

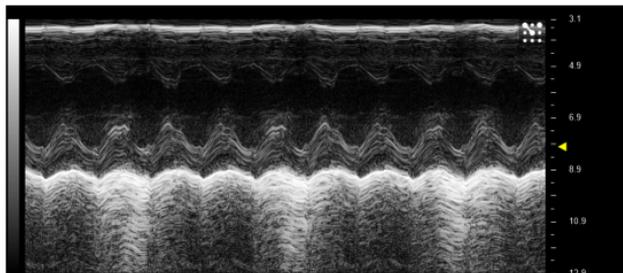
# Suppl. Figure 1:

B-MODE

M-MODE

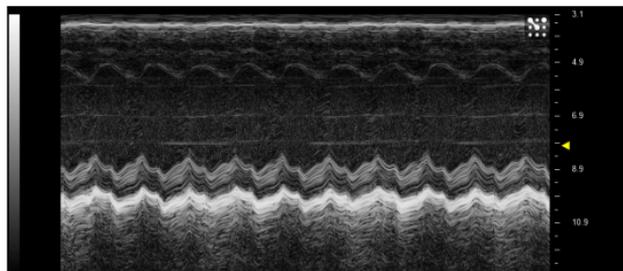
**A**

Sham\_Young



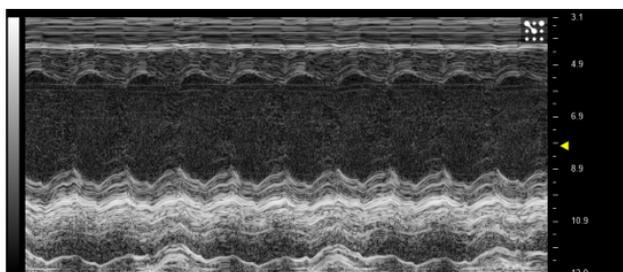
**B**

Sham\_Old



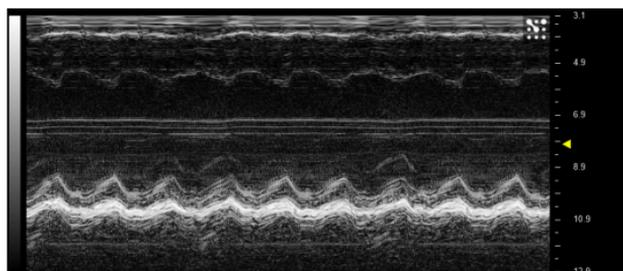
**C**

I/R\_Young



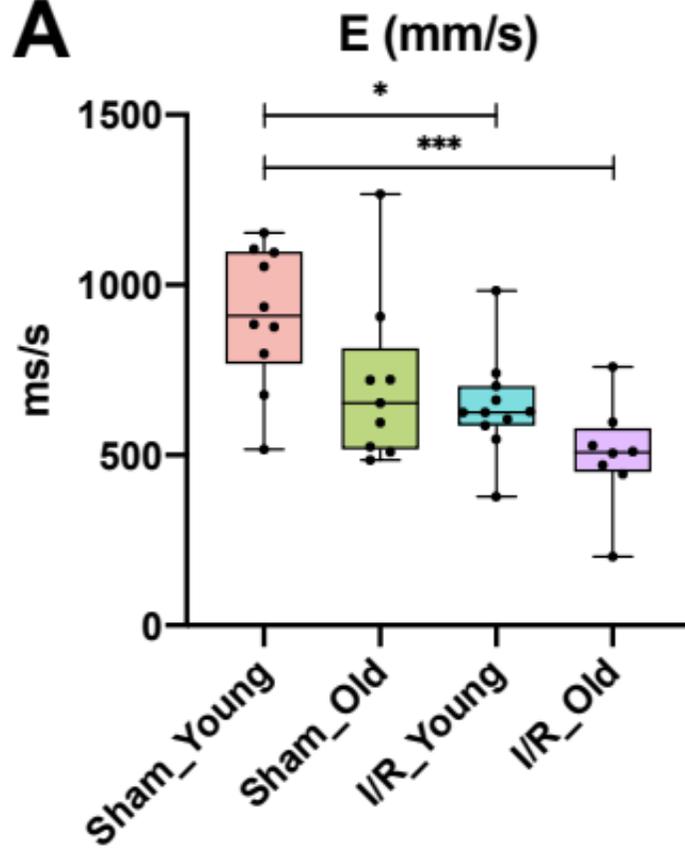
**D**

I/R\_Old

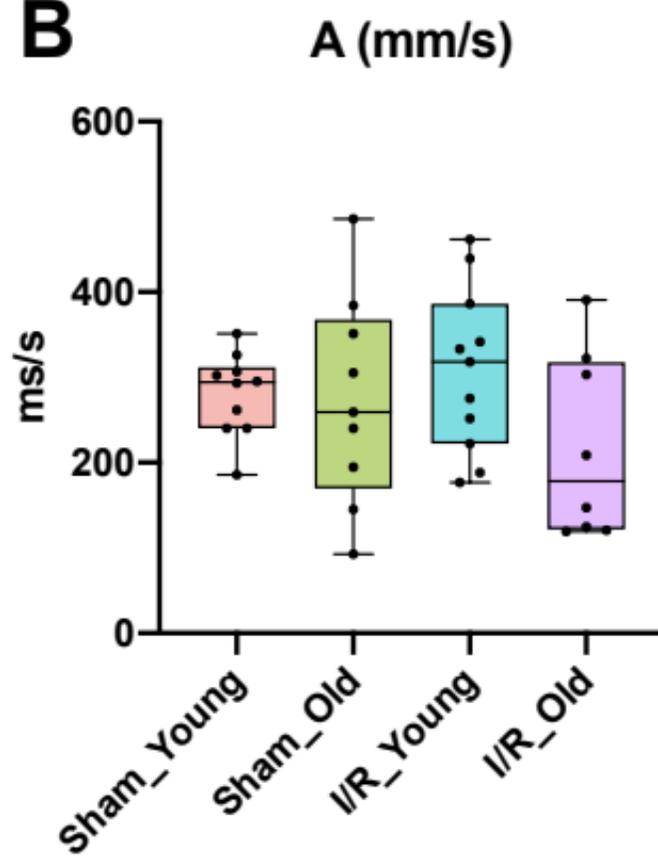


# Suppl. Figure 2:

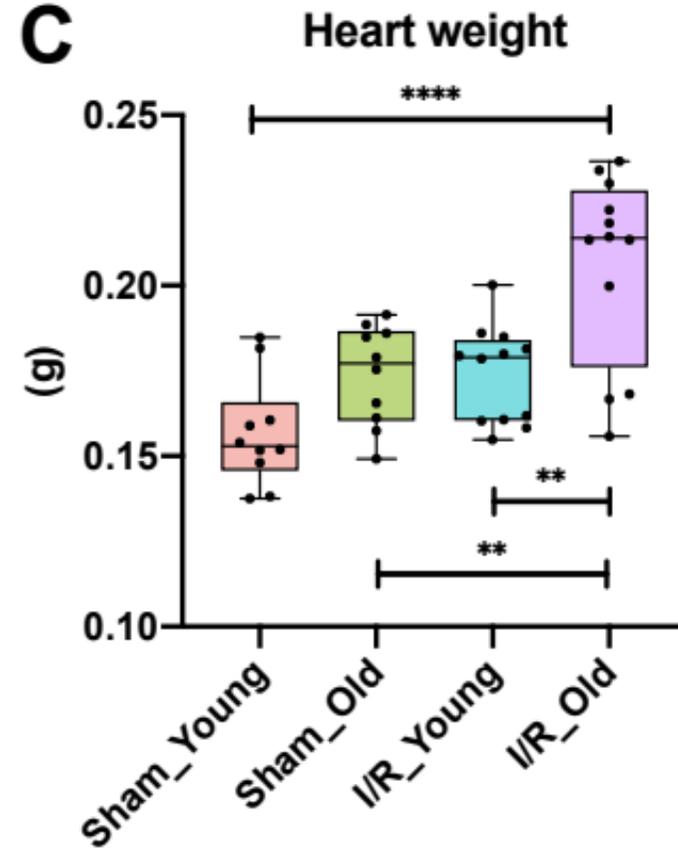
## A



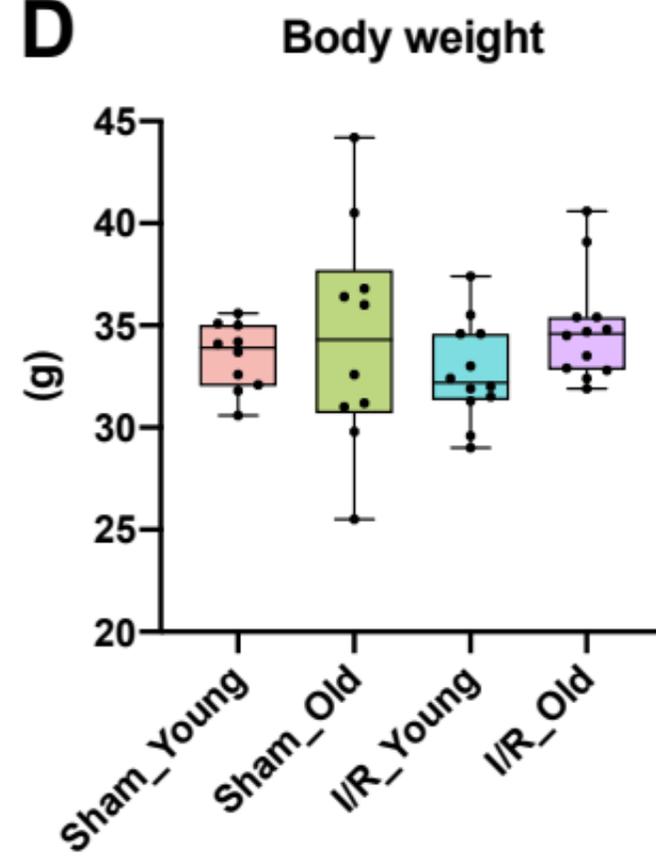
## B



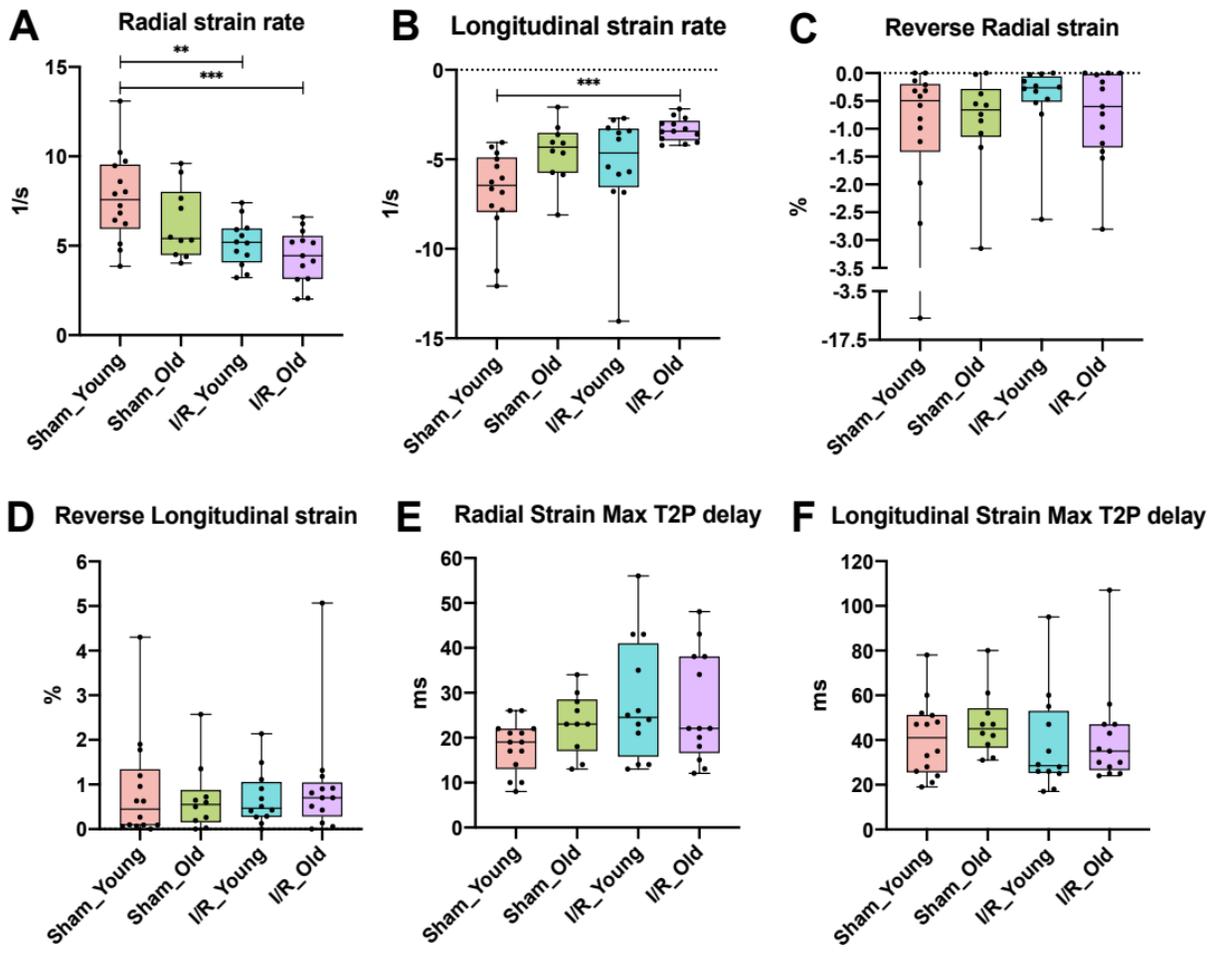
## C



## D



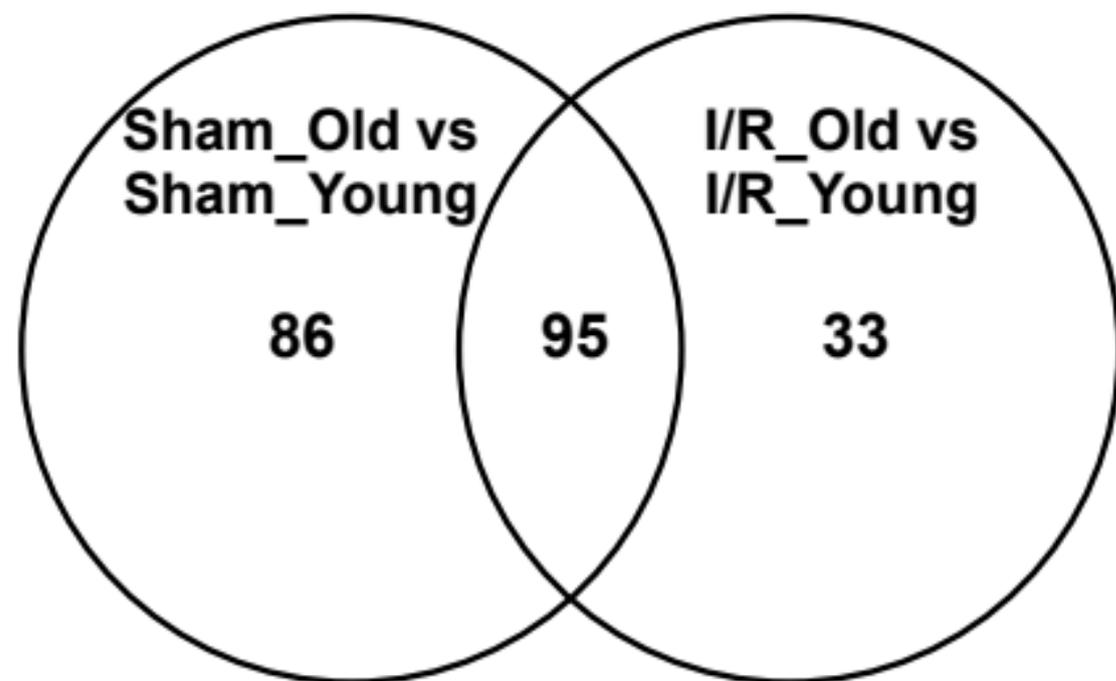
# Suppl. Figure 3:



