

Supplementary Table 2 The correlations between nutritional parameters / blood parameters and PNI

| Parameters | N | PNI 785 | | | | N | PNI 477 | | | | N | PNI 308 | | | |
|--------------|-------------|-------------|--------------|----------|---------|-------------|-------------|--------------|----------|---------|-------------|------------|--------------|----------|---------|
| Cases (n) | 785 | Low PNI 253 | High PNI 532 | χ^2 | P value | | Low PNI 167 | High PNI 310 | χ^2 | P value | | Low PNI 86 | High PNI 222 | χ^2 | P value |
| ALT (U/L) | | | | 0.356 | 0.551 | | | | 0.379 | 0.538 | | | | 0.236 | 0.627 |
| <15 | 370(47.13%) | 123(48.62%) | 247(46.43%) | | | 208(43.61%) | 76(45.51%) | 132(42.58%) | | | 162(52.60%) | 47(54.65%) | 115(51.80%) | | |
| ≥15 | 416(52.99%) | 130(51.38%) | 286(53.76%) | | | 269(56.39%) | 91(54.49%) | 178(57.42%) | | | 147(47.73%) | 39(45.35%) | 108(48.65%) | | |
| AST (U/L) | | | | 0.890 | 0.345 | | | | 0.048 | 0.827 | | | | 2.637 | 0.104 |
| <18 | 378(48.15%) | 128(50.59%) | 250(46.99%) | | | 211(44.23%) | 75(44.91%) | 136(43.87%) | | | 167(54.22%) | 53(61.63%) | 114(51.35%) | | |
| ≥18 | 407(51.85%) | 125(49.41%) | 282(53.01%) | | | 266(55.77%) | 92(55.09%) | 174(56.13%) | | | 141(45.78%) | 33(38.37%) | 108(48.65%) | | |
| LDH (U/L) | | | | 0.543 | 0.461 | | | | 0.007 | 0.933 | | | | 3.188 | 0.074 |
| <167 | 376(47.90%) | 126(49.80%) | 250(46.99%) | | | 193(40.46%) | 68(40.72%) | 125(40.32%) | | | 183(59.42%) | 58(67.44%) | 125(56.31%) | | |
| ≥167 | 409(52.10%) | 127(50.20%) | 282(53.01%) | | | 284(59.54%) | 99(59.28%) | 185(59.68%) | | | 125(40.58%) | 28(32.56%) | 97(43.69%) | | |
| GGT (U/L) | | | | 2.363 | 0.124 | | | | 0.001 | 0.989 | | | | 8.544 | 0.004 |
| <17 | 366(46.62%) | 128(50.59%) | 238(44.74%) | | | 203(42.56%) | 71(42.51%) | 132(42.58%) | | | 163(52.92%) | 57(66.28%) | 106(47.75%) | | |
| ≥17 | 419(53.38%) | 125(49.41%) | 294(55.26%) | | | 274(57.44%) | 96(57.49%) | 178(57.42%) | | | 145(47.08%) | 29(33.72%) | 116(52.25%) | | |
| ALP (U/L) | | | | 0.706 | 0.401 | | | | 0.236 | 0.627 | | | | 0.627 | 0.428 |
| <64 | 377(48.03%) | 127(50.20%) | 250(46.99%) | | | 227(47.59%) | 82(49.10%) | 145(46.77%) | | | 150(48.70%) | 45(52.33%) | 105(47.30%) | | |
| ≥64 | 408(51.97%) | 126(49.80%) | 282(53.01%) | | | 250(52.41%) | 85(50.90%) | 165(53.23%) | | | 158(51.30%) | 41(47.67%) | 117(52.70%) | | |
| GLU (mmol/L) | | | | 0.024 | 0.877 | | | | 0.755 | 0.385 | | | | 2.497 | 0.114 |
| <5.33 | 391(49.81%) | 125(49.41%) | 266(50.00%) | | | 247(51.78%) | 91(54.49%) | 156(50.32%) | | | 144(46.75%) | 34(39.53%) | 110(49.55%) | | |
| ≥5.33 | 394(50.19%) | 128(50.59%) | 266(50.00%) | | | 230(48.22%) | 76(45.51%) | 154(49.68%) | | | 164(53.25%) | 52(60.47%) | 112(50.45%) | | |
| IgA (g/L) | | | | 0.572 | 0.500 | | | | 0.894 | 0.344 | | | | 0.015 | 0.901 |
