|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplemental Table e-1: The rate ratio (RR) of amyotrophic lateral sclerosis (ALS) according to plasma levels of 404 metabolites in analyses including all participants and analyses stratified on the time interval between blood draw and ALS onset.** | | | | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **Including all participants** | | |  | **Interval less than 5 years** | | |  | **Interval 5 years or more** | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **HMDB ID** |  | **Metabolite name** |  | **RR (95% CI)** |  | **P-value** |  | **RR (95% CI)** |  | **P-value** |  | **RR (95% CI)** |  | **P-value** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HMDB00008 |  | Alpha-hydroxybutyrate |  | 0.94 (0.81 - 1.09) |  | 0.43 |  | 0.84 (0.68 - 1.03) |  | 0.089 |  | 1.07 (0.86 - 1.33) |  | 0.55 |
| HMDB00011 |  | Beta-hydroxybutyrate |  | 1.03 (0.89 - 1.20) |  | 0.656 |  | 1.14 (0.94 - 1.38) |  | 0.194 |  | 0.93 (0.74 - 1.16) |  | 0.5 |
| HMDB00017 |  | 4-pyridoxate |  | 0.98 (0.84 - 1.13) |  | 0.753 |  | 0.90 (0.73 - 1.11) |  | 0.34 |  | 1.06 (0.86 - 1.30) |  | 0.599 |
| HMDB00026 |  | N-carbamoyl-beta-alanine |  | 0.88 (0.76 - 1.02) |  | 0.097 |  | 0.83 (0.67 - 1.02) |  | 0.078 |  | 0.94 (0.76 - 1.16) |  | 0.557 |
| HMDB00036 |  | Taurocholate |  | 0.92 (0.79 - 1.08) |  | 0.307 |  | 0.95 (0.77 - 1.16) |  | 0.587 |  | 0.89 (0.71 - 1.13) |  | 0.349 |
| HMDB00050 |  | Adenosine |  | 0.98 (0.84 - 1.15) |  | 0.81 |  | 0.85 (0.68 - 1.06) |  | 0.144 |  | 1.14 (0.90 - 1.44) |  | 0.273 |
| HMDB00062 |  | Carnitine |  | 0.87 (0.75 - 1.01) |  | 0.063 |  | 0.82 (0.66 - 1.01) |  | 0.056 |  | 0.92 (0.74 - 1.15) |  | 0.473 |
| HMDB00063 |  | Cortisol |  | 0.94 (0.81 - 1.09) |  | 0.424 |  | 0.97 (0.79 - 1.19) |  | 0.803 |  | 0.90 (0.73 - 1.12) |  | 0.344 |
| HMDB00064 |  | Creatine |  | 1.04 (0.90 - 1.20) |  | 0.599 |  | 1.10 (0.89 - 1.35) |  | 0.373 |  | 0.99 (0.80 - 1.22) |  | 0.931 |
| HMDB00072 |  | Aconitate |  | 1.03 (0.86 - 1.25) |  | 0.729 |  | 0.92 (0.71 - 1.19) |  | 0.533 |  | 1.19 (0.90 - 1.56) |  | 0.218 |
| HMDB00086 |  | Alpha-glycerophosphocholine |  | 0.94 (0.81 - 1.10) |  | 0.445 |  | 0.89 (0.71 - 1.12) |  | 0.318 |  | 0.99 (0.80 - 1.22) |  | 0.943 |
| HMDB00089 |  | Cytidine |  | 0.89 (0.74 - 1.05) |  | 0.171 |  | 0.75 (0.58 - 0.99) |  | 0.039 |  | 1.01 (0.80 - 1.27) |  | 0.963 |
| HMDB00092 |  | Dimethylglycine |  | 0.91 (0.79 - 1.06) |  | 0.219 |  | 0.94 (0.77 - 1.14) |  | 0.538 |  | 0.88 (0.71 - 1.08) |  | 0.22 |
| HMDB00094 |  | Citrate |  | 0.98 (0.81 - 1.17) |  | 0.789 |  | 0.98 (0.75 - 1.28) |  | 0.883 |  | 0.99 (0.77 - 1.27) |  | 0.928 |
| HMDB00095 |  | CMP |  | 1.06 (0.91 - 1.23) |  | 0.478 |  | 0.94 (0.76 - 1.16) |  | 0.569 |  | 1.20 (0.96 - 1.49) |  | 0.116 |
| HMDB00099 |  | Cystathionine |  | 0.85 (0.73 - 1.00) |  | 0.057 |  | 0.95 (0.76 - 1.18) |  | 0.639 |  | 0.74 (0.57 - 0.95) |  | 0.018 |
| HMDB00112 |  | GABA |  | 0.98 (0.84 - 1.15) |  | 0.836 |  | 1.01 (0.80 - 1.26) |  | 0.963 |  | 0.96 (0.77 - 1.18) |  | 0.68 |
| HMDB00122\* |  | Fructose/glucose/galactose |  | 0.91 (0.78 - 1.07) |  | 0.263 |  | 0.81 (0.65 - 1.02) |  | 0.07 |  | 1.07 (0.83 - 1.37) |  | 0.619 |
| HMDB00123 |  | Glycine |  | 0.93 (0.80 - 1.08) |  | 0.357 |  | 1.14 (0.93 - 1.39) |  | 0.221 |  | 0.73 (0.58 - 0.93) |  | 0.009 |
| HMDB00126 |  | Alpha-glycerophosphate |  | 1.11 (0.94 - 1.32) |  | 0.209 |  | 1.20 (0.94 - 1.54) |  | 0.149 |  | 1.04 (0.83 - 1.30) |  | 0.738 |
| HMDB00127 |  | Glucuronate |  | 1.12 (0.96 - 1.30) |  | 0.147 |  | 1.04 (0.84 - 1.27) |  | 0.734 |  | 1.22 (0.97 - 1.54) |  | 0.085 |
| HMDB00128 |  | Guanidoacetic acid |  | 0.89 (0.76 - 1.03) |  | 0.122 |  | 0.97 (0.80 - 1.19) |  | 0.787 |  | 0.79 (0.62 - 1.00) |  | 0.049 |
| HMDB00132 |  | Guanine |  | 0.86 (0.73 - 1.00) |  | 0.048 |  | 0.82 (0.67 - 1.00) |  | 0.055 |  | 0.91 (0.71 - 1.15) |  | 0.412 |
| HMDB00133 |  | Guanosine |  | 1.05 (0.90 - 1.23) |  | 0.506 |  | 1.00 (0.81 - 1.22) |  | 0.977 |  | 1.13 (0.89 - 1.43) |  | 0.323 |
| HMDB00138 |  | Glycocholate |  | 0.93 (0.80 - 1.07) |  | 0.305 |  | 0.96 (0.79 - 1.18) |  | 0.714 |  | 0.89 (0.73 - 1.10) |  | 0.282 |
| HMDB00148 |  | Glutamate |  | 0.87 (0.75 - 1.01) |  | 0.069 |  | 0.76 (0.62 - 0.94) |  | 0.01 |  | 1.01 (0.82 - 1.25) |  | 0.934 |
| HMDB00152 |  | Gentisate |  | 1.11 (0.95 - 1.30) |  | 0.176 |  | 1.12 (0.91 - 1.38) |  | 0.293 |  | 1.11 (0.88 - 1.40) |  | 0.388 |
| HMDB00156 |  | Malate |  | 0.88 (0.75 - 1.03) |  | 0.105 |  | 0.91 (0.73 - 1.14) |  | 0.416 |  | 0.85 (0.68 - 1.08) |  | 0.178 |
| HMDB00157 |  | Hypoxanthine |  | 0.96 (0.84 - 1.10) |  | 0.558 |  | 0.94 (0.78 - 1.13) |  | 0.497 |  | 0.99 (0.81 - 1.21) |  | 0.931 |
| HMDB00158 |  | Tyrosine |  | 0.90 (0.77 - 1.05) |  | 0.188 |  | 0.85 (0.68 - 1.05) |  | 0.129 |  | 0.96 (0.76 - 1.21) |  | 0.729 |
| HMDB00159 |  | Phenylalanine |  | 0.89 (0.77 - 1.02) |  | 0.102 |  | 0.89 (0.74 - 1.09) |  | 0.265 |  | 0.87 (0.70 - 1.08) |  | 0.206 |
| HMDB00161 |  | Alanine |  | 0.91 (0.78 - 1.06) |  | 0.224 |  | 0.90 (0.72 - 1.11) |  | 0.313 |  | 0.93 (0.74 - 1.16) |  | 0.509 |
| HMDB00167 |  | Threonine |  | 0.99 (0.85 - 1.15) |  | 0.886 |  | 0.98 (0.80 - 1.20) |  | 0.858 |  | 0.99 (0.79 - 1.24) |  | 0.928 |
| HMDB00168 |  | Asparagine |  | 0.97 (0.82 - 1.13) |  | 0.669 |  | 1.02 (0.82 - 1.29) |  | 0.832 |  | 0.91 (0.73 - 1.15) |  | 0.437 |
| HMDB00172 |  | Isoleucine |  | 0.93 (0.80 - 1.08) |  | 0.365 |  | 0.98 (0.80 - 1.21) |  | 0.883 |  | 0.88 (0.71 - 1.10) |  | 0.258 |
| HMDB00177 |  | Histidine |  | 0.89 (0.74 - 1.07) |  | 0.232 |  | 0.88 (0.69 - 1.13) |  | 0.322 |  | 0.90 (0.68 - 1.19) |  | 0.448 |
| HMDB00182 |  | Lysine |  | 0.98 (0.84 - 1.14) |  | 0.798 |  | 0.95 (0.78 - 1.16) |  | 0.611 |  | 1.02 (0.81 - 1.29) |  | 0.881 |
| HMDB00186 |  | Lactose |  | 1.01 (0.87 - 1.17) |  | 0.888 |  | 0.80 (0.64 - 1.00) |  | 0.048 |  | 1.28 (1.03 - 1.58) |  | 0.024 |
| HMDB00187 |  | Serine |  | 0.89 (0.77 - 1.04) |  | 0.139 |  | 1.00 (0.82 - 1.23) |  | 0.973 |  | 0.79 (0.63 - 0.98) |  | 0.031 |
| HMDB00190 |  | Lactate |  | 0.91 (0.78 - 1.07) |  | 0.241 |  | 0.88 (0.72 - 1.08) |  | 0.234 |  | 0.95 (0.74 - 1.21) |  | 0.678 |
| HMDB00193 |  | Isocitrate |  | 0.83 (0.70 - 0.99) |  | 0.042 |  | 0.79 (0.61 - 1.02) |  | 0.068 |  | 0.88 (0.70 - 1.12) |  | 0.307 |
| HMDB00195 |  | Inosine |  | 0.96 (0.84 - 1.10) |  | 0.558 |  | 0.94 (0.79 - 1.13) |  | 0.525 |  | 0.97 (0.79 - 1.21) |  | 0.814 |
| HMDB00197 |  | Indoleacetic acid |  | 0.92 (0.80 - 1.05) |  | 0.21 |  | 0.85 (0.70 - 1.03) |  | 0.105 |  | 0.99 (0.82 - 1.19) |  | 0.902 |
| HMDB00201 |  | C2 carnitine |  | 0.93 (0.80 - 1.08) |  | 0.315 |  | 0.93 (0.76 - 1.13) |  | 0.458 |  | 0.93 (0.74 - 1.17) |  | 0.55 |
| HMDB00206 |  | N6-acetyllysine |  | 0.90 (0.77 - 1.06) |  | 0.199 |  | 0.83 (0.66 - 1.05) |  | 0.119 |  | 0.95 (0.76 - 1.19) |  | 0.662 |
| HMDB00210 |  | Pantothenate |  | 1.04 (0.90 - 1.22) |  | 0.572 |  | 1.02 (0.82 - 1.26) |  | 0.858 |  | 1.08 (0.87 - 1.35) |  | 0.486 |