# Suppl. Figure 4:

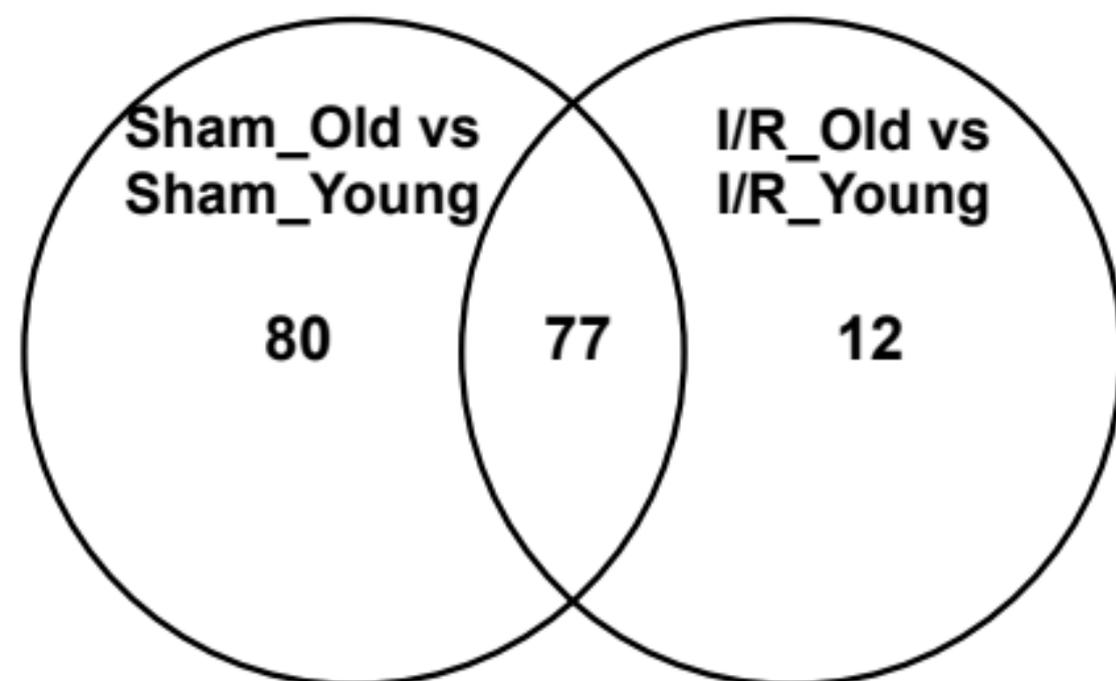
**A**

Positive mode



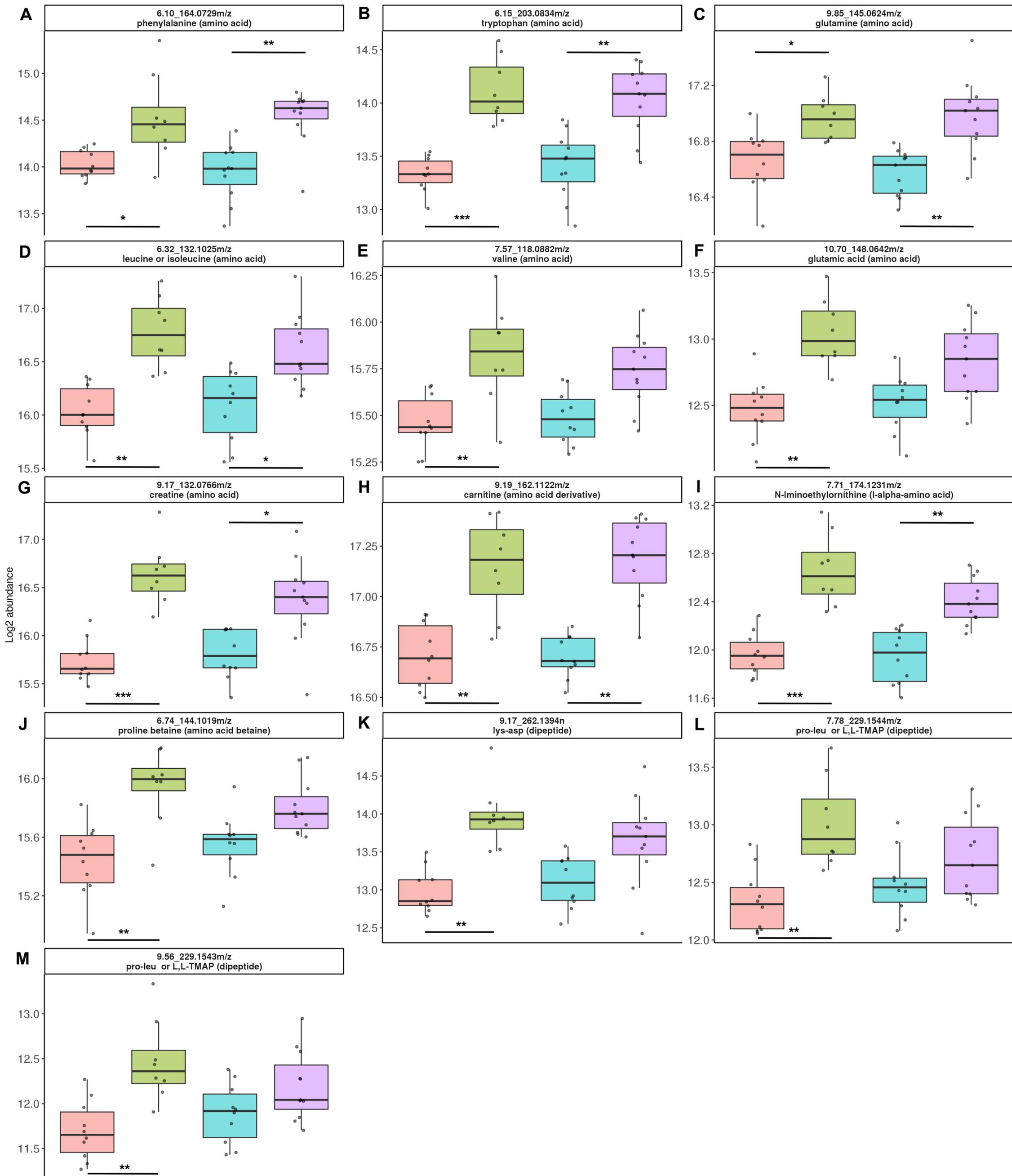
**B**

Negative mode



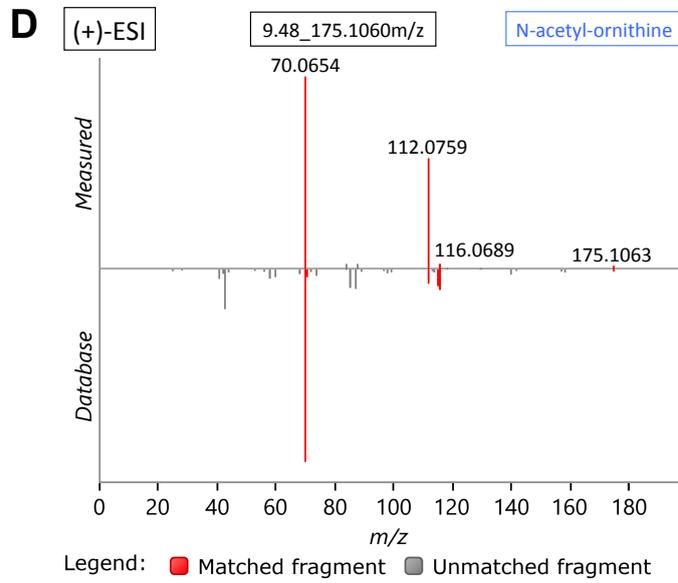
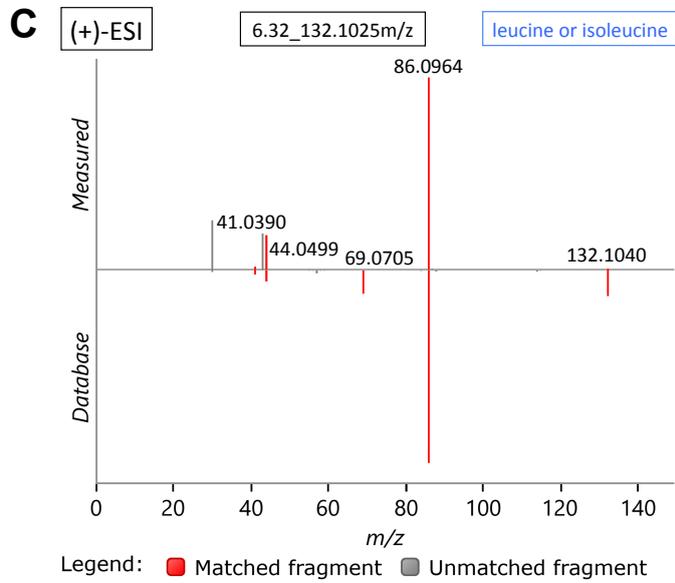
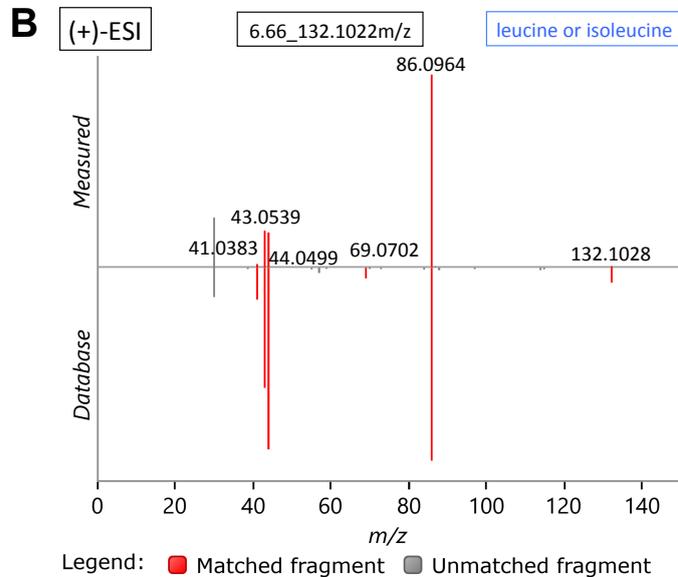
