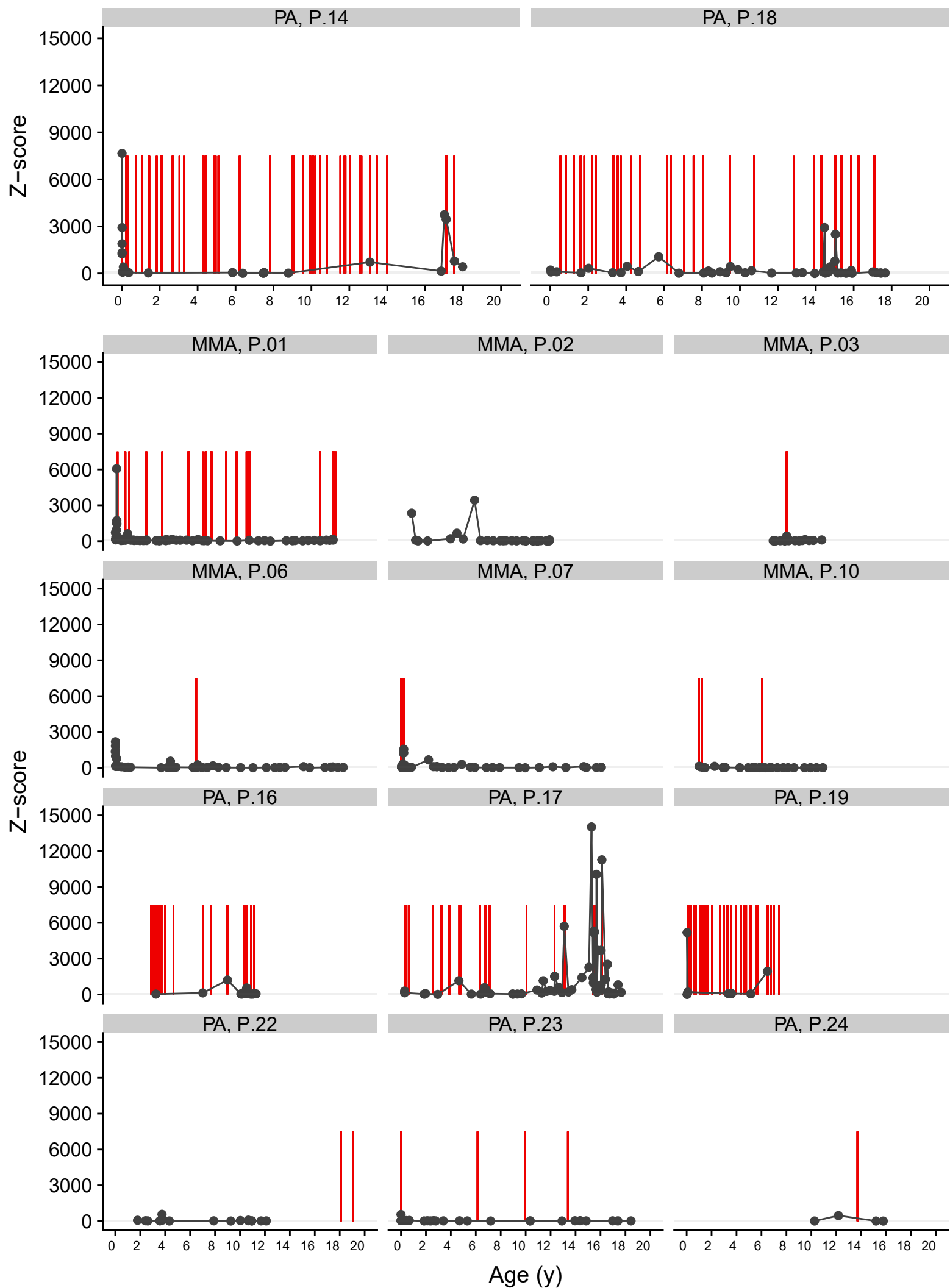
— Acute metabolic decompensations
— Plasma, targeted



Free carnitine (PL)

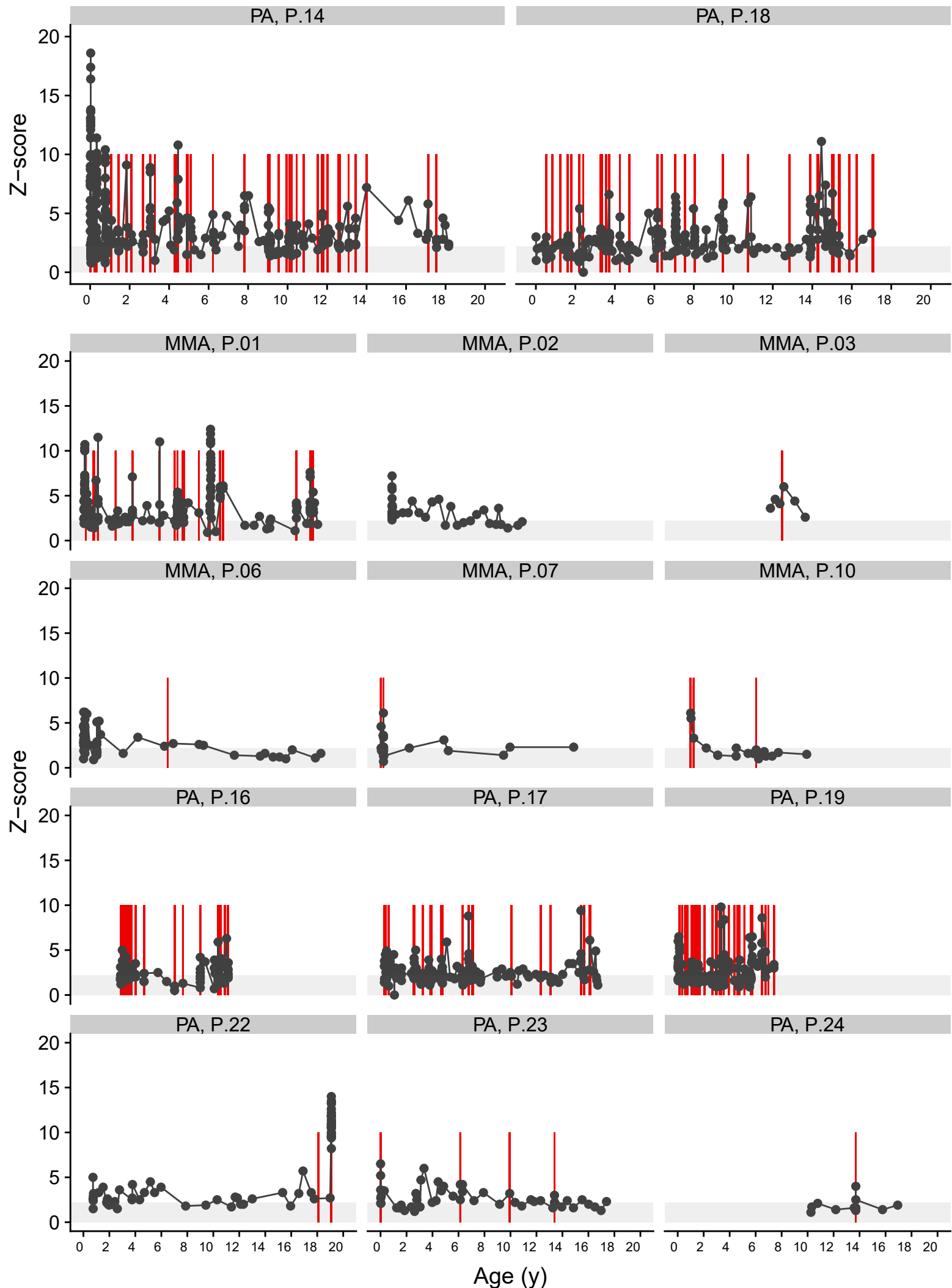


Lactate (U)