| HMDB00211 |  | Inositol |  | 0.89 (0.75 - 1.07) |  | 0.213 |  | 0.85 (0.66 - 1.08) |  | 0.185 |  | 0.95 (0.74 - 1.23) |  | 0.69 |
| HMDB00214 |  | Ornithine |  | 0.95 (0.82 - 1.10) |  | 0.495 |  | 1.02 (0.83 - 1.26) |  | 0.86 |  | 0.88 (0.72 - 1.09) |  | 0.254 |
| HMDB00222 |  | C16 carnitine |  | 0.94 (0.81 - 1.10) |  | 0.456 |  | 1.01 (0.82 - 1.25) |  | 0.889 |  | 0.88 (0.71 - 1.09) |  | 0.234 |
| HMDB00232 |  | Quinolinate |  | 0.89 (0.76 - 1.04) |  | 0.131 |  | 0.76 (0.61 - 0.95) |  | 0.014 |  | 1.06 (0.84 - 1.35) |  | 0.621 |
| HMDB00235 |  | Thiamine |  | 1.03 (0.89 - 1.20) |  | 0.676 |  | 1.12 (0.92 - 1.37) |  | 0.257 |  | 0.93 (0.75 - 1.16) |  | 0.528 |
| HMDB00247 |  | Sorbitol |  | 1.10 (0.95 - 1.26) |  | 0.204 |  | 1.14 (0.95 - 1.37) |  | 0.16 |  | 1.02 (0.81 - 1.28) |  | 0.865 |
| HMDB00251 |  | Taurine |  | 1.03 (0.88 - 1.20) |  | 0.732 |  | 0.93 (0.75 - 1.16) |  | 0.539 |  | 1.13 (0.91 - 1.41) |  | 0.259 |
| HMDB00252 |  | Sphingosine |  | 0.87 (0.73 - 1.03) |  | 0.113 |  | 0.86 (0.67 - 1.10) |  | 0.228 |  | 0.87 (0.68 - 1.13) |  | 0.294 |
| HMDB00254 |  | Succinate |  | 0.94 (0.78 - 1.13) |  | 0.495 |  | 1.00 (0.76 - 1.31) |  | 0.975 |  | 0.90 (0.70 - 1.15) |  | 0.391 |
| HMDB00258 |  | Sucrose |  | 0.98 (0.84 - 1.15) |  | 0.809 |  | 0.75 (0.59 - 0.95) |  | 0.019 |  | 1.36 (1.05 - 1.75) |  | 0.019 |
| HMDB00262 |  | Thymine |  | 0.93 (0.79 - 1.09) |  | 0.379 |  | 0.90 (0.72 - 1.13) |  | 0.383 |  | 0.96 (0.76 - 1.21) |  | 0.716 |
| HMDB00269 |  | Sphinganine |  | 0.87 (0.75 - 1.01) |  | 0.074 |  | 0.81 (0.65 - 1.01) |  | 0.059 |  | 0.93 (0.76 - 1.15) |  | 0.53 |
| HMDB00289 |  | Urate |  | 0.83 (0.71 - 0.97) |  | 0.02 |  | 0.80 (0.65 - 0.98) |  | 0.032 |  | 0.87 (0.69 - 1.11) |  | 0.277 |
| HMDB00292 |  | Xanthine |  | 0.96 (0.82 - 1.13) |  | 0.643 |  | 0.95 (0.76 - 1.17) |  | 0.604 |  | 0.99 (0.78 - 1.25) |  | 0.907 |
| HMDB00296 |  | Uridine |  | 0.95 (0.81 - 1.11) |  | 0.49 |  | 0.90 (0.72 - 1.12) |  | 0.33 |  | 1.00 (0.79 - 1.26) |  | 0.971 |
| HMDB00300 |  | Uracil |  | 0.98 (0.84 - 1.15) |  | 0.832 |  | 0.95 (0.77 - 1.18) |  | 0.658 |  | 1.01 (0.81 - 1.27) |  | 0.914 |
| HMDB00301 |  | Urocanic acid |  | 1.03 (0.86 - 1.24) |  | 0.73 |  | 1.08 (0.83 - 1.39) |  | 0.572 |  | 1.01 (0.77 - 1.32) |  | 0.97 |
| HMDB00448 |  | Adipate |  | 1.14 (0.96 - 1.35) |  | 0.127 |  | 1.18 (0.94 - 1.48) |  | 0.159 |  | 1.09 (0.85 - 1.40) |  | 0.502 |
| HMDB00462 |  | Allantoin |  | 0.89 (0.76 - 1.04) |  | 0.13 |  | 0.84 (0.67 - 1.04) |  | 0.114 |  | 0.95 (0.76 - 1.18) |  | 0.64 |
| HMDB00479 |  | 3-methylhistidine |  | 1.02 (0.88 - 1.18) |  | 0.792 |  | 1.07 (0.87 - 1.30) |  | 0.535 |  | 0.96 (0.77 - 1.19) |  | 0.698 |
| HMDB00510 |  | 2-aminoadipate |  | 0.97 (0.82 - 1.14) |  | 0.719 |  | 0.93 (0.74 - 1.16) |  | 0.492 |  | 1.03 (0.81 - 1.32) |  | 0.811 |
| HMDB00517 |  | Arginine |  | 0.98 (0.84 - 1.13) |  | 0.752 |  | 1.00 (0.81 - 1.23) |  | 0.986 |  | 0.95 (0.77 - 1.17) |  | 0.626 |
| HMDB00610\* |  | C18:2 CE |  | 1.03 (0.89 - 1.20) |  | 0.689 |  | 1.09 (0.88 - 1.33) |  | 0.438 |  | 0.97 (0.78 - 1.21) |  | 0.778 |
| HMDB00630 |  | Cytosine |  | 0.89 (0.76 - 1.04) |  | 0.145 |  | 0.89 (0.71 - 1.10) |  | 0.278 |  | 0.88 (0.71 - 1.11) |  | 0.289 |
| HMDB00631\* |  | Glycodeoxycholate/glycochenodeoxycholate |  | 0.88 (0.76 - 1.02) |  | 0.09 |  | 1.05 (0.85 - 1.30) |  | 0.626 |  | 0.75 (0.60 - 0.92) |  | 0.007 |
| HMDB00641 |  | Glutamine |  | 0.90 (0.77 - 1.05) |  | 0.179 |  | 1.00 (0.81 - 1.25) |  | 0.971 |  | 0.78 (0.62 - 0.98) |  | 0.034 |
| HMDB00651 |  | C10 carnitine |  | 0.91 (0.78 - 1.07) |  | 0.266 |  | 0.94 (0.76 - 1.18) |  | 0.616 |  | 0.88 (0.70 - 1.11) |  | 0.286 |
| HMDB00658 |  | C16:1 CE |  | 1.00 (0.86 - 1.16) |  | 0.978 |  | 0.90 (0.73 - 1.10) |  | 0.307 |  | 1.14 (0.91 - 1.42) |  | 0.269 |
| HMDB00670 |  | Homoarginine |  | 1.06 (0.92 - 1.22) |  | 0.441 |  | 0.89 (0.74 - 1.08) |  | 0.244 |  | 1.31 (1.06 - 1.62) |  | 0.014 |
| HMDB00679 |  | Homocitrulline |  | 0.93 (0.80 - 1.08) |  | 0.33 |  | 0.90 (0.72 - 1.12) |  | 0.33 |  | 0.94 (0.76 - 1.17) |  | 0.598 |
| HMDB00682 |  | Indoxylsulfate |  | 0.86 (0.75 - 0.98) |  | 0.025 |  | 0.89 (0.74 - 1.08) |  | 0.247 |  | 0.83 (0.68 - 1.00) |  | 0.056 |
| HMDB00684 |  | Kynurenine |  | 0.98 (0.84 - 1.15) |  | 0.817 |  | 0.88 (0.71 - 1.09) |  | 0.232 |  | 1.14 (0.89 - 1.46) |  | 0.298 |
| HMDB00687 |  | Leucine |  | 0.90 (0.78 - 1.05) |  | 0.177 |  | 0.91 (0.74 - 1.11) |  | 0.36 |  | 0.89 (0.72 - 1.11) |  | 0.309 |
| HMDB00688 |  | C5 carnitine |  | 0.90 (0.78 - 1.05) |  | 0.179 |  | 0.82 (0.67 - 1.01) |  | 0.065 |  | 1.00 (0.80 - 1.23) |  | 0.973 |
| HMDB00694 |  | 2-hydroxyglutarate |  | 0.90 (0.77 - 1.06) |  | 0.218 |  | 0.82 (0.64 - 1.05) |  | 0.114 |  | 0.97 (0.79 - 1.20) |  | 0.784 |
| HMDB00696 |  | Methionine |  | 0.93 (0.80 - 1.08) |  | 0.36 |  | 0.91 (0.74 - 1.12) |  | 0.355 |  | 0.96 (0.77 - 1.20) |  | 0.73 |
| HMDB00699 |  | 1-methylnicotinamide |  | 0.91 (0.77 - 1.07) |  | 0.259 |  | 0.92 (0.75 - 1.12) |  | 0.4 |  | 0.90 (0.69 - 1.18) |  | 0.438 |
| HMDB00705 |  | C6 carnitine |  | 0.93 (0.80 - 1.09) |  | 0.394 |  | 0.89 (0.71 - 1.12) |  | 0.319 |  | 0.98 (0.78 - 1.23) |  | 0.86 |
| HMDB00714 |  | Hippurate |  | 0.93 (0.81 - 1.07) |  | 0.317 |  | 1.04 (0.86 - 1.25) |  | 0.674 |  | 0.81 (0.66 - 1.00) |  | 0.053 |
| HMDB00715 |  | Kynurenic acid |  | 0.92 (0.78 - 1.08) |  | 0.326 |  | 0.84 (0.67 - 1.06) |  | 0.139 |  | 1.01 (0.79 - 1.29) |  | 0.925 |
| HMDB00716 |  | Pipecolic acid |  | 0.90 (0.77 - 1.04) |  | 0.156 |  | 0.81 (0.65 - 1.01) |  | 0.063 |  | 0.98 (0.80 - 1.21) |  | 0.87 |
| HMDB00725 |  | Hydroxyproline |  | 0.98 (0.84 - 1.14) |  | 0.799 |  | 1.00 (0.82 - 1.23) |  | 0.97 |  | 0.95 (0.76 - 1.18) |  | 0.624 |
| HMDB00767 |  | Pseudouridine |  | 0.90 (0.76 - 1.05) |  | 0.179 |  | 0.95 (0.76 - 1.19) |  | 0.651 |  | 0.83 (0.66 - 1.05) |  | 0.124 |
| HMDB00791 |  | C8 carnitine |  | 0.92 (0.79 - 1.08) |  | 0.32 |  | 0.92 (0.73 - 1.15) |  | 0.46 |  | 0.93 (0.74 - 1.16) |  | 0.511 |
| HMDB00812 |  | N-acetylaspartic acid |  | 0.83 (0.71 - 0.97) |  | 0.016 |  | 0.93 (0.75 - 1.16) |  | 0.528 |  | 0.73 (0.59 - 0.91) |  | 0.005 |
| HMDB00824 |  | C3 carnitine |  | 0.93 (0.80 - 1.07) |  | 0.309 |  | 0.81 (0.65 - 1.00) |  | 0.047 |  | 1.07 (0.87 - 1.32) |  | 0.518 |
| HMDB00840 |  | Salicylurate |  | 0.99 (0.85 - 1.16) |  | 0.924 |  | 1.03 (0.85 - 1.25) |  | 0.774 |  | 0.94 (0.73 - 1.20) |  | 0.614 |
| HMDB00848 |  | C18 carnitine |  | 0.92 (0.79 - 1.06) |  | 0.23 |  | 0.94 (0.77 - 1.15) |  | 0.535 |  | 0.89 (0.72 - 1.10) |  | 0.27 |
| HMDB00853 |  | Acetyl-galactosamine |  | 0.91 (0.77 - 1.07) |  | 0.26 |  | 0.86 (0.68 - 1.08) |  | 0.201 |  | 0.97 (0.75 - 1.24) |  | 0.793 |
| HMDB00870 |  | Histamine |  | 1.05 (0.90 - 1.22) |  | 0.566 |  | 0.96 (0.79 - 1.18) |  | 0.724 |  | 1.18 (0.92 - 1.51) |  | 0.185 |
| HMDB00875 |  | Trigonelline |  | 0.97 (0.83 - 1.13) |  | 0.708 |  | 1.08 (0.87 - 1.34) |  | 0.501 |  | 0.87 (0.70 - 1.09) |  | 0.225 |
| HMDB00881 |  | Xanthurenate |  | 0.96 (0.81 - 1.14) |  | 0.635 |  | 0.76 (0.59 - 0.99) |  | 0.04 |  | 1.14 (0.91 - 1.43) |  | 0.253 |
