

Table S1. Laboratory and clinical parameters in patients with different *HMOX1* promoter genotypes.

| Parameter | <i>HMOX1</i> genotype | | | | <i>P</i> -value |
|------------------------------------------|-----------------------|------------------------|------------------------|-------------------------|-----------------|
| | M/L (n=6) | M/M (n=29) | S/M (n=37) | S/S (n=10) | |
| Bilirubin (μ mol/l) | 15 (9.9-17.9) | 13.1 (7.6-18.2) | 9.1 (6.9-14.7) | 13.2 (9.1-14.7) | ns |
| GGT (μ kat/l) | 4.39 (0.93-5.5) | 1.66 (0.63-2.97) | 1.24 (0.98-2.05) | 0.99 (0.62-1.57) | ns |
| ALT (μ kat/l) | 1.25 (0.63-2.07) | 0.69 (0.46-2.2) | 0.96 (0.65-1.8) | 0.5 (0.39-1.72) | ns |
| AST (μ kat/l) | 0.87 (0.5-1.24) | 0.62 (0.45-1.08) | 0.67 (0.52-1.07) | 0.45 (0.39-0.93) | ns |
| Albumin (g/l) | 47.2 (45.1-48.4) | 45.3 (37.3-46.4) | 47.3 (44.4-49.1) | 46.2 (44.6-47.6) | ns |
| BMI (kg/m ²) | 29.4 (28.4-29.9) | 30.6 (27.7-33.7) | 29.6 (28.3-31.6) | 32.5 (27.8-37.5) | ns |
| IL-2 (ng/l) | 2.55 (0.14-18.9) | 0.54 (0.14-1.2) | 0.61 (0.3-4.2) | 0.34 (0.1-0.9) | ns |
| IL-6 (ng/l) | 16.44 (4.9-25.9) | 4.83 (2-15.2) | 4.27 (1.9-18) | 5.18 (2.2-29.1) | ns |
| TNF-α (ng/l) | 6.22 (5.6-6.9) | 9.5 (7.3-12.2) | 9.1 (6.3-13.4) | 8.19 (6.3-17.2) | ns |
| Adiponectin (mg/l) | 5.0 (3.9-9.8) | 5.2 (3.5-12.3) | 4.5 (2.7-7.5) | 8.8 (4.3-14.1) | ns |
| Leptin (μ g/l) | 8.3 (4.6-13.4) | 10.2 (5.8-18.7) | 7.4 (4.5-11.6) | 8.6 (5.5-18.4) | ns |
| HA (μ g/l) | 33.4 (18.6-70.3) | 22.5 (11.9-38.9) | 24 (16.6-34.3) | 19.2 (16-137) | ns |
| M30 (U/l) | 7.29 (6.2-404) | 72.2 (9.9-292) | 13 (8.5-176) | 184.5 (13.4-292) | ns |
| M65 (U/l) | 534 (375-1085) | 833 (417-1310) | 572 (407-1126) | 647 (441-900) | ns |
| AST/ALT | 0.72 (0.57-0.9) | 0.7 (0.56-1.13) | 0.61 (0.56-0.9) | 0.76 (0.5-0.95) | ns |
| APRI | 0.52 (0.3-0.8) | 0.55 (0.3-0.8) | 0.5 (0.3-1) | 0.5 (0.2-0.8) | ns |
| FIB 4 | 1.07 (1-1.8) | 1.51 (1-1.9) | 1.04 (0.8-1.9) | 1.22 (0.7-2.2) | ns |
| NAFLD fibrosis score | -2.1 (-4.3--1.4) | -1.56 (-2.2-(-0.3)) | -2.43 (-3.1-(-0.2)) | -2.71 (-3.9-(-0.15)) | ns |
| BARD score | 1 (0-1.75) | 2 (1-3) | 1 (1-3) | 1 (0-3) | ns |

Data are expressed as the median and IQ range. Analyzed by ANOVA; ns, not significant.

The length variations of *HMOX1* (GT)n repeats were classified into short S (n < 27), medium M (n = 27–32), and long L (n = 33) subgroups. S/L genotype was not assessed due to the small number of patients (n=2).

Table S2. Laboratory and clinical parameters of patients with different *UGT1A1* promoter genotypes.

| Parameter | <i>UGT1A1</i> genotype | | | <i>P</i> for trend |
|------------------------------------|-------------------------|------------------------|------------------------|--------------------|
| | 6/6 (n=26) | 6/7 (n=45) | 7/7 (n=11) | |
| Bilirubin (μmol/l) | 8.3 (6.2-11) | 13.1 (8.3-16.8) | 17.7 (8.2-18.8) | 0.02 |
| GGT (μkat/l) | 1.85 (0.7-3.4) | 1.3 (0.7-2.7) | 1.21 (0.8-1.8) | ns |
| ALT (μkat/l) | 0.98 (0.5-1.8) | 0.85 (0.5-2.3) | 0.94 (0.5-1.4) | ns |
| AST (μkat/l) | 0.62 (0.5-1) | 0.67 (0.5-1.2) | 0.55 (0.4-0.8) | ns |
| Albumin (g/l) | 45.6 (41-48) | 45.9 (43-48) | 47.6 (46-49) | ns |
| BMI (kg/m ²) | 29.6 (27.6-31.3) | 30.1 (28.9-34.9) | 31.2 (29.6-33.6) | ns |
| IL-2 (ng/l) | 0.23 (0.13-0.83) | 0.87 (0.21-2.6) | 0.47 (0.21-6.1) | ns |
| IL-6 (ng/l) | 4.05 (1.1-11.3) | 5.88 (2.2-21.3) | 7.83 (2.2-17.7) | ns |
| TNF-α (ng/l) | 8.52 (6.3-11.9) | 9.06 (6.3-12.8) | 8.76 (4.8-16.4) | ns |
| Adiponectin (mg/l) | 4.8 (3.5-7.1) | 6.3 (3.3-11.5) | 3.7 (3-5.2) | ns |
| Leptin (μg/l) | 7.1 (2.6-9.9) | 8.8 (6.5-18.7) | 9.3 (4.2-15.9) | ns |
| HA (μg/l) | 23.7 (18-35) | 24.9 (11-46) | 19.9 (17-26) | ns |
| M30 (U/l) | 23.4 (9-297) | 14.8 (8-267) | 12.7 (8-336) | ns |
| M65 (U/l) | 542 (453-1026) | 784 (375-1363) | 602 (378-1393) | ns |
| AST/ALT | 0.6 (0.6-1) | 0.77 (0.6-0.9) | 0.66 (0.6-0.9) | ns |
| APRI | 0.5 (0.3-0.9) | 0.57 (0.3-0.9) | 0.37 (0.3-0.6) | ns |
| FIB 4 | 1.36 (0.8-2.2) | 1.32 (0.9-1.9) | 0.97 (0.8-1.2) | ns |
| NAFLD fibrosis score | -2.08 (-4.2-(-0.03)) | -2.18 (-3.2-(-0.9)) | -1.61 (-2.3-(-0.6)) | ns |
| BARD score | 1 (0-3) | 2 (1-3) | 1 (1-2.25) | ns |

Data are expressed as the median and IQ range. Comparisons were performed using analysis of variance (ANOVA) on ranks with Dunn's *post hoc* analysis. ns, not significant

6/7 genotype group also covers one subject with 5/7 genotype