

| N* | Diagnosis | Gender | Age | Site | Status | IHC | Sanger | Sequenom |
|----|-----------|--------|-----|------|--------|-----|------------|------------------|
| 1 | AU | M | 26 | Max | Rec | Neg | WT | WT |
| 2 | AU | M | 31 | Mand | Rec | Pos | BRAF V600E | BRAF V600E |
| 3 | AU | F | 38 | Mand | Prim | Pos | BRAF V600E | BRAF V600E |
| 4 | AU | M | 32 | Mand | Prim | Pos | WT | WT |
| 5 | AU | M | 62 | Mand | Prim | Pos | BRAF V600E | BRAF V600E |
| 6 | AU | M | 29 | Mand | Prim | Pos | BRAF V600E | BRAF V600E |
| 7 | AU | M | 29 | Mand | Prim | Pos | BRAF V600E | BRAF V600E |
| 8 | AU | M | 22 | Max | Rec | Neg | WT | WT |
| 9 | AU | M | 21 | Max | Rec | Neg | WT | WT |
| 10 | AU | F | 31 | Mand | Rec | Pos | BRAF V600E | BRAF V600E |
| 11 | AU | M | 28 | Max | Prim | Neg | WT | KRAS G12R |
| 12 | AU | M | 22 | Max | Rec | Neg | WT | WT |
| 13 | AU | M | 66 | Mand | Rec | Pos | BRAF V600E | BRAF V600E |
| 14 | AU | F | 44 | Mand | Rec | Pos | NA | BRAF V600E |
| 15 | AU | F | 18 | Mand | Prim | Pos | WT | BRAF V600E |
| 16 | AU | M | 57 | Mand | Prim | Pos | BRAF V600E | BRAF V600E |
| 17 | AU | M | 16 | Max | Prim | Neg | WT | WT |
| 18 | AU | M | 66 | Mand | Rec | Neg | NA | NA |
| 19 | AU | M | 65 | Mand | Prim | Pos | NA | BRAF V600E |
| 20 | AU | M | 60 | Mand | Prim | NV | BRAF V600E | BRAF V600E |
| 21 | AU | F | 38 | Mand | Prim | Pos | NA | BRAF V600E |
| 22 | AU | F | 21 | Mand | Prim | Pos | BRAF V600E | BRAF V600E |
| 23 | AU | M | 56 | Mand | Prim | Neg | BRAF V600E | BRAF V600E |
| 24 | AU | M | 57 | Max | Prim | Neg | WT | WT |
| 25 | AC | F | 56 | Mand | Rec | Neg | WT | WT |
| 26 | AC | M | 33 | Mand | Rec | Neg | WT | WT |
| 27 | AC | M | 49 | Mand | Rec | Neg | NA | NA |
| 28 | AC | F | 68 | Max | Rec | Neg | WT | PIKC3A T1025T |
| 29 | AC | F | 68 | Max | Rec | Pos | WT | PIKC3A T1025T |
| 30 | AC | F | 54 | Mand | Prim | Neg | WT | WT |
| 31 | AC | M | 48 | Mand | Prim | Neg | WT | WT |
| 32 | AC | M | 80 | Max | Rec | Neg | WT | WT |
| 33 | AC | M | 82 | Max | Prim | Neg | WT | WT |
| 34 | AC | M | 64 | Mand | Prim | Pos | BRAF V600E | BRAF V600E |
| 35 | AC | F | 50 | Mand | Prim | Neg | WT | WT |
| 36 | AC | F | 50 | Mand | Prim | Neg | WT | WT |
| 37 | AC | M | 45 | Mand | Rec | Pos | NA | NA |