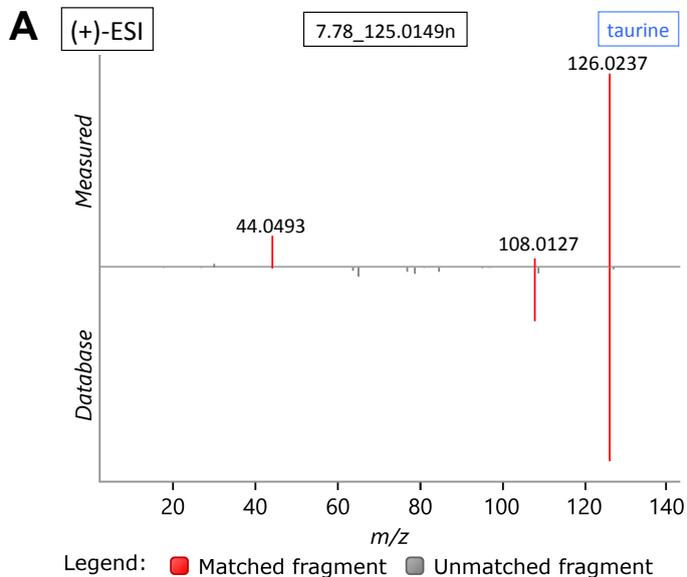
# Suppl. Figure 5:

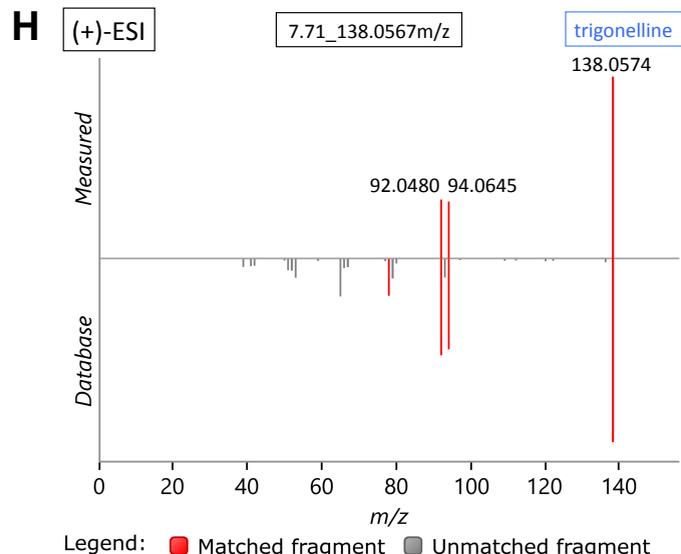
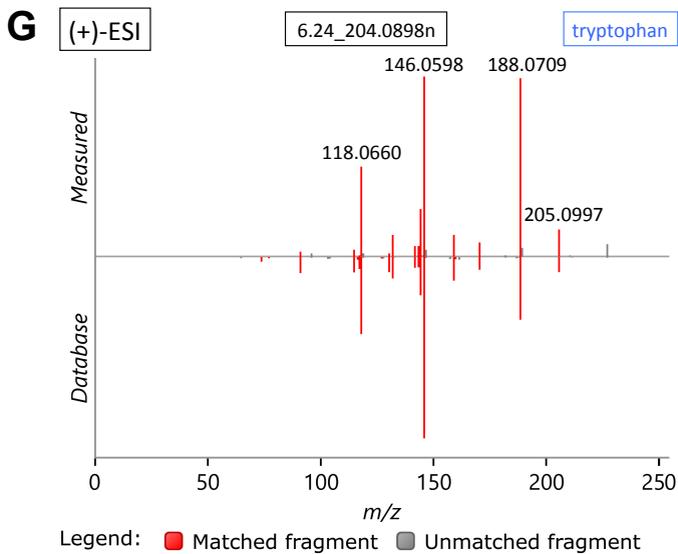
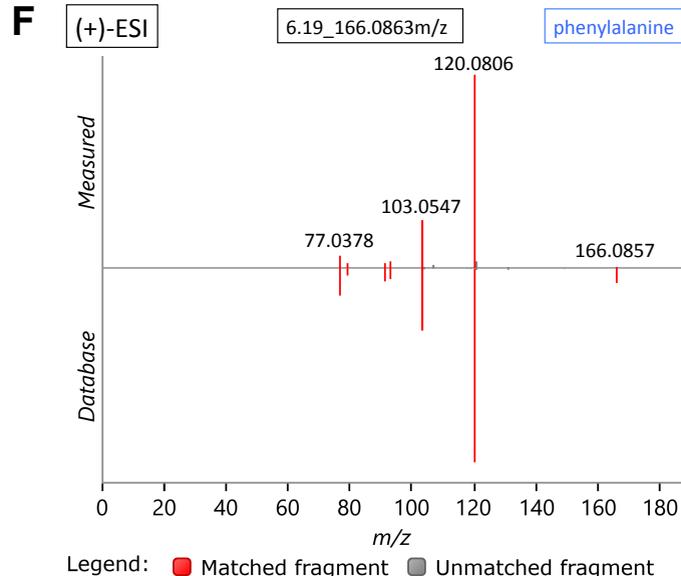
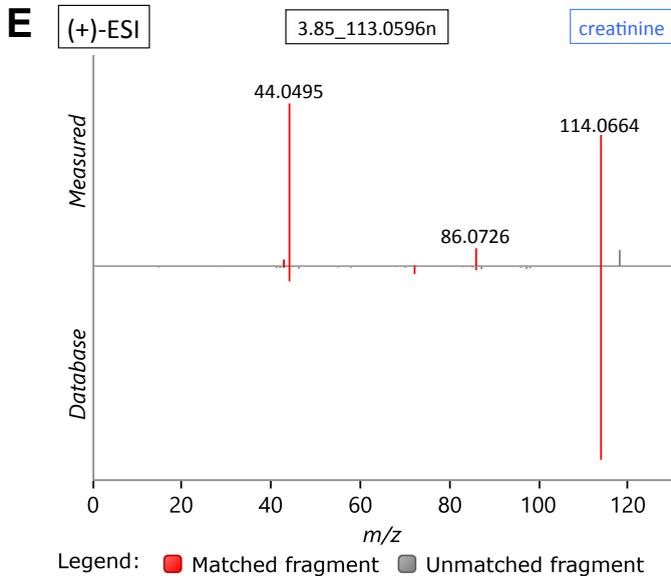
Sham\_Young Sham\_Old I/R\_Young I/R\_Old

