Additional File 2. Losses, gains and regions with allelic imbalance in the grade I meningioma and all four fragments of the grade II meningioma

## Region

chr1:0-2,342,520
chr1:0-2,342,520
chr1:0-2,342,520
chr1:0-2,342,520
chr1:0-2,342,520
chr1:1,239,637-1,296,372
chr1:1,239,637-1,296,372
chr1:1,239,637-1,296,372
chr1:1,239,637-1,296,372
chr1:1,239,637-1,296,372
chr1:1,709,577-6,110,409
chr1:1,709,577-6,110,409
chr1:1,709,577-6,110,409
chr1:1,709,577-6,110,409
chr1:1,709,577-6,110,409
chr1:3,372,743-6,110,409
chr1:3,372,743-6,110,409
chr1:3,372,743-6,110,409
chr1:3,372,743-6,110,409
chr1:3,372,743-6,110,409
chr1:6,313,247-8,172,796
chr1:6,313,247-8,172,796
chr1:6,313,247-8,172,796
chr1:6,313,247-8,172,796
chr1:6,313,247-8,172,796
chr1:6,313,247-8,181,652
chr1:6,313,247-8,181,652
chr1:6,313,247-8,181,652
chr1:6,313,247-8,181,652
chr1:6,313,247-8,181,652
chr1:8,276,853-8,996,085
chr1:8,276,853-8,996,085
chr1:8,276,853-8,996,085
chr1:8,276,853-8,996,085
chr1:8,276,853-8,996,085
chr1:9,063,095-9,135,973
chr1:9,063,095-9,135,973
chr1:9,063,095-9,135,973
chr1:9,063,095-9,135,973 Loss
chr1:9,063,095-9,135,973 Loss
chr1:9,610,456-10,447,333 Loss
chr1:9,610,456-10,447,333 Loss

Genomic Event
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Allelic Imbalance
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss
Loss

| Sample Name | Participation |
| :--- | :--- |
| Grade1 | Absent |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-4 | Absent |
| Grade2-3 | Complete |
| Grade1 | Absent |
| Grade2-1 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade2-2 | Complete |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-3 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-4 | Partial |
| Partial |  |
| Absent |  |
| Gartial |  |

chr1:9,610,456-10,447,333 Loss chr1:9,610,456-10,447,333 Loss chr1:9,610,456-10,447,333 Loss chr1:10,976,898-11,506,265 Loss chr1:10,976,898-11,506,265 Loss chr1:10,976,898-11,506,265Loss chr1:10,976,898-11,506,265 Loss chr1:10,976,898-11,506,265 Loss chr1:11,606,557-11,836,963 Loss chr1:11,606,557-11,836,963 Loss chr1:11,606,557-11,836,963 Loss chr1:11,606,557-11,836,963 Loss chr1:11,606,557-11,836,963 Loss chr1:12,164,074-13,830,696 Loss chr1:12,164,074-13,830,696 Loss chr1:12,164,074-13,830,696 Loss chr1:12,164,074-13,830,696 Loss chr1:12,164,074-13,830,696 Loss chr1:13,874,932-18,435,797 Allelic Imbalance chr1:13,874,932-18,435,797 Allelic Imbalance chr1:13,874,932-18,435,797 Allelic Imbalance chr1:13,874,932-18,435,797 Allelic Imbalance chr1:13,874,932-18,435,797 Allelic Imbalance chr1:13,874,932-18,438,295 Loss chr1:13,874,932-18,438,295Loss
chr1:13,874,932-18,438,295Loss chr1:13,874,932-18,438,295Loss chr1:13,874,932-18,438,295Loss
chr1:18,511,560-18,528,437 Loss chr1:18,511,560-18,528,437 Loss
chr1:18,511,560-18,528,437 Loss
chr1:18,511,560-18,528,437 Loss chr1:18,511,560-18,528,437 Loss
chr1:18,583,459-20,882,863 Allelic Imbalance chr1:18,583,459-20,882,863 Allelic Imbalance chr1:18,583,459-20,882,863 Allelic Imbalance chr1:18,583,459-20,882,863 Allelic Imbalance chr1:18,583,459-20,882,863 Allelic Imbalance chr1:18,583,459-26,612,467 Loss
chr1:18,583,459-26,612,467 Loss
chr1:18,583,459-26,612,467 Loss
chr1:18,583,459-26,612,467 Loss
chr1:18,583,459-26,612,467 Loss
chr1:20,924,563-26,612,467 Allelic Imbalance chr1:20,924,563-26,612,467 Allelic Imbalance chr1:20,924,563-26,612,467 Allelic Imbalance chr1:20,924,563-26,612,467 Allelic Imbalance

