

# POMA (2.0.0): Exploratory Data Analysis Report

Username

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# 1 Know your data

- Your data have **57** samples, **31** features and **2** groups, that are ‘Controls’, ‘DMD’. Furthermore, **1** covariates have been found in your data. These covariates are ‘steroids’.
- A **3.45%** of values in your data are NAs (missing values). Variables that have NA values are ‘aspartic\_acid (5)’, ‘citrulline (28)’, ‘glutamic\_acid (15)’, ‘methionine (3)’, ‘x3\_hba (1)’, ‘a\_kg (1)’, ‘citrate (2)’, ‘fumarate (1)’, ‘lactate (2)’, ‘malate (1)’, ‘pyruvate (1)’, ‘succinate (1)’.
- A **0%** of values in your data are zeros.
- Removed from the exploratory data analysis **0** features that only have zeros.
- Removed from the exploratory data analysis **0** features that have zero variance.

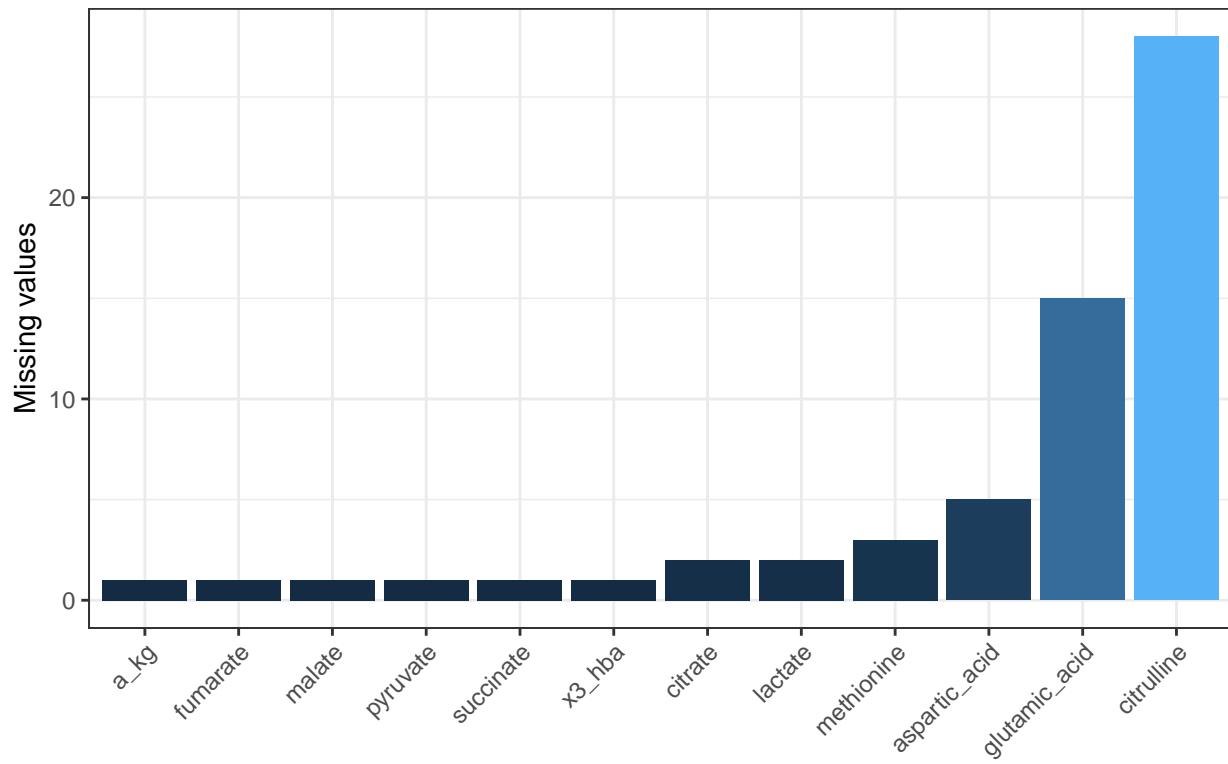
## 1.1 Summary Table

Samples	Features	Covariates
57	31	1

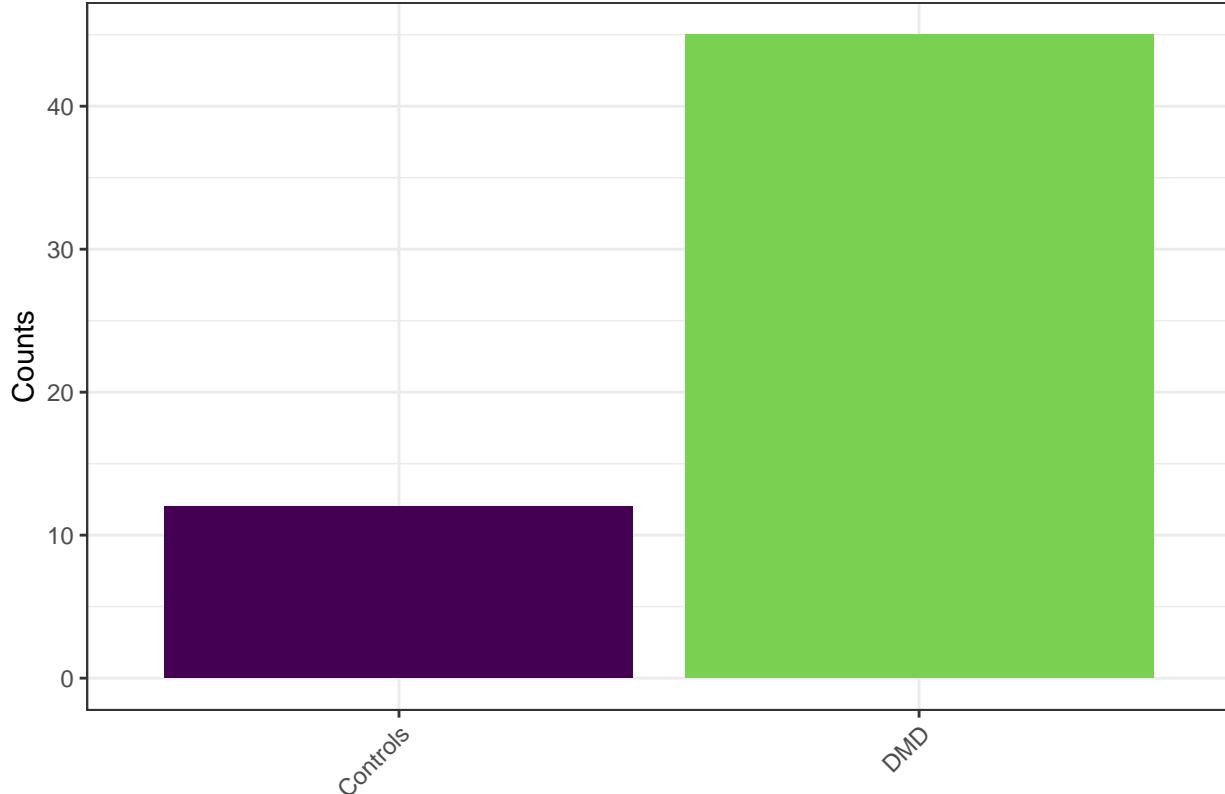
Counts_Zero	Percent_Zero
0	0 %

Counts_NA	Percent_NA
61	3.45 %

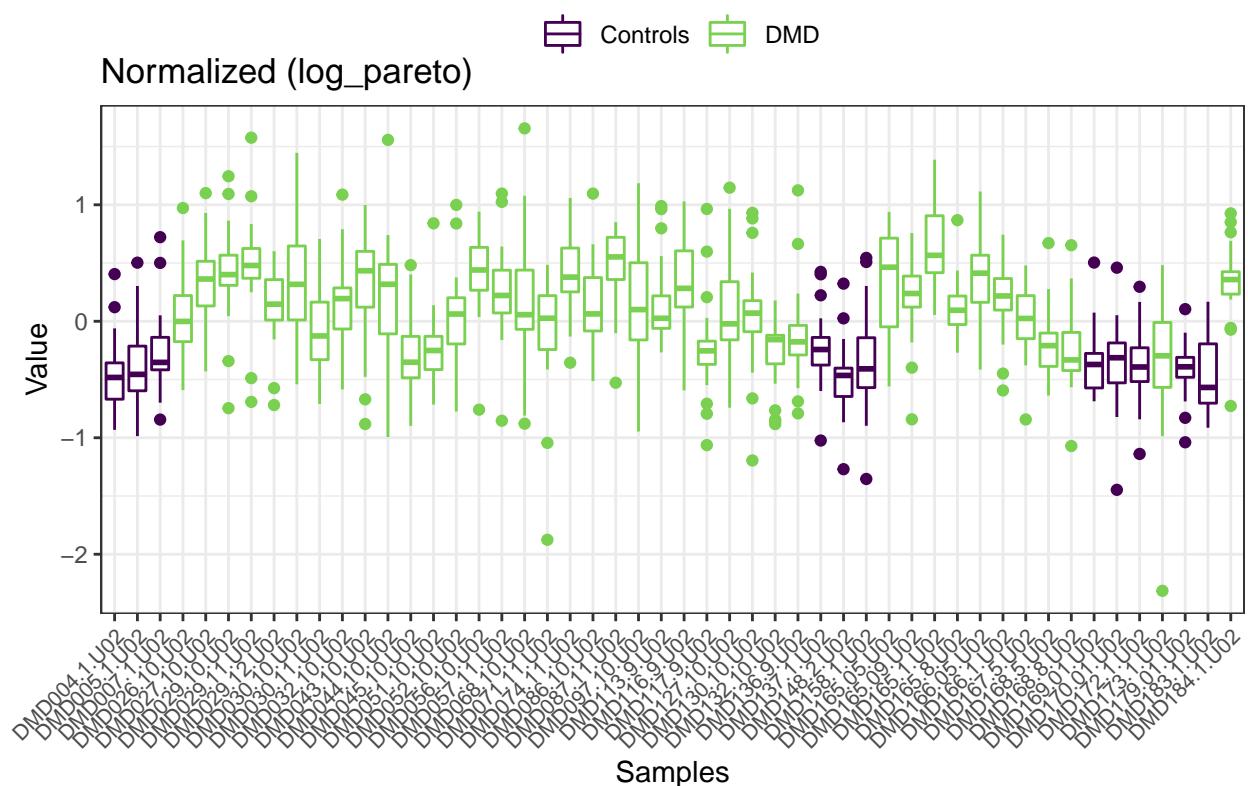
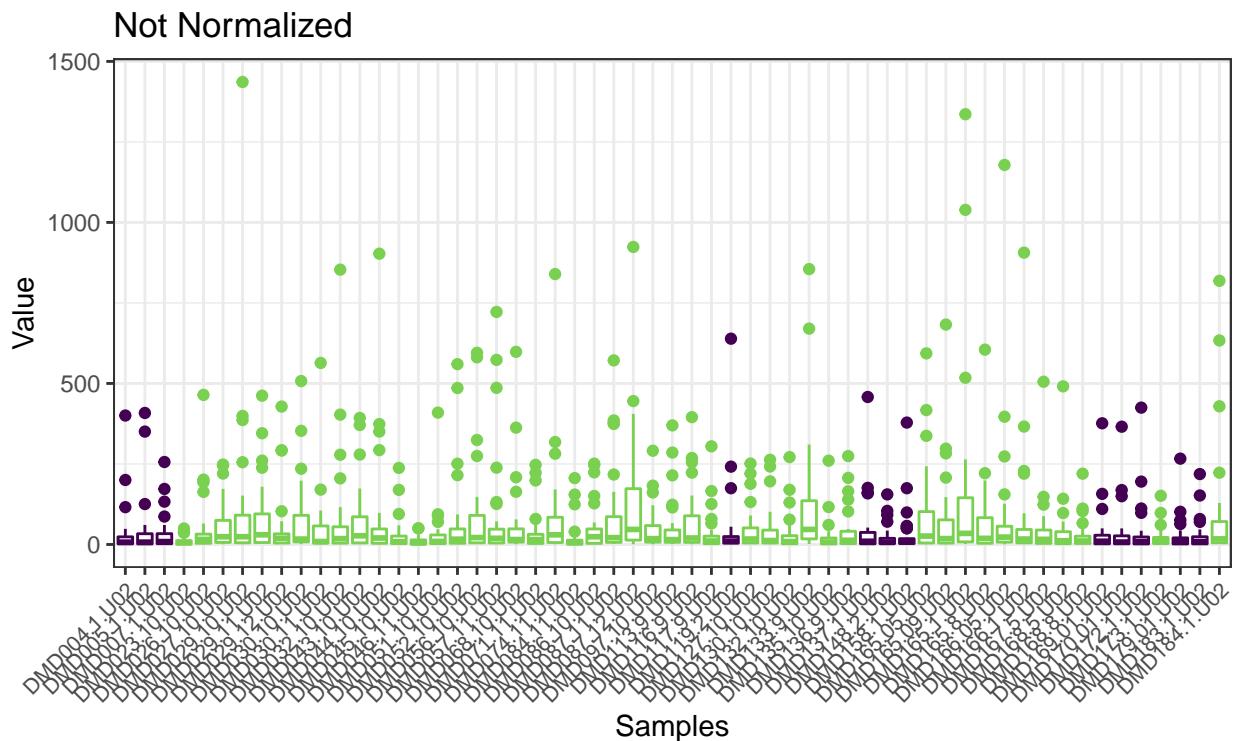
## Missing Value Plot