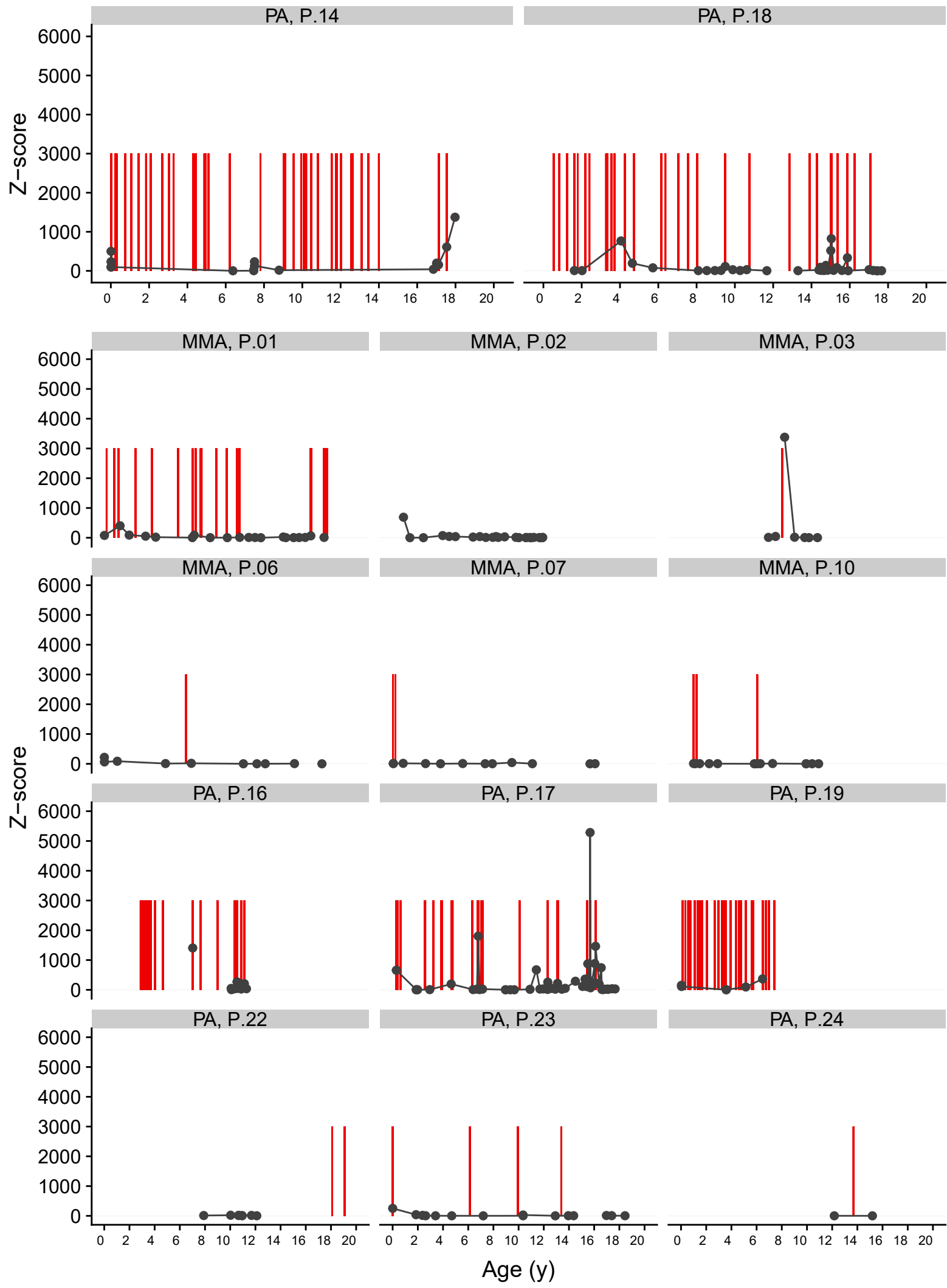


Lactate (PL)

— Acute metabolic decompensations
— Plasma, targeted



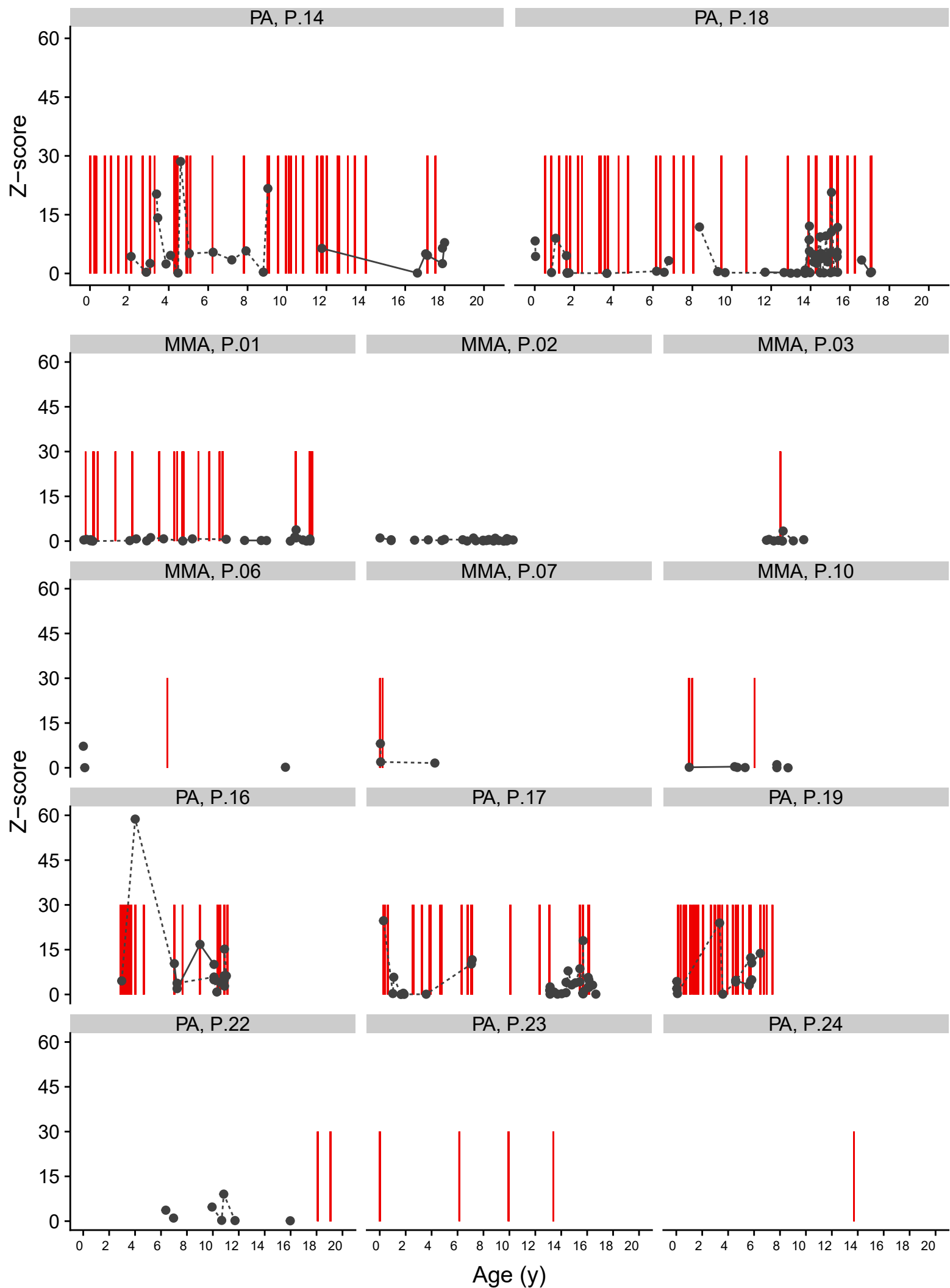
3-Hydroxybutyric acid (U)



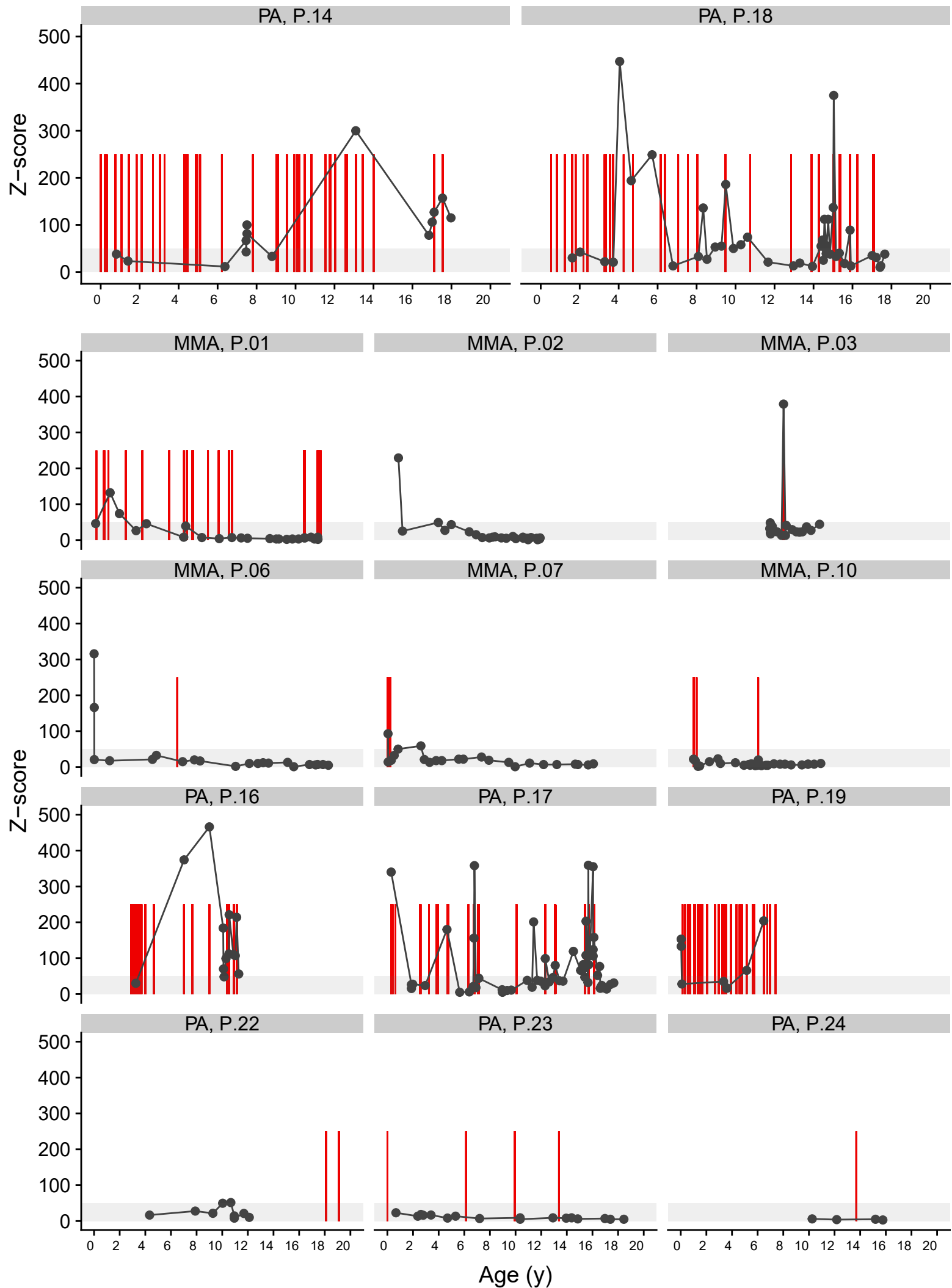
Supplementary Figure 30

3-Hydroxyisovaleric acid (DI-HRMS)

