**STable 4 Differential metabolites in lipid and fatty acid metabolism between the asthmatic and the control group.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NAME |  | tR | mz | q value | Fold Change | VIP | polarity |
| Linoleamide |  | 10.046201 | 280.26309 | 3.405E-08 | 2.0288124 | 2.41261 | pos |
| 11-Peroxy-5Z,8Z,12E,14Z-eicosatetraenoate |  | 10.038681 | 336.22955 | 7.241E-05 | 2.6104307 | 2.40932 | pos |
| Docosanamide |  | 11.474308 | 340.35678 | 3.778E-05 | 1.3622926 | 1.86443 | pos |
| CL(18:2(9Z,12Z)/18:2(9Z,12Z)/18:2(9Z,12Z)/18:2(9Z,12Z)) |  | 6.156217 | 481.9818 | 5.32E-05 | 3.415049 | 1.71625 | neg |
| Eicosapentaenoic acid |  | 10.83561 | 303.2308 | 0.011879 | 1.520885 | 1.58964 | pos |
| Stearoylethanolamide |  | 10.980033 | 328.32062 | 0.0009169 | 1.3569875 | 1.51726 | pos |
| PE(16:1(9Z)/14:0) |  | 8.0172 | 662.4749 | 0.04452 | 0.779462 | 1.50357 | pos |
| Dodecanedioic acid |  | 7.5064683 | 229.14468 | 0.0463865 | 1.5342667 | 1.46652 | neg |
| Palmitic amide |  | 11.06248 | 256.2628 | 0.000964 | 1.479096 | 1.46284 | pos |
| cis-5-Decenedioic acid |  | 6.3664436 | 199.09763 | 0.0284428 | 1.6464221 | 1.45196 | neg |
| delta-Hexanolactone |  | 7.6189 | 229.1427 | 0.020559 | 1.444162 | 1.44214 | pos |
| Linoleic acid |  | 10.506156 | 303.23004 | 0.0147156 | 0.665149 | 1.34927 | pos |
| hexadecanoic acid |  | 2.0005114 | 257.24747 | 0.039997 | 1.5859418 | 1.33557 | pos |
| 3-Oxodecanoic acid |  | 8.3477898 | 250.14064 | 0.0006508 | 2.5419575 | 1.31819 | pos |
| PG(18:0/20:3(5Z,8Z,11Z)) |  | 10.15092 | 401.2875 | 0.00104 | 1.385871 | 1.30959 | pos |
| LysoPC(P-16:0) |  | 7.33525 | 480.3473 | 0.000184 | 1.579804 | 1.2472 | pos |
| 6-Decenoic acid |  | 8.8290377 | 169.12257 | 0.010495 | 1.8573895 | 1.24251 | neg |
| Sebacic acid |  | 6.7731037 | 203.12752 | 0.0251447 | 1.8343144 | 1.23262 | pos |
| TG(18:0/18:0/18:1(9Z)) |  | 10.72772 | 297.2786 | 0.014888 | 1.266516 | 1.17179 | pos |
| Sphinganine |  | 9.612483 | 302.305 | 0.009582 | 1.274952 | 1.11418 | pos |
| 3-Oxotetradecanoic acid |  | 9.638808 | 241.1814 | 0.038127 | 1.56425 | 1.09758 | neg |
| PS(18:1(9Z)/22:6(4Z,7Z,10Z,13Z,16Z,19Z)) |  | 7.663367 | 417.7693 | 0.010716 | 1.332459 | 1.09036 | pos |
| DG(22:4(7Z,10Z,13Z,16Z)/24:0/0:0) |  | 10.01721 | 379.337 | 0.02775 | 1.378996 | 1.06682 | pos |
| Phytosphingosine |  | 9.658642 | 318.3 | 0.049862 | 1.377217 | 1.05773 | pos |
| Ganglioside GM3 (d18:1/20:0) |  | 7.562433 | 605.4006 | 0.001255 | 2.166717 | 1.05567 | pos |
| DG(20:3(8Z,11Z,14Z)/14:0/0:0) |  | 9.136083 | 296.2556 | 0.003639 | 1.455871 | 1.05181 | pos |
| (R)-3-Hydroxy-hexadecanoic acid |  | 10.37285 | 271.2282 | 0.049112 | 1.327716 | 1.04958 | neg |
| Ganglioside GA2 (d18:1/24:1(15Z)) |  | 8.378558 | 588.4088 | 0.000163 | 1.77577 | 1.03437 | pos |
| MG(0:0/24:6(6Z,9Z,12Z,15Z,18Z,21Z)/0:0) |  | 9.144267 | 221.1545 | 0.039671 | 1.318878 | 1.0275 | neg |
| PIP2(16:0/18:0) |  | 8.706883 | 500.2493 | 0.003981 | 0.465073 | 1.02748 | pos |

m/z, mass to charge ratio; tR，retention time; VIP, The variable importance in the projection; Fold Change: the asthmatic group to the control group