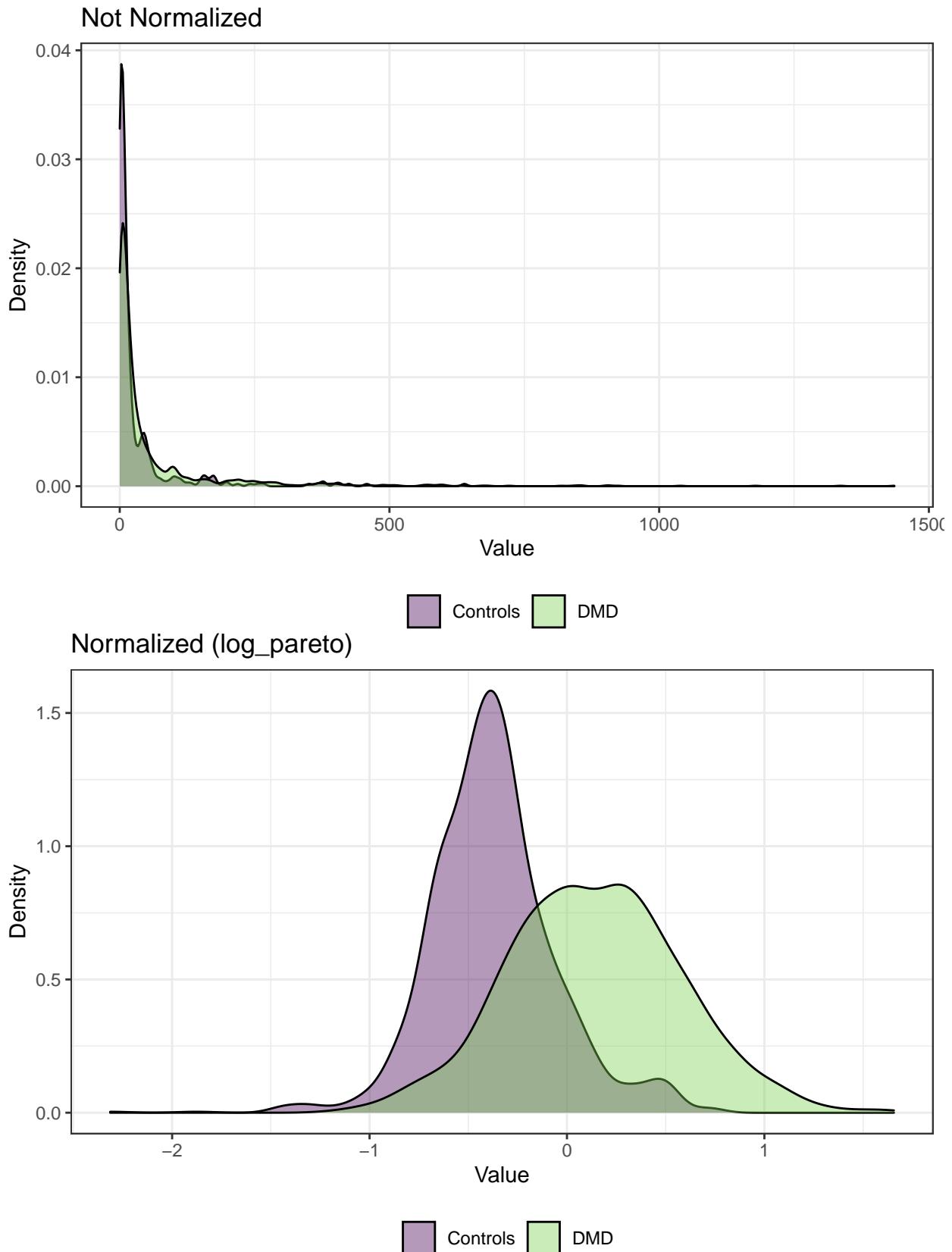
## 1.2 Samples by Group



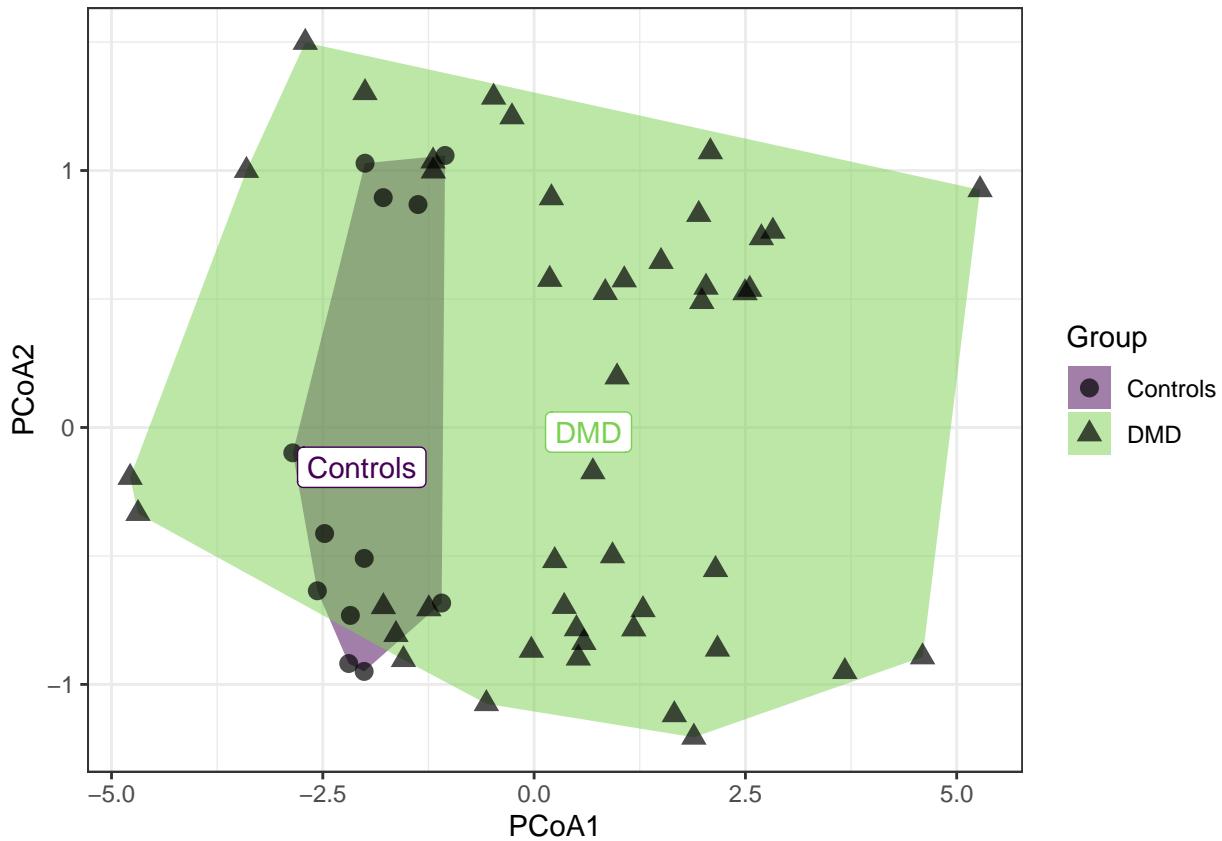
## 2 Normalization Plots



### 