- Acute metabolic decompensations
- Dried blood spots
- Plasma

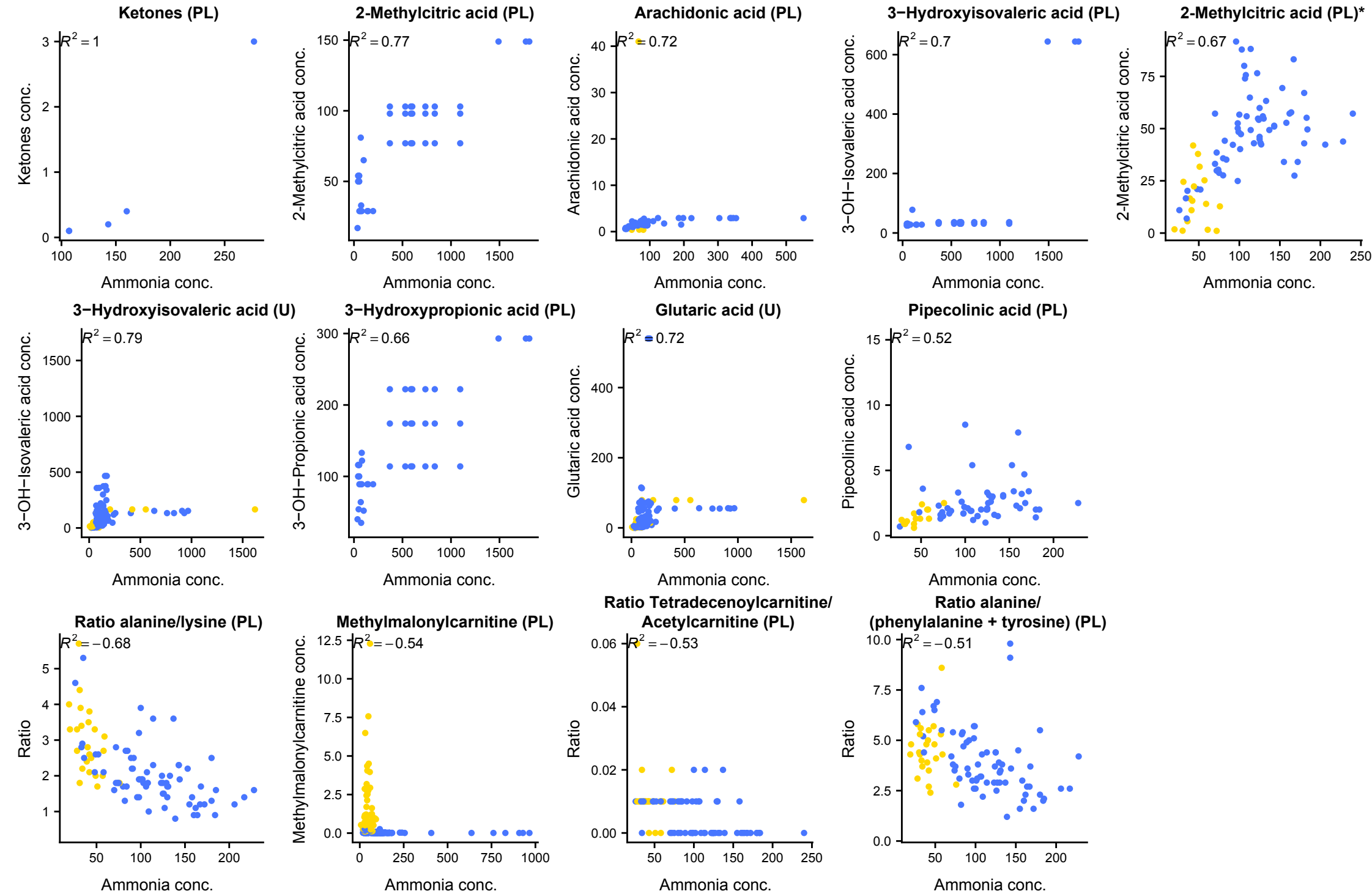


3-Hydroxyisovaleric acid (U)