| HMDB00883 |  | Valine |  | 0.89 (0.77 - 1.03) |  | 0.124 |  | 0.82 (0.67 - 1.02) |  | 0.072 |  | 0.96 (0.78 - 1.18) |  | 0.676 |
| HMDB00884 |  | Ribothymidine |  | 0.89 (0.76 - 1.05) |  | 0.16 |  | 0.98 (0.78 - 1.23) |  | 0.864 |  | 0.81 (0.64 - 1.01) |  | 0.062 |
| HMDB00885 |  | C16:0 CE |  | 1.07 (0.92 - 1.25) |  | 0.397 |  | 1.07 (0.87 - 1.32) |  | 0.512 |  | 1.06 (0.84 - 1.33) |  | 0.627 |
| HMDB00897 |  | 7-methylguanine |  | 0.91 (0.77 - 1.08) |  | 0.292 |  | 0.98 (0.78 - 1.22) |  | 0.83 |  | 0.83 (0.64 - 1.07) |  | 0.154 |
| HMDB00898 |  | 1-methylhistamine |  | 1.07 (0.92 - 1.23) |  | 0.387 |  | 1.12 (0.92 - 1.37) |  | 0.243 |  | 1.00 (0.80 - 1.24) |  | 0.968 |
| HMDB00904 |  | Citrulline |  | 0.97 (0.83 - 1.13) |  | 0.68 |  | 1.05 (0.85 - 1.30) |  | 0.63 |  | 0.87 (0.69 - 1.10) |  | 0.239 |
| HMDB00918 |  | C18:1 CE |  | 1.07 (0.91 - 1.24) |  | 0.416 |  | 1.07 (0.87 - 1.32) |  | 0.52 |  | 1.06 (0.84 - 1.33) |  | 0.626 |
| HMDB00925 |  | Trimethylamine-N-oxide |  | 0.97 (0.84 - 1.12) |  | 0.639 |  | 0.88 (0.70 - 1.09) |  | 0.24 |  | 1.05 (0.87 - 1.28) |  | 0.608 |
| HMDB00929 |  | Tryptophan |  | 0.95 (0.82 - 1.10) |  | 0.501 |  | 1.03 (0.85 - 1.25) |  | 0.775 |  | 0.84 (0.65 - 1.07) |  | 0.157 |
| HMDB00965 |  | Hypotaurine |  | 0.95 (0.82 - 1.10) |  | 0.485 |  | 0.97 (0.79 - 1.20) |  | 0.79 |  | 0.93 (0.75 - 1.14) |  | 0.48 |
| HMDB00982 |  | 5-methylcytidine |  | 0.88 (0.75 - 1.03) |  | 0.103 |  | 0.86 (0.69 - 1.07) |  | 0.18 |  | 0.89 (0.72 - 1.11) |  | 0.297 |
| HMDB00991 |  | 2-aminooctanoate |  | 0.94 (0.82 - 1.08) |  | 0.374 |  | 0.96 (0.80 - 1.14) |  | 0.635 |  | 0.93 (0.75 - 1.14) |  | 0.482 |
| HMDB01008 |  | Biliverdin |  | 0.88 (0.75 - 1.03) |  | 0.104 |  | 0.81 (0.65 - 1.01) |  | 0.066 |  | 0.96 (0.76 - 1.20) |  | 0.695 |
| HMDB01046 |  | Cotinine |  | 1.04 (0.90 - 1.21) |  | 0.584 |  | 1.07 (0.87 - 1.31) |  | 0.528 |  | 1.03 (0.83 - 1.28) |  | 0.782 |
| HMDB01276 |  | N-acetylspermidine |  | 0.97 (0.84 - 1.12) |  | 0.7 |  | 0.97 (0.80 - 1.18) |  | 0.796 |  | 0.96 (0.77 - 1.21) |  | 0.741 |
| HMDB01325 |  | Trimethyllysine |  | 0.99 (0.86 - 1.15) |  | 0.937 |  | 1.04 (0.85 - 1.28) |  | 0.672 |  | 0.94 (0.76 - 1.15) |  | 0.537 |
| HMDB01348 |  | C18:0 SM |  | 0.94 (0.80 - 1.10) |  | 0.416 |  | 1.10 (0.88 - 1.38) |  | 0.384 |  | 0.77 (0.62 - 0.97) |  | 0.029 |
| HMDB01390 |  | Hydroxycotinine |  | 1.04 (0.91 - 1.20) |  | 0.553 |  | 1.04 (0.85 - 1.28) |  | 0.687 |  | 1.06 (0.87 - 1.28) |  | 0.577 |
| HMDB01406 |  | Niacinamide |  | 0.91 (0.78 - 1.05) |  | 0.201 |  | 0.89 (0.73 - 1.09) |  | 0.26 |  | 0.93 (0.74 - 1.17) |  | 0.528 |
| HMDB01476 |  | 3-hydroxyanthranilic acid |  | 0.91 (0.79 - 1.06) |  | 0.239 |  | 0.76 (0.61 - 0.93) |  | 0.008 |  | 1.14 (0.90 - 1.43) |  | 0.273 |
| HMDB01539 |  | ADMA |  | 0.95 (0.81 - 1.11) |  | 0.505 |  | 1.03 (0.82 - 1.29) |  | 0.788 |  | 0.85 (0.67 - 1.07) |  | 0.164 |
| HMDB01545 |  | Pyridoxal |  | 0.97 (0.83 - 1.12) |  | 0.644 |  | 0.92 (0.74 - 1.13) |  | 0.421 |  | 1.02 (0.83 - 1.27) |  | 0.822 |
| HMDB01563 |  | 1-methylguanosine |  | 0.82 (0.71 - 0.96) |  | 0.012 |  | 0.82 (0.66 - 1.02) |  | 0.072 |  | 0.82 (0.66 - 1.02) |  | 0.072 |
| HMDB01565 |  | Phosphocholine |  | 0.96 (0.83 - 1.11) |  | 0.593 |  | 0.87 (0.71 - 1.07) |  | 0.187 |  | 1.07 (0.87 - 1.31) |  | 0.551 |
| HMDB01847 |  | Caffeine |  | 1.04 (0.89 - 1.21) |  | 0.614 |  | 1.03 (0.85 - 1.26) |  | 0.747 |  | 1.06 (0.84 - 1.34) |  | 0.621 |
| HMDB01859 |  | Acetaminophen |  | 1.10 (0.95 - 1.28) |  | 0.191 |  | 1.11 (0.91 - 1.34) |  | 0.306 |  | 1.11 (0.88 - 1.40) |  | 0.384 |
| HMDB01886\* |  | 3-methylxanthine pending\_conf |  | 1.11 (0.95 - 1.30) |  | 0.182 |  | 1.07 (0.87 - 1.31) |  | 0.52 |  | 1.17 (0.92 - 1.49) |  | 0.194 |
| HMDB01906 |  | Aminoisobutyric acid |  | 1.03 (0.89 - 1.20) |  | 0.656 |  | 1.02 (0.84 - 1.24) |  | 0.82 |  | 1.06 (0.83 - 1.34) |  | 0.657 |
| HMDB01991 |  | 7-methylxanthine |  | 1.10 (0.94 - 1.27) |  | 0.232 |  | 1.04 (0.86 - 1.27) |  | 0.666 |  | 1.17 (0.93 - 1.48) |  | 0.188 |
| HMDB02000 |  | Myristoleic acid |  | 1.03 (0.89 - 1.19) |  | 0.727 |  | 1.05 (0.87 - 1.28) |  | 0.603 |  | 1.00 (0.80 - 1.25) |  | 0.998 |
| HMDB02005 |  | Methionine sulfoxide |  | 0.97 (0.84 - 1.13) |  | 0.693 |  | 0.99 (0.80 - 1.22) |  | 0.914 |  | 0.95 (0.77 - 1.17) |  | 0.618 |
| HMDB02013 |  | C4 carnitine |  | 0.91 (0.78 - 1.05) |  | 0.194 |  | 0.79 (0.64 - 0.98) |  | 0.034 |  | 1.04 (0.84 - 1.30) |  | 0.704 |
| HMDB02014 |  | C14:1 carnitine |  | 0.93 (0.80 - 1.09) |  | 0.399 |  | 0.99 (0.80 - 1.22) |  | 0.897 |  | 0.88 (0.69 - 1.11) |  | 0.275 |
| HMDB02250 |  | C12 carnitine |  | 0.93 (0.80 - 1.09) |  | 0.386 |  | 0.95 (0.77 - 1.17) |  | 0.644 |  | 0.91 (0.72 - 1.15) |  | 0.43 |
| HMDB02302 |  | Indole-3-propionate |  | 0.88 (0.76 - 1.03) |  | 0.111 |  | 1.02 (0.82 - 1.27) |  | 0.855 |  | 0.77 (0.61 - 0.96) |  | 0.021 |
| HMDB02329 |  | Oxalate |  | 0.94 (0.81 - 1.10) |  | 0.466 |  | 0.93 (0.75 - 1.15) |  | 0.49 |  | 0.96 (0.76 - 1.21) |  | 0.709 |
| HMDB02366 |  | C5:1 carnitine |  | 0.87 (0.76 - 1.01) |  | 0.059 |  | 0.82 (0.67 - 1.00) |  | 0.056 |  | 0.92 (0.75 - 1.13) |  | 0.425 |
| HMDB02802 |  | Cortisone |  | 0.93 (0.80 - 1.08) |  | 0.326 |  | 0.96 (0.77 - 1.19) |  | 0.718 |  | 0.90 (0.74 - 1.09) |  | 0.279 |
| HMDB02815 |  | C18:1 LPC |  | 1.04 (0.89 - 1.21) |  | 0.643 |  | 1.17 (0.95 - 1.45) |  | 0.146 |  | 0.90 (0.72 - 1.12) |  | 0.336 |
| HMDB03282 |  | 1-methylguanine |  | 0.91 (0.78 - 1.06) |  | 0.233 |  | 0.99 (0.80 - 1.23) |  | 0.933 |  | 0.82 (0.65 - 1.03) |  | 0.085 |
| HMDB03331 |  | 1-methyladenosine |  | 0.94 (0.80 - 1.11) |  | 0.468 |  | 0.85 (0.67 - 1.08) |  | 0.191 |  | 1.02 (0.81 - 1.29) |  | 0.85 |
| HMDB03334 |  | SDMA |  | 1.00 (0.86 - 1.16) |  | 0.997 |  | 0.94 (0.77 - 1.16) |  | 0.592 |  | 1.06 (0.85 - 1.32) |  | 0.596 |
| HMDB03357 |  | N-acetylornithine |  | 0.86 (0.74 - 1.00) |  | 0.051 |  | 0.97 (0.78 - 1.20) |  | 0.777 |  | 0.77 (0.62 - 0.96) |  | 0.019 |
| HMDB03464 |  | 4-guanidinobutanoic acid |  | 0.94 (0.81 - 1.10) |  | 0.457 |  | 0.96 (0.76 - 1.20) |  | 0.708 |  | 0.93 (0.75 - 1.15) |  | 0.51 |
| HMDB03681 |  | 4-acetamidobutanoate |  | 0.96 (0.82 - 1.13) |  | 0.651 |  | 0.98 (0.78 - 1.22) |  | 0.829 |  | 0.94 (0.75 - 1.17) |  | 0.575 |
| HMDB04030 |  | 21-deoxycortisol |  | 0.85 (0.73 - 0.99) |  | 0.034 |  | 0.86 (0.70 - 1.06) |  | 0.159 |  | 0.83 (0.67 - 1.04) |  | 0.102 |
| HMDB04030a |  | Deoxycortisone |  | 1.07 (0.92 - 1.24) |  | 0.402 |  | 1.14 (0.93 - 1.41) |  | 0.203 |  | 0.98 (0.79 - 1.23) |  | 0.879 |
| HMDB04193 |  | N1-methyl-2-pyridone-5-carboxamide |  | 0.86 (0.73 - 1.01) |  | 0.072 |  | 0.85 (0.69 - 1.05) |  | 0.139 |  | 0.86 (0.66 - 1.12) |  | 0.265 |
| HMDB04231 |  | Pantothenol |  | 0.99 (0.84 - 1.18) |  | 0.938 |  | 0.94 (0.74 - 1.19) |  | 0.613 |  | 1.04 (0.82 - 1.32) |  | 0.752 |
| HMDB04400 |  | 5-acetylamino-6-amino-3-methyluracil |  | 0.99 (0.86 - 1.15) |  | 0.935 |  | 1.00 (0.82 - 1.22) |  | 0.984 |  | 0.99 (0.80 - 1.24) |  | 0.952 |
| HMDB04824 |  | N2,N2-dimethylguanosine |  | 0.81 (0.69 - 0.96) |  | 0.015 |  | 0.88 (0.70 - 1.10) |  | 0.267 |  | 0.72 (0.56 - 0.94) |  | 0.014 |