| Grade2-2 | Partial |
| :--- | :--- |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade2-4 | Complete |
| Grade2-2 | Partial |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Pbsent |
| Gradial |  |
| Grade2 | Partial |
| Gartial |  |

chr1:20,924,563-26,612,467 Allelic Imbalance chr1:26,899,284-28,826,479 Loss chr1:26,899,284-28,826,479 Loss chr1:26,899,284-28,826,479 Loss chr1:26,899,284-28,826,479 Loss chr1:26,899,284-28,826,479 Loss chr1:29,743,519-31,258,543 Allelic Imbalance chr1:29,743,519-31,258,543 Allelic Imbalance chr1:29,743,519-31,258,543 Allelic Imbalance chr1:29,743,519-31,258,543 Allelic Imbalance chr1:29,743,519-31,258,543 Allelic Imbalance chr1:29,743,519-31,258,543 Loss chr1:29,743,519-31,258,543 Loss chr1:29,743,519-31,258,543 Loss chr1:29,743,519-31,258,543 Loss chr1:29,743,519-31,258,543 Loss chr1:31,316,754-36,734,509 Loss chr1:31,316,754-36,734,509 Loss chr1:31,316,754-36,734,509 Loss chr1:31,316,754-36,734,509 Loss chr1:31,316,754-36,734,509 Loss chr1:36,939,814-39,427,875 Allelic Imbalance chr1:36,939,814-39,427,875 Allelic Imbalance chr1:36,939,814-39,427,875 Allelic Imbalance chr1:36,939,814-39,427,875 Allelic Imbalance chr1:36,939,814-39,427,875 Allelic Imbalance chr1:36,939,814-41,087,251 Loss chr1:36,939,814-41,087,251 Loss chr1:36,939,814-41,087,251 Loss chr1:36,939,814-41,087,251 Loss chr1:36,939,814-41,087,251 Loss chr1:46,739,615-54,375,459 Loss chr1:46,739,615-54,375,459 Loss chr1:46,739,615-54,375,459 Loss chr1:46,739,615-54,375,459 Loss chr1:46,739,615-54,375,459 Loss chr1:52,398,520-54,305,759 Allelic Imbalance chr1:52,398,520-54,305,759 Allelic Imbalance chr1:52,398,520-54,305,759 Allelic Imbalance chr1:52,398,520-54,305,759 Allelic Imbalance chr1:52,398,520-54,305,759 Allelic Imbalance chr1:54,471,319-68,478,313 Allelic Imbalance chr1:54,471,319-68,478,313 Allelic Imbalance chr1:54,471,319-68,478,313 Allelic Imbalance chr1:54,471,319-68,478,313 Allelic Imbalance chr1:54,471,319-68,478,313 Allelic Imbalance chr1:54,471,319-68,499,957 Loss

| Grade2-1 | Partial |
| :--- | :--- |
| Grade1 | Absent |
| Grade2-1 | Absent |
| Grade2-4 | Complete |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade2-1 | Complete |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade2-4 | Grade1 |

chr1:54,471,319-68,499,957 Loss
chr1:54,471,319-68,499,957 Loss
chr1:54,471,319-68,499,957 Loss
chr1:54,471,319-68,499,957 Loss
chr $1: 68,475,798-71,023,273$ Allelic Loss
chr1:68,475,798-71,023,273 Allelic Loss
chr1:68,475,798-71,023,273 Allelic Loss
chr1:68,475,798-71,023,273 Allelic Loss
chr1:68,475,798-71,023,273 Allelic Loss
chr1:71,005,838-71,511,289 Loss
chr1:71,005,838-71,511,289 Loss
chr1:71,005,838-71,511,289 Loss
chr1:71,005,838-71,511,289 Loss
chr1:71,005,838-71,511,289 Loss
chr1:71,684,307-72,019,324 Loss
chr1:71,684,307-72,019,324 Loss
chr1:71,684,307-72,019,324 Loss
chr1:71,684,307-72,019,324Loss
chr1:71,684,307-72,019,324 Loss
chr1:76,113,826-76,336,750 Loss
chr1:76,113,826-76,336,750 Loss
chr1:76,113,826-76,336,750 Loss
chr1:76,113,826-76,336,750 Loss
chr1:76,113,826-76,336,750 Loss
chr1:78,719,046-86,495,830 Allelic Imbalance
chr1:78,719,046-86,495,830 Allelic Imbalance
chr1:78,719,046-86,495,830 Allelic Imbalance
chr1:78,719,046-86,495,830 Allelic Imbalance
chr1:78,719,046-86,495,830 Allelic Imbalance
chr1:78,719,046-86,495,830 Loss
chr1:78,719,046-86,495,830 Loss
chr1:78,719,046-86,495,830 Loss
chr1:78,719,046-86,495,830 Loss
chr1:78,719,046-86,495,830 Loss
chr1:93,732,250-103,694,48 Allelic Imbalance
chr1:93,732,250-103,694,48 Allelic Imbalance
chr1:93,732,250-103,694,48 Allelic Imbalance
chr1:93,732,250-103,694,48 Allelic Imbalance
chr1:93,732,250-103,694,48 Allelic Imbalance
chr1:93,732,250-103,694,48 Loss
chr1:93,732,250-103,694,48 Loss
chr1:93,732,250-103,694,48 Loss
chr1:93,732,250-103,694,48 Loss
chr1:93,732,250-103,694,48 Loss
chr1:103,763,946-115,397,9 Allelic Imbalance
chr1:103,763,946-115,397,9 Allelic Imbalance
chr1:103,763,946-115,397,9 Allelic Imbalance