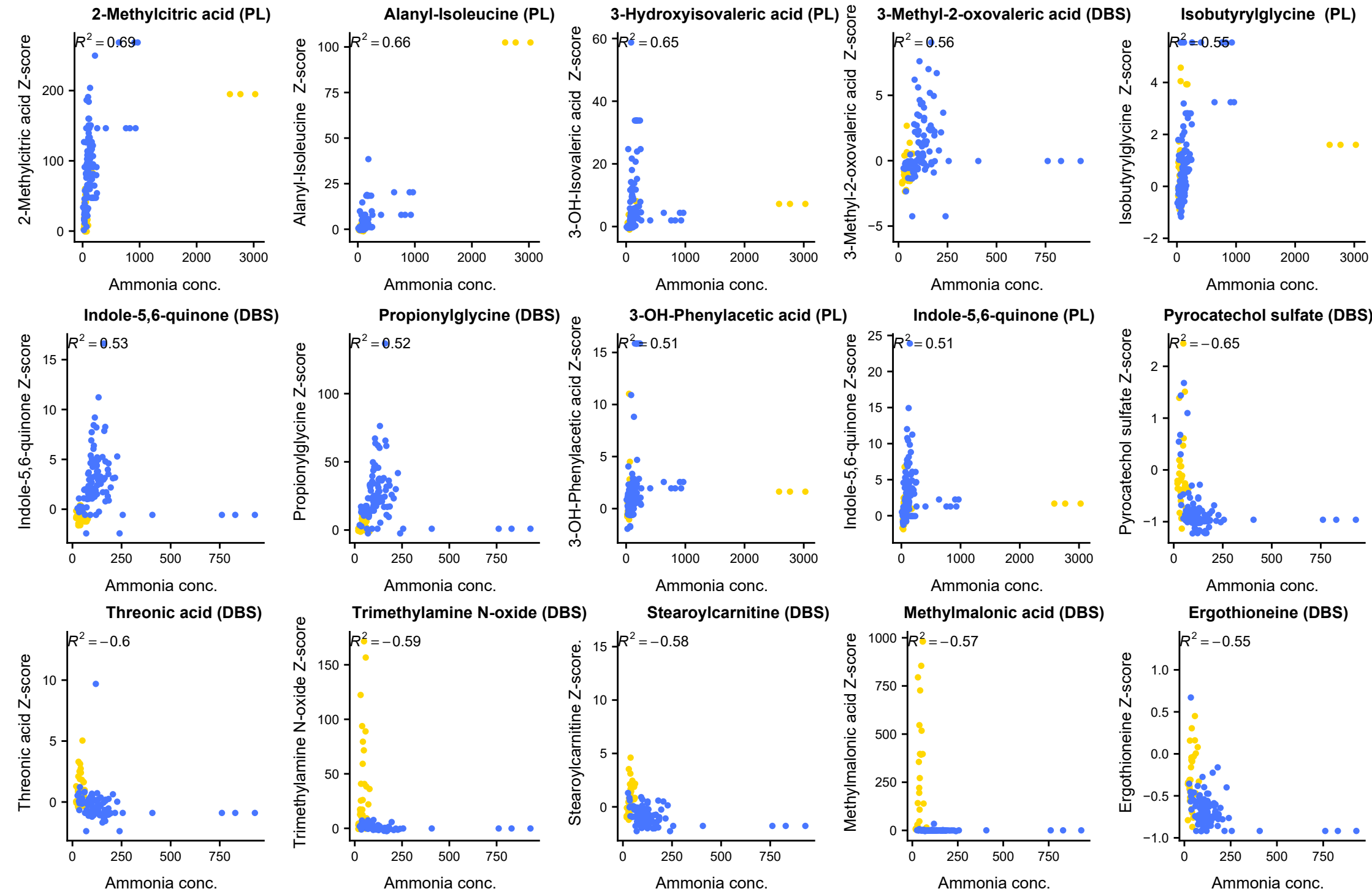
Supplementary Figure 32

Correlation to ammonia in plasma, from targeted metabolic assays



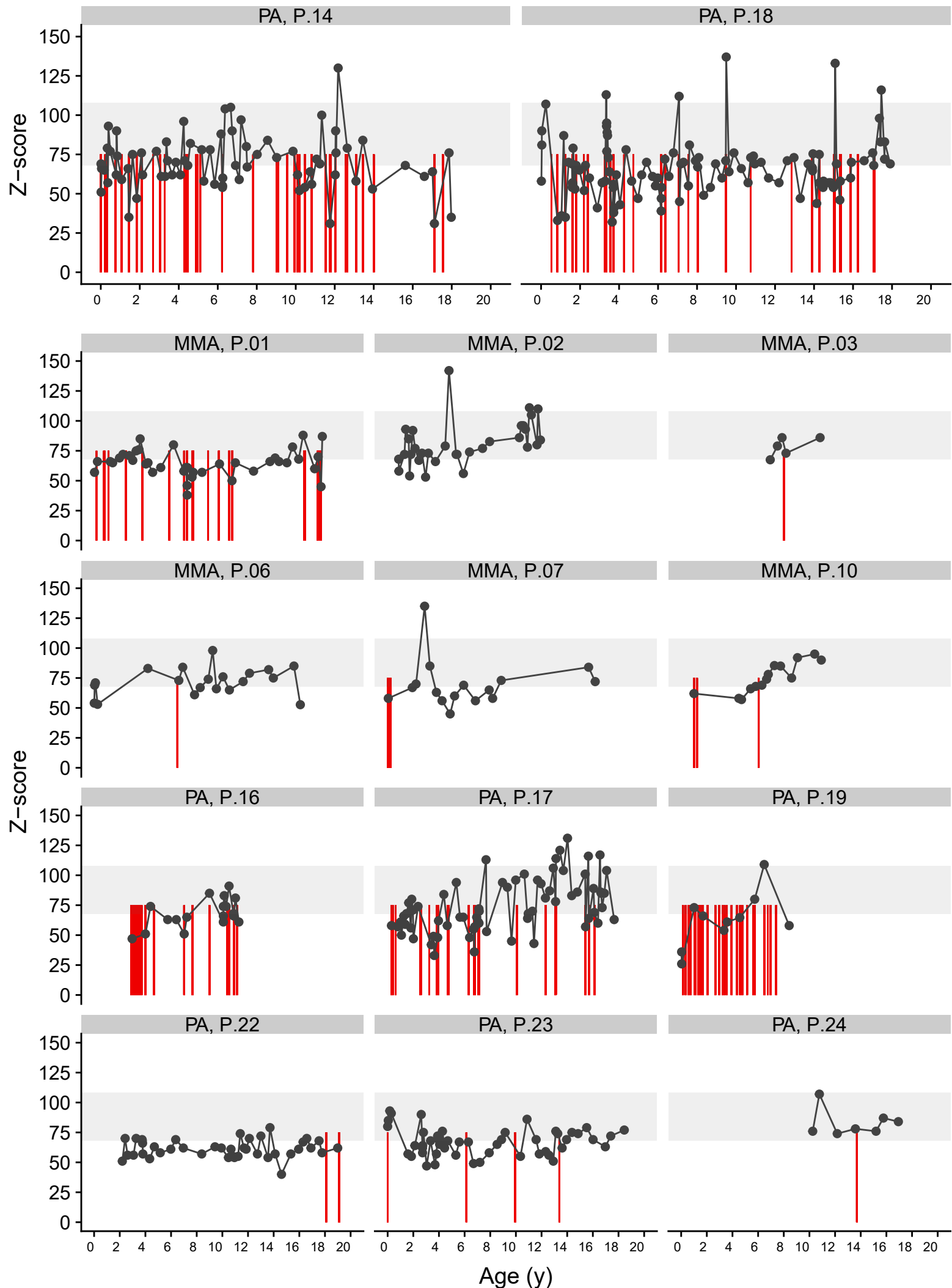
Supplementary Figure 33

Correlation to Ammonia in plasma, from DI-HRMS analysis



Histidine (PL)

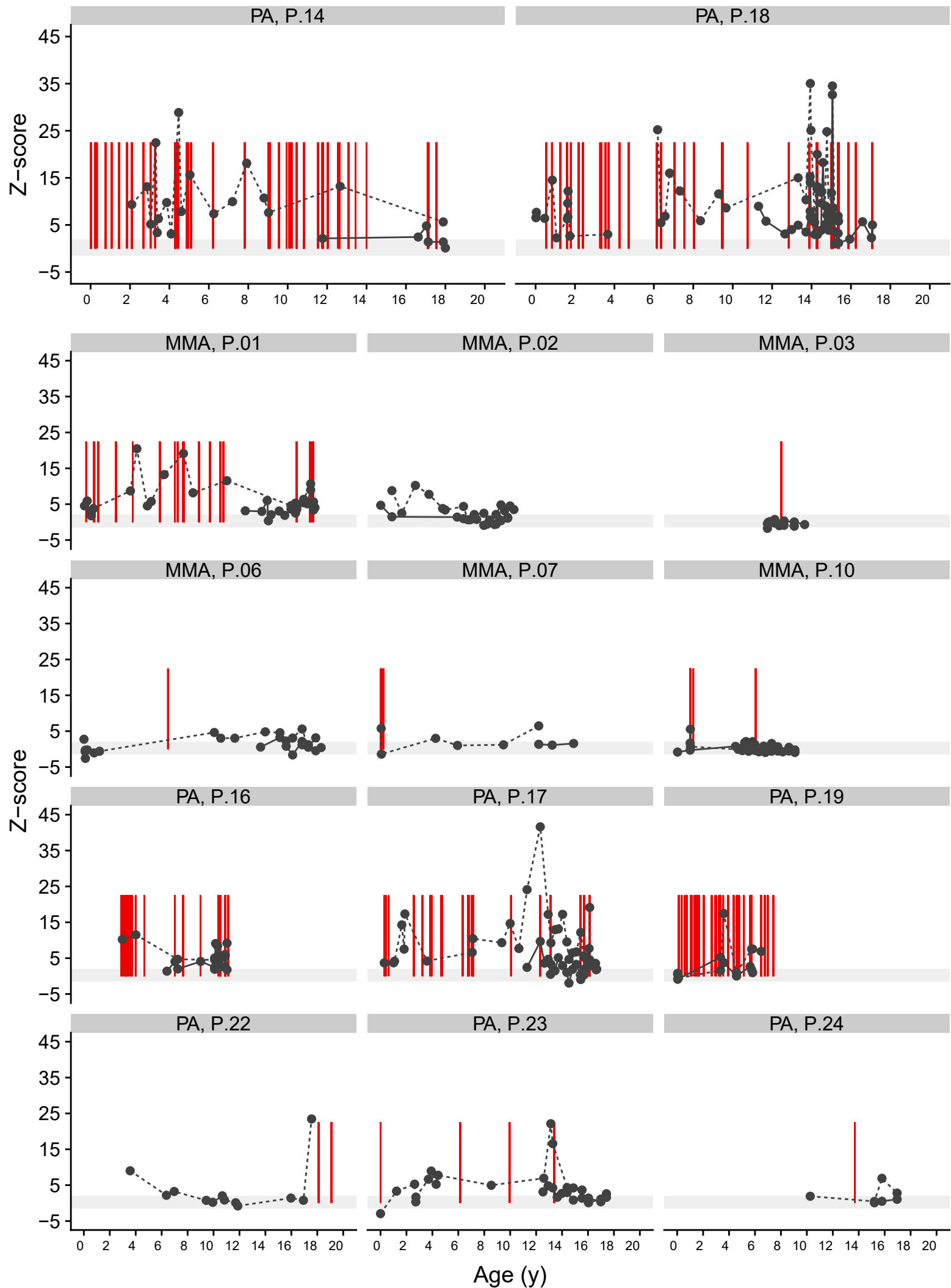
— Acute metabolic decompensations
— Plasma, targeted



Supplementary Figure 35

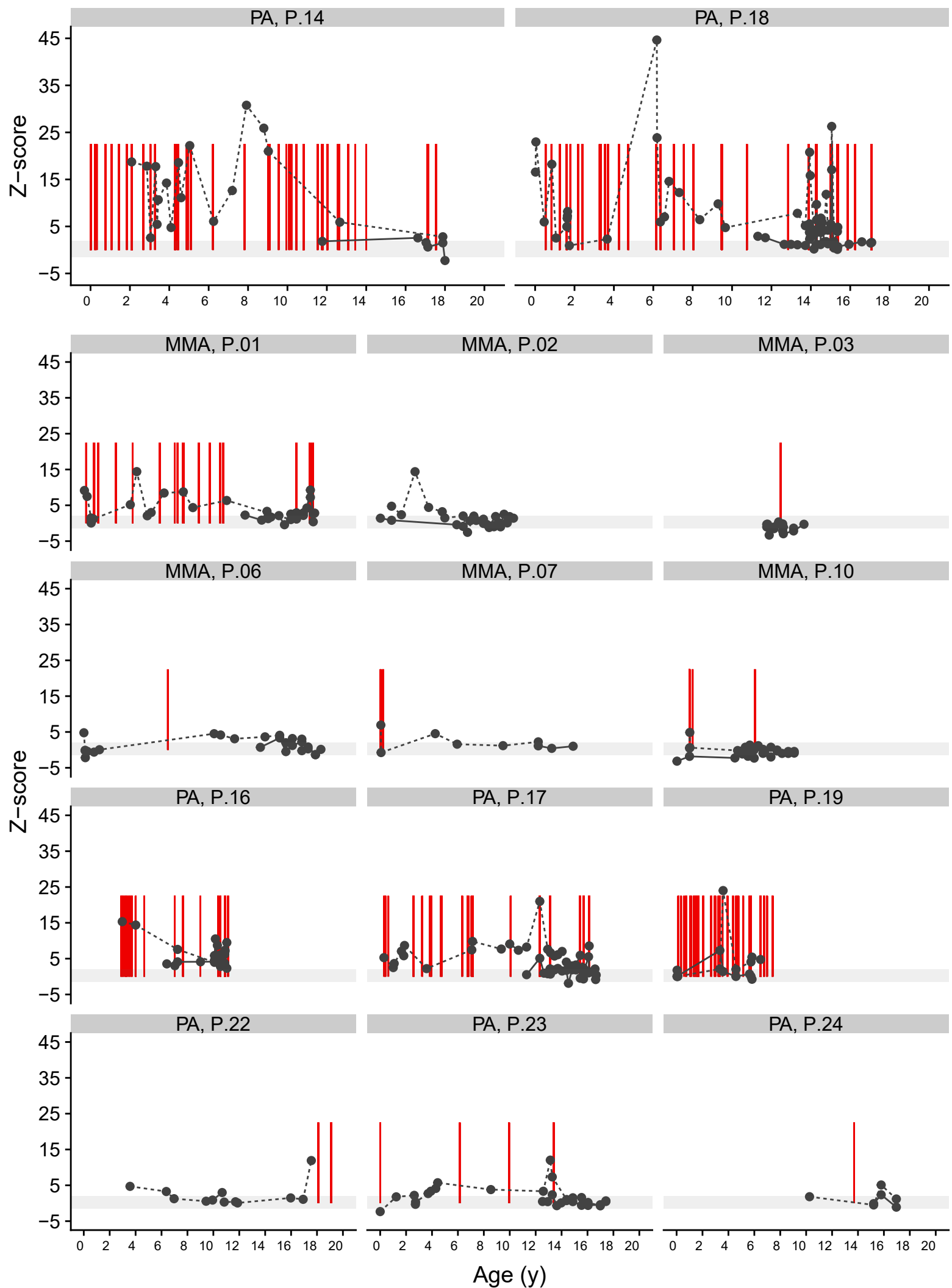
LysoPC(15:0) (DI-HRMS)

