**Supplemental Table 1 Genotypes of *TYMS* 5’UTR, 3’UTR, SNP G->C, LOH *n* (%)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Genotype** | **Relapsed** |  | **De novo metastatic** |  | **Total** |
| *TYMS* 5’UTR | 48 (100) |  | 41 (100) |  | 89 (100) |
| 2R | 2 (4.2) |  | 6 (14.6) |  | 8 (9.0) |
| 2R/3R | 27 (56.3) |  | 18 (43.9) |  | 45 (50.6) |
| 2R/3RG | 11 (22.9) |  | 10 (24.4) |  | 21 (23.6) |
| 2R/3RG | 4 (8.3) |  | 4 (9.8) |  | 8 (9) |
| 2R/3RGLOH | 3 (6.3) |  | 2 (4.9) |  | 5 (5.6) |
| 2RLOH/3RG | 4 (8.3) |  | 4 (9.8) |  | 8 (9) |
| 2R/3RC | 16 (33.3) |  | 8 (19.5) |  | 24 (27.0) |
| 2R/3RC | 8 (16.7) |  | 3 (7.3) |  | 11 (12.4) |
| 2R/3RCLOH | 7 (14.6) |  | 3 (7.3) |  | 10 (11.2) |
| 2RLOH/3RC | 1 (2.1) |  | 2 (4.9) |  | 3 (3.4) |
| 3R | 19 (39.6) |  | 17 (41.5) |  | 36 (40.4) |
| 3RG | 4 (8.3) |  | 4 (9.8) |  | 8 (9) |
| 3RG/3RC | 9 (18.8) |  | 8 (19.5) |  | 17 (19.1) |
| 3RC | 6 (12.5) |  | 5 (12.2) |  | 11 (12.4) |
|  |  |  |  |  |  |
| *TYMS* 3’UTR |  |  |  |  |  |
| ins/ins | 8 (16.7) |  | 13 (31,.7) |  | 21 (23,.6) |
| ins/LOH | 14 (29.2) |  | 8 (19.5) |  | 22 (24.7) |
| ins/del | 19 (39.6) |  | 10 (24.4) |  | 29 (32.6) |
| del/LOH | 1 (2.1) |  | 3 (7.3) |  | 4 (4.5) |
| del/del | 6 (12.5) |  | 7 (17.1) |  | 13 (85.4) |

**Supplemental Table 2 Combination of *TYMS*’ polymorphisms and presence of LOH**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
|  | **Relapsed** | **De novo metastatic** | **Total** |
|  | ***n*** | ***n*** | ***n*** |
| 2RG-del/del | 0 | 2 | 2 |
| 2RG-ins/del | 1 | 1 | 2 |
| 2RG-ins/ins | 1 | 3 | 4 |
| 2RG/3RC-del/del | 1 | 0 | 1 |
| 2RG/3RC-ins/del | 5 | 0 | 5 |
| 2RG/3RC-ins/ins | 2 | 3 | 5 |
| 2RG/3RCLOH-del/LOH | 1 | 0 | 1 |
| 2RG/3RCLOH-ins/LOH | 6 | 3 | 9 |
| 2RG/3RG-del/del | 0 | 2 | 2 |
| 2RG/3RG-ins/del | 3 | 0 | 3 |
| 2RG/3RG-ins/ins | 1 | 2 | 3 |
| 2RG/3RGLOH-ins/LOH | 3 | 2 | 5 |
| 2RGLOH/3RC-del/LOH | 0 | 2 | 2 |
| 2RGLOH/3RC-ins/LOH | 1 | 0 | 1 |
| 2RGLOH/3RG-del/LOH | 0 | 1 | 1 |
| 2RGLOH/3RG-ins/LOH | 4 | 3 | 7 |
| 3RC-del/del | 1 | 0 | 1 |
| 3RC-ins/del | 4 | 2 | 6 |
| 3RC-ins/ins | 1 | 3 | 4 |
| 3RG-del/del | 2 | 2 | 4 |
| 3RG-ins/del | 1 | 1 | 2 |
| 3RG-ins/ins | 1 | 1 | 2 |
| 3RG/3RC-del/del | 2 | 1 | 3 |
| 3RG/3RC-ins/del | 5 | 6 | 11 |
| 3RG/3RC-ins/ins | 2 | 1 | 3 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Supplemental Table 3 Association between polymorphisms and presence of LOH *n* (%)** | | | | |  |
|  |  | **LOH,** | | |  |
|  |  | **No** | **Yes** | ***P* value** |  |
| 3’UTR | del/del | 13 (20.6) | 1 (03.8) |  |  |
|  | ins/ins & ins/del | 50 (79.4) | 25 (96.2) | <0.060 |  |
|  |  |  |  |  |  |
| SNP C | No | 24 (38.0) | 15 (57.7) | <0.105 |  |
|  | Yes | 39 (62.0) | 11 (42.3) |  |  |
| SUM |  | 63 (100.0) | 26 (100.0) |  |  |