

Table S1. *KEAP1*, *Nrf2*, *GSTP1AB*, *GSTP1CD*, *GPX3* and *MDR1* genotype distributions in female BEN patients and controls, and the risk for BEN development

| Genotype | Patients, <i>n</i> (%) | Controls, <i>n</i> (%) | OR 1 ^a (95% CI) | <i>p</i> | OR 2 (95% CI) | <i>p</i> | OR 3 (95% CI) | <i>p</i> | OR 4 (95% CI) | <i>p</i> |
|--------------------------|---------------------------|---------------------------|-------------------------------|----------|------------------|----------|------------------|----------|------------------|----------|
| <i>KEAP1</i> rs1048290 | | | | | | | | | | |
| *C/C ^c | 11 (12) | 11 (15) | 1.0 | - | 1.0 | - | 1.0 | | 1.0 | - |
| *C/G*G/G | 81 (88) | 60 (85) | 1.35 (0.54-3.32) | 0.513 | 1.49 (0.58-3.78) | 0.399 | 1.32 (0.53-3.28) | 0.549 | 1.43 (0.55-3.71) | 0.453 |
| <i>Nrf2</i> rs6721961 | | | | | | | | | | |
| *C/C ^c | 67 (73) | 57 (80) | 1.0 | - | 1.0 | - | 1.0 | | 1.0 | - |
| *C/A*A/A | 25 (27) | 14 (20) | 1.51 (0.72-3.19) | 0.270 | 1.47 (0.68-3.18) | 0.323 | 1.46 (0.68-3.10) | 0.323 | 1.39 (0.63-3.05) | 0.406 |
| <i>GSTP1AB</i> rs1695 | | | | | | | | | | |
| *A/A ^c | 41 (45) | 35 (49) | 1.0 | - | 1.0 | - | 1.0 | | 1.0 | - |
| *A/G*G/G | 51 (55) | 36 (51) | 1.20 (0.65-2.25) | 0.548 | 1.27 (0.66-2.45) | 0.461 | 1.09 (0.57-2.06) | 0.781 | 1.15 (0.59-2.25) | 0.667 |
| <i>GSTP1CD</i> rs1138272 | | | | | | | | | | |
| *C/C ^c | 85 (92) | 66 (93) | 1.0 | - | 1.0 | - | 1.0 | | 1.0 | - |
| *C/T*T/T | 7 (8) | 5 (7) | 1.08 (0.33-3.58) | 0.891 | 0.96 (0.27-3.36) | 0.961 | 1.02 (0.30-3.45) | 0.970 | 1.27 (0.55-2.93) | 0.931 |
| <i>GPX3</i> rs8177412 | | | | | | | | | | |
| *T/T ^c | 66 (72) | 60 (85) | 1.0 | - | 1.0 | - | 1.0 | | 1.0 | - |
| *T/C*C/C | 26 (28) | 11 (15) | 2.14 (0.97-4.72) | 0.057 | 2.15 (0.96-4.81) | 0.062 | 2.09 (0.94-4.64) | 0.068 | 2.09 (0.92-4.72) | 0.075 |
| <i>MDR1</i> rs1045642 | | | | | | | | | | |
| *C/C ^c | 16 (18) | 19 (27) | 1.0 | - | 1.0 | - | 1.0 | | 1.0 | - |
| *C/T*T/T | 74 (82) | 52 (73) | 1.69 (0.79-3.13) | 0.172 | 1.51 (0.69-3.29) | 0.296 | 1.97 (0.89-4.32) | 0.090 | 1.75 (0.78-3.93) | 0.169 |

^aOR—odds ratio; OR 1—crude results, without confounding factors; OR 2—with other two genes as confounding factors; OR 3—with age as confounding factor; OR 4—with all previously stated confounding factors; 95%CI—95% confidence interval; *p* < 0.05 was considered statistically significant; ^creferent group.

Table S2. *KEAP1*, *Nrf2*, *GSTP1AB*, *GSTP1CD*, *GPX3* and *MDR1* genotype distributions in male BEN patients and controls, and the risk for BEN development

| Genotype | Patients, <i>n</i> (%) | Controls, <i>n</i> (%) | OR 1 ^a (95% CI) | <i>p</i> | OR 2 (95% CI) | <i>p</i> | OR 3 (95% CI) | <i>p</i> | OR 4 (95% CI) | <i>p</i> |
|--------------------------|---------------------------|---------------------------|-------------------------------|----------|------------------|----------|------------------|----------|------------------|----------|
| <i>KEAP1</i> rs1048290 | | | | | | | | | | |
| *C/C ^c | 24 (20) | 11 (16) | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | - |
| *C/G*G/G | 93 (80) | 58 (84) | 0.73 (0.33-1.61) | 0.442 | 0.77 (0.34-1.74) | 0.531 | 0.73 (0.33-1.61) | 0.444 | 0.76 (0.34-1.73) | 0.528 |
| <i>Nrf2</i> rs6721961 | | | | | | | | | | |
| *C/C ^c | 91 (78) | 46 (67) | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | - |
| *C/A*A/A | 26 (22) | 23 (33) | 0.57 (0.29-1.10) | 0.098 | 0.57 (0.29-1.13) | 0.110 | 1.01 (0.96-1.05) | 0.175 | 0.58 (0.29-1.14) | 0.118 |
| <i>GSTP1AB</i> rs1695 | | | | | | | | | | |
| *A/A ^c | 55 (47) | 29 (42) | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | - |
| *A/G*G/G | 62 (53) | 40 (58) | 0.81 (0.44-1.49) | 0.510 | 0.73 (0.38-1.39) | 0.348 | 0.82 (0.45-1.50) | 0.531 | 0.74 (0.39-1.41) | 0.370 |
| <i>GSTP1CD</i> rs1138272 | | | | | | | | | | |
| *C/C ^c | 102 (87) | 63 (92) | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | - |
| *C/T*T/T | 15 (13) | 6 (8) | 1.54 (0.56-4.18) | 0.393 | 1.66 (0.58-4.81) | 0.342 | 1.56 (0.57-4.26) | 0.377 | 1.67 (0.58-4.81) | 0.340 |
| <i>GPX3</i> rs8177412 | | | | | | | | | | |
| *T/T ^c | 93 (80) | 52 (75) | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | - |
| *T/C*C/C | 24 (20) | 17 (25) | 0.78 (0.38-1.60) | 0.513 | 0.80 (0.38-1.66) | 0.554 | 0.79 (0.39-1.62) | 0.536 | 0.81 (0.39-1.70) | 0.587 |
| <i>MDR1</i> rs1045642 | | | | | | | | | | |
| *C/C ^c | 23 (20) | 17 (25) | 1.0 | - | 1.0 | - | 1.0 | - | 1.0 | - |
| *C/T*T/T | 89 (80) | 52 (75) | 1.26 (0.61-2.58) | 0.519 | 1.16 (0.55-2.44) | 0.679 | 1.27 (0.62-2.60) | 0.509 | 1.17 (0.56-2.45) | 0.670 |

^aOR—odds ratio; OR 1—crude results, without confounding factors; OR 2—with other two genes as confounding factors; OR 3—with age as confounding factor; OR 4—with all previously stated confounding factors; 95%CI—95% confidence interval; *p* < 0.05 was considered statistically significant; ^c referent group.