**Supplemental Table 2 : Breakpoints seen only by tumor aCGH of the primary NB (section A) or only by cfDNA OncoScan® genomic profiling (section B)** Genes targeted by these breakpoints are listed.

1. **Tumour aCGH-specific breakpoints**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Case Number** | **Sample** | **Chr** | **Predicted breakpoint localisation** | **Genes targeted by BP** | **Predicted breakpoint position** |
| 4 | aCGH | 14 | 83012422 | LOC101928559,  | intergenic |
| 5 | aCGH | 4 | 101350762 | EMCN | intronic |
| 5 | aCGH | 10 | 104706552 | CNNM2 | intronic |
| 13 | aCGH | 1 | 160603686 | SLAMF1 | intronic |
| 16 | aCGH | 10 | 98456141 | PIK3AP1 | intronic |
| 16 | aCGH | 11 | 71267599 | KRTAP5-9, KRTAP5-10 | intergenic |
| 17 | aCGH | 17 | 18947084 | GRAP | intronic |
| 18 | aCGH | 5 | 157058170 | SOX30 | intronic |
| 18 | aCGH | 5 | 158496443 | EBF1 | intronic |
| 28 | aCGH | 2 | 45997077 | PRKCE | intronic |
| 28 | aCGH | 2 | 65394710 | RAB1A, ACTR2 | intergenic |
| 28 | aCGH | 2 | 67400039 | LOC102800447, LOC644838 | ncRNA\_intronic |
| 28 | aCGH | 9 | 8519248 | PTPRD | intronic |
| 41 | aCGH | 2 | 146790488 | TEX41, PABPC1P2 | intergenic |
| 41 | aCGH | 2 | 209643975 | PTH2R, MAP2 | intergenic |
| 42 | aCGH | 1 | 151034889 | MLLT11 | intronic |
| 49 | aCGH | 4 | 132610801 | LOC101927282, PCDH10 | intergenic |
| 49 | aCGH | 4 | 136856929 | LINC00613, PCDH18 | intergenic |
| 49 | aCGH | 19 | 2418039 | TMPRSS9 | exonic |
| 55 | aCGH | 6 | 14777420 | LINC01108, JARID | intergenic |
| 55 | aCGH | 6 | 32982371 | HLA-DOA, HLA-DPA1 | intergenic |
| 55 | aCGH | 6 | 40688988 | LRFN2, LOC10192955 | intergenic |
| 55 | aCGH | 6 | 48181071 | PTCHD4, MUT | intergenic |  |
| 66 | aCGH | 2 | 16547195 | MYCN, FAM49A | intergenic |
| 68 | aCGH | 1 | 63154210 | DOCK7 | upstream |
| 68 | aCGH | 17 | 41840779 | SOST, DUSP3 | intergenic |
| 68 | aCGH | 19 | 14251416 | LOC100507373 | ncRNA\_intronic |

1. **cfDNA OncoScan® specific breakpoints**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Case Number** | **Sample** | **Chr** | **Predicted breakpoint localisation** | **Genes targeted by BP** | **Predicted Breakpoint Position** |
| 3 | Oncoscan | 15 | 98789461 | LOC101927332, FAM169B **IGR1R (amplification)**; | intergenic |
| 3 | Oncoscan | 15 | 99786967 | TTC23 | intronic |
| 4 | Oncoscan | 17 | 34646372 | CCL4L1, TBC1D3H | intergenic |
| 5 | Oncoscan | 18 | 52856944 | LOC101927229, TCF4 | intergenic |
| 16 | Oncoscan | 9 | 132640369 | USP20 | intronic |
| 17 | Oncoscan | 15 | 99148057 | FAM169B,**IGF1R (high level gain)** | intergenic |
| 17 | Oncoscan | 15 | 99758788 | TTC23 | intronic |
| 18 | Oncoscan | 2 | 10220077 | CYS1 | exonic |