| <2.30 | 388(49.43%) | 130(51.38%) | 258(48.50%) | | | 243(50.94%) | 90(53.89%) | 153(49.35%) | | | 145(47.08%) | 40(46.51%) | 105(47.30%) | | |
| ≥2.30 | 397(50.57%) | 123(48.62%) | 274(51.50%) | | | 234(49.06%) | 77(46.11%) | 157(50.65%) | | | 163(52.92%) | 46(53.49%) | 117(52.70%) | | |
| IgG (g/L) | | | | 5.675 | 0.017 | | | | 3.276 | 0.070 | | | | 2.544 | 0.111 |
| <11.70 | 386(49.17%) | 140(55.34%) | 246(46.24%) | | | 233(48.85%) | 91(54.49%) | 142(45.81%) | | | 153(49.68%) | 49(56.98%) | 104(46.85%) | | |
| ≥11.70 | 399(50.83%) | 113(44.66%) | 286(53.76%) | | | 244(51.15%) | 76(45.51%) | 168(54.19%) | | | 155(50.32%) | 37(43.02%) | 118(53.15%) | | |
| IgM (g/L) | | | | 0.038 | 0.846 | | | | 3.380 | 0.066 | | | | 5.171 | 0.023 |

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|--------------|-------------|-------------|-------------|---------|---------|-------------|-------------|-------------|---------|---------|-------------|------------|-------------|--------|---------|
| <1.10 | 387(49.30%) | 126(49.80%) | 261(49.06%) | | | 244(51.15%) | 95(56.89%) | 149(48.06%) | | | 143(46.43%) | 31(36.05%) | 112(50.45%) | | |
| ≥1.10 | 398(50.70%) | 127(50.20%) | 271(50.94%) | | | 233(48.85%) | 72(43.11%) | 161(51.94%) | | | 165(53.57%) | 55(63.95%) | 110(49.55%) | | |
| ALB (g/L) | | | | 241.100 | <0.0001 | | | | 184.400 | <0.0001 | | | | 62.690 | <0.0001 |
| <45.2 | 392(49.94%) | 228(90.12%) | 164(30.83%) | | | 235(49.27%) | 153(91.62%) | 82(26.45%) | | | 157(50.97%) | 75(87.21%) | 82(36.94%) | | |
| ≥45.2 | 393(50.06%) | 25(9.88%) | 368(69.17%) | | | 242(50.73%) | 14(8.38%) | 228(73.55%) | | | 151(49.03%) | 11(12.79%) | 140(63.06%) | | |
| CRP (mg/dl) | | | | 2.703 | 0.100 | | | | 9.251 | 0.002 | | | | 4.472 | 0.035 |
| <0.2 | 384(48.92%) | 113(44.66%) | 271(50.94%) | | | 187(39.20%) | 50(29.94%) | 137(44.19%) | | | 197(63.96%) | 63(73.26%) | 134(60.36%) | | |
| ≥0.2 | 401(51.08%) | 140(55.34%) | 261(49.06%) | | | 290(60.80%) | 117(70.06%) | 173(55.81%) | | | 111(36.04%) | 23(26.74%) | 88(39.64%) | | |
| CA125 (U/ml) | | | | 0.128 | 0.721 | | | | 0.005 | 0.943 | | | | 0.036 | 0.849 |
| <13.35 | 392(49.94%) | 124(49.01%) | 268(50.38%) | | | 221(46.33%) | 77(46.11%) | 144(46.45%) | | | 171(55.52%) | 47(54.65%) | 124(55.86%) | | |
| ≥13.35 | 393(50.06%) | 129(50.99%) | 264(49.62%) | | | 256(53.67%) | 90(53.89%) | 166(53.55%) | | | 137(44.48%) | 39(45.35%) | 98(44.14%) | | |
| CA153 (U/ml) | | | | 0.937 | 0.333 | | | | 1.270 | 0.260 | | | | 0.177 | 0.674 |
| <11.63 | 392(49.94%) | 120(47.43%) | 272(51.13%) | | | 208(43.61%) | 67(40.12%) | 141(45.48%) | | | 184(59.74%) | 53(61.63%) | 131(59.01%) | | |
| ≥11.63 | 393(50.06%) | 133(52.57%) | 260(48.87%) | | | 269(56.39%) | 100(59.88%) | 169(54.52%) | | | 124(40.26%) | 33(38.37%) | 91(40.99%) | | |