| Grade2-4 | Complete |
| :--- | :--- |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-1 | Complete |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-3 | Complete |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade1 | Absent |
| Grade2-1 | Complete |
| Grade2-2 | Complete |
| Grade2-3 | Complete |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Complete |
| Grade2-2 | Complete |
| Grade2-3 | Complete |
| Grade2-4 | Complete |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-1 | Grade2-4 |

chr1:103,763,946-115,397,9 Allelic Imbalance chr1:103,763,946-115,397,9 Allelic Imbalance chr1:103,763,946-115,401,9 Loss chr1:103,763,946-115,401,9 Loss chr1:103,763,946-115,401,9 Loss chr1:103,763,946-115,401,9Loss chr1:103,763,946-115,401,9 Loss chr1:149,756,665-152,217,8 Allelic Imbalance chr1:149,756,665-152,217,8 Allelic Imbalance chr1:149,756,665-152,217,8 Allelic Imbalance chr1:149,756,665-152,217,8 Allelic Imbalance chr1:149,756,665-152,217,8 Allelic Imbalance chr1:149,756,665-152,217,8 Gain chr1:149,756,665-152,217,8 Gain chr1:149,756,665-152,217,8 Gain chr1:149,756,665-152,217,8 Gain chr1:149,756,665-152,217,8 Gain chr1:153,693,339-155,203,1 Allelic Imbalance chr1:153,693,339-155,203,1 Allelic Imbalance chr1:153,693,339-155,203,1 Allelic Imbalance chr1:153,693,339-155,203,1 Allelic Imbalance chr1:153,693,339-155,203,1 Allelic Imbalance chr1:153,693,339-155,203,1 Gain chr1:153,693,339-155,203,1 Gain chr1:153,693,339-155,203,1 Gain chr1:153,693,339-155,203,1 Gain chr1:153,693,339-155,203,1 Gain chr1:155,209,741-157,960,2 Gain chr1:155,209,741-157,960,2 Gain chr1:155,209,741-157,960,2 Gain chr1:155,209,741-157,960,2 Gain chr1:155,209,741-157,960,2 Gain chr1:155,209,741-158,735,7 Allelic Imbalance chr1:155,209,741-158,735,7 Allelic Imbalance chr1:155,209,741-158,735,7 Allelic Imbalance chr1:155,209,741-158,735,7 Allelic Imbalance chr1:155,209,741-158,735,7 Allelic Imbalance chr1:158,086,703-158,735,7 Gain chr1:158,086,703-158,735,7 Gain chr1:158,086,703-158,735,7 Gain chr1:158,086,703-158,735,7 Gain chr1:158,086,703-158,735,7 Gain chr1:158,747,432-164,879,3 Allelic Imbalance chr1:158,747,432-164,879,3 Allelic Imbalance chr1:158,747,432-164,879,3 Allelic Imbalance chr1:158,747,432-164,879,3 Allelic Imbalance chr1:158,747,432-164,879,3 Allelic Imbalance

| Grade2-2 | Partial |
| :--- | :--- |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-4 | Grade2-1 |