3 Group Distribution Plots



## 4 Outlier Detection

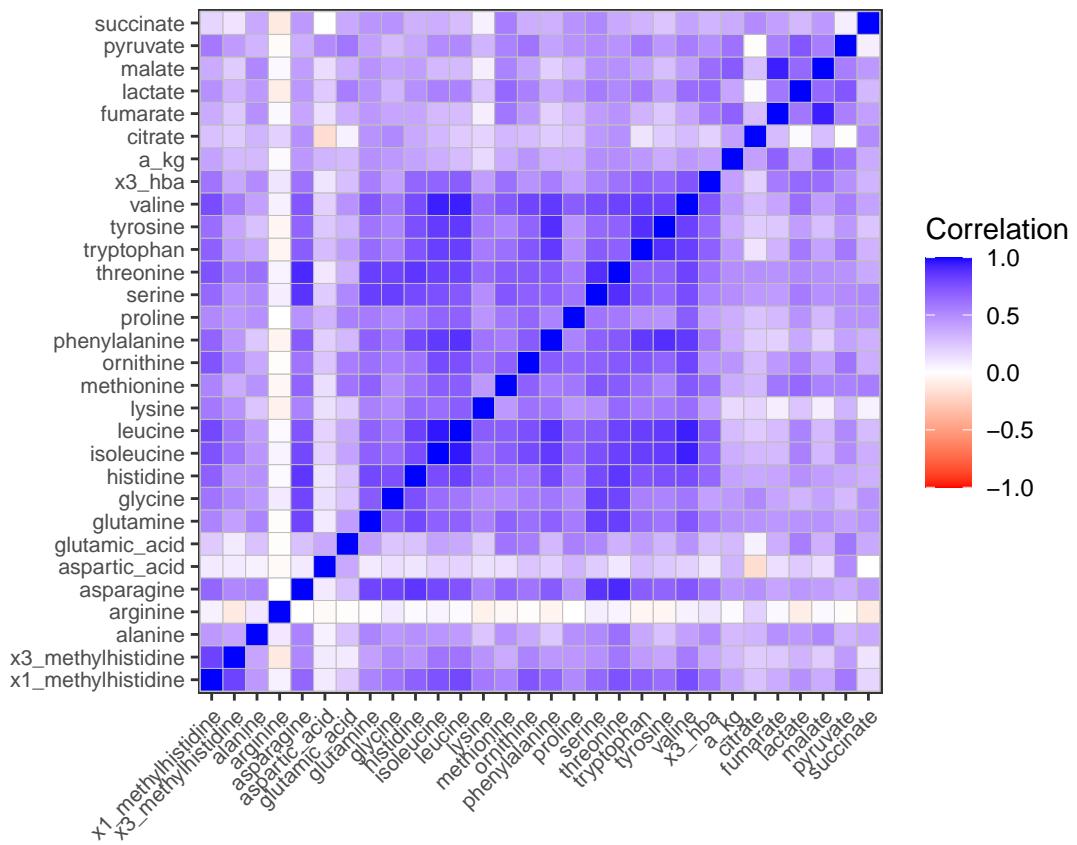


7 possible outliers detected in your data. These outliers are ‘DMD119.2.U02’, ‘DMD084.11.U02’, ‘DMD087.12.U02’, ‘DMD023.10.U02’, ‘DMD046.11.U02’, ‘DMD133.9.U02’, ‘DMD135.10.U02’.