| CEA (ng/ml) | | | | 0.064 | 0.780 | | | | 0.056 | 0.813 | | | | 1.493 | 0.222 |
| <1.66 | 392(49.94%) | 128(50.59%) | 264(49.62%) | | | 212(44.44%) | 73(43.71%) | 139(44.84%) | | | 180(58.44%) | 55(63.95%) | 125(56.31%) | | |
| ≥1.66 | 393(50.06%) | 125(49.41%) | 268(50.38%) | | | 265(55.56%) | 94(56.29%) | 171(55.16%) | | | 128(41.56%) | 31(36.05%) | 97(43.69%) | | |
| D-D (mg/L) | | | | 3.209 | 0.073 | | | | 1.372 | 0.242 | | | | 0.699 | 0.403 |
| <0.29 | 387(49.30%) | 113(44.66%) | 274(51.50%) | | | 200(41.93%) | 64(38.32%) | 136(43.87%) | | | 187(60.71%) | 49(56.98%) | 138(62.16%) | | |
| ≥0.29 | 398(50.70%) | 140(55.34%) | 258(48.50%) | | | 277(58.07%) | 103(61.68%) | 174(56.13%) | | | 121(39.29%) | 37(43.02%) | 84(37.84%) | | |
| FIB (g/L) | | | | 0.595 | 0.441 | | | | 1.631 | 0.202 | | | | 0.579 | 0.447 |
| <2.85 | 388(49.43%) | 120(47.43%) | 268(50.38%) | | | 216(45.28%) | 69(41.32%) | 147(47.42%) | | | 172(55.84%) | 51(59.30%) | 121(54.50%) | | |
| ≥2.85 | 397(50.57%) | 133(52.57%) | 264(49.62%) | | | 261(54.72%) | 98(58.68%) | 163(52.58%) | | | 136(44.16%) | 35(40.70%) | 101(45.50%) | | |
| INR (INR) | | | | 0.949 | 0.330 | | | | 2.547 | 0.111 | | | | 0.154 | 0.695 |
| <0.93 | 365(46.50%) | 124(49.01%) | 241(45.30%) | | | 177(37.11%) | 70(41.92%) | 107(34.52%) | | | 188(61.04%) | 54(62.79%) | 134(60.36%) | | |
| ≥0.93 | 420(53.50%) | 129(50.99%) | 291(54.70%) | | | 300(62.89%) | 97(58.08%) | 203(65.48%) | | | 120(38.96%) | 32(37.21%) | 88(39.64%) | | |
| FDP (ug/ml) | | | | 2.018 | 0.155 | | | | 1.601 | 0.206 | | | | 0.659 | 0.417 |
| <1.40 | 367(46.75%) | 109(43.08%) | 258(48.50%) | | | 137(28.72%) | 42(25.15%) | 95(30.65%) | | | 230(74.68%) | 67(77.91%) | 163(73.42%) | | |
| ≥1.40 | 418(53.25%) | 144(56.92%) | 274(51.50%) | | | 340(71.28%) | 125(74.85%) | 215(69.35%) | | | 78(25.32%) | 19(22.09%) | 59(26.58%) | | |

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|---|-------------|-------------|-------------|--------|---------|-------------|-------------|-------------|--------|---------|-------------|------------|-------------|--------|--------|
| White blood cell (W) ($\times 10^9/L$) | | | | 31.300 | <0.0001 | | | | 25.540 | <0.0001 | | | | 6.609 | 0.010 |
| <6.01 | 389(49.55%) | 162(64.03%) | 227(42.67%) | | | 239(50.10%) | 110(65.87%) | 129(41.61%) | | | 150(48.70%) | 52(60.47%) | 98(44.14%) | | |
| ≥ 6.01 | 396(50.45%) | 91(35.97%) | 305(57.33%) | | | 238(49.90%) | 57(34.13%) | 181(58.39%) | | | 158(51.30%) | 34(39.53%) | 124(55.86%) | | |
| Red blood cell (R) ($\times 10^{12}/L$) | | | | 26.380 | <0.0001 | | | | 19.040 | <0.0001 | | | | 7.808 | 0.005 |
| <4.40 | 389(49.55%) | 159(62.85%) | 230(43.23%) | | | 235(49.27%) | 105(62.87%) | 130(41.94%) | | | 154(50.00%) | 54(62.79%) | 100(45.05%) | | |
| ≥ 4.40 | 396(50.45%) | 94(37.15%) | 302(56.77%) | | | 242(50.73%) | 62(37.13%) | 180(58.06%) | | | 154(50.00%) | 32(37.21%) | 122(54.95%) | | |