- Acute metabolic decompensations
- Dried blood spots
- Plasma



LysoPC(17:0) (DI-HRMS)

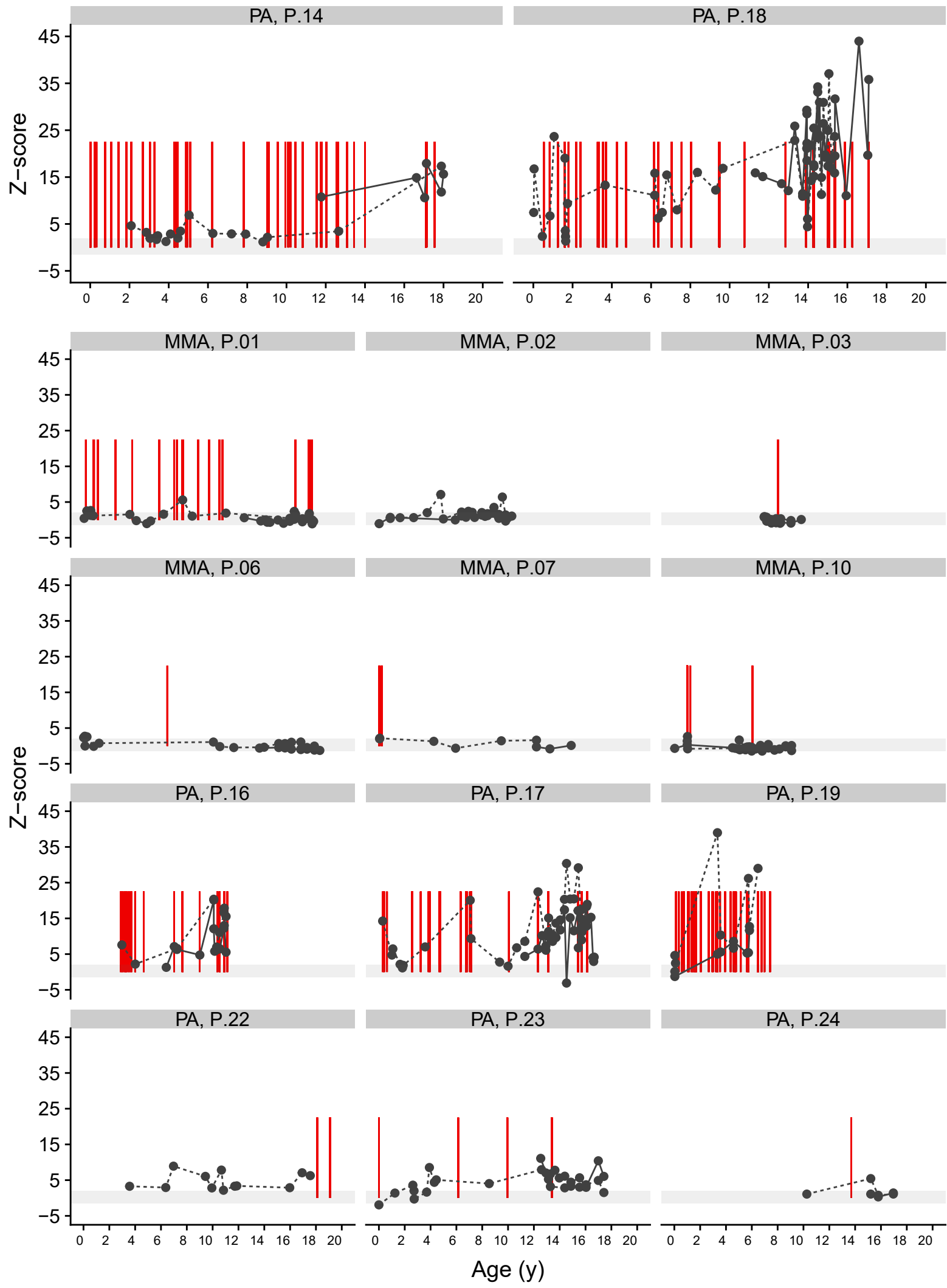
— Acute metabolic decompensations
— Dried blood spots
- - - Plasma



Supplementary Figure 37

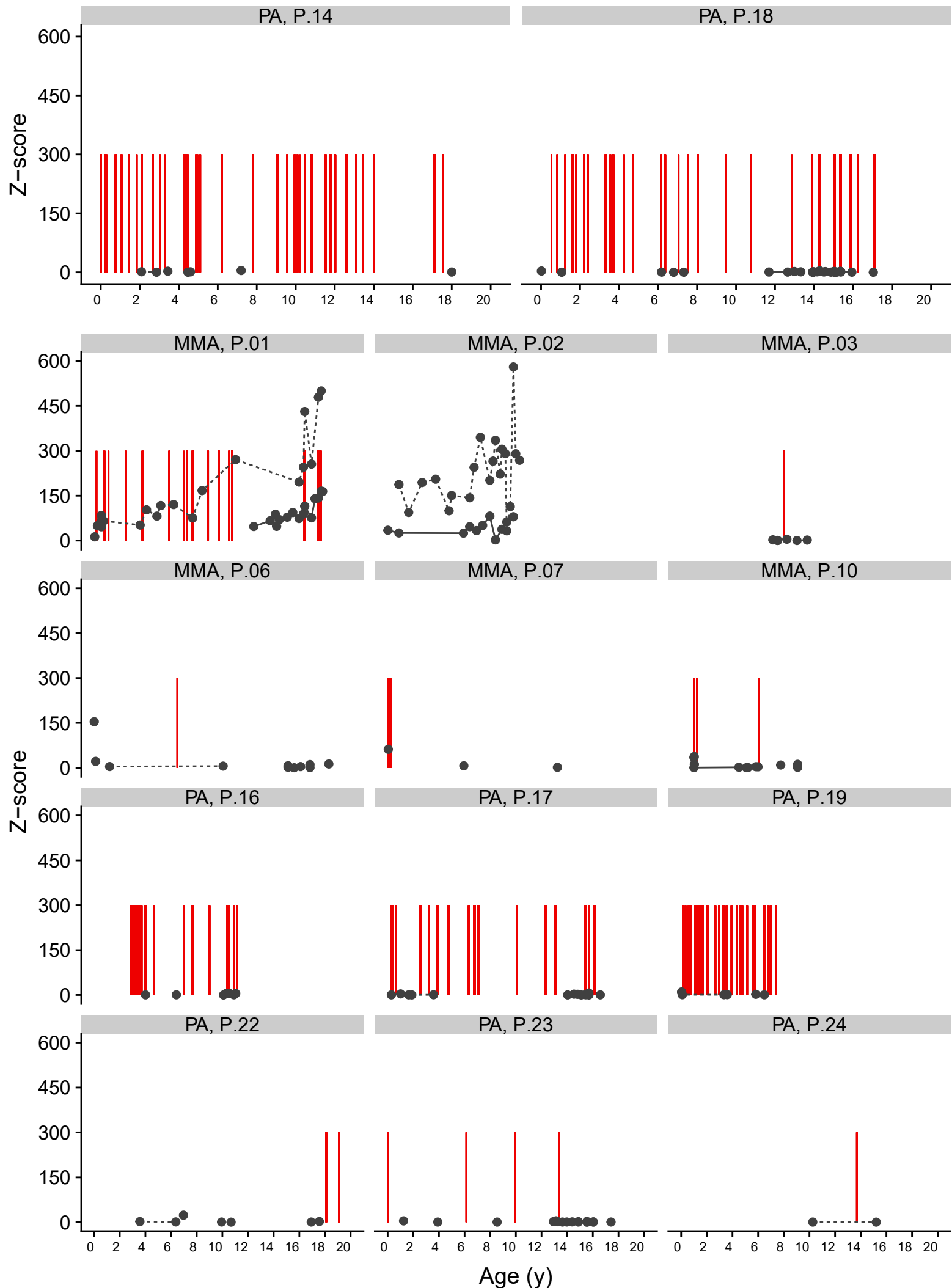
2-Amino-3-phosphonopropionic acid (DI-HRMS)