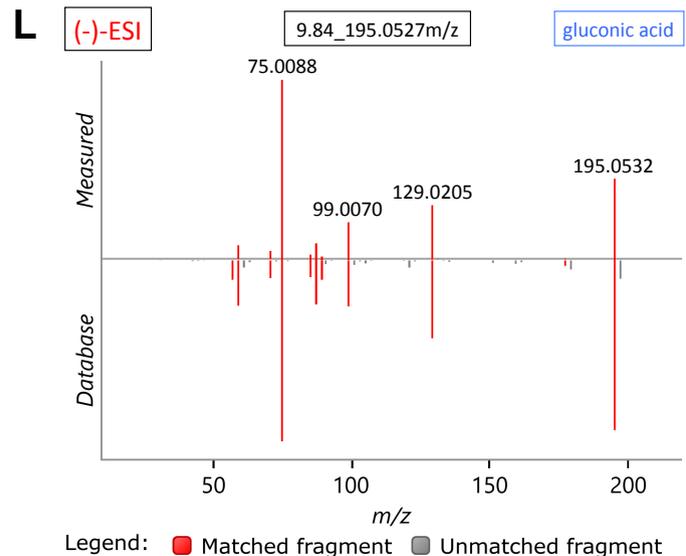
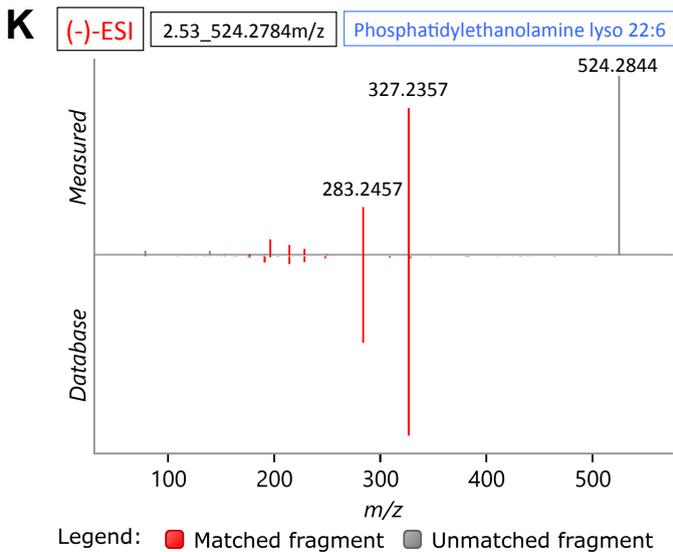
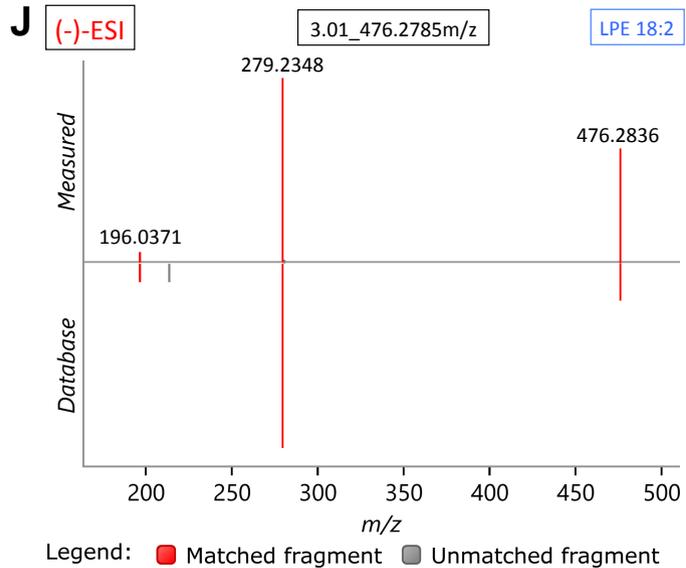
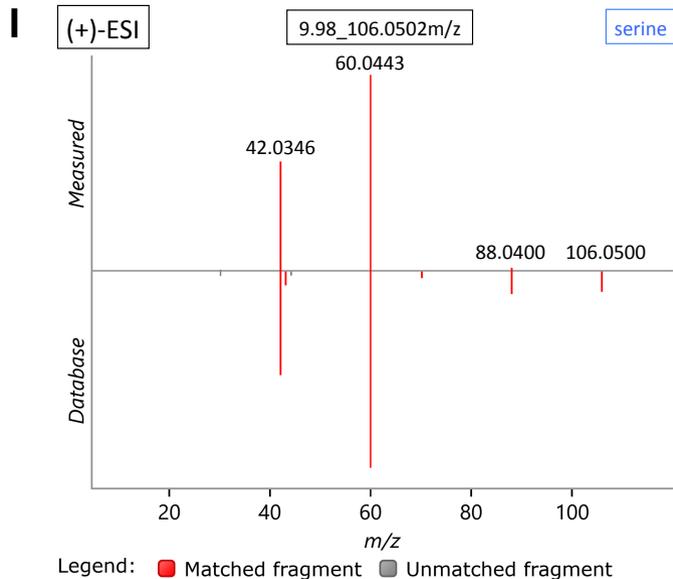


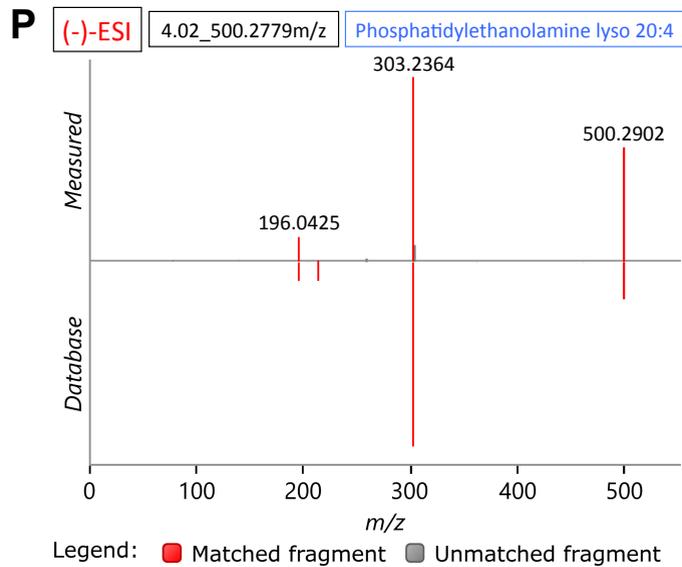
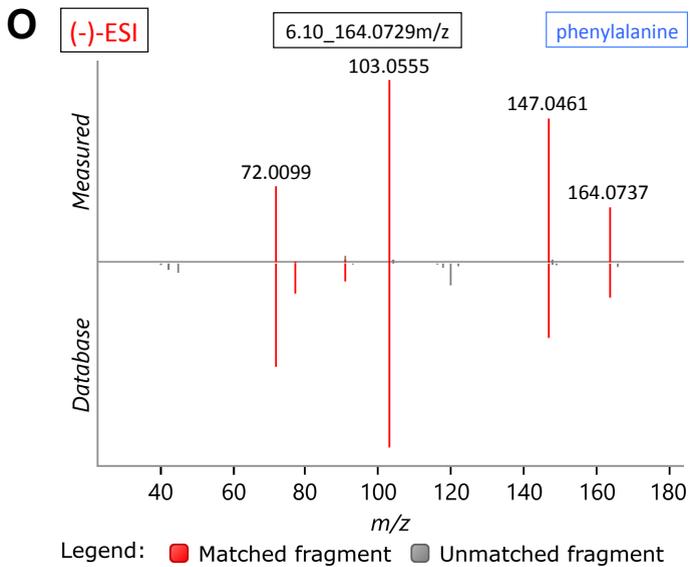
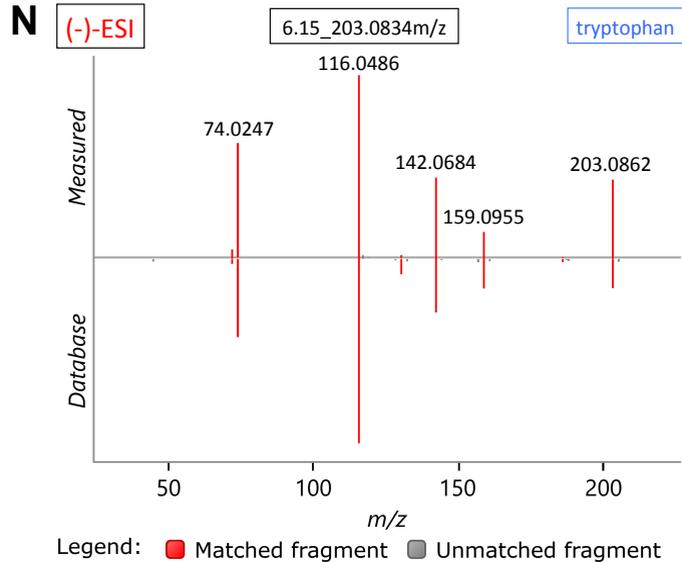
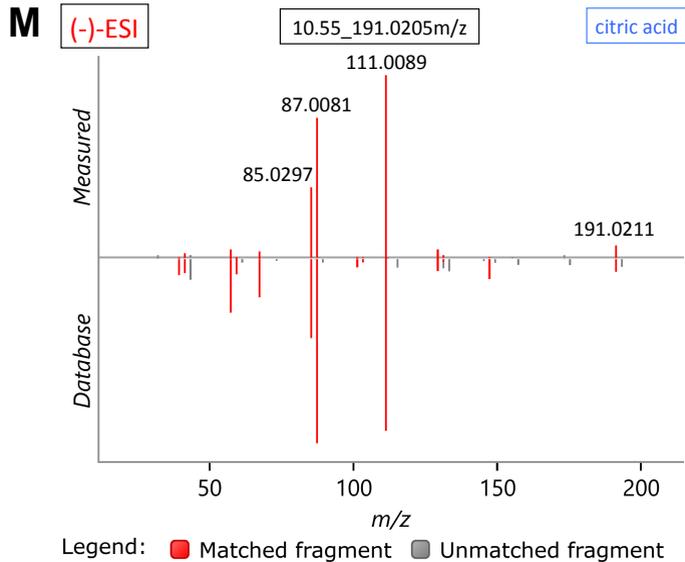


