**Supplemental Table S3.** Alterations in genes in MAPK and D-cyclin-CDK4/6-INK4a-Rb pathways in addition to *NRAS*.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Gene symbol** | **Total (*n*)** | **Unique patients** |
| MAPK signaling pathway | *KRAS* | 4 | 12 |
| *HRAS* | 1 |
| *BRAF*V600E/K | 0 |
| Other *BRAF* mutations | 8 |
| Cell cycle pathway | *CDKN2A* | 39 | 40 |
| *CDK4* | 5 |
| *CCND1* | 5 |