- Acute metabolic decompensations
- Dried blood spots
- - - Plasma

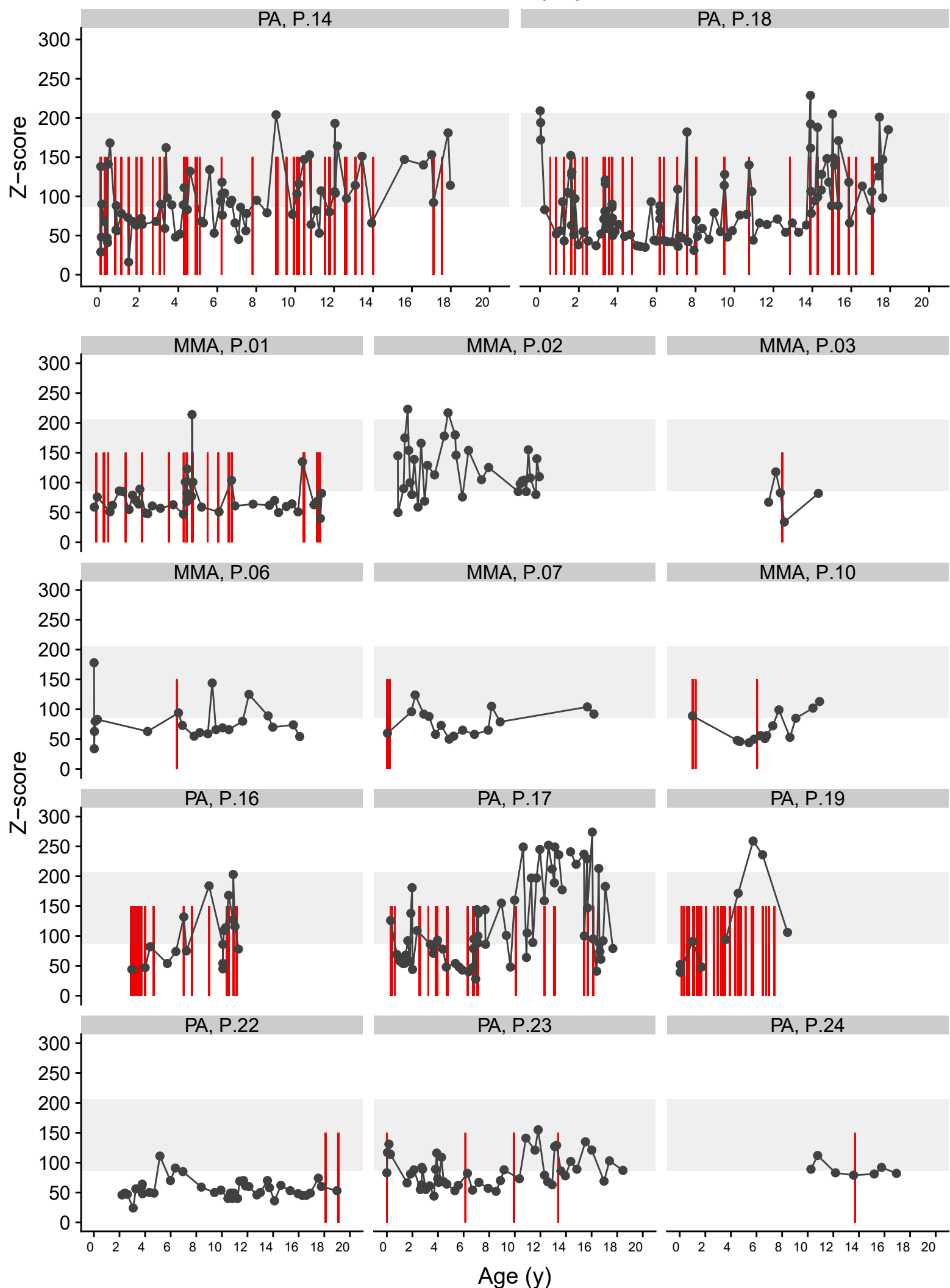


Propionic acid (DI-HRMS)

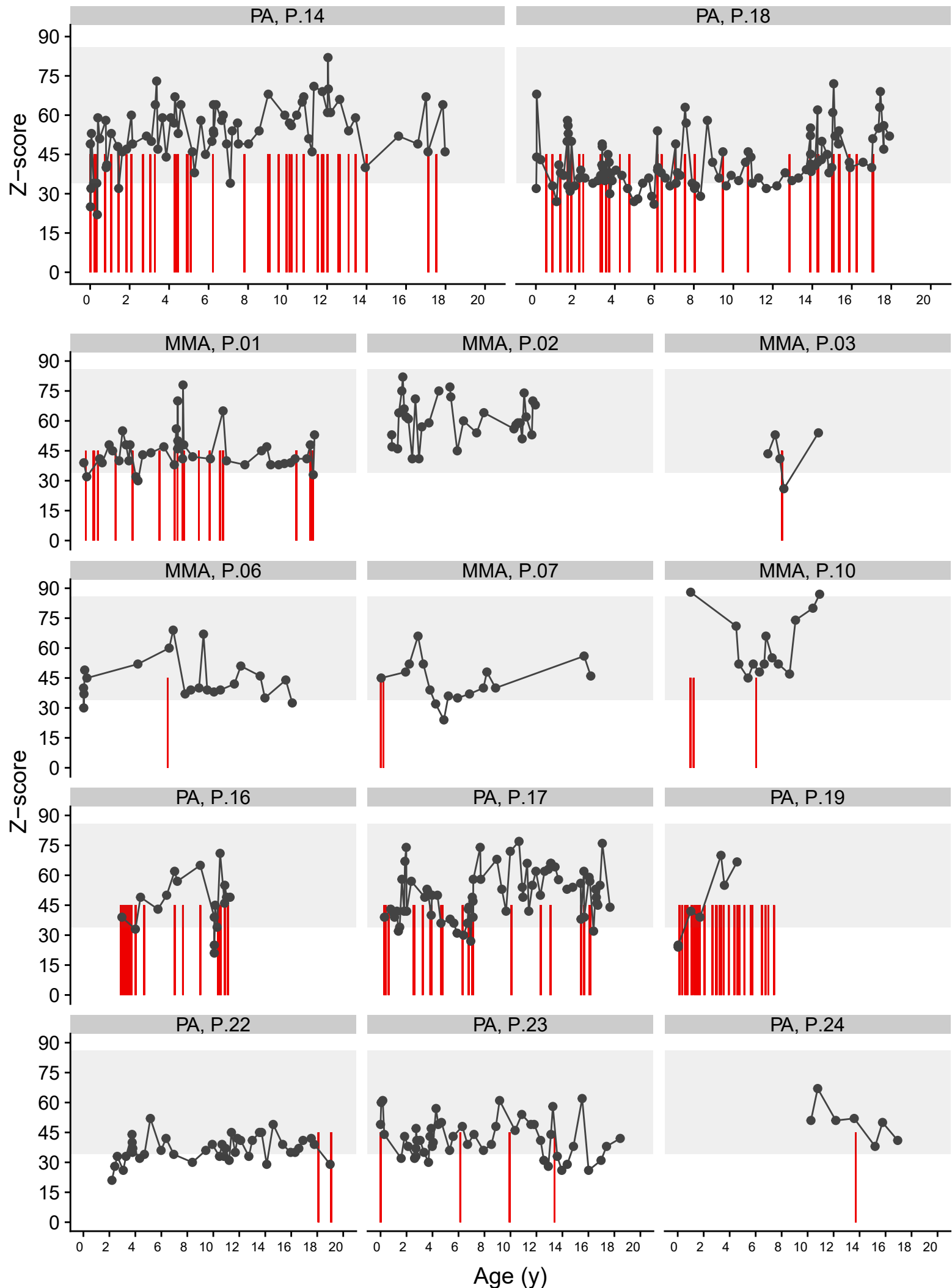
- Acute metabolic decompensations
- Dried blood spots
- Plasma



Leucine (PL)