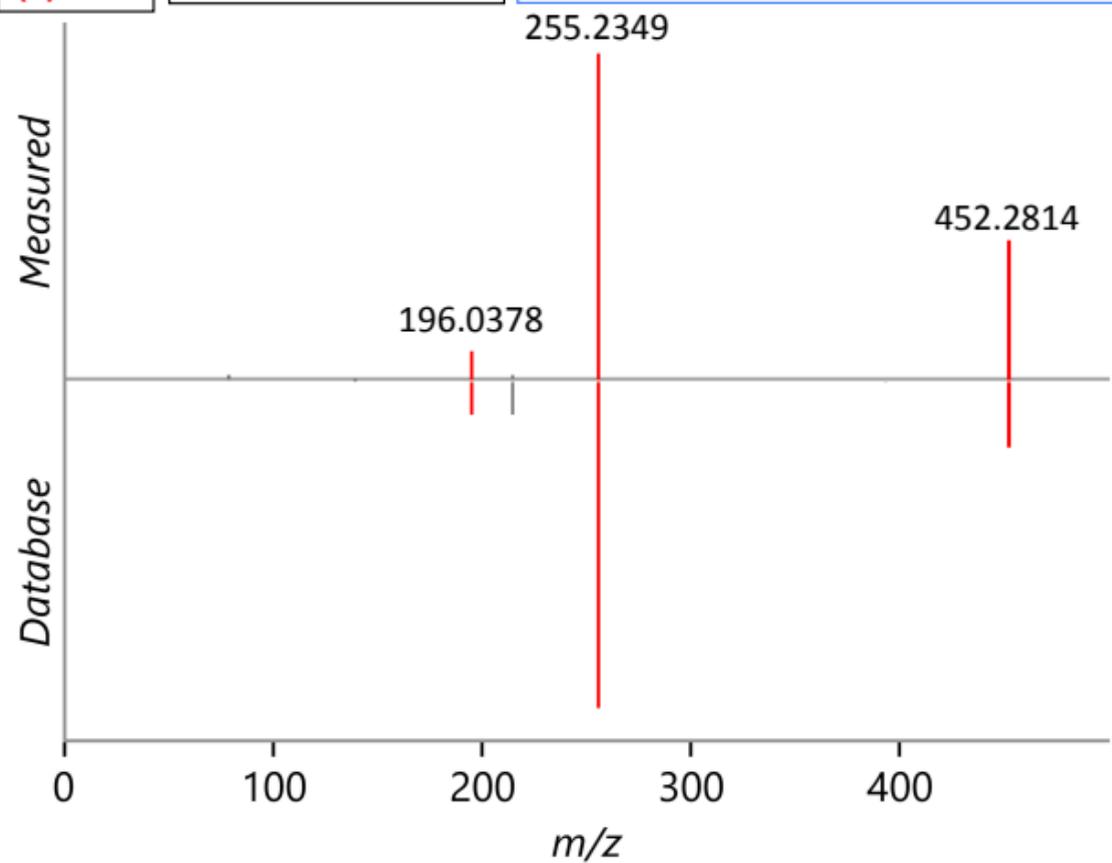
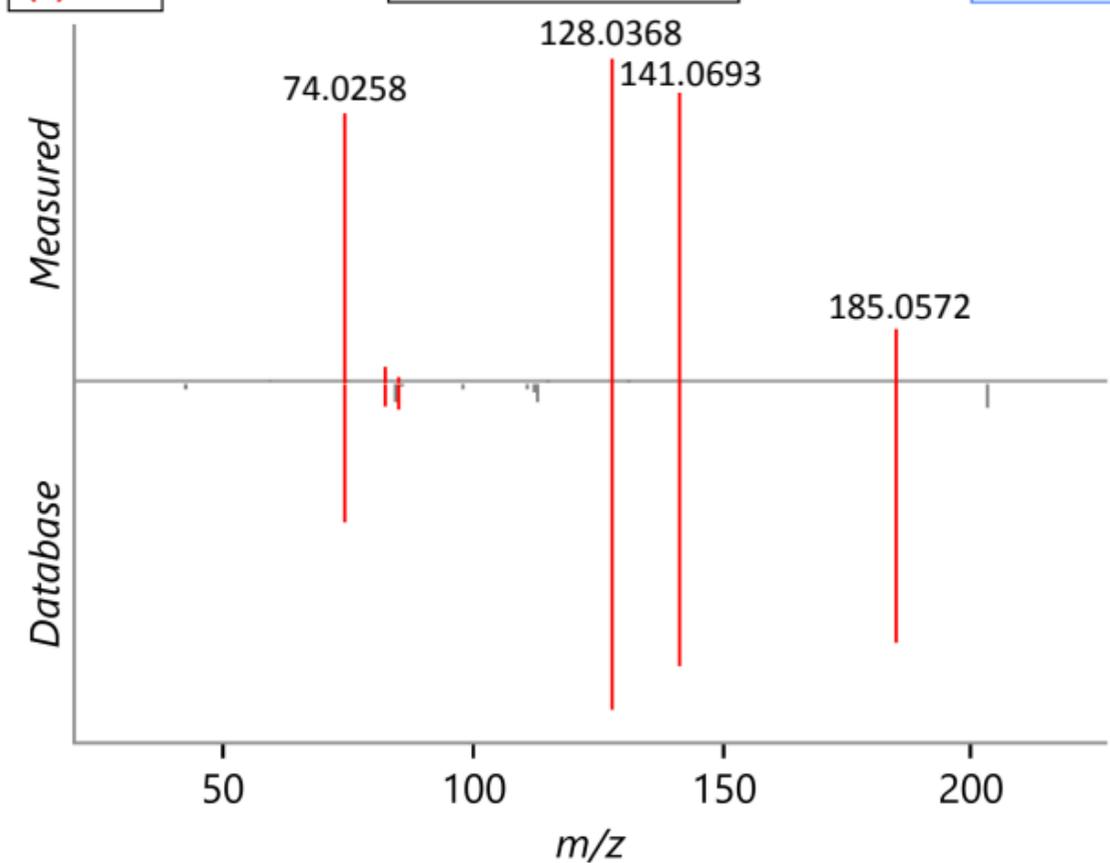
# Suppl. Figure 7:





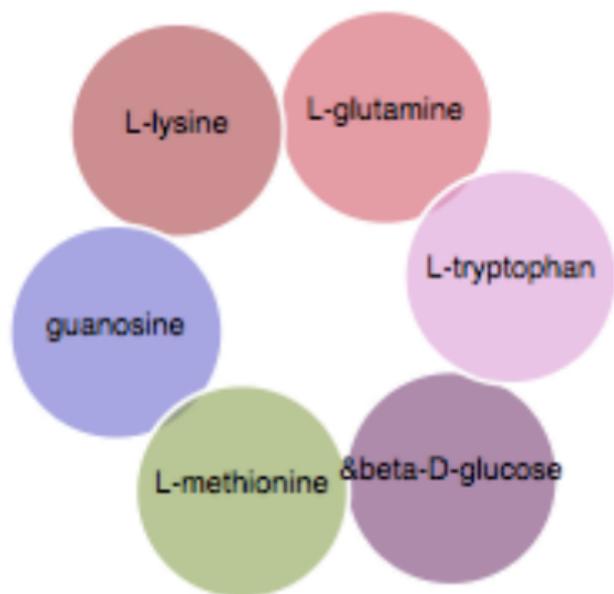




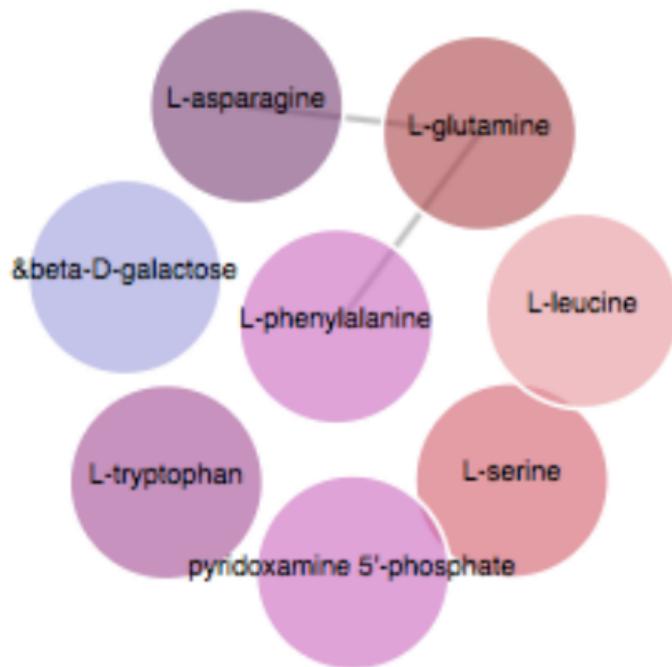
**Q****(-)-ESI** 3.08\_452.2784m/z **Phosphatidylethanolamine lyso 16:0**Legend: ■ Matched fragment ■ Unmatched fragment**R****(-)-ESI** 10.24\_203.0624m/z **Glu Gly**Legend: ■ Matched fragment ■ Unmatched fragment

## Suppl. Figure 8:

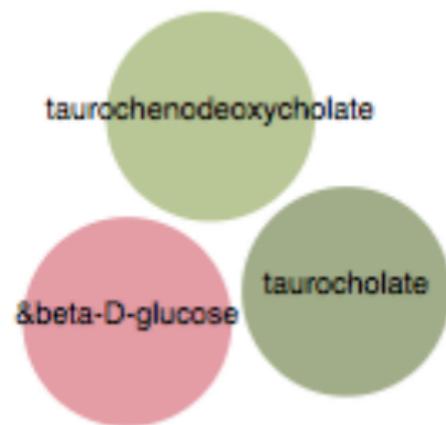
**A** Negative mode:  
Sham\_Old\_vs\_Sham\_Young



**B** Positive mode  
I/R\_Old\_vs\_I/R\_Young

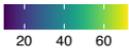


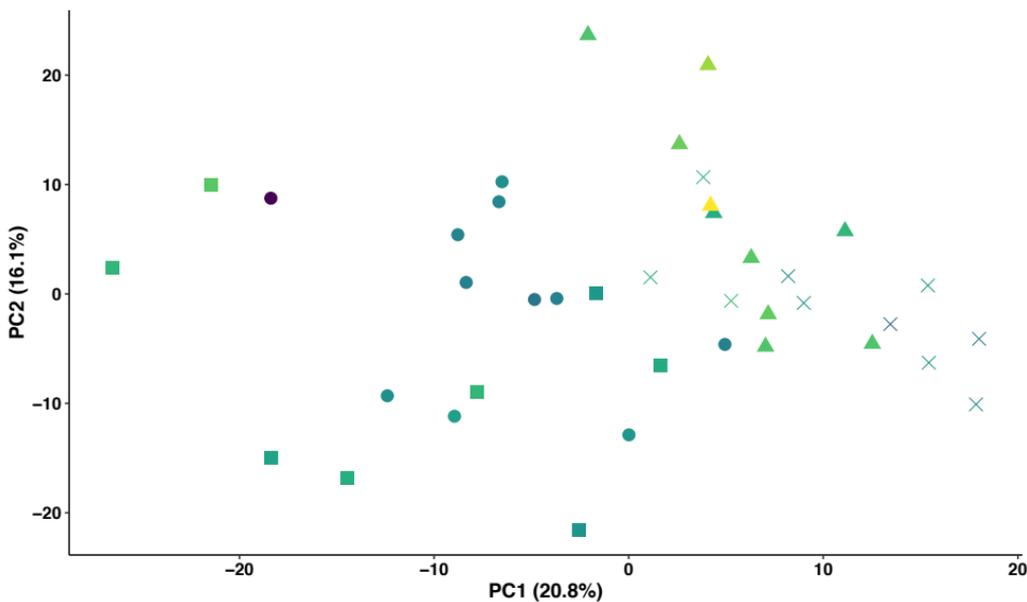
**C** Negative  
I/R\_Old\_vs\_I/R\_Young