| HMDB04827 |  | Proline betaine |  | 0.91 (0.79 - 1.04) |  | 0.171 |  | 0.90 (0.74 - 1.09) |  | 0.276 |  | 0.91 (0.74 - 1.12) |  | 0.372 |
| HMDB04949 |  | C16:0 Ceramide (d18:1) |  | 0.92 (0.78 - 1.08) |  | 0.308 |  | 0.95 (0.77 - 1.18) |  | 0.644 |  | 0.86 (0.67 - 1.12) |  | 0.27 |
| HMDB04952 |  | C22:0 Ceramide (d18:1) |  | 0.96 (0.83 - 1.11) |  | 0.578 |  | 0.86 (0.71 - 1.04) |  | 0.122 |  | 1.11 (0.88 - 1.40) |  | 0.364 |
| HMDB04953 |  | C24:1 Ceramide (d18:1) |  | 0.93 (0.80 - 1.09) |  | 0.379 |  | 1.00 (0.81 - 1.25) |  | 0.977 |  | 0.85 (0.68 - 1.07) |  | 0.164 |
| HMDB04956 |  | C24:0 Ceramide (d18:1) |  | 0.96 (0.82 - 1.12) |  | 0.565 |  | 0.87 (0.71 - 1.07) |  | 0.191 |  | 1.08 (0.85 - 1.36) |  | 0.548 |
| HMDB05065 |  | C18:1 carnitine |  | 0.95 (0.82 - 1.10) |  | 0.495 |  | 1.10 (0.90 - 1.34) |  | 0.354 |  | 0.80 (0.64 - 1.00) |  | 0.048 |
| HMDB05066 |  | C14 carnitine |  | 0.90 (0.77 - 1.05) |  | 0.179 |  | 0.90 (0.74 - 1.11) |  | 0.341 |  | 0.90 (0.72 - 1.13) |  | 0.364 |
| HMDB05356\*\* |  | C48:0 TAG |  | 0.86 (0.74 - 1.00) |  | 0.048 |  | 0.75 (0.61 - 0.92) |  | 0.005 |  | 1.01 (0.82 - 1.26) |  | 0.895 |
| HMDB05357\*\* |  | C50:0 TAG |  | 0.85 (0.73 - 0.98) |  | 0.028 |  | 0.74 (0.60 - 0.91) |  | 0.004 |  | 0.99 (0.79 - 1.22) |  | 0.894 |
| HMDB05359\*\* |  | C48:1 TAG |  | 0.86 (0.75 - 1.00) |  | 0.049 |  | 0.77 (0.62 - 0.94) |  | 0.01 |  | 0.99 (0.80 - 1.23) |  | 0.92 |
| HMDB05360\*\* |  | C50:1 TAG |  | 0.86 (0.74 - 0.99) |  | 0.036 |  | 0.76 (0.62 - 0.93) |  | 0.007 |  | 0.99 (0.80 - 1.22) |  | 0.912 |
| HMDB05362\*\* |  | C51:2 TAG |  | 0.86 (0.74 - 0.99) |  | 0.042 |  | 0.77 (0.62 - 0.95) |  | 0.013 |  | 0.96 (0.78 - 1.19) |  | 0.717 |
| HMDB05363\*\* |  | C52:4 TAG |  | 0.96 (0.83 - 1.11) |  | 0.563 |  | 0.92 (0.75 - 1.12) |  | 0.394 |  | 1.00 (0.82 - 1.23) |  | 0.995 |
| HMDB05365\* |  | C52:0 TAG |  | 0.86 (0.74 - 1.01) |  | 0.064 |  | 0.79 (0.64 - 0.98) |  | 0.034 |  | 0.95 (0.76 - 1.18) |  | 0.62 |
| HMDB05367\* |  | C52:1 TAG |  | 0.84 (0.72 - 0.97) |  | 0.017 |  | 0.75 (0.61 - 0.92) |  | 0.006 |  | 0.94 (0.76 - 1.17) |  | 0.59 |
| HMDB05369\* |  | C52:2 TAG |  | 0.88 (0.77 - 1.02) |  | 0.081 |  | 0.83 (0.68 - 1.01) |  | 0.064 |  | 0.94 (0.77 - 1.15) |  | 0.559 |
| HMDB05370\* |  | C54:4 TAG |  | 1.01 (0.88 - 1.16) |  | 0.927 |  | 1.06 (0.87 - 1.30) |  | 0.543 |  | 0.95 (0.79 - 1.16) |  | 0.635 |
| HMDB05376\* |  | C48:2 TAG |  | 0.91 (0.78 - 1.05) |  | 0.185 |  | 0.80 (0.66 - 0.99) |  | 0.037 |  | 1.04 (0.83 - 1.29) |  | 0.758 |
| HMDB05377\* |  | C50:2 TAG |  | 0.89 (0.77 - 1.03) |  | 0.117 |  | 0.80 (0.65 - 0.98) |  | 0.03 |  | 1.00 (0.81 - 1.23) |  | 0.994 |
| HMDB05384\* |  | C52:3 TAG |  | 0.93 (0.81 - 1.07) |  | 0.29 |  | 0.88 (0.72 - 1.07) |  | 0.211 |  | 0.98 (0.80 - 1.19) |  | 0.811 |
| HMDB05385\* |  | C54:5 TAG |  | 0.90 (0.78 - 1.04) |  | 0.159 |  | 0.85 (0.70 - 1.04) |  | 0.124 |  | 0.95 (0.78 - 1.15) |  | 0.59 |
| HMDB05391\* |  | C54:6 TAG |  | 0.96 (0.83 - 1.11) |  | 0.551 |  | 0.86 (0.70 - 1.05) |  | 0.145 |  | 1.07 (0.87 - 1.31) |  | 0.529 |
| HMDB05392\* |  | C56:8 TAG |  | 1.07 (0.91 - 1.24) |  | 0.419 |  | 0.98 (0.79 - 1.23) |  | 0.88 |  | 1.15 (0.92 - 1.43) |  | 0.222 |
| HMDB05395\* |  | C54:1 TAG |  | 0.84 (0.73 - 0.98) |  | 0.027 |  | 0.80 (0.65 - 0.97) |  | 0.027 |  | 0.90 (0.72 - 1.13) |  | 0.385 |
| HMDB05403\* |  | C54:2 TAG |  | 0.87 (0.75 - 1.01) |  | 0.066 |  | 0.85 (0.70 - 1.04) |  | 0.12 |  | 0.89 (0.72 - 1.11) |  | 0.307 |
| HMDB05404\* |  | C56:2 TAG |  | 0.89 (0.76 - 1.03) |  | 0.119 |  | 0.87 (0.71 - 1.07) |  | 0.19 |  | 0.90 (0.72 - 1.13) |  | 0.373 |
| HMDB05405\* |  | C54:3 TAG |  | 0.92 (0.80 - 1.05) |  | 0.228 |  | 0.94 (0.77 - 1.14) |  | 0.532 |  | 0.90 (0.74 - 1.09) |  | 0.292 |
| HMDB05406\* |  | C56:5 TAG |  | 1.07 (0.93 - 1.23) |  | 0.355 |  | 1.12 (0.92 - 1.37) |  | 0.262 |  | 1.01 (0.82 - 1.24) |  | 0.937 |
| HMDB05410\* |  | C56:3 TAG |  | 0.93 (0.81 - 1.07) |  | 0.315 |  | 0.93 (0.77 - 1.13) |  | 0.465 |  | 0.93 (0.76 - 1.14) |  | 0.493 |
| HMDB05413\* |  | C58:8 TAG |  | 1.09 (0.93 - 1.27) |  | 0.294 |  | 1.12 (0.89 - 1.41) |  | 0.331 |  | 1.06 (0.85 - 1.31) |  | 0.608 |
| HMDB05432\* |  | C48:3 TAG |  | 0.95 (0.82 - 1.10) |  | 0.485 |  | 0.84 (0.69 - 1.03) |  | 0.09 |  | 1.09 (0.87 - 1.36) |  | 0.434 |
| HMDB05433\* |  | C50:3 TAG |  | 0.95 (0.82 - 1.09) |  | 0.451 |  | 0.86 (0.71 - 1.06) |  | 0.155 |  | 1.04 (0.84 - 1.29) |  | 0.71 |
| HMDB05435\* |  | C50:4 TAG +NH4 |  | 0.97 (0.84 - 1.12) |  | 0.661 |  | 0.84 (0.69 - 1.02) |  | 0.083 |  | 1.13 (0.92 - 1.40) |  | 0.249 |
| HMDB05436\* |  | C52:6 TAG |  | 1.00 (0.86 - 1.16) |  | 0.982 |  | 0.88 (0.72 - 1.08) |  | 0.217 |  | 1.13 (0.92 - 1.40) |  | 0.252 |
| HMDB05447\* |  | C54:7 TAG |  | 1.09 (0.93 - 1.27) |  | 0.276 |  | 0.99 (0.80 - 1.23) |  | 0.938 |  | 1.19 (0.96 - 1.48) |  | 0.11 |
| HMDB05448\* |  | C56:9 TAG |  | 1.07 (0.92 - 1.24) |  | 0.378 |  | 0.94 (0.76 - 1.17) |  | 0.596 |  | 1.20 (0.97 - 1.49) |  | 0.094 |
| HMDB05456\* |  | C56:6 TAG |  | 1.05 (0.91 - 1.22) |  | 0.495 |  | 1.03 (0.84 - 1.27) |  | 0.769 |  | 1.06 (0.86 - 1.31) |  | 0.573 |
| HMDB05458\* |  | C58:6 TAG |  | 1.04 (0.90 - 1.20) |  | 0.587 |  | 0.98 (0.81 - 1.20) |  | 0.857 |  | 1.10 (0.89 - 1.36) |  | 0.373 |
| HMDB05462\* |  | C56:7 TAG |  | 1.02 (0.87 - 1.19) |  | 0.808 |  | 0.99 (0.79 - 1.23) |  | 0.928 |  | 1.04 (0.84 - 1.30) |  | 0.708 |
| HMDB05463\* |  | C58:9 TAG |  | 1.10 (0.94 - 1.28) |  | 0.229 |  | 1.08 (0.87 - 1.36) |  | 0.486 |  | 1.11 (0.90 - 1.38) |  | 0.327 |
| HMDB05471\* |  | C58:7 TAG |  | 1.10 (0.95 - 1.28) |  | 0.212 |  | 1.11 (0.89 - 1.39) |  | 0.355 |  | 1.09 (0.88 - 1.35) |  | 0.435 |
| HMDB05476\* |  | C58:10 TAG |  | 1.10 (0.94 - 1.28) |  | 0.229 |  | 1.01 (0.81 - 1.26) |  | 0.936 |  | 1.18 (0.95 - 1.46) |  | 0.128 |
| HMDB05478\* |  | C60:12 TAG |  | 1.07 (0.92 - 1.24) |  | 0.391 |  | 1.05 (0.84 - 1.32) |  | 0.643 |  | 1.08 (0.88 - 1.33) |  | 0.47 |
| HMDB05923 |  | N4-acetylcytidine |  | 0.85 (0.71 - 1.00) |  | 0.05 |  | 0.84 (0.67 - 1.04) |  | 0.111 |  | 0.86 (0.66 - 1.11) |  | 0.246 |
| HMDB06344 |  | Phenylacetylglutamine |  | 0.95 (0.83 - 1.10) |  | 0.484 |  | 0.97 (0.79 - 1.21) |  | 0.808 |  | 0.94 (0.77 - 1.13) |  | 0.49 |
| HMDB06347 |  | C26 carnitine |  | 0.86 (0.74 - 1.00) |  | 0.051 |  | 0.75 (0.61 - 0.92) |  | 0.006 |  | 1.02 (0.81 - 1.28) |  | 0.877 |
| HMDB06460 |  | C20 carnitine |  | 0.94 (0.81 - 1.09) |  | 0.383 |  | 0.88 (0.72 - 1.08) |  | 0.216 |  | 1.00 (0.80 - 1.25) |  | 0.971 |
| HMDB06469 |  | C18:2 carnitine |  | 0.97 (0.84 - 1.12) |  | 0.69 |  | 1.07 (0.87 - 1.31) |  | 0.51 |  | 0.86 (0.69 - 1.08) |  | 0.187 |
| HMDB06725 |  | C14:0 CE |  | 0.90 (0.78 - 1.03) |  | 0.127 |  | 0.79 (0.65 - 0.96) |  | 0.016 |  | 1.04 (0.84 - 1.29) |  | 0.722 |
| HMDB06726 |  | C20:4 CE |  | 1.13 (0.97 - 1.31) |  | 0.13 |  | 1.24 (1.01 - 1.53) |  | 0.045 |  | 0.99 (0.79 - 1.25) |  | 0.938 |
| HMDB06729 |  | C22:4 CE |  | 1.20 (1.02 - 1.41) |  | 0.028 |  | 1.23 (0.98 - 1.53) |  | 0.076 |  | 1.16 (0.92 - 1.47) |  | 0.216 |