| 18 | Oncoscan | 7 | 84788236 | SEMA3D, GRM3 | intergenic |
| 19 | Oncoscan | 17 | 18873395 | SLC5A10 | intronic |
| 38 | Oncoscan | 3 | 72410420 | RYBP | exonic |
| 42 | Oncoscan | 9 | 137274189 | RXRA | intronic |
| 42 | Oncoscan | 15 | 80029812 | KIAA1024, MTHFS | intergenic |
| 49 | Oncoscan | 5 | 28559496 | LINC01021, LSP1P3 | intergenic |
| 49 | Oncoscan | 12 | 53541815 | SOAT2, CSAD | intergenic |
| 50 | Oncoscan | 4 | 92060179 | CCSER1 | intronic |
| 55 | Oncoscan | 5 | 160813 | PLEKHG4B | intronic |
| 55 | Oncoscan | 5 | 1296987 | **TERT,** MIR4457 | intergenic |
| 55 | Oncoscan | 5 | 16977272 | MYO10, LOC285696 | intergenic |
| 55 | Oncoscan | 5 | 17380282 | LOC401177 | ncRNA\_exonic |
| 55 | Oncoscan | 5 | 20413591 | CDH18 | intronic |
| 55 | Oncoscan | 5 | 20751127 | CDH18, GUSBP1 | intergenic |
| 55 | Oncoscan | 5 | 22888094 | CDH12, PRDM9 | intergenic |
| 55 | Oncoscan | 5 | 23273868 | CDH12, PRDM9 | intergenic |
| 55 | Oncoscan | 5 | 31874694 | PDZD2 | intronic |
| 55 | Oncoscan | 5 | 32412190 | ZFR | intronic |
| 55 | Oncoscan | 5 | 38091039 | GDNF-AS1, EGFLAM | intergenic |
| 55 | Oncoscan | 5 | 38479561 | LIFR | UTR |
| 55 | Oncoscan | 5 | 39761832 | LOC101926940, LINC00603 | intergenic |
| 55 | Oncoscan | 5 | 39989952 | LOC101926940, LINC00603 | intergenic |
| 55 | Oncoscan | 5 | 42537402 | GHR | intronic |
| 55 | Oncoscan | 5 | 42689377 | GHR | intronic |
| 55 | Oncoscan | 5 | 43430253 | CCL28, C5orf28 | intergenic |
| 55 | Oncoscan | 5 | 43537854 | PAIP1 | intronic |
| 58 | Oncoscan | 1 | 145710712 | CD160, NBPF10,NBPF20 | intronic |
| 58 | Oncoscan | 3 | 53853049 | CHDH | exonic |
| 58 | Oncoscan | 5 | 1289704 | **TERT** | intronic |
| 58 | Oncoscan | 9 | 130331770 | FAM129B | intronic |
| 58 | Oncoscan | 13 | 112683647 | LINC00403 | ncRNA\_intronic |
| 58 | Oncoscan | 13 | 113330942 | ATP11AUN | intronic |
| 58 | Oncoscan | 22 | 20253268 | RTN4R | intronic |
| 58 | Oncoscan | 22 | 37892615 | CARD10 | intronic |
| 60 | Oncoscan | 6 | 169579367 | SMOC2, THBS2 | intergenic |
| 64 | Oncoscan | 4 | 174680888 | HAND2-AS1, FBXO8 | intergenic |
| 68 | Oncoscan | 1 | 78521626 | GIPC2 | intronic |
| 68 | Oncoscan | 2 | 55572304 | CCDC88A | intronic |
| 68 | Oncoscan | 6 | 109705339 | CD164, PPIL6 | intergenic |
| 68 | Oncoscan | 10 | 73471881 | C10orf105 | UTR3 |
| 68 | Oncoscan | 11 | 58481586 | GLYAT | intronic |
| 68 | Oncoscan | 12 | 71879359 | LGR5 | intronic |
| 68 | Oncoscan | 14 | 37308473 | SLC25A21 | intronic |
| 68 | Oncoscan | 17 | 39718789 | LINC00974, KRT9 | intergenic |
| 68 | Oncoscan | 19 | 11756788 | ZNF627, ZNF833P | intergenic |
| 68 | Oncoscan | 20 | 47259882 | PREX1 | intronic |
|  |  |  |  |  |  |