chr1:158,747,432-164,879,3 Gain
chr1:158,747,432-164,879,3 Gain
chr1:158,747,432-164,879,3 Gain
chr1:158,747,432-164,879,3 Gain
chr1:158,747,432-164,879,3 Gain
chr1:165,034,548-165,341,3 Gain chr1:165,034,548-165,341,3 Gain chr1:165,034,548-165,341,3 Gain chr1:165,034,548-165,341,3 Gain chr1:165,034,548-165,341,3 Gain chr1:165,034,548-165,778,5 Allelic Imbalance chr1:165,034,548-165,778,5 Allelic Imbalance chr1:165,034,548-165,778,5 Allelic Imbalance chr1:165,034,548-165,778,5 Allelic Imbalance chr1:165,034,548-165,778,5 Allelic Imbalance chr1:165,560,963-165,778,5 Gain chr1:165,560,963-165,778,5 Gain chr1:165,560,963-165,778,5 Gain chr1:165,560,963-165,778,5 Gain chr1:165,560,963-165,778,5 Gain chr1:165,922,580-167,016,2 Gain chr1:165,922,580-167,016,2 Gain chr1:165,922,580-167,016,2 Gain chr1:165,922,580-167,016,2 Gain chr1:165,922,580-167,016,2 Gain chr1:167,157,499-175,090,2 Gain chr1:167,157,499-175,090,2 Gain chr1:167,157,499-175,090,2 Gain chr1:167,157,499-175,090,2 Gain chr1:167,157,499-175,090,2 Gain chr1:175,855,987-177,706,7 Gain chr1:175,855,987-177,706,7 Gain chr1:175,855,987-177,706,7 Gain chr1:175,855,987-177,706,7 Gain chr1:175,855,987-177,706,7 Gain chr1:177,813,426-180,097,1 Gain chr1:177,813,426-180,097,1 Gain chr1:177,813,426-180,097,1 Gain chr1:177,813,426-180,097,1 Gain chr1:177,813,426-180,097,1 Gain chr1:180,167,839-180,901,4 Gain chr1:180,167,839-180,901,4 Gain chr1:180,167,839-180,901,4 Gain chr1:180,167,839-180,901,4 Gain chr1:180,167,839-180,901,4 Gain chr1:181,111,459-181,405,3 Gain chr1:181,111,459-181,405,3 Gain

| Grade1 | Absent |
| :--- | :--- |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Complete |
| Grade2-3 | Complete |
| Grade2-4 | Complete |
| Grade2-2 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Grade2-2-3 |

chr1:181,111,459-181,405,3 Gain chr1:181,111,459-181,405,3 Gain chr1:181,111,459-181,405,3 Gain chr1:181,481,984-181,712,3 Gain chr1:181,481,984-181,712,3 Gain chr1:181,481,984-181,712,3 Gain chr1:181,481,984-181,712,3 Gain chr1:181,481,984-181,712,3 Gain chr1:181,842,663-204,999,5 Gain chr1:181,842,663-204,999,5 Gain chr1:181,842,663-204,999,5 Gain chr1:181,842,663-204,999,5 Gain chr1:181,842,663-204,999,5 Gain chr1:165,922,580-226,032,6 Allelic Imbalance chr1:165,922,580-226,032,6 Allelic Imbalance chr1:165,922,580-226,032,6 Allelic Imbalance chr1:165,922,580-226,032,6 Allelic Imbalance chr1:165,922,580-226,032,6 Allelic Imbalance chr1:205,053,666-205,763,5 Gain chr1:205,053,666-205,763,5 Gain chr1:205,053,666-205,763,5 Gain chr1:205,053,666-205,763,5 Gain chr1:205,053,666-205,763,5 Gain chr1:205,898,895-206,233,0 Gain chr1:205,898,895-206,233,0 Gain chr1:205,898,895-206,233,0 Gain chr1:205,898,895-206,233,0 Gain chr1:205,898,895-206,233,0 Gain chr1:206,616,227-207,038,0 Gain chr1:206,616,227-207,038,0 Gain chr1:206,616,227-207,038,0 Gain chr1:206,616,227-207,038,0 Gain chr1:206,616,227-207,038,0 Gain chr1:207,195,651-210,724,6 Gain chr1:207,195,651-210,724,6 Gain chr1:207,195,651-210,724,6 Gain chr1:207,195,651-210,724,6 Gain chr1:207,195,651-210,724,6 Gain chr1:210,785,771-213,488,1 Gain chr1:210,785,771-213,488,1 Gain chr1:210,785,771-213,488,1 Gain chr1:210,785,771-213,488,1 Gain chr1:210,785,771-213,488,1 Gain chr1:213,627,727-213,941,9 Gain chr1:213,627,727-213,941,9 Gain chr1:213,627,727-213,941,9 Gain chr1:213,627,727-213,941,9 Gain

| Grade2-2 | Partial |
| :--- | :--- |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Complete |
| Grade2-3 | Complete |
| Grade2-2 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Absent |
| Grade2-3 | Absent |
| Grade2-2 | Complete |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-2 | Abade1 |

