|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Treatment | FF-Tissue ID | FFPE-Tissue ID | Gene | Variant | Exome-seq of FF | Exome-seq of FFPE | Sanger sequencing of FF | Alternate allele frequency for FF |
| Spontaneous- HCC-1 | VF202/BC15616 | 700304 |  |  |  |  |  |  |
| Spontaneous- HCC-2 | VF245/BC15585 | 700347 | *Bves* | M66K | yes | - | - | 0.32 |
| Spontaneous- HCC-3 | VM8/BC1832 | 9504548 | *Bves* | R180S | yes | - | - | 0.091 |
| P195L | yes | - | - | 0.134 |
| GBE-HCC-1, 2000 mg/kg | M175/BC15578 | 700277 | *Bves* | P195L | yes | - | - | 0.063 |
| GBE-HCC-2, 2000 mg/kg | M181/BC15563 | 700283 | *Bves* | P195L | yes | - | - | 0.063 |
| GBE-HCC-3, 2000 mg/kg | F398/BC15605 | 700500 |  |  |  |  |  |  |
| GBE-HCC-4, 2000 mg/kg | F382/BC15624 | 700484 |  |  |  |  |  |  |
| MEG-HCC-1, 37 mg/kg | M64/BC1867 | 9504604 | *Bves* | R180S | yes | - | - | 0.114 |
| P195L | yes | - | - | 0.139 |
| MEG-HCC-2, 75 mg/kg | M129/BC1834 | 9504669 | *Bves* | R180S | yes | - | - | 0.089 |
| P195L | yes | - | - | 0.13 |
| MEG-HCC-3,  150 mg/kg | M196/BC1885 | 9504736 | *Braf* | V637E | yes | yes | yes | 0.368 |
| *Bves* | R180S | yes | - | - | 0.059 |
| P195L | yes |  | - | 0.119 |

**Supplementary Table 5. Sanger sequencing of variants of *Braf* and *Bves* that were identified by exome sequencing**