| HMDB06731 |  | C20:5 CE |  | 0.99 (0.86 - 1.15) |  | 0.929 |  | 0.97 (0.80 - 1.18) |  | 0.759 |  | 1.02 (0.82 - 1.27) |  | 0.856 |
| HMDB06733 |  | C22:6 CE |  | 1.05 (0.90 - 1.22) |  | 0.518 |  | 1.16 (0.93 - 1.43) |  | 0.182 |  | 0.95 (0.77 - 1.17) |  | 0.626 |
| HMDB06736\* |  | C20:3 CE |  | 1.04 (0.90 - 1.21) |  | 0.598 |  | 1.00 (0.82 - 1.22) |  | 0.969 |  | 1.08 (0.86 - 1.36) |  | 0.504 |
| HMDB06831 |  | Butyrobetaine isomer |  | 0.85 (0.74 - 0.98) |  | 0.023 |  | 0.80 (0.66 - 0.96) |  | 0.02 |  | 0.92 (0.75 - 1.13) |  | 0.432 |
| HMDB07098\* |  | C32:0 DAG |  | 0.87 (0.75 - 1.00) |  | 0.052 |  | 0.78 (0.64 - 0.95) |  | 0.014 |  | 0.98 (0.79 - 1.21) |  | 0.857 |
| HMDB07099\* |  | C32:1 DAG |  | 0.88 (0.76 - 1.01) |  | 0.069 |  | 0.80 (0.65 - 0.98) |  | 0.028 |  | 0.97 (0.79 - 1.18) |  | 0.739 |
| HMDB07100\* |  | C34:0 DAG |  | 0.87 (0.75 - 1.01) |  | 0.061 |  | 0.81 (0.66 - 1.00) |  | 0.054 |  | 0.93 (0.75 - 1.15) |  | 0.481 |
| HMDB07102\* |  | C34:1 DAG |  | 0.93 (0.81 - 1.07) |  | 0.326 |  | 0.94 (0.76 - 1.17) |  | 0.588 |  | 0.92 (0.76 - 1.11) |  | 0.382 |
| HMDB07103\* |  | C34:2 DAG |  | 0.93 (0.81 - 1.07) |  | 0.327 |  | 0.94 (0.76 - 1.17) |  | 0.596 |  | 0.92 (0.76 - 1.11) |  | 0.392 |
| HMDB07128\* |  | C32:2 DAG |  | 0.87 (0.75 - 1.01) |  | 0.067 |  | 0.78 (0.64 - 0.96) |  | 0.02 |  | 0.98 (0.79 - 1.21) |  | 0.834 |
| HMDB07132\* |  | C34:3 DAG |  | 0.93 (0.80 - 1.07) |  | 0.303 |  | 0.85 (0.69 - 1.04) |  | 0.106 |  | 1.01 (0.83 - 1.24) |  | 0.902 |
| HMDB07158\* |  | C36:0 DAG |  | 0.94 (0.80 - 1.09) |  | 0.412 |  | 1.05 (0.87 - 1.27) |  | 0.589 |  | 0.75 (0.57 - 0.98) |  | 0.036 |
| HMDB07170\* |  | C38:4 DAG |  | 1.00 (0.87 - 1.15) |  | 0.981 |  | 0.92 (0.77 - 1.10) |  | 0.36 |  | 1.12 (0.90 - 1.38) |  | 0.308 |
| HMDB07199\* |  | C38:5 DAG |  | 0.97 (0.84 - 1.11) |  | 0.645 |  | 0.91 (0.75 - 1.10) |  | 0.321 |  | 1.02 (0.84 - 1.26) |  | 0.812 |
| HMDB07216\* |  | C36:1 DAG |  | 0.85 (0.73 - 0.98) |  | 0.024 |  | 0.79 (0.65 - 0.97) |  | 0.024 |  | 0.91 (0.73 - 1.12) |  | 0.357 |
| HMDB07218\* |  | C36:2 DAG |  | 0.86 (0.75 - 0.99) |  | 0.041 |  | 0.85 (0.70 - 1.04) |  | 0.125 |  | 0.87 (0.71 - 1.06) |  | 0.168 |
| HMDB07219\* |  | C36:3 DAG |  | 0.91 (0.79 - 1.05) |  | 0.212 |  | 0.91 (0.74 - 1.11) |  | 0.339 |  | 0.92 (0.75 - 1.12) |  | 0.39 |
| HMDB07248\* |  | C36:4 DAG |  | 0.95 (0.82 - 1.09) |  | 0.465 |  | 0.91 (0.74 - 1.12) |  | 0.38 |  | 0.98 (0.80 - 1.19) |  | 0.809 |
| HMDB07448\* |  | C38:3 DAG |  | 0.95 (0.83 - 1.09) |  | 0.485 |  | 0.91 (0.75 - 1.10) |  | 0.326 |  | 0.99 (0.82 - 1.21) |  | 0.956 |
| HMDB07869\* |  | C30:0 PC |  | 0.96 (0.83 - 1.11) |  | 0.6 |  | 0.84 (0.69 - 1.02) |  | 0.073 |  | 1.14 (0.91 - 1.42) |  | 0.244 |
| HMDB07870\* |  | C30:1 PC |  | 1.04 (0.89 - 1.21) |  | 0.634 |  | 0.86 (0.70 - 1.06) |  | 0.152 |  | 1.32 (1.04 - 1.67) |  | 0.024 |
| HMDB07871\* |  | C32:0 PC |  | 1.07 (0.92 - 1.24) |  | 0.39 |  | 0.89 (0.72 - 1.09) |  | 0.242 |  | 1.35 (1.07 - 1.71) |  | 0.011 |
| HMDB07873\* |  | C32:1 PC |  | 1.03 (0.89 - 1.20) |  | 0.712 |  | 0.86 (0.70 - 1.06) |  | 0.151 |  | 1.26 (1.01 - 1.58) |  | 0.04 |
| HMDB07874\* |  | C32:2 PC |  | 1.05 (0.90 - 1.21) |  | 0.54 |  | 0.92 (0.75 - 1.12) |  | 0.391 |  | 1.24 (0.98 - 1.56) |  | 0.076 |
| HMDB07883\* |  | C34:4 PC |  | 1.09 (0.95 - 1.26) |  | 0.233 |  | 1.00 (0.82 - 1.21) |  | 0.999 |  | 1.20 (0.96 - 1.49) |  | 0.104 |
| HMDB07970\* |  | C34:0 PC |  | 1.04 (0.89 - 1.21) |  | 0.645 |  | 0.82 (0.66 - 1.02) |  | 0.082 |  | 1.32 (1.05 - 1.66) |  | 0.018 |
| HMDB07972\* |  | C34:1 PC |  | 1.03 (0.89 - 1.20) |  | 0.676 |  | 0.89 (0.72 - 1.10) |  | 0.28 |  | 1.22 (0.97 - 1.53) |  | 0.083 |
| HMDB07973\* |  | C34:2 PC |  | 1.01 (0.86 - 1.19) |  | 0.915 |  | 0.89 (0.72 - 1.11) |  | 0.303 |  | 1.21 (0.92 - 1.59) |  | 0.165 |
| HMDB07983\* |  | C36:4 PC-A |  | 0.97 (0.83 - 1.13) |  | 0.688 |  | 0.83 (0.67 - 1.03) |  | 0.092 |  | 1.15 (0.91 - 1.46) |  | 0.243 |
| HMDB07991\* |  | C38:6 PC |  | 1.08 (0.92 - 1.27) |  | 0.328 |  | 0.99 (0.79 - 1.25) |  | 0.947 |  | 1.17 (0.94 - 1.46) |  | 0.17 |
| HMDB08006\* |  | C34:3 PC |  | 1.08 (0.92 - 1.26) |  | 0.368 |  | 0.89 (0.73 - 1.10) |  | 0.278 |  | 1.40 (1.08 - 1.80) |  | 0.01 |
| HMDB08036\* |  | C36:0 PC |  | 1.02 (0.87 - 1.19) |  | 0.825 |  | 0.78 (0.62 - 0.98) |  | 0.035 |  | 1.32 (1.04 - 1.67) |  | 0.02 |
| HMDB08038\* |  | C36:1 PC |  | 0.99 (0.85 - 1.15) |  | 0.889 |  | 0.79 (0.64 - 0.98) |  | 0.035 |  | 1.26 (1.01 - 1.58) |  | 0.044 |
| HMDB08039\* |  | C36:2 PC |  | 0.85 (0.73 - 0.98) |  | 0.028 |  | 0.75 (0.60 - 0.93) |  | 0.009 |  | 0.95 (0.77 - 1.17) |  | 0.604 |
| HMDB08047\* |  | C38:3 PC |  | 0.99 (0.85 - 1.14) |  | 0.845 |  | 0.78 (0.64 - 0.96) |  | 0.02 |  | 1.30 (1.03 - 1.64) |  | 0.026 |
| HMDB08048\* |  | C38:4 PC |  | 1.17 (1.00 - 1.36) |  | 0.043 |  | 1.01 (0.82 - 1.25) |  | 0.898 |  | 1.36 (1.08 - 1.70) |  | 0.008 |
| HMDB08057\* |  | C40:6 PC |  | 1.01 (0.87 - 1.16) |  | 0.942 |  | 0.80 (0.65 - 0.98) |  | 0.035 |  | 1.32 (1.05 - 1.66) |  | 0.019 |
| HMDB08105\* |  | C36:3 PC |  | 1.11 (0.94 - 1.30) |  | 0.224 |  | 0.92 (0.75 - 1.14) |  | 0.468 |  | 1.44 (1.10 - 1.88) |  | 0.007 |
| HMDB08138\* |  | C36:4 PC-B |  | 1.15 (0.99 - 1.33) |  | 0.069 |  | 1.07 (0.87 - 1.31) |  | 0.537 |  | 1.24 (1.00 - 1.55) |  | 0.055 |
| HMDB08270\* |  | C38:2 PC |  | 0.99 (0.85 - 1.16) |  | 0.93 |  | 0.75 (0.61 - 0.93) |  | 0.008 |  | 1.39 (1.09 - 1.77) |  | 0.007 |
| HMDB08511\* |  | C40:10 PC |  | 1.14 (0.97 - 1.34) |  | 0.119 |  | 0.99 (0.79 - 1.24) |  | 0.932 |  | 1.31 (1.03 - 1.67) |  | 0.025 |
| HMDB08731\* |  | C40:9 PC |  | 1.09 (0.93 - 1.28) |  | 0.287 |  | 1.02 (0.80 - 1.28) |  | 0.897 |  | 1.16 (0.93 - 1.44) |  | 0.195 |
| HMDB08923\* |  | C32:0 PE |  | 0.98 (0.85 - 1.13) |  | 0.78 |  | 0.85 (0.70 - 1.03) |  | 0.094 |  | 1.19 (0.94 - 1.50) |  | 0.153 |
| HMDB08925\* |  | C34:0 PE |  | 0.90 (0.78 - 1.05) |  | 0.172 |  | 0.82 (0.67 - 1.00) |  | 0.048 |  | 1.02 (0.81 - 1.28) |  | 0.873 |
| HMDB08928\* |  | C34:2 PE |  | 0.96 (0.83 - 1.11) |  | 0.569 |  | 0.87 (0.73 - 1.05) |  | 0.141 |  | 1.11 (0.89 - 1.39) |  | 0.344 |
| HMDB08937\* |  | C36:4 PE |  | 1.03 (0.90 - 1.18) |  | 0.673 |  | 0.99 (0.84 - 1.18) |  | 0.928 |  | 1.10 (0.88 - 1.37) |  | 0.412 |
| HMDB08942\* |  | C38:2 PE |  | 1.02 (0.86 - 1.20) |  | 0.822 |  | 0.97 (0.78 - 1.20) |  | 0.764 |  | 1.09 (0.84 - 1.40) |  | 0.516 |
| HMDB08952\* |  | C34:2 PE plasmalogen |  | 0.97 (0.84 - 1.12) |  | 0.675 |  | 0.90 (0.73 - 1.12) |  | 0.349 |  | 1.03 (0.84 - 1.25) |  | 0.795 |
| HMDB08991\* |  | C36:0 PE |  | 0.97 (0.83 - 1.14) |  | 0.741 |  | 0.82 (0.66 - 1.02) |  | 0.076 |  | 1.17 (0.93 - 1.47) |  | 0.187 |
| HMDB08993\* |  | C36:1 PE |  | 0.98 (0.85 - 1.13) |  | 0.794 |  | 0.86 (0.71 - 1.04) |  | 0.122 |  | 1.17 (0.94 - 1.46) |  | 0.171 |
| HMDB08994\* |  | C36:2 PE |  | 0.91 (0.78 - 1.05) |  | 0.182 |  | 0.84 (0.70 - 1.02) |  | 0.079 |  | 1.01 (0.81 - 1.26) |  | 0.941 |
| HMDB09003\* |  | C38:4 PE |  | 0.99 (0.86 - 1.14) |  | 0.918 |  | 0.99 (0.83 - 1.19) |  | 0.939 |  | 0.99 (0.79 - 1.24) |  | 0.944 |