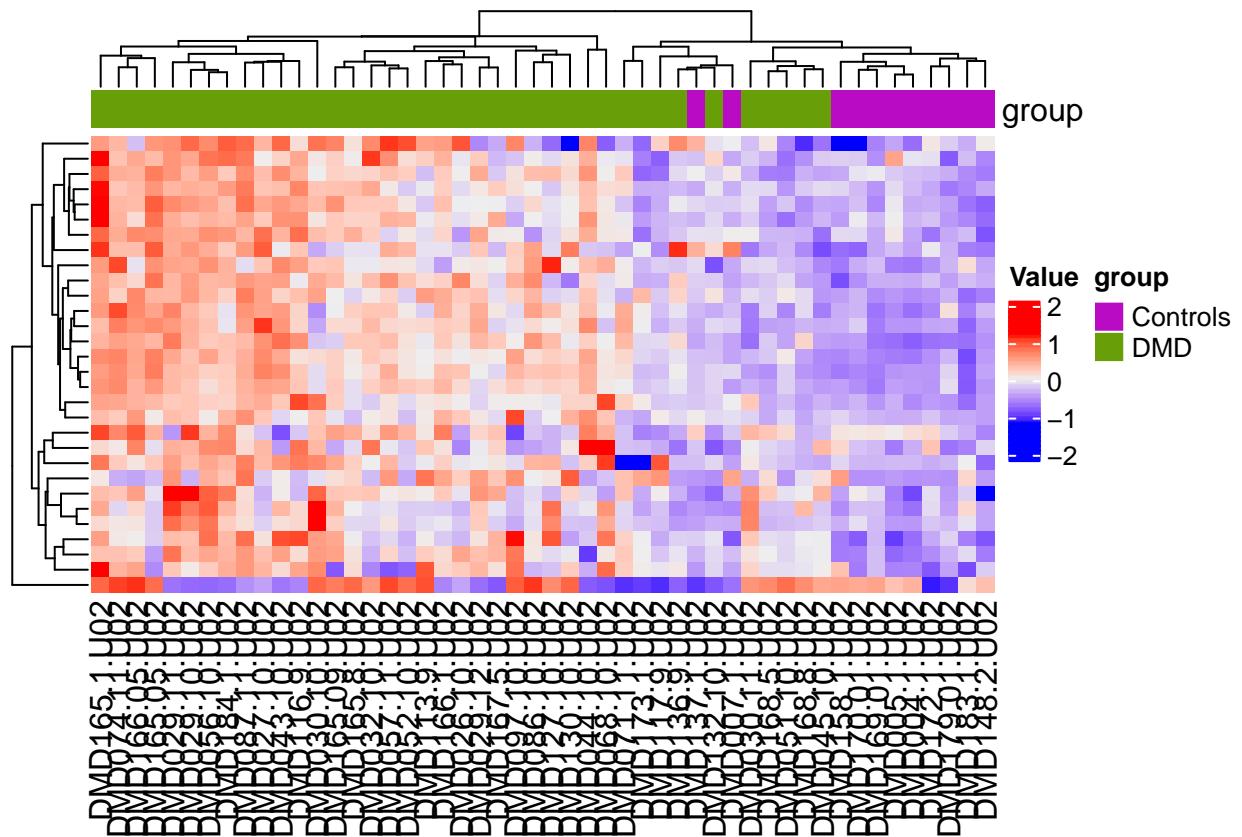
sample	group	distance_to_centroid	limit_distance
DMD119.2.U02	Controls	2.742576	2.290945
DMD084.11.U02	DMD	4.522825	4.040548
DMD087.12.U02	DMD	4.252170	4.040548
DMD023.10.U02	DMD	5.653399	4.040548
DMD046.11.U02	DMD	5.580959	4.040548
DMD133.9.U02	DMD	5.349670	4.040548
DMD135.10.U02	DMD	4.055233	4.040548

## 5 High Correlated Features ( $r > 0.97$ )

There are **0** high correlated feature pairs in your data.



## 6 Heatmap and Clustering



## 7 Principal Component Analysis