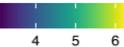
# Suppl. Figure 9:

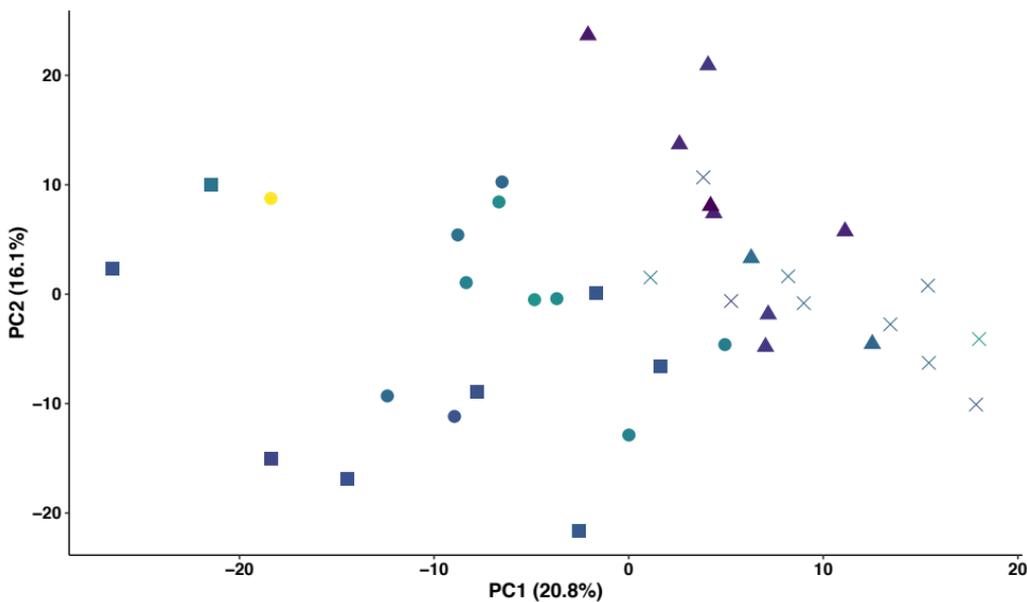
## A positive Ejection.fraction

group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old Ejection.fraction 



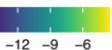
## B positive LVIDd

LVIDd  group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old

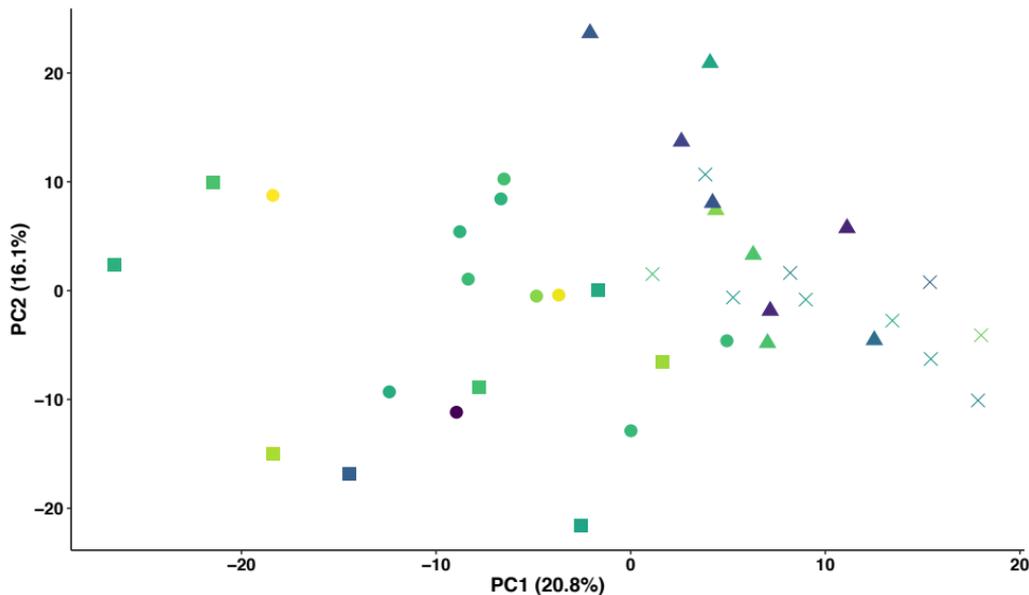


**C** positive Reverse.Radial.Strain.Rate

Reverse.Radial.Strain.Rate



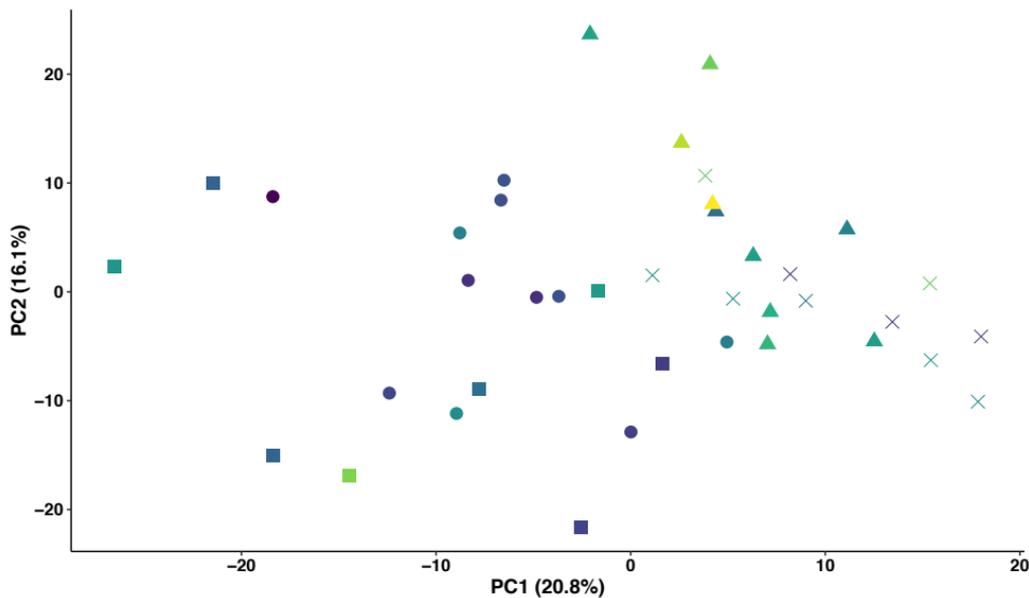
group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old

**D** positive Reverse.Longitudinal.Strain.Rate

Reverse.Longitudinal.Strain.Rate

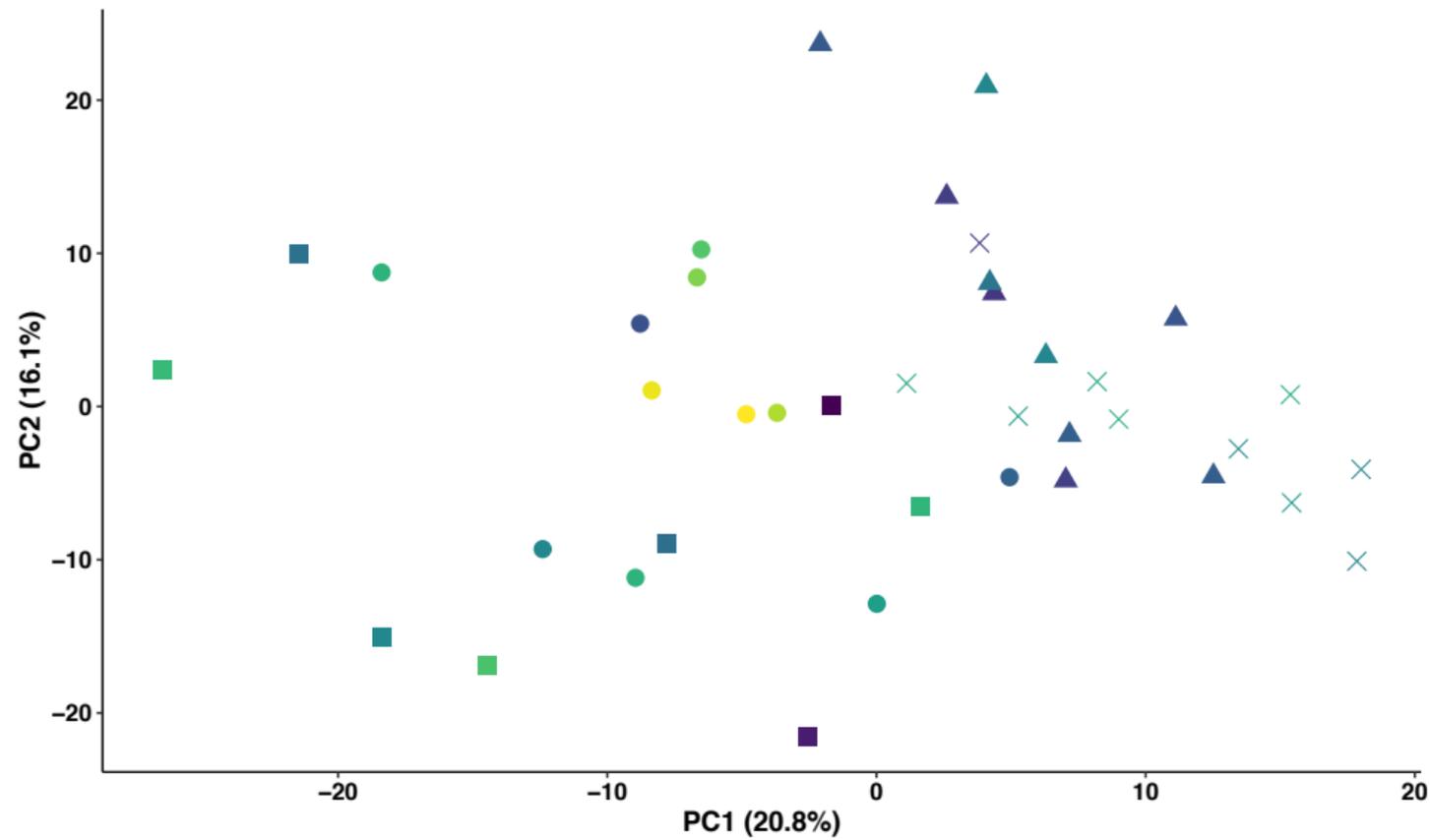
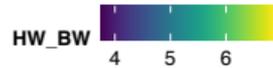