chr1:213,627,727-213,941,9 Gain chr1:214,084,263-220,868,2 Gain chr1:214,084,263-220,868,2 Gain chr1:214,084,263-220,868,2 Gain chr1:214,084,263-220,868,2 Gain chr1:214,084,263-220,868,2 Gain chr1:221,236,220-224,863,8 Gain chr1:221,236,220-224,863,8 Gain chr1:221,236,220-224,863,8 Gain chr1:221,236,220-224,863,8 Gain chr1:221,236,220-224,863,8 Gain chr1:224,914,179-226,032,6 Gain chr1:224,914,179-226,032,6 Gain chr1:224,914,179-226,032,6 Gain chr1:224,914,179-226,032,6 Gain chr1:224,914,179-226,032,6 Gain chr1:226,073,063-227,336,9 Allelic Imbalance chr1:226,073,063-227,336,9 Allelic Imbalance chr1:226,073,063-227,336,9 Allelic Imbalance chr1:226,073,063-227,336,9 Allelic Imbalance chr1:226,073,063-227,336,9 Allelic Imbalance chr1:226,073,063-227,336,9 Gain chr1:226,073,063-227,336,9 Gain chr1:226,073,063-227,336,9 Gain chr1:226,073,063-227,336,9 Gain chr1:226,073,063-227,336,9 Gain chr2:25,286,655-27,427,390 Loss chr2:25,286,655-27,427,390 Loss chr2:25,286,655-27,427,390 Loss chr2:25,286,655-27,427,390 Loss chr2:25,286,655-27,427,390 Loss chr2:141,344,553-141,948,8 Loss chr2:141,344,553-141,948,8 Loss chr2:141,344,553-141,948,8 Loss chr2:141,344,553-141,948,8Loss chr2:141,344,553-141,948,8 Loss chr2:142,066,896-142,114,0 Loss chr2:142,066,896-142,114,0 Loss chr2:142,066,896-142,114,0 Loss chr2:142,066,896-142,114,0 Loss chr2:142,066,896-142,114,0 Loss chr3:60,533,831-60,552,706 Loss chr3:60,533,831-60,552,706 Loss chr3:60,533,831-60,552,706 Loss chr3:60,533,831-60,552,706 Loss chr3:60,533,831-60,552,706 Loss chr3:60,729,820-60,775,714 Gain

| Grade2-3 | Partial |
| :--- | :--- |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade1 | Grade2-3 |

chr3:60,729,820-60,775,714 Gain
chr3:60,729,820-60,775,714 Gain
chr3:60,729,820-60,775,714 Gain
chr3:60,729,820-60,775,714 Gain
chr3:174,219,266-174,359,1 Loss
chr3:174,219,266-174,359,1 Loss
chr3:174,219,266-174,359,1 Loss
chr3:174,219,266-174,359,1 Loss
chr3:174,219,266-174,359,1 Loss
chr6:63,926,951-64,934,998 Loss
chr6:63,926,951-64,934,998 Loss
chr6:63,926,951-64,934,998 Loss
chr6:63,926,951-64,934,998Loss
chr6:63,926,951-64,934,998 Loss
chr6:70,142,826-134,466,51 Loss
chr6:70,142,826-134,466,51 Loss
chr6:70,142,826-134,466,51 Loss
chr6:70,142,826-134,466,51 Loss
chr6:70,142,826-134,466,51 Loss
chr6:134,521,112-167,155,0 Loss
chr6:134,521,112-167,155,0 Loss
chr6:134,521,112-167,155,0 Loss
chr6:134,521,112-167,155,0 Loss
chr6:134,521,112-167,155,0 Loss
chr6:151,674,459-157,877,9 Allelic Imbalance
chr6:151,674,459-157,877,9 Allelic Imbalance
chr6:151,674,459-157,877,9 Allelic Imbalance
chr6:151,674,459-157,877,9 Allelic Imbalance
chr6:151,674,459-157,877,9 Allelic Imbalance
chr6:158,102,055-167,155,0 Allelic Imbalance
chr6:158,102,055-167,155,0 Allelic Imbalance
chr6:158,102,055-167,155,0 Allelic Imbalance
chr6:158,102,055-167,155,0 Allelic Imbalance
chr6:158,102,055-167,155,0 Allelic Imbalance
chr6:167,190,221-170,445,4 Loss
chr6:167,190,221-170,445,4 Loss
chr6:167,190,221-170,445,4Loss
chr6:167,190,221-170,445,4 Loss
chr6:167,190,221-170,445,4 Loss
chr6:167,197,802-170,445,4 Allelic Imbalance chr6:167,197,802-170,445,4 Allelic Imbalance chr6:167,197,802-170,445,4 Allelic Imbalance chr6:167,197,802-170,445,4 Allelic Imbalance chr6:167,197,802-170,445,4 Allelic Imbalance chr6:170,499,358-171,115,0 Loss
chr6:170,499,358-171,115,0 Loss
chr6:170,499,358-171,115,0 Loss

| Grade2-2 | Absent |
| :--- | :--- |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-1 | Complete |
| Grade2-2 | Complete |
| Grade2-3 | Complete |
| Grade2-4 | Complete |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-1 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Absent |
| Grade2-4 | Absent |
| Grade2-3 | Complete |
| Grade2-1 | Partial |
| Grade1 | Absent |
| Grade2-2 | Complete |
| Grade2-3 | Grade2-1 |