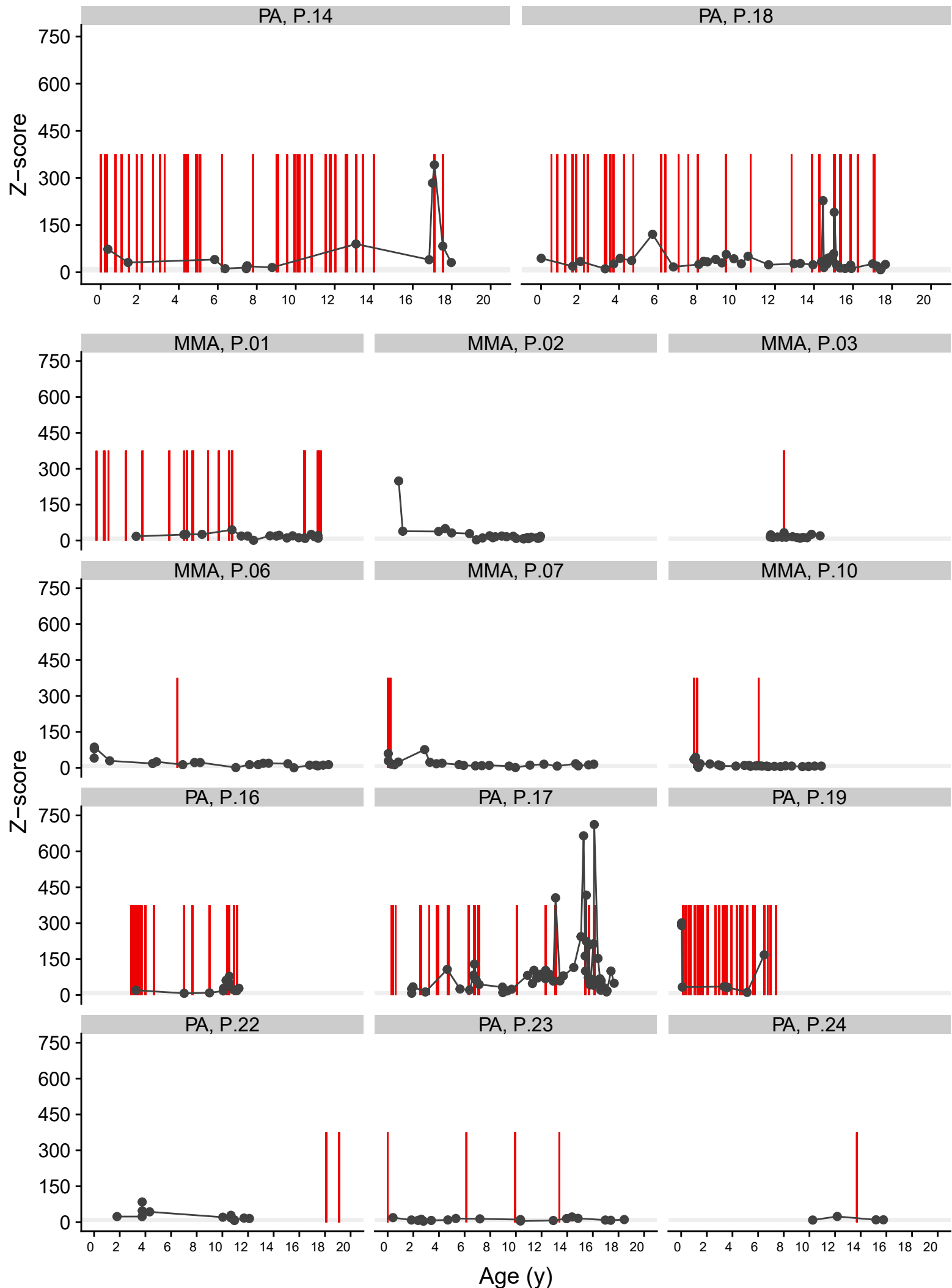


Phenylalanine (PL)



Pyruvate (U)

— Acute metabolic decompensations
— Urine, targeted

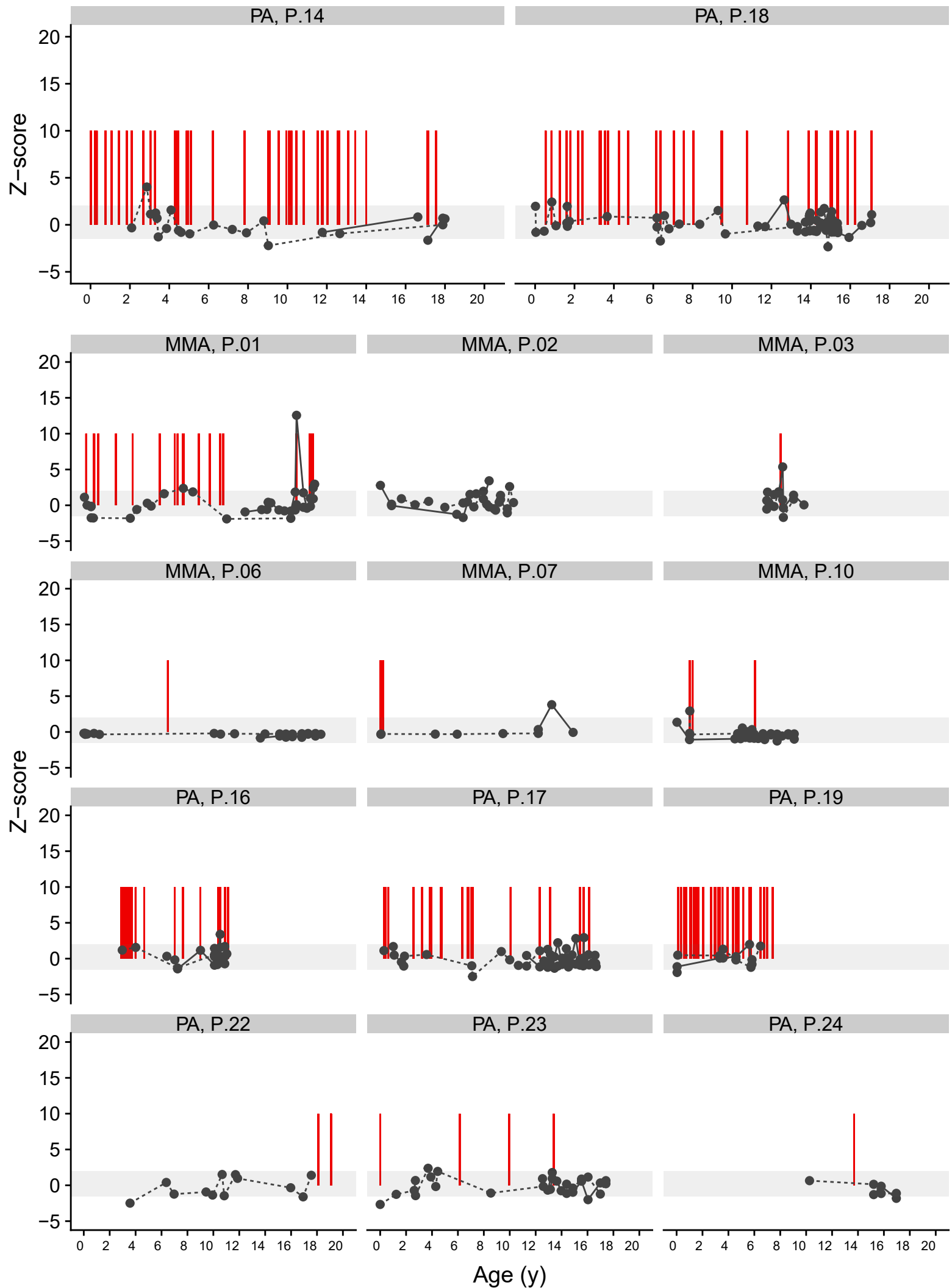


Pyruvate (DI-HRMS)

— Acute metabolic decompensations

— Dried blood spots

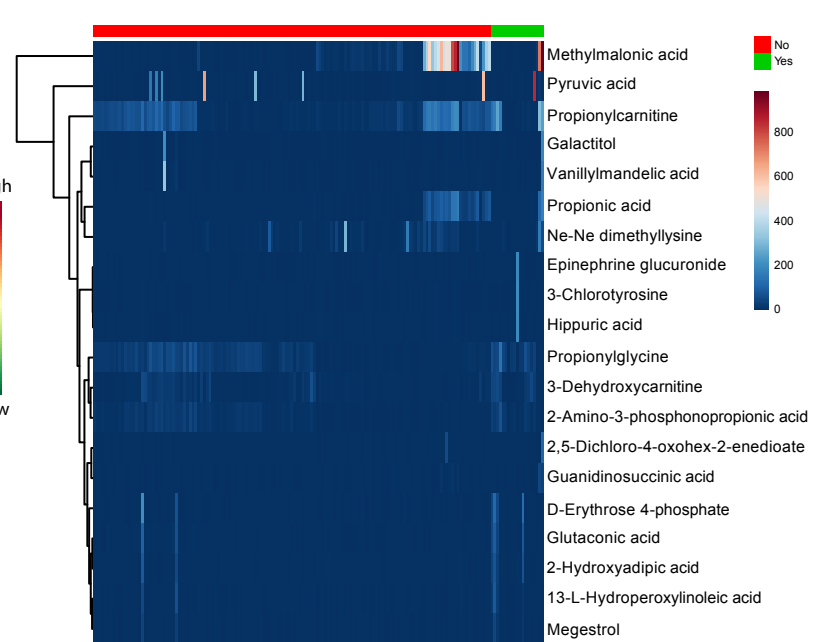
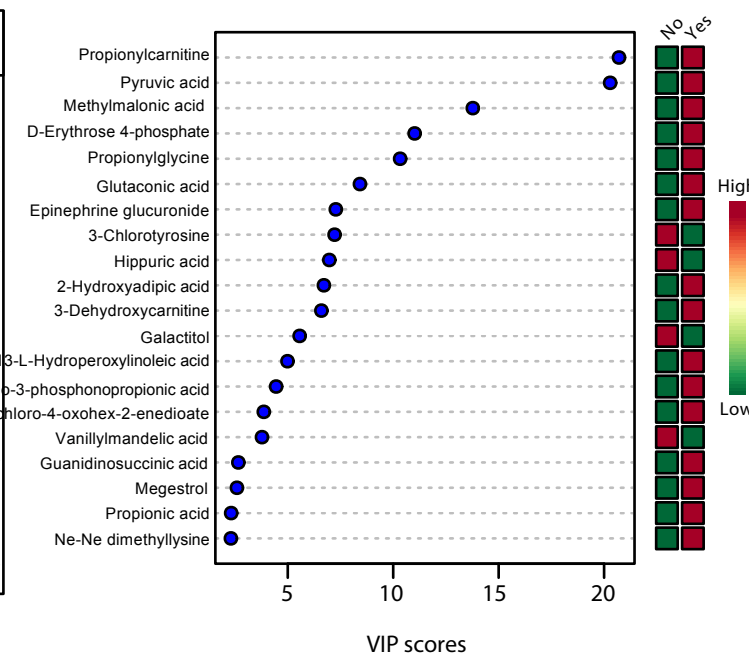
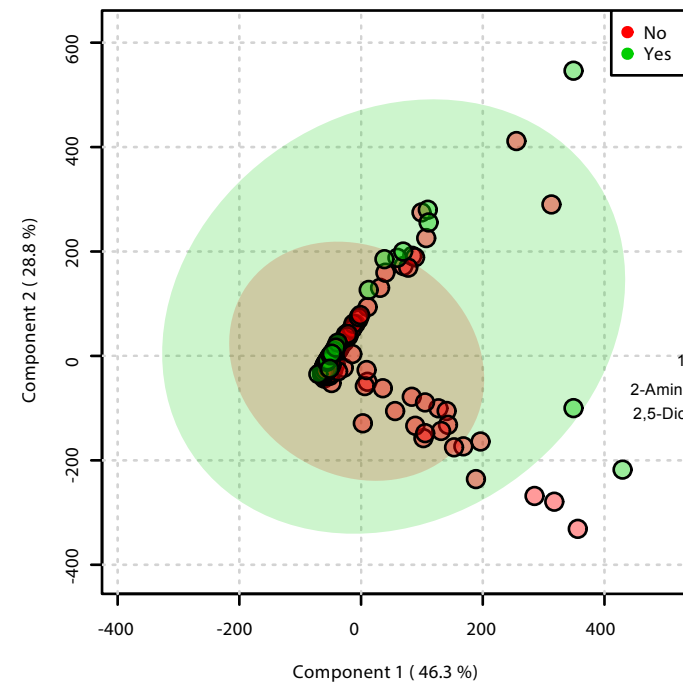
- - - Plasma



