

Non-targeted and targeted metabolomics approaches to diagnosing lung cancer and predicting patient prognosis

Supplementary Materials

Supplementary Table S1: Concentrations of 23 serum free amino acids in lung cancer patients and healthy controls^a

| Amino acids | Concentrations ($\mu\text{mol}\cdot\text{L}^{-1}$, $n = 25$) | |
|----------------------|---|---------------------------|
| | Healthy control | Patients with lung cancer |
| Aspartic acid (Asp) | 14.88 \pm 3.88 | 28.17 \pm 8.55 |
| Glutamic acid (Glu) | 81.28 \pm 29.77 | 145.81 \pm 59.05 |
| Hydroxyproline (Hyp) | 11.11 \pm 4.78 | 19.10 \pm 11.38 |
| Asparagine (Asn) | 8.28 \pm 4.08 | 29.79 \pm 7.53 |
| Glutamine (Gln) | 93.39 \pm 20.95 | 126.62 \pm 17.81 |
| Serine (Ser) | 234.23 \pm 45.70 | 202.94 \pm 40.52 |
| Glycine (Gly) | 258.29 \pm 44.50 | 241.24 \pm 34.76 |
| Arginine (Arg) | 9.75 \pm 1.77 | 11.08 \pm 3.32 |
| Threonine (Thr) | 67.91 \pm 9.35 | 58.22 \pm 18.25 |
| Histidine (His) | 51.80 \pm 8.21 | 68.11 \pm 19.34 |
| Taurine (Tau) | 76.23 \pm 17.97 | 79.55 \pm 14.62 |
| Alanine (Ala) | 374.07 \pm 65.98 | 372.26 \pm 90.41 |
| Proline (Pro) | 154.90 \pm 47.58 | 163.16 \pm 32.46 |
| Valine (Val) | 244.80 \pm 48.52 | 208.41 \pm 32.35 |
| Cysteine (Cys) | 13.48 \pm 5.93 | 25.46 \pm 7.48 |
| Methionine (Met) | 14.62 \pm 3.94 | 7.74 \pm 0.66 |
| Ornithine (Orn) | 88.20 \pm 14.19 | 74.63 \pm 14.73 |
| Isoleucine (Ile) | 102.27 \pm 21.53 | 157.18 \pm 19.38 |
| Tryptophan (Trp) | 41.37 \pm 13.07 | 19.38 \pm 3.47 |
| Leucine (Leu) | 59.07 \pm 7.42 | 117.35 \pm 18.48 |
| Phenylalanine (Phe) | 43.95 \pm 6.74 | 60.21 \pm 24.40 |
| Lysine (Lys) | 69.72 \pm 11.16 | 93.58 \pm 25.72 |
| Tyrosine (Tyr) | 56.69 \pm 9.09 | 77.22 \pm 28.55 |

^aThe concentrations are presented as mean \pm standard deviation.