# T-test Result Summary

Input Dataset: ->e.csv.

Treatment Group: two\_groups.

Assumption of Equal Variances: FALSE. When the equal variances between two groups hold, the t-test is Student's t-test, otherwise, the Welch t-test. In this case, it is the Welch t-test.

False Discovery Rate (FDR) Correction: In order to control the false discovery rate, the Benjamini & Hochberg (1995) Procedure was used on the p-values of the t-tests. The adjusted p-values are reported as p\_values\_adjusted.

Result Summary: out of 148 compounds, there are **9** (0.061%) having p-values less than 0.05 ,and **0** (0%) adjusted p-values less than 0.05. Table 2 shows the 20 most significant compounds.

| label | p\_values | p\_values\_adjusted |
| --- | --- | --- |
| methionine | 0.003949014 | 0.3034261 |
| leucine | 0.004100352 | 0.3034261 |
| beta-alanine | 0.008250884 | 0.4070436 |
| levoglucosan | 0.030411510 | 0.7318209 |
| oxalic acid | 0.030858793 | 0.7318209 |
| adenosine | 0.037915234 | 0.7318209 |
| glycerol-alpha-phosphate | 0.038372418 | 0.7318209 |
| valine | 0.039557885 | 0.7318209 |
| erythronic acid lactone | 0.044752694 | 0.7359332 |
| inosine-5'-monophosphate | 0.054089618 | 0.7535873 |
| myo-inositol | 0.059149325 | 0.7535873 |
| isoleucine | 0.061840524 | 0.7535873 |
| noradrenaline | 0.066193481 | 0.7535873 |
| alpha-ketoglutarate | 0.075416338 | 0.7972584 |
| cysteine | 0.089879986 | 0.8868159 |
| phenylalanine | 0.108200643 | 0.9607701 |
| succinic acid | 0.110358727 | 0.9607701 |
| beta-gentiobiose | 0.117886422 | 0.9670789 |
| behenic acid | 0.127630292 | 0.9670789 |
| 1-monostearin | 0.135333908 | 0.9670789 |

Table 2: t-test result summary (->Student t-test->result dataset.csv)