chr6:170,499,358-171,115,0 Loss
chr6:170,499,358-171,115,0 Loss chr7:38,294,904-38,384,590 Gain chr7:38,294,904-38,384,590 Gain chr7:38,294,904-38,384,590 Gain chr7:38,294,904-38,384,590 Gain chr7:38,294,904-38,384,590 Gain chr7:61,074,194-62,368,143 Gain chr7:61,074,194-62,368,143 Gain chr7:61,074,194-62,368,143 Gain chr7:61,074,194-62,368,143 Gain chr7:61,074,194-62,368,143 Gain chr8:3,679,475-3,701,441 Loss chr8:3,679,475-3,701,441 Loss chr8:3,679,475-3,701,441 Loss chr8:3,679,475-3,701,441 Loss chr8:3,679,475-3,701,441 Loss chr11:326,567-939,530 Loss chr11:326,567-939,530 Loss chr11:326,567-939,530 Loss chr11:326,567-939,530 Loss chr11:326,567-939,530 Loss chr11:1,033,174-1,254,645 Loss chr11:1,033,174-1,254,645 Loss chr11:1,033,174-1,254,645 Loss chr11:1,033,174-1,254,645 Loss chr11:1,033,174-1,254,645 Loss chr11:1,413,671-1,644,910 Loss chr11:1,413,671-1,644,910 Loss chr11:1,413,671-1,644,910 Loss chr11:1,413,671-1,644,910 Loss chr11:1,413,671-1,644,910 Loss chr11:1,699,159-3,033,703 Allelic Imbalance chr11:1,699,159-3,033,703 Allelic Imbalance chr11:1,699,159-3,033,703 Allelic Imbalance chr11:1,699,159-3,033,703 Allelic Imbalance chr11:1,699,159-3,033,703 Allelic Imbalance chr11:1,699,159-3,033,703 Loss chr11:1,699,159-3,033,703 Loss chr11:1,699,159-3,033,703 Loss chr11:1,699,159-3,033,703 Loss chr11:1,699,159-3,033,703 Loss chr11:3,116,008-9,536,682 Loss chr11:3,116,008-9,536,682 Loss chr11:3,116,008-9,536,682 Loss chr11:3,116,008-9,536,682 Loss chr11:3,116,008-9,536,682 Loss

| Grade2-2 | Partial |
| :--- | :--- |
| Grade2-4 | Partial |
| Grade2-4 | Complete |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-4 | Complete |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Complete |
| Grade1 | Absent |
| Grade2-1 | Complete |
| Grade2-2 | Complete |
| Grade2-3 | Complete |
| Grade2-4 | Complete |
| Grade2-3-4 | Grade1 |


| chr11:3,116,352-9,536,682 | Allelic Imbalance | Grade1 |
| :--- | :--- | :--- | Absent 1 Complete

chr22:16,197,021-17,437,07 Loss
chr22:16,197,021-17,437,07 Loss
chr22:16,197,021-17,437,07 Loss
chr22:17,437,078-19,426,86 Allelic Imbalance chr22:17,437,078-19,426,86 Allelic Imbalance chr22:17,437,078-19,426,86 Allelic Imbalance chr22:17,437,078-19,426,86 Allelic Imbalance chr22:17,437,078-19,426,86 Allelic Imbalance chr22:19,426,861-19,585,25 Loss chr22:19,426,861-19,585,25 Loss chr22:19,426,861-19,585,25 Loss chr22:19,426,861-19,585,25 Loss chr22:19,426,861-19,585,25 Loss chr22:19,585,254-19,870,48 Allelic Imbalance chr22:19,585,254-19,870,48 Allelic Imbalance chr22:19,585,254-19,870,48 Allelic Imbalance chr22:19,585,254-19,870,48 Allelic Imbalance chr22:19,585,254-19,870,48 Allelic Imbalance chr22:19,870,489-19,949,05 Loss chr22:19,870,489-19,949,05 Loss chr22:19,870,489-19,949,05Loss chr22:19,870,489-19,949,05 Loss chr22:19,870,489-19,949,05 Loss chr22:19,974,324-20,009,90 Loss chr22:19,974,324-20,009,90 Loss chr22:19,974,324-20,009,90 Loss chr22:19,974,324-20,009,90 Loss chr22:19,974,324-20,009,90 Loss chr22:20,852,369-20,950,40 Loss chr22:20,852,369-20,950,40 Loss chr22:20,852,369-20,950,40 Loss chr22:20,852,369-20,950,40 Loss chr22:20,852,369-20,950,40 Loss chr22:21,421,264-21,975,12 Loss chr22:21,421,264-21,975,12 Loss chr22:21,421,264-21,975,12 Loss chr22:21,421,264-21,975,12 Loss chr22:21,421,264-21,975,12 Loss chr22:22,244,707-23,633,54 Allelic Imbalance chr22:22,244,707-23,633,54 Allelic Imbalance chr22:22,244,707-23,633,54 Allelic Imbalance chr22:22,244,707-23,633,54 Allelic Imbalance chr22:22,244,707-23,633,54 Allelic Imbalance chr22:22,244,707-23,633,54 Loss chr22:22,244,707-23,633,54Loss
chr22:22,244,707-23,633,54 Loss
chr22:22,244,707-23,633,54 Loss