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|----|---------|---|----|------|------|-----|------------|------------|
| 38 | AC | M | 66 | Mand | Rec | Neg | WT | NRAS Q61R |
| 39 | AC | M | 44 | Mand | Prim | Pos | WT | WT |
| 40 | AC | M | 73 | Mand | Prim | Neg | WT | WT |
| 41 | AC | M | 50 | Mand | Prim | Neg | WT | NRAS Q61R |
| 42 | A E/P | M | 59 | Mand | Prim | Pos | NV | NV |
| 43 | A E/P | M | 73 | Mand | Rec | Pos | BRAF V600E | BRAF V600E |
| 44 | A E/P | M | 83 | Max | Rec | Neg | WT | WT |
| 45 | A E/P | F | 60 | Mand | Rec | Neg | BRAF V600E | BRAF V600E |
| 46 | A E/P | M | 67 | Max | Rec | Neg | WT | WT |
| 47 | A E/P | F | 52 | Mand | Prim | Neg | BRAF V600E | BRAF V600E |
| 48 | A E/P | M | 54 | Max | Prim | Neg | WT | WT |
| 49 | CEOT | F | 12 | Max | Prim | Neg | WT | WT |
| 50 | CEOT | F | 52 | Max | Rec | Neg | WT | WT |
| 51 | CEOT | M | 16 | Mand | Rec | Neg | WT | WT |
| 52 | CEOT | F | 44 | Max | Prim | Neg | WT | WT |
| 53 | OKC | M | 40 | Max | Rec | Neg | WT | WT |
| 54 | OKC | M | 56 | Mand | Rec | Neg | WT | WT |
| 55 | OKC | M | 46 | Mand | Rec | Neg | WT | WT |
| 56 | OKC | M | 37 | Max | Rec | Neg | WT | WT |
| 57 | OKC | M | 59 | Mand | Rec | Neg | WT | WT |
| 58 | OKC | M | 24 | Mand | Rec | Neg | WT | NRAS Q61L |
| 59 | OKC | M | 38 | Max | Prim | Neg | WT | WT |
| 60 | OKC | M | 40 | Max | Rec | Neg | WT | WT |
| 61 | OKC | M | 54 | Mand | Prim | Neg | WT | WT |
| 62 | OKC | M | 68 | Max | Rec | Neg | WT | WT |
| 63 | OKC | M | 42 | Mand | Prim | Neg | WT | WT |
| 64 | OKC | M | 33 | Max | Prim | Neg | WT | WT |
| 65 | OKC | M | 19 | Mand | Prim | Neg | WT | NRAS Q61L |
| 66 | OKC | M | 54 | Mand | Prim | Neg | WT | WT |
| 67 | OKC | M | 60 | Max | Prim | Neg | WT | WT |
| 68 | S-OKC | F | 17 | Mand | Prim | Neg | WT | WT |
| 69 | S-OKC | F | 10 | Max | Prim | Neg | WT | WT |
| 70 | S-OKC | F | 20 | Mand | Prim | Neg | WT | WT |
| 71 | S-OKC | F | 8 | Max | Prim | Neg | WT | WT |
| 72 | Ca. amb | M | 59 | Max | Prim | Neg | NV | NV |
| 73 | Ca. amb | M | 45 | Max | Rec | Neg | WT | KRAS A146V |
| 74 | Ca. amb | M | 38 | Max | Rec | NV | WT | KRAS A146V |
| 75 | Ca. amb | M | 91 | Mand | Rec | Neg | WT | WT |
| 76 | Ca. amb | M | 82 | Mand | Prim | Neg | WT | WT |
| 77 | Ca. CC | F | 81 | Mand | Rec | Neg | NV | NV |

| | | | | | | | | |
|----|--------|---|----|------|------|-----|----|----|
| 78 | Ca. CC | F | 80 | Mand | Prim | Neg | NV | NV |
| 79 | Ca. CC | F | 77 | Max | Prim | Neg | NV | NV |
| 80 | FS amb | M | 52 | Mand | Prim | Neg | NV | NV |
| 81 | FS amb | M | 40 | Max | Prim | Neg | NV | NV |

Supplemental Table 1. Mutational status of odontogenic lesions. AMB: ameloblastoma; AU: unicystic ameloblastoma; AC: conventional ameloblastoma; A E / P: extraosseous / peripheral ameloblastoma; OKC: odontogenic keratocyst; S-OKC: syndromic odontogenic keratocyst; CEOT: calcifying epithelial odontogenic tumor; Ca. amb: ameloblastic carcinoma; FS amb: ameloblastic fibrosarcoma; Ca. CC: clear cells odontogenic carcinoma; IHC: immunohistochemistry; M: male; F: female; Max: maxilla; Mand: mandible; Prim: primitive; Rec: recurrence; Pos: positive; Neg: negative; NA: No available; NV: No evaluated.