| Hemoglobin (Hb) ($\times 10^9/L$) | | | | 37.140 | <0.0001 | | | | 21.100 | <0.0001 | | | | 15.030 | 0.0001 |
| <132 | 382(48.66%) | 163(64.43%) | 219(41.17%) | | | 243(50.94%) | 109(65.27%) | 134(43.23%) | | | 139(45.13%) | 54(62.79%) | 85(38.29%) | | |
| ≥ 132 | 403(51.34%) | 90(35.57%) | 313(58.83%) | | | 234(49.06%) | 58(34.73%) | 176(56.77%) | | | 169(54.87%) | 32(37.21%) | 137(61.71%) | | |
| Neutrophil (N) ($\times 10^9/L$) | | | | 8.124 | 0.004 | | | | 7.056 | 0.008 | | | | 1.949 | 0.163 |
| <3.68 | 392(49.94%) | 145(57.31%) | 247(46.43%) | | | 229(48.01%) | 94(56.29%) | 135(43.55%) | | | 163(52.92%) | 51(59.30%) | 112(50.45%) | | |
| ≥ 3.68 | 393(50.06%) | 108(42.69%) | 285(53.57%) | | | 248(51.99%) | 73(43.71%) | 175(56.45%) | | | 145(47.08%) | 35(40.70%) | 110(49.55%) | | |
| Lymphocyte (L) ($\times 10^9/L$) | | | | 19.600 | <0.0001 | | | | 17.430 | <0.0001 | | | | 2.261 | 0.133 |
| <1.76 | 391(49.81%) | 155(61.26%) | 236(44.36%) | | | 258(54.09%) | 112(67.07%) | 146(47.10%) | | | 133(43.18%) | 43(50.00%) | 90(40.54%) | | |
| ≥ 1.76 | 394(50.19%) | 98(38.74%) | 296(55.64%) | | | 219(45.91%) | 55(32.93%) | 164(52.90%) | | | 175(56.82%) | 43(50.00%) | 132(59.46%) | | |
| Monocyte (M) ($\times 10^9/L$) | | | | 5.788 | 0.016 | | | | 1.512 | 0.219 | | | | 6.248 | 0.012 |
| <0.35 | 367(46.75%) | 134(52.96%) | 233(43.80%) | | | 216(45.28%) | 82(49.10%) | 134(43.23%) | | | 151(49.03%) | 52(60.47%) | 99(44.59%) | | |
| ≥ 0.35 | 418(53.25%) | 119(47.04%) | 299(56.20%) | | | 261(54.72%) | 85(50.90%) | 176(56.77%) | | | 157(50.97%) | 34(39.53%) | 123(55.41%) | | |
| Eosinophils (E) ($\times 10^9/L$) | | | | 2.713 | 0.100 | | | | 2.005 | 0.157 | | | | 1.801 | 0.180 |
| <0.06 | 356(45.35%) | 104(41.11%) | 252(47.37%) | | | 241(50.52%) | 77(46.11%) | 164(52.90%) | | | 115(37.34%) | 27(31.40%) | 88(39.64%) | | |
| ≥ 0.06 | 429(54.65%) | 149(58.89%) | 280(52.63%) | | | 236(49.48%) | 90(53.89%) | 146(47.10%) | | | 193(62.66%) | 59(68.60%) | 134(60.36%) | | |
| Basophils (B) ($\times 10^9/L$) | | | | 8.078 | 0.005 | | | | 8.100 | 0.004 | | | | 0.929 | 0.335 |
| <0.02 | 224(28.54%) | 89(35.18%) | 135(25.38%) | | | 136(28.51%) | 61(36.53%) | 75(24.19%) | | | 88(28.57%) | 28(32.56%) | 60(27.03%) | | |
| ≥ 0.02 | 561(71.46%) | 164(64.82%) | 397(74.62%) | | | 341(71.49%) | 106(63.47%) | 235(75.81%) | | | 220(71.43%) | 58(67.44%) | 162(72.97%) | | |
| Platelet (P) ($\times 10^9/L$) | | | | 11.240 | 0.001 | | | | 8.975 | 0.003 | | | | 3.367 | 0.067 |
| <243 | 388(49.43%) | 147(58.10%) | 241(45.30%) | | | 224(46.96%) | 94(56.29%) | 130(41.94%) | | | 164(53.25%) | 53(61.63%) | 111(50.00%) | | |
| ≥ 243 | 397(50.57%) | 106(41.90%) | 291(54.70%) | | | 253(53.04%) | 73(43.71%) | 180(58.06%) | | | 144(46.75%) | 33(38.37%) | 111(50.00%) | | |