group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old



# E positive HW\_BW

group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old

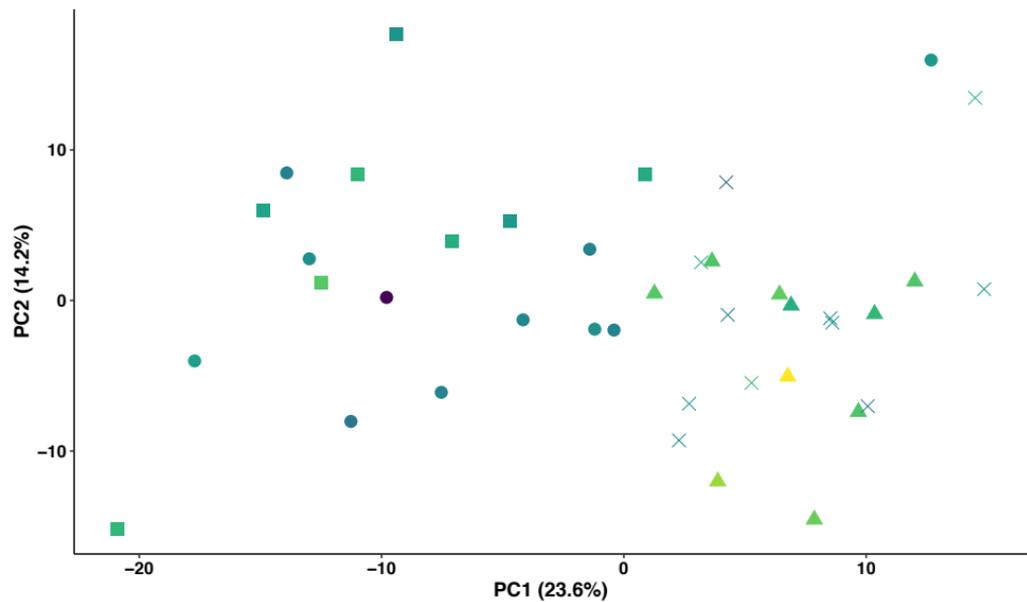


# Suppl. Figure 10:

## A negative Ejection.fraction

group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old

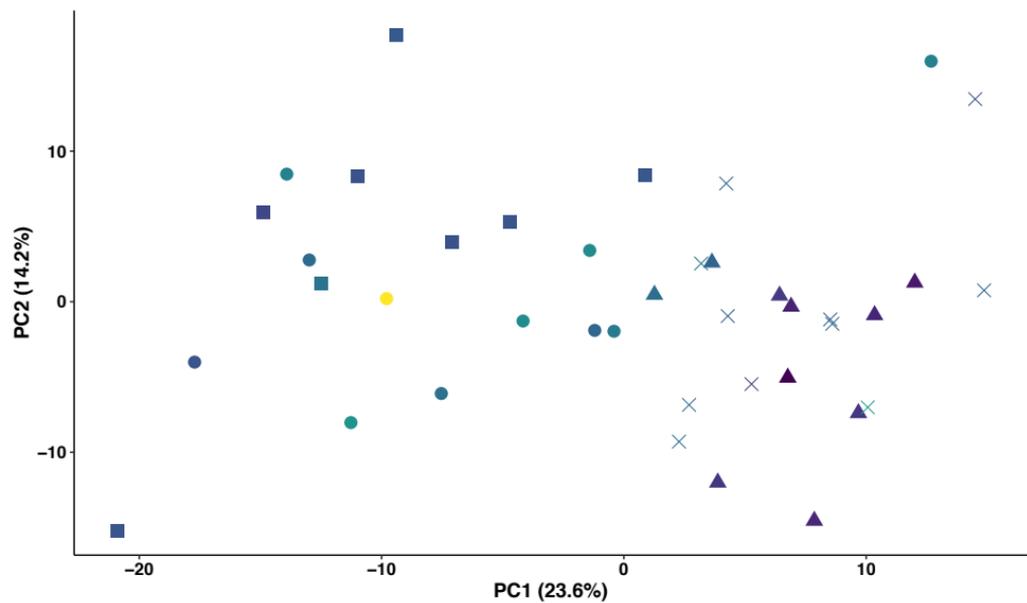
Ejection.fraction  20 40 60



## B negative LVIDd

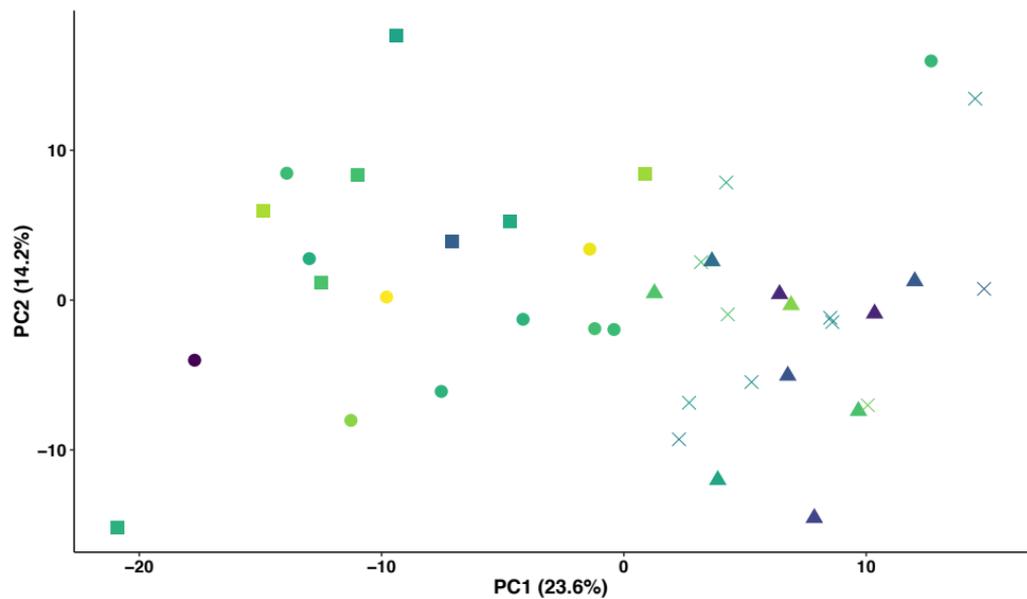
LVIDd  4 5 6

group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old

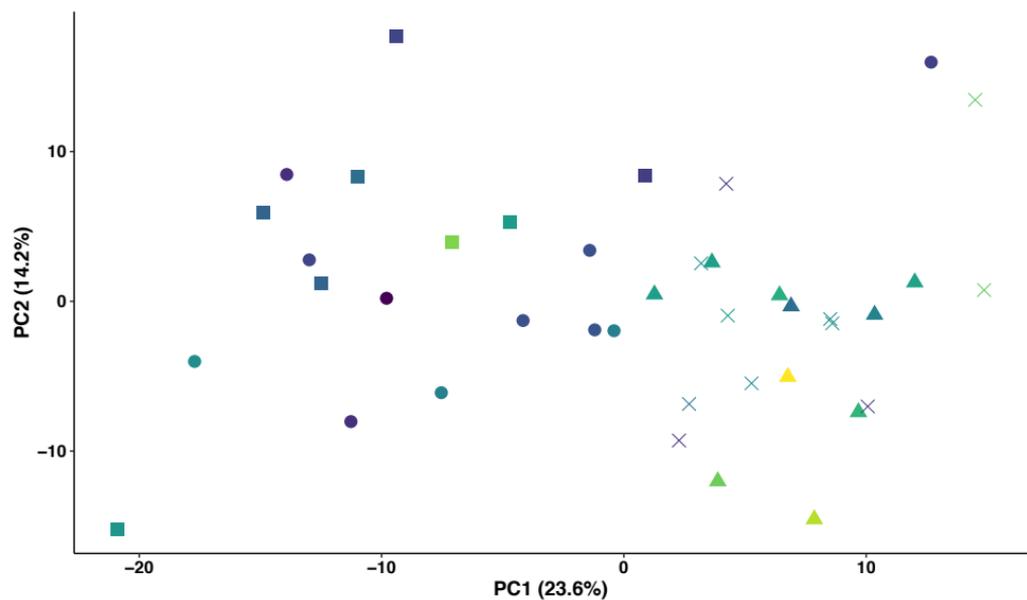


**C** negative Reverse.Radial.Strain.RateReverse.Radial.Strain.Rate  
-12 -9 -6

group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old

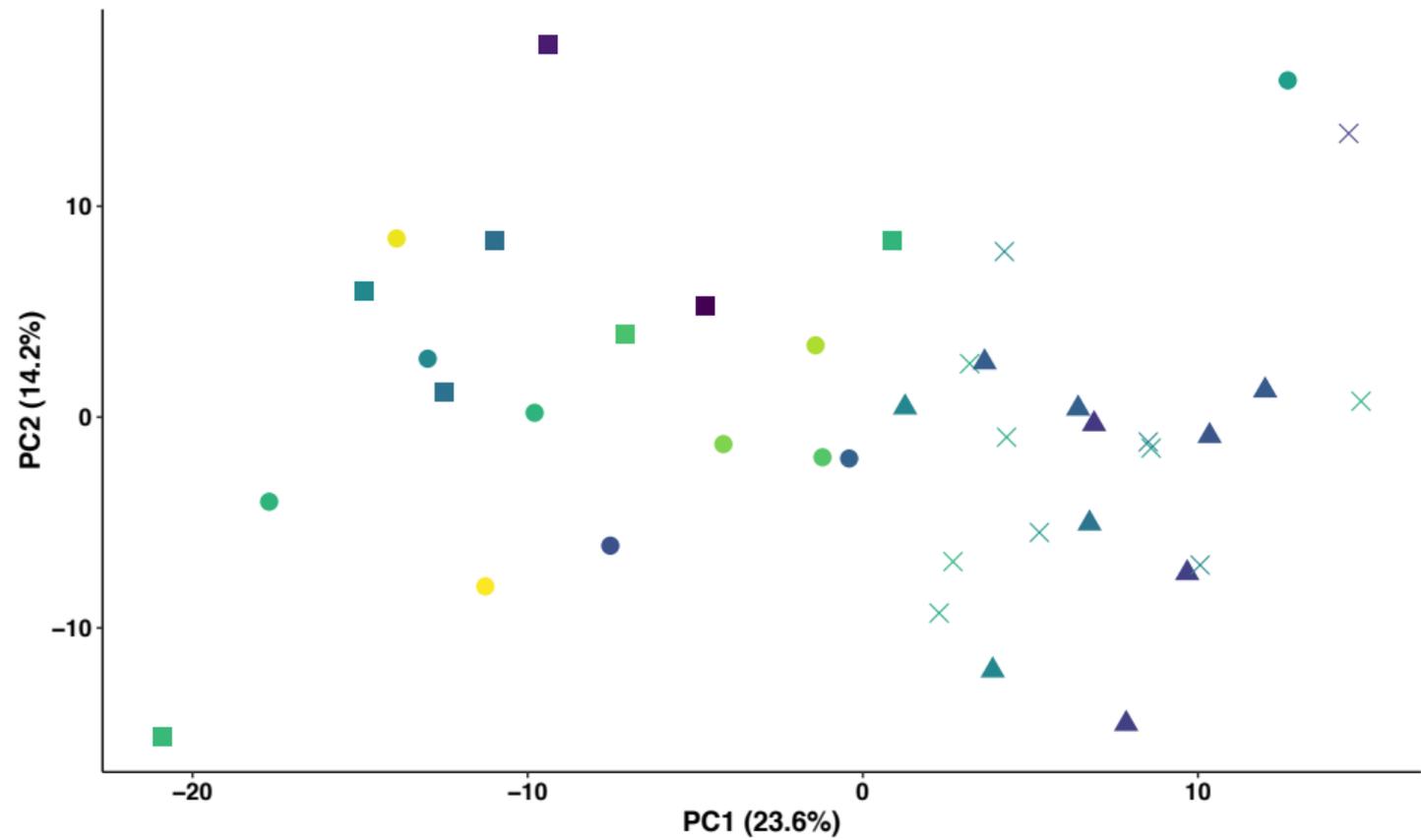
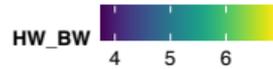
**D** negative Reverse.Longitudinal.Strain.RateReverse.Longitudinal.Strain.Rate  
4 6 8 10

group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old



# E negative HW\_BW

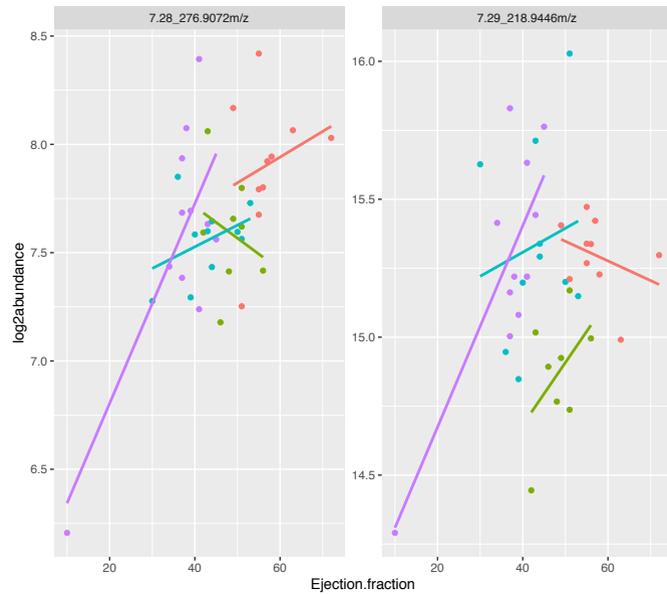