| HMDB09012\* |  | C40:6 PE |  | 0.97 (0.84 - 1.12) |  | 0.661 |  | 0.93 (0.76 - 1.13) |  | 0.468 |  | 1.02 (0.83 - 1.25) |  | 0.879 |
| HMDB09060\* |  | C36:3 PE |  | 1.05 (0.91 - 1.21) |  | 0.526 |  | 0.93 (0.76 - 1.13) |  | 0.453 |  | 1.23 (0.99 - 1.54) |  | 0.064 |
| HMDB09069\* |  | C38:5 PE |  | 1.13 (0.98 - 1.30) |  | 0.094 |  | 0.99 (0.83 - 1.18) |  | 0.899 |  | 1.39 (1.10 - 1.76) |  | 0.005 |
| HMDB09082\* |  | C36:2 PE plasmalogen |  | 1.07 (0.92 - 1.25) |  | 0.373 |  | 0.86 (0.70 - 1.07) |  | 0.181 |  | 1.40 (1.09 - 1.78) |  | 0.007 |
| HMDB09102\* |  | C38:6 PE |  | 1.02 (0.89 - 1.18) |  | 0.753 |  | 0.98 (0.81 - 1.19) |  | 0.824 |  | 1.09 (0.88 - 1.35) |  | 0.447 |
| HMDB09805\* |  | C34:0 PI |  | 0.87 (0.73 - 1.04) |  | 0.132 |  | 0.82 (0.64 - 1.04) |  | 0.107 |  | 0.94 (0.73 - 1.20) |  | 0.602 |
| HMDB10167\* |  | C40:6 PS |  | 1.00 (0.85 - 1.17) |  | 0.952 |  | 0.87 (0.69 - 1.08) |  | 0.208 |  | 1.15 (0.91 - 1.45) |  | 0.23 |
| HMDB10169 |  | C16:0 SM |  | 0.92 (0.78 - 1.07) |  | 0.275 |  | 0.92 (0.73 - 1.15) |  | 0.443 |  | 0.91 (0.73 - 1.13) |  | 0.401 |
| HMDB10368 |  | C18:0 CE |  | 1.04 (0.89 - 1.21) |  | 0.622 |  | 0.91 (0.74 - 1.12) |  | 0.378 |  | 1.20 (0.95 - 1.50) |  | 0.124 |
| HMDB10370 |  | C18:3 CE |  | 0.95 (0.83 - 1.10) |  | 0.533 |  | 0.86 (0.71 - 1.04) |  | 0.112 |  | 1.11 (0.88 - 1.40) |  | 0.365 |
| HMDB10375 |  | C22:5 CE |  | 1.07 (0.92 - 1.24) |  | 0.38 |  | 1.14 (0.94 - 1.40) |  | 0.187 |  | 0.97 (0.77 - 1.21) |  | 0.754 |
| HMDB10379 |  | C14:0 LPC |  | 0.95 (0.82 - 1.10) |  | 0.489 |  | 0.86 (0.70 - 1.06) |  | 0.157 |  | 1.06 (0.84 - 1.32) |  | 0.636 |
| HMDB10382 |  | C16:0 LPC |  | 0.96 (0.83 - 1.12) |  | 0.63 |  | 1.00 (0.82 - 1.23) |  | 0.977 |  | 0.91 (0.72 - 1.14) |  | 0.396 |
| HMDB10383 |  | C16:1 LPC |  | 1.06 (0.92 - 1.23) |  | 0.412 |  | 1.07 (0.87 - 1.31) |  | 0.516 |  | 1.05 (0.85 - 1.30) |  | 0.668 |
| HMDB10384 |  | C18:0 LPC |  | 0.96 (0.83 - 1.12) |  | 0.629 |  | 0.96 (0.78 - 1.18) |  | 0.667 |  | 0.95 (0.77 - 1.18) |  | 0.669 |
| HMDB10386\* |  | C18:2 LPC |  | 1.03 (0.88 - 1.20) |  | 0.728 |  | 1.17 (0.94 - 1.46) |  | 0.154 |  | 0.90 (0.73 - 1.11) |  | 0.336 |
| HMDB10393 |  | C20:3 LPC |  | 0.92 (0.80 - 1.07) |  | 0.278 |  | 0.98 (0.80 - 1.19) |  | 0.811 |  | 0.84 (0.68 - 1.05) |  | 0.132 |
| HMDB10395 |  | C20:4 LPC |  | 1.11 (0.96 - 1.28) |  | 0.164 |  | 1.28 (1.05 - 1.58) |  | 0.016 |  | 0.93 (0.75 - 1.14) |  | 0.476 |
| HMDB10397 |  | C20:5 LPC |  | 0.97 (0.84 - 1.13) |  | 0.704 |  | 1.10 (0.89 - 1.36) |  | 0.376 |  | 0.85 (0.68 - 1.04) |  | 0.119 |
| HMDB10404 |  | C22:6 LPC |  | 1.05 (0.91 - 1.23) |  | 0.491 |  | 1.22 (0.97 - 1.52) |  | 0.084 |  | 0.91 (0.74 - 1.13) |  | 0.406 |
| HMDB10407\* |  | C16:1 LPC plasmalogen |  | 0.99 (0.85 - 1.15) |  | 0.874 |  | 1.11 (0.89 - 1.38) |  | 0.339 |  | 0.86 (0.69 - 1.08) |  | 0.197 |
| HMDB10411\* |  | C46:0 TAG |  | 0.87 (0.75 - 1.00) |  | 0.052 |  | 0.76 (0.62 - 0.93) |  | 0.008 |  | 1.01 (0.81 - 1.26) |  | 0.928 |
| HMDB10412\* |  | C46:1 TAG |  | 0.91 (0.78 - 1.05) |  | 0.196 |  | 0.80 (0.65 - 0.98) |  | 0.028 |  | 1.06 (0.85 - 1.33) |  | 0.608 |
| HMDB10419\* |  | C46:2 TAG |  | 0.94 (0.80 - 1.09) |  | 0.388 |  | 0.81 (0.65 - 1.00) |  | 0.048 |  | 1.11 (0.88 - 1.39) |  | 0.388 |
| HMDB10471\* |  | C50:5 TAG |  | 0.98 (0.84 - 1.13) |  | 0.739 |  | 0.85 (0.69 - 1.03) |  | 0.102 |  | 1.14 (0.92 - 1.41) |  | 0.241 |
| HMDB10497\* |  | C50:6 TAG |  | 0.99 (0.86 - 1.15) |  | 0.93 |  | 0.84 (0.69 - 1.03) |  | 0.094 |  | 1.19 (0.96 - 1.48) |  | 0.109 |
| HMDB10498\* |  | C54:9 TAG |  | 1.07 (0.92 - 1.25) |  | 0.377 |  | 0.98 (0.79 - 1.21) |  | 0.845 |  | 1.17 (0.94 - 1.46) |  | 0.165 |
| HMDB10513\* |  | C56:10 TAG |  | 1.09 (0.93 - 1.27) |  | 0.302 |  | 0.97 (0.78 - 1.20) |  | 0.755 |  | 1.21 (0.97 - 1.52) |  | 0.096 |
| HMDB10517\* |  | C52:7 TAG |  | 1.02 (0.88 - 1.18) |  | 0.772 |  | 0.87 (0.71 - 1.07) |  | 0.2 |  | 1.19 (0.97 - 1.48) |  | 0.102 |
| HMDB10518\* |  | C54:8 TAG |  | 1.03 (0.89 - 1.19) |  | 0.713 |  | 0.89 (0.72 - 1.11) |  | 0.307 |  | 1.18 (0.95 - 1.46) |  | 0.138 |
| HMDB10531\* |  | C58:11 TAG |  | 1.07 (0.92 - 1.25) |  | 0.358 |  | 0.96 (0.77 - 1.21) |  | 0.747 |  | 1.18 (0.95 - 1.47) |  | 0.134 |
| HMDB11103 |  | 1,7-dimethyluric acid |  | 1.00 (0.86 - 1.16) |  | 0.998 |  | 0.98 (0.81 - 1.19) |  | 0.854 |  | 1.04 (0.82 - 1.31) |  | 0.766 |
| HMDB11105 |  | 5-acetylamino-6-formylamino-3-methyluracil |  | 0.94 (0.82 - 1.08) |  | 0.377 |  | 0.94 (0.78 - 1.13) |  | 0.524 |  | 0.94 (0.77 - 1.16) |  | 0.58 |
| HMDB11130 |  | C18:0 LPE |  | 0.97 (0.84 - 1.13) |  | 0.728 |  | 1.01 (0.82 - 1.23) |  | 0.953 |  | 0.93 (0.74 - 1.16) |  | 0.511 |
| HMDB11131 |  | C18:0 MAG |  | 1.04 (0.87 - 1.25) |  | 0.671 |  | 1.13 (0.88 - 1.45) |  | 0.339 |  | 0.93 (0.70 - 1.23) |  | 0.596 |
| HMDB11208\* |  | C34:1 PC plasmalogen |  | 1.13 (0.97 - 1.33) |  | 0.122 |  | 0.98 (0.79 - 1.22) |  | 0.846 |  | 1.36 (1.06 - 1.76) |  | 0.016 |
| HMDB11210\* |  | C34:2 PC plasmalogen |  | 1.14 (0.97 - 1.34) |  | 0.107 |  | 1.09 (0.88 - 1.36) |  | 0.421 |  | 1.20 (0.95 - 1.52) |  | 0.134 |
| HMDB11211\* |  | C34:3 PC plasmalogen |  | 1.00 (0.85 - 1.17) |  | 0.982 |  | 0.99 (0.79 - 1.23) |  | 0.925 |  | 1.01 (0.81 - 1.26) |  | 0.943 |
| HMDB11212\* |  | C34:4 PC plasmalogen |  | 1.00 (0.86 - 1.15) |  | 0.953 |  | 1.06 (0.87 - 1.30) |  | 0.548 |  | 0.94 (0.76 - 1.16) |  | 0.541 |
| HMDB11214\* |  | C34:5 PC plasmalogen |  | 1.01 (0.86 - 1.17) |  | 0.946 |  | 0.86 (0.69 - 1.06) |  | 0.165 |  | 1.20 (0.95 - 1.53) |  | 0.131 |
| HMDB11220\* |  | C36:5 PC plasmalogen-B |  | 1.15 (0.98 - 1.34) |  | 0.084 |  | 0.98 (0.79 - 1.20) |  | 0.832 |  | 1.41 (1.10 - 1.81) |  | 0.007 |
| HMDB11221\* |  | C36:5 PC plasmalogen-A |  | 1.01 (0.87 - 1.17) |  | 0.934 |  | 0.88 (0.72 - 1.07) |  | 0.199 |  | 1.18 (0.95 - 1.47) |  | 0.139 |
| HMDB11229\* |  | C38:7 PC plasmalogen |  | 0.99 (0.85 - 1.15) |  | 0.898 |  | 0.94 (0.76 - 1.17) |  | 0.582 |  | 1.04 (0.84 - 1.30) |  | 0.719 |
| HMDB11241\* |  | C36:1 PC plasmalogen |  | 1.13 (0.96 - 1.34) |  | 0.139 |  | 1.08 (0.85 - 1.36) |  | 0.53 |  | 1.19 (0.93 - 1.52) |  | 0.167 |
| HMDB11243\* |  | C36:2 PC plasmalogen |  | 1.06 (0.90 - 1.24) |  | 0.476 |  | 0.91 (0.73 - 1.13) |  | 0.395 |  | 1.26 (0.99 - 1.61) |  | 0.057 |
| HMDB11244\* |  | C36:3 PC plasmalogen-A |  | 1.01 (0.86 - 1.18) |  | 0.932 |  | 0.85 (0.68 - 1.05) |  | 0.124 |  | 1.25 (0.97 - 1.60) |  | 0.079 |
| HMDB11244a\* |  | C36:3 PC plasmalogen-B |  | 1.11 (0.94 - 1.31) |  | 0.206 |  | 0.97 (0.78 - 1.22) |  | 0.82 |  | 1.30 (1.01 - 1.67) |  | 0.038 |
| HMDB11252\* |  | C38:4 PC plasmalogen |  | 1.12 (0.96 - 1.31) |  | 0.144 |  | 0.96 (0.78 - 1.17) |  | 0.682 |  | 1.40 (1.09 - 1.81) |  | 0.009 |
| HMDB11294\* |  | C40:7 PC plasmalogen |  | 1.15 (0.99 - 1.34) |  | 0.076 |  | 1.00 (0.82 - 1.23) |  | 0.98 |  | 1.40 (1.08 - 1.80) |  | 0.01 |
| HMDB11294\* |  | C40:7 PC plasmalogen |  | 1.23 (1.04 - 1.45) |  | 0.015 |  | 1.01 (0.81 - 1.25) |  | 0.947 |  | 1.63 (1.23 - 2.15) |  | 0.001 |
