**Table 1** Association between *UGT1A1\*28* genotypes or combined bilirubin levels and grade 3 to 4 toxicity

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variables | No. of patients without an event |  | No. of patients with an event | *P* | OR (95% CI)c |
| n | % |  | n | % |
| Diarrhea (n = 117) |  |  |  |  |  |  |  |
|  *UGT1A1\*28* |  |  |  |  |  |  |  |
|  (TA)6/6 | 75 | 91.5 |  | 7 | 8.5 | 0.005a | 1.000 (ref.) |
|  (TA)6/7 or (TA)7/7d | 25 | 71.4 |  | 10 | 28.6 |  | 4.078 (1.280-12.991) |
|  Combined bilirubin levele |  |  |  |  |  |  |  |
|  Group1 | 18 | 81.8 |  | 4 | 18.2 | 0.836b | 1.000 (ref.) |
|  Group2 | 71 | 85.5 |  | 12 | 14.5 |  | 0.868 (0.225-3.352) |
|  Group3 | 11 | 91.7 |  | 1 | 8.3 |  | 0.304 (0.026-3.614) |
| Neutropenia (n = 120) |  |  |  |  |  |  |  |
|  *UGT1A1\*28* |  |  |  |  |  |  |  |
|  (TA)6/6 | 61 | 72.6 |  | 23 | 27.4 | 0.964a | 1.000 (ref.) |
|  (TA)6/7 or (TA)7/7d | 26 | 72.2 |  | 10 | 27.8 |  | 1.082 (0.422-2.776) |
|  Combined bilirubin levele |  |  |  |  |  |  |  |
|  Group1 | 18 | 75.0 |  | 6 | 25.0 | 0.950b | 1.000 (ref.) |
|  Group2 | 59 | 71.1 |  | 24 | 28.9 |  | 0.991 (0.310-3.171) |
|  Group3 | 10 | 76.9 |  | 3 | 23.1 |  | 0.697 (0.123-3.960) |

a *P*s were calculated with two-sided χ2 tests.

b *P*s were calculated with two-sided Fisher’s exact tests.

c Logistic regression model including terms for age, sex, KPS, histology and primary tumor site.

d In the dominant model.

e Group 1: individuals with total bilirubin>13.0 and unconjugated bilirubin>4.1; Group 2: individuals with total bilirubin<13.0 and unconjugated bilirubin>4.1; Group 3: individuals with total bilirubin<13.0 and unconjugated bilirubin<4.1.

Abbreviations: OR, odds ratio; CI, confidence interval; KPS, Karnofsky performance status.

**Table 2** Chemotherapy differences between the groups of patients classified by *UGT1A1\*28* genotypes or combined bilirubin levels

|  |  |  |  |
| --- | --- | --- | --- |
| Variables | *UGT1A1\*28* genotype |  | Combined bilirubin levelsa |
| (TA)6/6 | (TA)6/7 or (TA)7/7 | *P* |  | Group 1 | Group 2 | Group 3 | *P* |
| Chemotherapy cycles, mean + s.d. | 6.55 + 2.99 | 5.92 + 3.17 | 0.276b |  | 6.00 + 2.72 | 6.36 + 3.17 | 7.00 + 2.94 | 0.641c |
| Dose reduction, n (%) |  |  |  |  |  |  |  |  |
|  No | 65 (77.4) | 22 (61.1) | 0.067d |  | 16 (66.7) | 60 (72.3) | 11 (84.6) | 0.530e |
|  Yes | 19 (22.6) | 14 (38.9) |  |  | 8 (33.3) | 23 (27.7) | 2 (15.4) |  |

a Group 1: individuals with total bilirubin>13.0 and unconjugated bilirubin>4.1; Group 2: individuals with total bilirubin<13.0 and unconjugated bilirubin>4.1; Group 3: individuals with total bilirubin<13.0 and unconjugated bilirubin<4.1.

b *P*s were calculated with Wilcoxon tests.

c *P*s were calculated with Kruskal-Wallis tests.

d *P*s were calculated with two-sided χ2 tests.

e *P*s were calculated with two-sided Fisher’s exact tests.

Abbreviations: s.d., standard deviation.