**Table S3 The difference in metabolites between the JS group and HB group.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | VIP | p\_value | FDR | Type |
| 5-dodecenoic acid | 1.20  | 0.00  | 0.00  | up |
| D-(+)-trehalose | 1.20  | 0.00  | 0.01  | down |
| Palatinose | 1.20  | 0.00  | 0.01  | down |
| Glycerol monostearate | 1.20  | 0.00  | 0.01  | up |
| Dodecanoic acid | 1.20  | 0.00  | 0.01  | up |
| Pyrazine | 1.20  | 0.00  | 0.01  | up |
| D-arabinose | 1.20  | 0.00  | 0.01  | up |
| D-galactose | 1.20  | 0.00  | 0.01  | down |
| Palmitic acid | 1.20  | 0.00  | 0.01  | up |
| Isoborneol | 1.20  | 0.00  | 0.01  | up |
| Decanoic acid | 1.20  | 0.00  | 0.01  | up |
| L-hydroxyproline | 1.20  | 0.00  | 0.01  | up |
| Amphetamine | 1.20  | 0.00  | 0.00  | up |
| Butanedioic acid | 1.20  | 0.00  | 0.01  | up |
| N-acetyl-D-glucosamine | 1.19  | 0.00  | 0.02  | up |
| L-isoleucine | 1.19  | 0.00  | 0.01  | up |
| β-gentiobiose | 1.19  | 0.00  | 0.02  | down |
| Lactic acid | 1.19  | 0.00  | 0.01  | insig |
| DL-phenylalanine | 1.19  | 0.00  | 0.02  | up |
| Campesterol | 1.19  | 0.01  | 0.02  | up |
| Methyl galactoside | 1.19  | 0.01  | 0.03  | down |
| Malic acid | 1.19  | 0.00  | 0.01  | up |
| Propanedioic acid | 1.19  | 0.01  | 0.03  | up |
| Oleic acid | 1.19  | 0.01  | 0.03  | up |
| Pentanedioic acid | 1.18  | 0.01  | 0.03  | up |
| L-5-oxoproline | 1.18  | 0.01  | 0.03  | up |
| 9-octadecenoic acid | 1.18  | 0.01  | 0.03  | up |
| Glycine | 1.18  | 0.00  | 0.02  | up |
| D-(+)-talofuranose | 1.17  | 0.01  | 0.03  | down |
| Sulfurous acid | 1.17  | 0.01  | 0.03  | down |
| D-mannose | 1.17  | 0.01  | 0.03  | up |
| Cholesterol | 1.17  | 0.01  | 0.04  | up |
| Putrescine | 1.17  | 0.01  | 0.04  | up |
| Stearic acid | 1.16  | 0.02  | 0.04  | up |
| L-leucine | 1.16  | 0.01  | 0.03  | up |
| L-serine | 1.16  | 0.00  | 0.02  | up |
| Tromethamine | 1.15  | 0.02  | 0.05  | down |
| L-valine | 1.15  | 0.02  | 0.05  | up |
| Heptacosane | 1.14  | 0.02  | 0.05  | down |
| 2-pyrrolidinone | 1.13  | 0.01  | 0.04  | up |
| Hexanoic acid | 1.13  | 0.04  | 0.08  | down |
| L-proline | 1.13  | 0.03  | 0.07  | down |
| 2,6-bis(tert-butyl)phenol | 1.12  | 0.02  | 0.05  | up |
| L-threonine | 1.10  | 0.01  | 0.04  | up |
| 3 hydroxy-2,3-didehydrosebacic acid | 1.09  | 0.05  | 0.10  | up |
| 9-tetradecenoic acid | 1.09  | 0.04  | 0.09  | up |
| Propanal | 1.09  | 0.04  | 0.09  | up |
| Pyroglutamic acid | 1.09  | 0.03  | 0.07  | up |
| Pentasiloxane | 1.09  | 0.04  | 0.09  | insig |
| 4-aminobutanoic acid | 1.05  | 0.05  | 0.10  | up |