| HMDB11310\* |  | C36:4 PC plasmalogen |  | 1.11 (0.95 - 1.30) |  | 0.206 |  | 0.91 (0.73 - 1.13) |  | 0.406 |  | 1.41 (1.10 - 1.80) |  | 0.007 |
| HMDB11343\* |  | C34:3 PE plasmalogen |  | 0.96 (0.83 - 1.11) |  | 0.619 |  | 0.86 (0.69 - 1.06) |  | 0.148 |  | 1.07 (0.87 - 1.30) |  | 0.528 |
| HMDB11384\* |  | C38:3 PE plasmalogen |  | 1.03 (0.88 - 1.21) |  | 0.714 |  | 0.95 (0.76 - 1.18) |  | 0.63 |  | 1.13 (0.89 - 1.43) |  | 0.32 |
| HMDB11386\* |  | C38:5 PE plasmalogen |  | 0.96 (0.83 - 1.11) |  | 0.572 |  | 0.88 (0.72 - 1.08) |  | 0.226 |  | 1.04 (0.84 - 1.29) |  | 0.722 |
| HMDB11387\* |  | C38:6 PE plasmalogen |  | 0.98 (0.85 - 1.14) |  | 0.842 |  | 0.91 (0.74 - 1.12) |  | 0.365 |  | 1.06 (0.85 - 1.32) |  | 0.612 |
| HMDB11394\* |  | C40:7 PE plasmalogen |  | 0.99 (0.85 - 1.16) |  | 0.919 |  | 0.86 (0.69 - 1.07) |  | 0.178 |  | 1.15 (0.92 - 1.45) |  | 0.222 |
| HMDB11410\* |  | C36:5 PE plasmalogen |  | 0.96 (0.83 - 1.12) |  | 0.611 |  | 0.88 (0.71 - 1.09) |  | 0.235 |  | 1.03 (0.84 - 1.27) |  | 0.763 |
| HMDB11420\* |  | C38:7 PE plasmalogen |  | 0.97 (0.83 - 1.12) |  | 0.644 |  | 0.92 (0.74 - 1.14) |  | 0.444 |  | 1.00 (0.81 - 1.24) |  | 0.984 |
| HMDB11441\* |  | C36:3 PE plasmalogen |  | 0.94 (0.81 - 1.10) |  | 0.454 |  | 0.87 (0.70 - 1.07) |  | 0.188 |  | 1.03 (0.83 - 1.27) |  | 0.807 |
| HMDB11442\* |  | C36:4 PE plasmalogen |  | 1.00 (0.86 - 1.16) |  | 0.998 |  | 0.83 (0.67 - 1.02) |  | 0.077 |  | 1.23 (0.98 - 1.55) |  | 0.074 |
| HMDB11503 |  | C16:0 LPE |  | 1.04 (0.90 - 1.21) |  | 0.585 |  | 1.09 (0.89 - 1.34) |  | 0.398 |  | 0.98 (0.78 - 1.23) |  | 0.885 |
| HMDB11506 |  | C18:1 LPE |  | 1.01 (0.87 - 1.18) |  | 0.889 |  | 1.11 (0.89 - 1.37) |  | 0.356 |  | 0.92 (0.73 - 1.15) |  | 0.44 |
| HMDB11507\* |  | C18:2 LPE |  | 0.99 (0.84 - 1.16) |  | 0.855 |  | 1.03 (0.82 - 1.29) |  | 0.796 |  | 0.94 (0.74 - 1.18) |  | 0.573 |
| HMDB11511 |  | C20:0 LPE |  | 0.95 (0.82 - 1.11) |  | 0.524 |  | 1.05 (0.86 - 1.28) |  | 0.66 |  | 0.83 (0.65 - 1.04) |  | 0.11 |
| HMDB11517 |  | C20:4 LPE |  | 1.11 (0.95 - 1.28) |  | 0.186 |  | 1.22 (1.01 - 1.47) |  | 0.041 |  | 0.93 (0.73 - 1.19) |  | 0.563 |
| HMDB11526 |  | C22:6 LPE |  | 1.07 (0.92 - 1.24) |  | 0.369 |  | 1.16 (0.94 - 1.44) |  | 0.167 |  | 0.98 (0.80 - 1.22) |  | 0.885 |
| HMDB11565 |  | C16:1 MAG |  | 1.07 (0.90 - 1.28) |  | 0.434 |  | 1.10 (0.88 - 1.39) |  | 0.4 |  | 1.04 (0.79 - 1.36) |  | 0.794 |
| HMDB11582 |  | C22:1 MAG |  | 0.95 (0.79 - 1.13) |  | 0.544 |  | 0.91 (0.72 - 1.16) |  | 0.449 |  | 0.98 (0.74 - 1.30) |  | 0.878 |
| HMDB11621 |  | Cinnamoylglycine |  | 0.93 (0.80 - 1.08) |  | 0.33 |  | 1.03 (0.84 - 1.27) |  | 0.749 |  | 0.81 (0.64 - 1.03) |  | 0.081 |
| HMDB11697 |  | C24:0 SM |  | 1.04 (0.89 - 1.21) |  | 0.648 |  | 0.86 (0.69 - 1.08) |  | 0.193 |  | 1.26 (1.00 - 1.59) |  | 0.054 |
| HMDB11701\* |  | C51:3 TAG |  | 0.90 (0.78 - 1.04) |  | 0.16 |  | 0.85 (0.70 - 1.04) |  | 0.114 |  | 0.96 (0.78 - 1.19) |  | 0.706 |
| HMDB11705\* |  | C49:1 TAG |  | 0.86 (0.74 - 0.99) |  | 0.04 |  | 0.75 (0.61 - 0.92) |  | 0.006 |  | 1.00 (0.81 - 1.24) |  | 0.98 |
| HMDB11706\* |  | C49:2 TAG |  | 0.86 (0.74 - 0.99) |  | 0.042 |  | 0.77 (0.62 - 0.95) |  | 0.013 |  | 0.97 (0.78 - 1.21) |  | 0.773 |
| HMDB12097 |  | C14:0 SM |  | 0.93 (0.81 - 1.08) |  | 0.351 |  | 0.87 (0.71 - 1.07) |  | 0.194 |  | 1.00 (0.81 - 1.23) |  | 0.997 |
| HMDB12101 |  | C18:1 SM |  | 1.15 (0.98 - 1.34) |  | 0.084 |  | 1.27 (1.02 - 1.58) |  | 0.031 |  | 1.02 (0.81 - 1.28) |  | 0.877 |
| HMDB12102 |  | C20:0 SM |  | 0.97 (0.83 - 1.13) |  | 0.704 |  | 0.94 (0.75 - 1.16) |  | 0.549 |  | 1.01 (0.80 - 1.27) |  | 0.958 |
| HMDB12103 |  | C22:0 SM |  | 1.06 (0.90 - 1.24) |  | 0.482 |  | 0.86 (0.69 - 1.08) |  | 0.193 |  | 1.33 (1.04 - 1.69) |  | 0.022 |
| HMDB12104 |  | C22:1 SM |  | 1.12 (0.96 - 1.32) |  | 0.157 |  | 1.04 (0.84 - 1.29) |  | 0.722 |  | 1.22 (0.96 - 1.55) |  | 0.107 |
| HMDB12107 |  | C24:1 SM |  | 1.02 (0.87 - 1.20) |  | 0.783 |  | 1.00 (0.81 - 1.24) |  | 0.997 |  | 1.03 (0.82 - 1.29) |  | 0.787 |
| HMDB12252 |  | Linoleoyl ethanolamide |  | 0.86 (0.73 - 1.01) |  | 0.063 |  | 0.81 (0.66 - 1.01) |  | 0.061 |  | 0.92 (0.72 - 1.16) |  | 0.464 |
| HMDB12356 |  | C34:0 PS |  | 1.06 (0.91 - 1.23) |  | 0.473 |  | 0.95 (0.77 - 1.17) |  | 0.647 |  | 1.19 (0.95 - 1.50) |  | 0.127 |
| HMDB13122\* |  | C18:1 LPC plasmalogen |  | 1.01 (0.87 - 1.18) |  | 0.911 |  | 1.09 (0.87 - 1.37) |  | 0.45 |  | 0.93 (0.75 - 1.15) |  | 0.5 |
| HMDB13127 |  | C4-OH carnitine |  | 1.00 (0.87 - 1.16) |  | 0.982 |  | 0.99 (0.81 - 1.21) |  | 0.922 |  | 1.02 (0.82 - 1.27) |  | 0.84 |
| HMDB13130 |  | C5-DC carnitine |  | 0.85 (0.73 - 0.99) |  | 0.04 |  | 0.74 (0.59 - 0.93) |  | 0.008 |  | 0.97 (0.78 - 1.20) |  | 0.748 |
| HMDB13133 |  | C3-DC-CH3 carnitine |  | 0.96 (0.82 - 1.12) |  | 0.617 |  | 0.86 (0.68 - 1.09) |  | 0.223 |  | 1.04 (0.84 - 1.29) |  | 0.722 |
| HMDB13238 |  | C7 carnitine |  | 0.87 (0.76 - 1.01) |  | 0.063 |  | 0.79 (0.65 - 0.97) |  | 0.023 |  | 0.98 (0.79 - 1.21) |  | 0.832 |
| HMDB13287 |  | Ne,Ne-dimethyllysine |  | 0.97 (0.83 - 1.13) |  | 0.674 |  | 0.91 (0.73 - 1.13) |  | 0.391 |  | 1.03 (0.83 - 1.28) |  | 0.78 |
| HMDB13288 |  | C9 carnitine |  | 0.82 (0.71 - 0.96) |  | 0.012 |  | 0.75 (0.60 - 0.92) |  | 0.008 |  | 0.92 (0.74 - 1.14) |  | 0.444 |
| HMDB13325 |  | C10:2 carnitine |  | 0.93 (0.80 - 1.09) |  | 0.358 |  | 0.89 (0.72 - 1.11) |  | 0.31 |  | 0.97 (0.78 - 1.21) |  | 0.771 |
| HMDB13326 |  | C12:1 carnitine |  | 0.95 (0.82 - 1.11) |  | 0.532 |  | 0.97 (0.79 - 1.19) |  | 0.758 |  | 0.93 (0.74 - 1.17) |  | 0.556 |
| HMDB13331 |  | C14:2 carnitine |  | 0.94 (0.80 - 1.10) |  | 0.442 |  | 0.96 (0.77 - 1.19) |  | 0.683 |  | 0.92 (0.73 - 1.16) |  | 0.49 |
| HMDB13631 |  | Oleoyl glycine |  | 0.92 (0.79 - 1.08) |  | 0.324 |  | 1.06 (0.85 - 1.32) |  | 0.632 |  | 0.81 (0.65 - 1.02) |  | 0.068 |
| HMDB13678 |  | 4-hydroxyhippurate |  | 0.87 (0.75 - 1.02) |  | 0.088 |  | 0.95 (0.77 - 1.19) |  | 0.666 |  | 0.80 (0.64 - 1.00) |  | 0.052 |
| HMDB13713 |  | N-acetyltryptophan |  | 0.86 (0.74 - 0.99) |  | 0.036 |  | 0.95 (0.77 - 1.17) |  | 0.629 |  | 0.78 (0.64 - 0.96) |  | 0.016 |
| HMDB13733 |  | Trimethylbenzene |  | 0.97 (0.83 - 1.13) |  | 0.662 |  | 1.01 (0.81 - 1.26) |  | 0.924 |  | 0.93 (0.75 - 1.15) |  | 0.505 |
| HMDB13733\* |  | Trimethylbenzene isomer |  | 0.89 (0.76 - 1.04) |  | 0.132 |  | 1.02 (0.82 - 1.28) |  | 0.838 |  | 0.76 (0.59 - 0.97) |  | 0.028 |
| HMDB29377 |  | Piperine |  | 0.90 (0.78 - 1.04) |  | 0.151 |  | 0.88 (0.73 - 1.07) |  | 0.208 |  | 0.93 (0.74 - 1.16) |  | 0.507 |
| HMDB29416 |  | NMMA |  | 0.98 (0.84 - 1.15) |  | 0.826 |  | 0.95 (0.77 - 1.18) |  | 0.662 |  | 1.01 (0.80 - 1.27) |  | 0.932 |
| HMDB31106\* |  | C51:0 TAG |  | 0.87 (0.75 - 1.02) |  | 0.081 |  | 0.75 (0.60 - 0.93) |  | 0.008 |  | 1.03 (0.82 - 1.30) |  | 0.77 |
| HMDB38057 |  | Dehydrophytosphingosine |  | 1.04 (0.89 - 1.22) |  | 0.625 |  | 1.01 (0.81 - 1.27) |  | 0.925 |  | 1.06 (0.84 - 1.35) |  | 0.602 |
| HMDB38057\* |  | Sphingosine isomer2 |  | 0.90 (0.75 - 1.08) |  | 0.251 |  | 0.88 (0.68 - 1.13) |  | 0.3 |  | 0.92 (0.70 - 1.20) |  | 0.536 |