group ▲ Sham\_Young ■ Sham\_Old × I/R\_Young ● I/R\_Old



# Suppl. Figure 11:

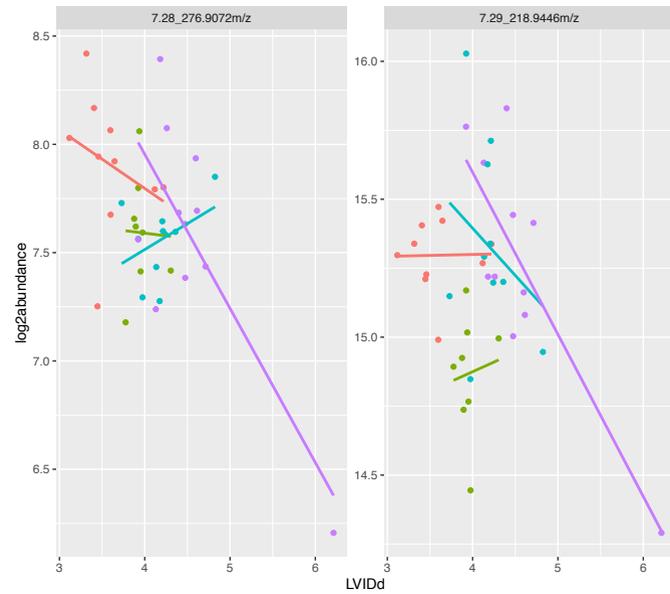
## A Ejection fraction, I/R\_Old group

group Sham\_Young Sham\_Old I/R\_Young I/R\_Old



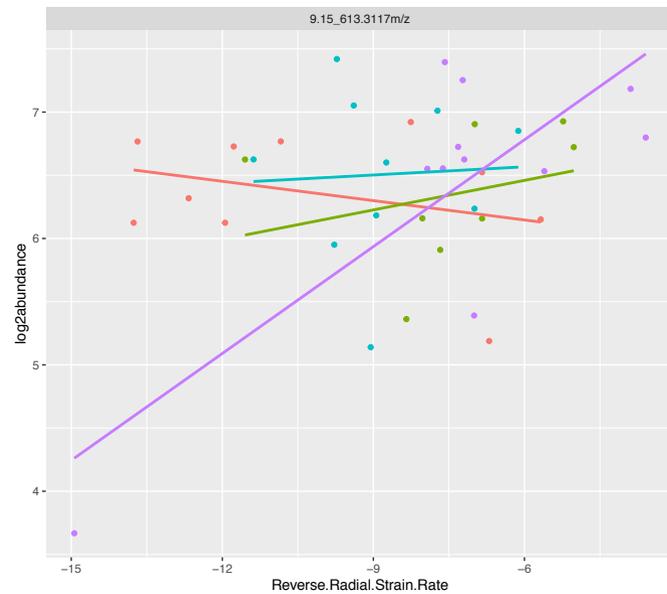
## B LVIDd, I/R\_Old group

group Sham\_Young Sham\_Old I/R\_Young I/R\_Old



## C Reverse Radial Strain Rate, I/R\_Old group

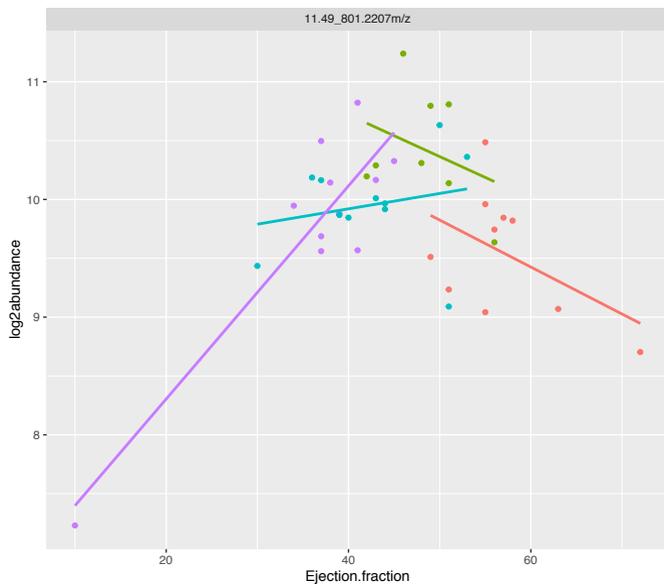
group Sham\_Young Sham\_Old I/R\_Young I/R\_Old



# Suppl. Figure 12:

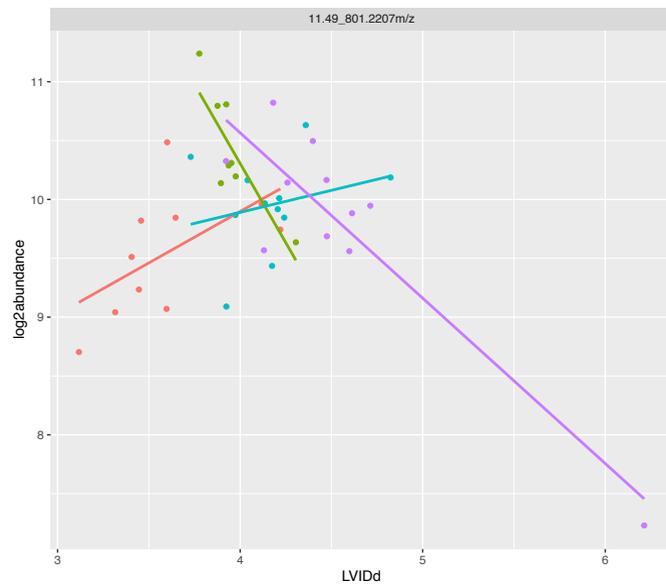
## A Ejection fraction, I/R\_Old group

group Sham\_Young Sham\_Old I/R\_Young I/R\_Old



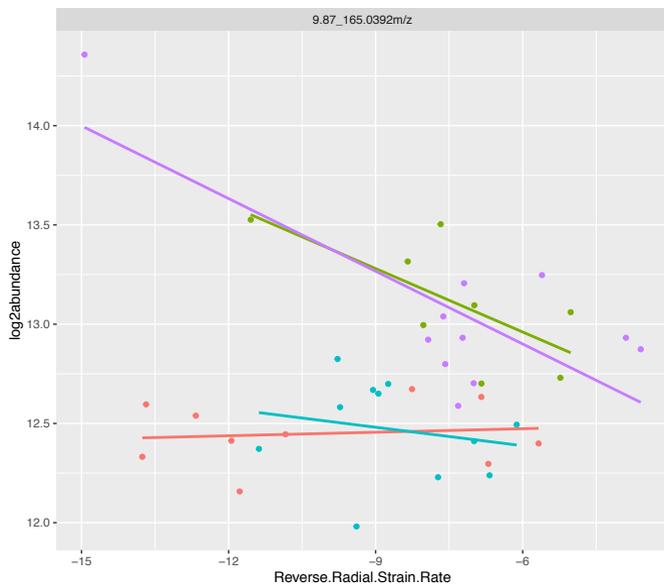
## B LVIDd, I/R\_Old group

group Sham\_Young Sham\_Old I/R\_Young I/R\_Old



## C Reverse Radial Strain Rate, I/R\_Old group

group Sham\_Young Sham\_Old I/R\_Young I/R\_Old



## D Reverse Longitudinal Strain Rate, Sham\_Young

group Sham\_Young Sham\_Old I/R\_Young I/R\_Old