| Grade2-3 | Absent |
| :--- | :--- |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-3-4 | Abade2-1 |
| Grade2-2 | Absent |
| Grade2-4 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grsent |  |
| Gradent |  |

chr22:22,244,707-23,633,54 Loss
chr22:23,701,151-25,377,77 Loss chr22:23,701,151-25,377,77 Loss chr22:23,701,151-25,377,77 Loss chr22:23,701,151-25,377,77 Loss chr22:23,701,151-25,377,77 Loss chr22:23,928,706-28,100,48 Allelic Imbalance chr22:23,928,706-28,100,48 Allelic Imbalance chr22:23,928,706-28,100,48 Allelic Imbalance chr22:23,928,706-28,100,48 Allelic Imbalance chr22:23,928,706-28,100,48 Allelic Imbalance chr22:25,585,854-28,100,48 Loss chr22:25,585,854-28,100,48 Loss chr22:25,585,854-28,100,48 Loss chr22:25,585,854-28,100,48 Loss chr22:25,585,854-28,100,48 Loss chr22:28,129,263-29,690,56 Loss chr22:28,129,263-29,690,56 Loss chr22:28,129,263-29,690,56 Loss chr22:28,129,263-29,690,56 Loss chr22:28,129,263-29,690,56 Loss chr22:29,790,127-30,689,33 Loss chr22:29,790,127-30,689,33 Loss chr22:29,790,127-30,689,33 Loss chr22:29,790,127-30,689,33 Loss chr22:29,790,127-30,689,33 Loss chr22:30,163,739-30,957,12 Allelic Imbalance chr22:30,163,739-30,957,12 Allelic Imbalance chr22:30,163,739-30,957,12 Allelic Imbalance chr22:30,163,739-30,957,12 Allelic Imbalance chr22:30,163,739-30,957,12 Allelic Imbalance chr22:30,763,296-32,011,22 Loss chr22:30,763,296-32,011,22 Loss chr22:30,763,296-32,011,22 Loss chr22:30,763,296-32,011,22 Loss chr22:30,763,296-32,011,22 Loss chr22:32,119,208-36,653,10 Loss chr22:32,119,208-36,653,10 Loss chr22:32,119,208-36,653,10Loss chr22:32,119,208-36,653,10 Loss chr22:32,119,208-36,653,10 Loss chr22:31,770,014-40,029,00 Allelic Imbalance chr22:31,770,014-40,029,00 Allelic Imbalance chr22:31,770,014-40,029,00 Allelic Imbalance chr22:31,770,014-40,029,00 Allelic Imbalance chr22:31,770,014-40,029,00 Allelic Imbalance chr22:37,255,386-37,958,74 Loss

| Grade1 | Complete |
| :--- | :--- |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade2-1 | Absent |
| Grade1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-4 | Grade2-4 |

chr22:37,255,386-37,958,74 Loss
chr22:37,255,386-37,958,74Loss chr22:37,255,386-37,958,74 Loss chr22:37,255,386-37,958,74 Loss chr22:38,699,380-39,430,00 Loss chr22:38,699,380-39,430,00 Loss chr22:38,699,380-39,430,00 Loss chr22:38,699,380-39,430,00 Loss chr22:38,699,380-39,430,00 Loss chr22:39,778,859-41,345,59 Loss chr22:39,778,859-41,345,59 Loss chr22:39,778,859-41,345,59 Loss chr22:39,778,859-41,345,59 Loss chr22:39,778,859-41,345,59 Loss chr22:40,931,121-42,689,98 Allelic Imbalance chr22:40,931,121-42,689,98 Allelic Imbalance chr22:40,931,121-42,689,98 Allelic Imbalance chr22:40,931,121-42,689,98 Allelic Imbalance chr22:40,931,121-42,689,98 Allelic Imbalance chr22:41,792,686-43,459,82 Loss chr22:41,792,686-43,459,82 Loss chr22:41,792,686-43,459,82 Loss chr22:41,792,686-43,459,82 Loss chr22:41,792,686-43,459,82 Loss chr22:42,819,631-44,270,19 Allelic Imbalance chr22:42,819,631-44,270,19 Allelic Imbalance chr22:42,819,631-44,270,19 Allelic Imbalance chr22:42,819,631-44,270,19 Allelic Imbalance chr22:42,819,631-44,270,19 Allelic Imbalance chr22:43,768,475-44,340,06 Loss chr22:43,768,475-44,340,06 Loss chr22:43,768,475-44,340,06 Loss chr22:43,768,475-44,340,06 Loss chr22:43,768,475-44,340,06 Loss chr22:44,423,373-44,494,44Loss chr22:44,423,373-44,494,44 Loss chr22:44,423,373-44,494,44 Loss chr22:44,423,373-44,494,44 Loss chr22:44,423,373-44,494,44 Loss chr22:44,525,653-44,576,39 Loss chr22:44,525,653-44,576,39 Loss chr22:44,525,653-44,576,39 Loss chr22:44,525,653-44,576,39 Loss chr22:44,525,653-44,576,39 Loss chr22:44,649,410-45,586,88 Loss chr22:44,649,410-45,586,88 Loss chr22:44,649,410-45,586,88 Loss