| HMDB42062\* |  | C43:0 TAG |  | 0.91 (0.77 - 1.06) |  | 0.225 |  | 0.77 (0.62 - 0.97) |  | 0.024 |  | 1.07 (0.85 - 1.34) |  | 0.569 |
| HMDB42063\* |  | C44:0 TAG |  | 0.91 (0.78 - 1.05) |  | 0.188 |  | 0.79 (0.65 - 0.97) |  | 0.023 |  | 1.07 (0.86 - 1.34) |  | 0.534 |
| HMDB42076\* |  | C47:2 TAG |  | 0.89 (0.76 - 1.03) |  | 0.113 |  | 0.77 (0.63 - 0.95) |  | 0.012 |  | 1.05 (0.84 - 1.32) |  | 0.658 |
| HMDB42093\* |  | C45:0 TAG |  | 0.90 (0.77 - 1.06) |  | 0.212 |  | 0.80 (0.64 - 1.00) |  | 0.047 |  | 1.03 (0.82 - 1.30) |  | 0.809 |
| HMDB42094\* |  | C47:0 TAG |  | 0.85 (0.73 - 1.00) |  | 0.047 |  | 0.78 (0.62 - 0.98) |  | 0.033 |  | 0.93 (0.74 - 1.16) |  | 0.513 |
| HMDB42095\* |  | C49:0 TAG |  | 0.86 (0.74 - 1.01) |  | 0.062 |  | 0.78 (0.63 - 0.97) |  | 0.022 |  | 0.97 (0.77 - 1.21) |  | 0.779 |
| HMDB42098\* |  | C43:1 TAG |  | 0.90 (0.77 - 1.05) |  | 0.178 |  | 0.75 (0.60 - 0.95) |  | 0.014 |  | 1.07 (0.85 - 1.35) |  | 0.545 |
| HMDB42099\* |  | C45:1 TAG |  | 0.90 (0.78 - 1.05) |  | 0.175 |  | 0.79 (0.64 - 0.97) |  | 0.023 |  | 1.07 (0.85 - 1.35) |  | 0.573 |
| HMDB42100\* |  | C47:1 TAG |  | 0.87 (0.75 - 1.01) |  | 0.059 |  | 0.76 (0.62 - 0.94) |  | 0.01 |  | 1.01 (0.81 - 1.26) |  | 0.917 |
| HMDB42103\* |  | C49:3 TAG |  | 0.91 (0.79 - 1.06) |  | 0.219 |  | 0.80 (0.66 - 0.98) |  | 0.034 |  | 1.06 (0.85 - 1.31) |  | 0.628 |
| HMDB42104\* |  | C51:1 TAG |  | 0.82 (0.71 - 0.96) |  | 0.011 |  | 0.70 (0.57 - 0.87) |  | 0.001 |  | 0.98 (0.79 - 1.21) |  | 0.825 |
| HMDB42196\* |  | C53:2 TAG +NH4 |  | 0.88 (0.76 - 1.02) |  | 0.079 |  | 0.83 (0.68 - 1.02) |  | 0.072 |  | 0.93 (0.76 - 1.15) |  | 0.509 |
| HMDB42226\* |  | C55:2 TAG |  | 0.84 (0.73 - 0.98) |  | 0.025 |  | 0.79 (0.65 - 0.97) |  | 0.021 |  | 0.92 (0.73 - 1.15) |  | 0.449 |
| HMDB42466\* |  | C55:3 TAG |  | 0.95 (0.82 - 1.09) |  | 0.468 |  | 0.92 (0.76 - 1.12) |  | 0.417 |  | 0.98 (0.79 - 1.21) |  | 0.855 |
| HMDB43058\* |  | C53:3 TAG |  | 0.94 (0.81 - 1.08) |  | 0.354 |  | 0.95 (0.79 - 1.15) |  | 0.617 |  | 0.91 (0.74 - 1.12) |  | 0.379 |
| HMDB43170\* |  | C45:2 TAG |  | 0.89 (0.76 - 1.03) |  | 0.127 |  | 0.75 (0.61 - 0.93) |  | 0.009 |  | 1.07 (0.85 - 1.36) |  | 0.55 |
| HMDB59824 |  | 4-hydroxy-3-methylacetophenone |  | 0.98 (0.84 - 1.14) |  | 0.801 |  | 1.01 (0.82 - 1.25) |  | 0.935 |  | 0.95 (0.77 - 1.18) |  | 0.637 |
| HMDB0240212 |  | DMGV |  | 0.95 (0.81 - 1.11) |  | 0.535 |  | 0.86 (0.69 - 1.07) |  | 0.186 |  | 1.05 (0.83 - 1.33) |  | 0.678 |
| NA |  | Pipecolic acid isomer |  | 0.91 (0.78 - 1.06) |  | 0.213 |  | 0.94 (0.77 - 1.14) |  | 0.51 |  | 0.85 (0.66 - 1.09) |  | 0.206 |
| NA |  | N-methylproline |  | 0.95 (0.82 - 1.11) |  | 0.543 |  | 0.99 (0.81 - 1.21) |  | 0.906 |  | 0.91 (0.73 - 1.13) |  | 0.394 |
| NA |  | Ectoine |  | 1.06 (0.91 - 1.23) |  | 0.441 |  | 1.13 (0.91 - 1.39) |  | 0.273 |  | 0.99 (0.80 - 1.22) |  | 0.908 |
| NA |  | Proline betaine isomer |  | 0.91 (0.79 - 1.06) |  | 0.217 |  | 0.97 (0.79 - 1.19) |  | 0.787 |  | 0.84 (0.68 - 1.05) |  | 0.128 |
| NA |  | 2-aminoheptanoic acid |  | 0.88 (0.75 - 1.02) |  | 0.095 |  | 0.91 (0.74 - 1.12) |  | 0.378 |  | 0.82 (0.65 - 1.04) |  | 0.105 |
| NA |  | S-methyl-L-cysteine-S-oxide |  | 1.12 (0.96 - 1.29) |  | 0.147 |  | 1.02 (0.83 - 1.27) |  | 0.834 |  | 1.19 (0.97 - 1.47) |  | 0.103 |
| NA |  | Guanine isomer |  | 0.95 (0.82 - 1.09) |  | 0.453 |  | 0.96 (0.79 - 1.16) |  | 0.664 |  | 0.93 (0.75 - 1.15) |  | 0.502 |
| NA |  | Hydroxyectoine |  | 0.97 (0.83 - 1.13) |  | 0.7 |  | 1.07 (0.86 - 1.32) |  | 0.545 |  | 0.86 (0.68 - 1.09) |  | 0.206 |
| NA |  | 5-hydroxytryptophan isomer |  | 0.89 (0.78 - 1.03) |  | 0.112 |  | 0.84 (0.69 - 1.01) |  | 0.07 |  | 0.95 (0.78 - 1.16) |  | 0.626 |
| NA |  | L-threo-sphingosine |  | 0.86 (0.72 - 1.04) |  | 0.119 |  | 0.78 (0.59 - 1.03) |  | 0.078 |  | 0.95 (0.74 - 1.21) |  | 0.654 |
| NA |  | C18:1 LPC plasmalogen minor |  | 1.04 (0.88 - 1.23) |  | 0.622 |  | 1.12 (0.89 - 1.40) |  | 0.333 |  | 0.95 (0.75 - 1.22) |  | 0.704 |
| NA |  | C16:1 SM |  | 1.09 (0.93 - 1.28) |  | 0.274 |  | 1.04 (0.84 - 1.28) |  | 0.726 |  | 1.15 (0.91 - 1.47) |  | 0.247 |
| NA |  | C42:0 TAG |  | 0.94 (0.81 - 1.10) |  | 0.452 |  | 0.84 (0.69 - 1.03) |  | 0.1 |  | 1.09 (0.87 - 1.36) |  | 0.478 |
| NA |  | C18:2 SM |  | 1.17 (1.00 - 1.36) |  | 0.048 |  | 1.20 (0.98 - 1.47) |  | 0.077 |  | 1.12 (0.88 - 1.41) |  | 0.348 |
| NA |  | NH4 C44:2 TAG |  | 0.89 (0.77 - 1.04) |  | 0.148 |  | 0.78 (0.63 - 0.96) |  | 0.017 |  | 1.06 (0.84 - 1.34) |  | 0.613 |
| NA |  | C36:5 PC plasmalogen |  | 0.99 (0.85 - 1.15) |  | 0.902 |  | 0.97 (0.79 - 1.19) |  | 0.741 |  | 1.01 (0.81 - 1.26) |  | 0.919 |
| NA |  | NH4 C44:1 TAG |  | 0.92 (0.79 - 1.07) |  | 0.256 |  | 0.81 (0.66 - 1.00) |  | 0.046 |  | 1.06 (0.85 - 1.33) |  | 0.602 |
| NA |  | C44:2 TAG |  | 0.90 (0.78 - 1.05) |  | 0.174 |  | 0.79 (0.64 - 0.96) |  | 0.019 |  | 1.07 (0.85 - 1.35) |  | 0.54 |
| NA |  | C44:1 TAG |  | 0.91 (0.78 - 1.06) |  | 0.22 |  | 0.80 (0.65 - 0.98) |  | 0.03 |  | 1.07 (0.85 - 1.34) |  | 0.558 |
| NA |  | C36:3 PS plasmalogen |  | 0.98 (0.84 - 1.14) |  | 0.778 |  | 0.95 (0.78 - 1.17) |  | 0.649 |  | 1.02 (0.80 - 1.29) |  | 0.877 |
| NA |  | C36:2 PS plasmalogen |  | 0.99 (0.85 - 1.15) |  | 0.891 |  | 0.86 (0.70 - 1.06) |  | 0.159 |  | 1.16 (0.93 - 1.45) |  | 0.198 |
| NA |  | C36:2 PS plasmalogen |  | 0.96 (0.83 - 1.11) |  | 0.562 |  | 0.97 (0.77 - 1.22) |  | 0.817 |  | 0.94 (0.77 - 1.14) |  | 0.526 |
| NA |  | C36:1 PS plasmalogen |  | 1.00 (0.86 - 1.16) |  | 0.969 |  | 0.93 (0.75 - 1.15) |  | 0.501 |  | 1.07 (0.86 - 1.34) |  | 0.538 |
| NA |  | C45:3 TAG |  | 0.90 (0.78 - 1.05) |  | 0.184 |  | 0.74 (0.60 - 0.91) |  | 0.005 |  | 1.12 (0.90 - 1.41) |  | 0.31 |
| NA |  | NH4 C46:3 TAG |  | 0.93 (0.79 - 1.08) |  | 0.316 |  | 0.80 (0.65 - 0.98) |  | 0.034 |  | 1.11 (0.88 - 1.40) |  | 0.39 |
| NA |  | C46:4 TAG |  | 0.94 (0.81 - 1.10) |  | 0.454 |  | 0.83 (0.68 - 1.01) |  | 0.065 |  | 1.12 (0.89 - 1.41) |  | 0.338 |
| NA |  | C46:3 TAG |  | 0.94 (0.81 - 1.09) |  | 0.421 |  | 0.81 (0.66 - 1.00) |  | 0.046 |  | 1.13 (0.89 - 1.42) |  | 0.311 |
| NA |  | C36:4 hydroxy-PC-B |  | 1.09 (0.94 - 1.28) |  | 0.259 |  | 0.98 (0.79 - 1.21) |  | 0.844 |  | 1.23 (0.97 - 1.55) |  | 0.081 |
| NA |  | C36:4 hydroxy-PC-A |  | 1.09 (0.94 - 1.27) |  | 0.263 |  | 1.04 (0.84 - 1.30) |  | 0.695 |  | 1.13 (0.92 - 1.40) |  | 0.25 |
| NA |  | C48:5 TAG |  | 0.98 (0.85 - 1.14) |  | 0.802 |  | 0.85 (0.70 - 1.04) |  | 0.11 |  | 1.18 (0.94 - 1.48) |  | 0.157 |
| NA |  | C44:13 PE plasmalogen |  | 0.97 (0.83 - 1.13) |  | 0.675 |  | 0.88 (0.72 - 1.09) |  | 0.246 |  | 1.08 (0.86 - 1.36) |  | 0.513 |
| NA |  | C48:4 TAG |  | 0.98 (0.84 - 1.13) |  | 0.745 |  | 0.86 (0.70 - 1.05) |  | 0.135 |  | 1.13 (0.91 - 1.41) |  | 0.265 |
| NA |  | C54:10 TAG |  | 0.91 (0.76 - 1.08) |  | 0.281 |  | 0.81 (0.64 - 1.03) |  | 0.092 |  | 1.04 (0.79 - 1.36) |  | 0.785 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All estimates are adjusted for age, sex, body mass index and matching variables.  \* Representative ID | | | | | | | | | | | | | | |