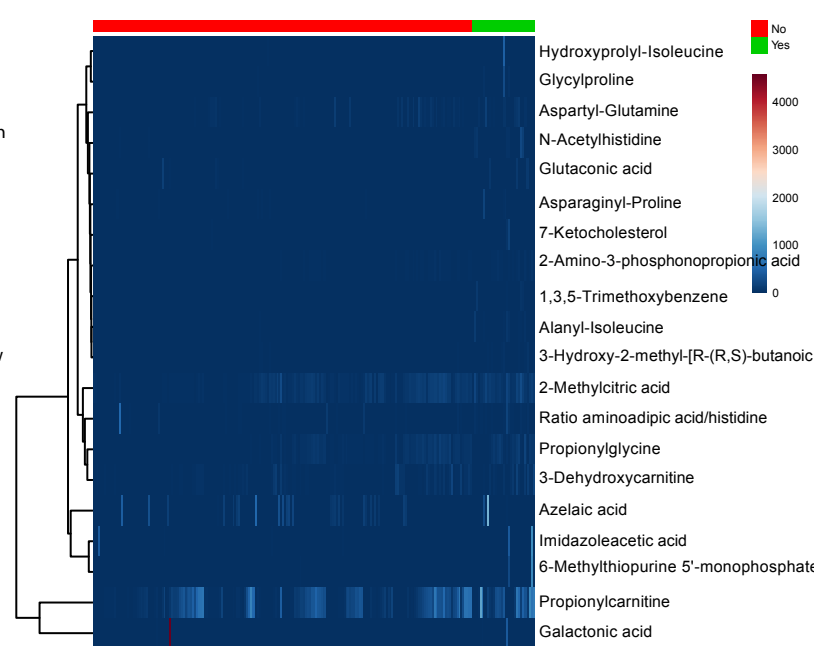
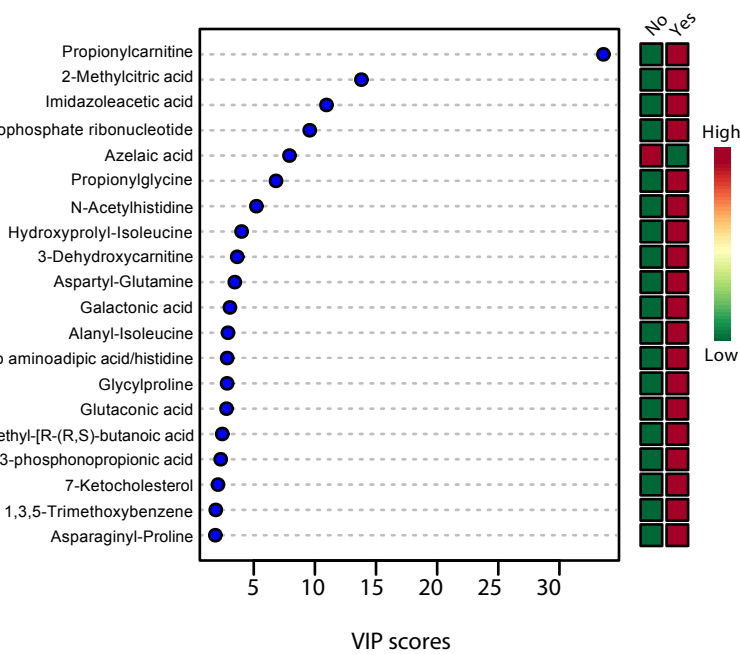
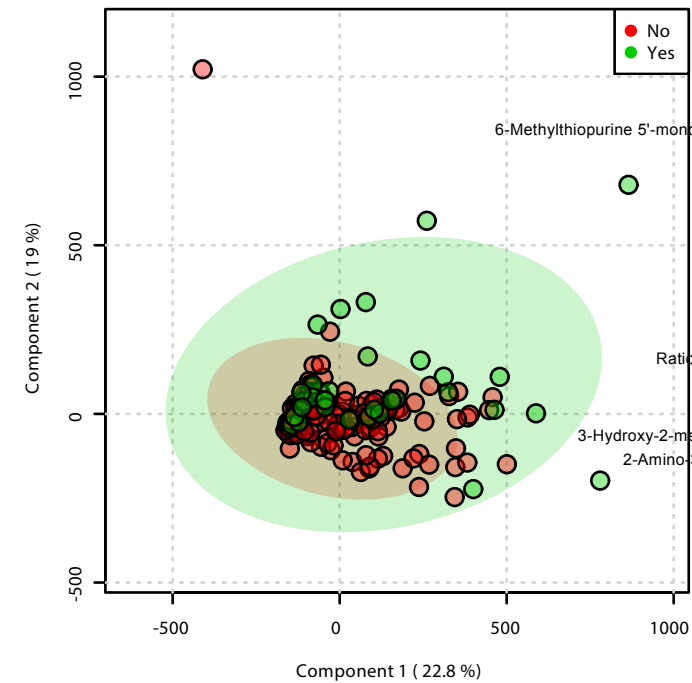
Supplementary Figure 43

PLS-DA, VIP-scores and heatmap for AMD samples versus no AMD samples, for PA and MMA

A) DBS



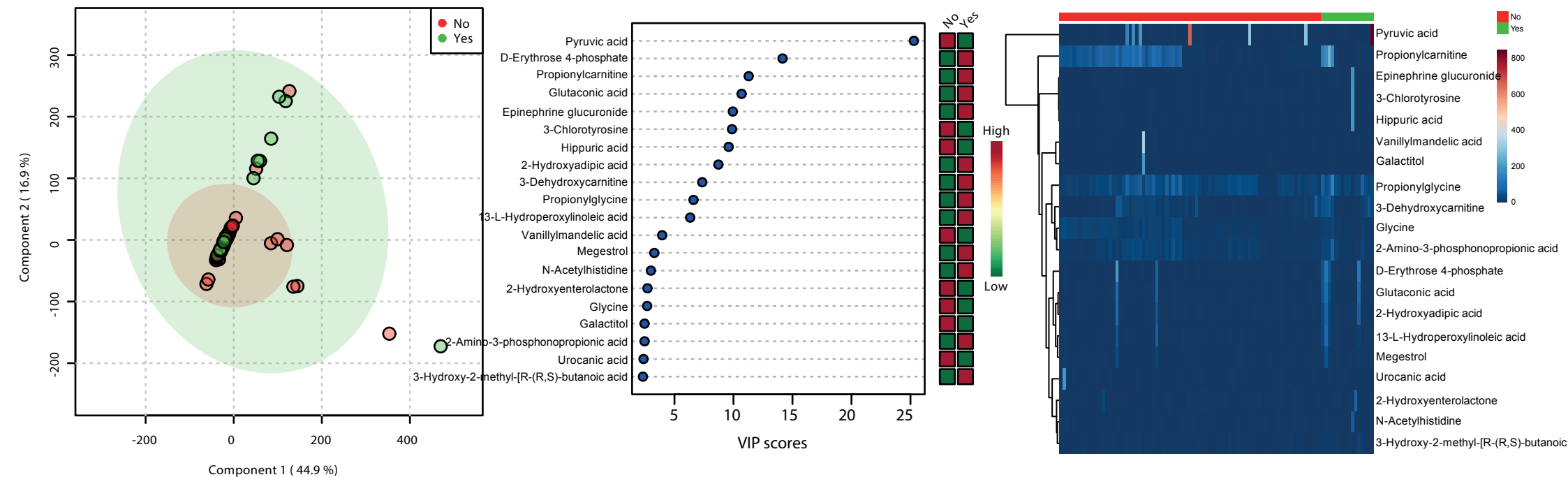
B) Plasma



Supplementary Figure 44

PLS-DA, VIP-scores and heatmap for AMD samples versus no AMD samples, for PA only

A) DBS



B) Plasma