| Grade1 | Partial |
| :--- | :--- |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade1 | Absent |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade2-4 | Complete |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade2-1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade1 | Complete |
| Grade2-4 | Complete |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-1 | Grade2-2 |

chr22:44,649,410-45,586,88 Loss chr22:44,649,410-45,586,88 Loss chr22:44,324,176-46,044,68 Allelic Imbalance chr22:44,324,176-46,044,68 Allelic Imbalance chr22:44,324,176-46,044,68 Allelic Imbalance chr22:44,324,176-46,044,68 Allelic Imbalance chr22:44,324,176-46,044,68 Allelic Imbalance chr22:45,821,913-45,896,05 Loss chr22:45,821,913-45,896,05 Loss chr22:45,821,913-45,896,05 Loss chr22:45,821,913-45,896,05 Loss chr22:45,821,913-45,896,05 Loss chr22:45,985,993-46,269,99 Loss chr22:45,985,993-46,269,99 Loss chr22:45,985,993-46,269,99 Loss chr22:45,985,993-46,269,99 Loss chr22:45,985,993-46,269,99 Loss chr22:46,355,329-46,908,39 Loss chr22:46,355,329-46,908,39 Loss chr22:46,355,329-46,908,39 Loss chr22:46,355,329-46,908,39 Loss chr22:46,355,329-46,908,39 Loss chr22:46,989,960-47,116,36 Loss chr22:46,989,960-47,116,36 Loss chr22:46,989,960-47,116,36 Loss chr22:46,989,960-47,116,36 Loss chr22:46,989,960-47,116,36 Loss chr22:47,344,809-50,084,58 Loss chr22:47,344,809-50,084,58 Loss chr22:47,344,809-50,084,58 Loss chr22:47,344,809-50,084,58 Loss chr22:47,344,809-50,084,58 Loss chr22:46,647,940-51,025,41 Allelic Imbalance chr22:46,647,940-51,025,41 Allelic Imbalance chr22:46,647,940-51,025,41 Allelic Imbalance chr22:46,647,940-51,025,41 Allelic Imbalance chr22:46,647,940-51,025,41 Allelic Imbalance chr22:50,982,436-51,065,07 Loss chr22:50,982,436-51,065,07 Loss chr22:50,982,436-51,065,07 Loss chr22:50,982,436-51,065,07 Loss chr22:50,982,436-51,065,07 Loss chr22:51,143,227-51,304,56 Loss chr22:51,143,227-51,304,56 Loss chr22:51,143,227-51,304,56 Loss chr22:51,143,227-51,304,56 Loss chr22:51,143,227-51,304,56 Loss

| Grade2-3 | Partial |
| :--- | :--- |
| Grade2-4 | Partial |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-2 | Absent |
| Grade2-3 | Absent |
| Grade2-4 | Absent |
| Grade2-1 | Complete |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3 | Partial |
| Grade2-4 | Partial |
| Grade1 | Absent |
| Grade2-1 | Absent |
| Grade2-4 | Absent |
| Grade2-2 | Complete |
| Grade2-3 | Partial |
| Grade1 | Partial |
| Grade2-1 | Partial |
| Grade2-2 | Partial |
| Grade2-3-4 | Prade2-3 |

chrX:32,737,942-33,582,89\& Loss
chrX:32,737,942-33,582,89ع Loss chrX:32,737,942-33,582,89\& Loss chrX:32,737,942-33,582,89\& Loss chrX:32,737,942-33,582,89と Loss

Grade1
Grade2-1
Grade2-3
Grade2-2
Grade2-4

Absent
Complete
Complete
Partial
Partial

