

**Supplementary Table 2. Candidate gene fusion events detected by ACT Onco+®**

| Case No. | Cancer type | Candidate fusion                | Assay annotation                                            |
|----------|-------------|---------------------------------|-------------------------------------------------------------|
| 1        | BDC         | BCR-ABL1                        | B13A2                                                       |
| 2        | BDC         | CAPZA2-MET                      | C1M6.1                                                      |
| 3        | HCC         | CCDC6-RET; NCOA4-RET; KIF5B-RET | C1R12 (COSF1271.1); N7R12 (COSF1491.1); K24R11 (COSF1262.1) |
| 4        | NEN         | ESR1-CCDC170                    | E2C8.1                                                      |
| 5        | NEN         | ESR1-CCDC170                    | E2C8.1                                                      |
| 6        | BDC         | FGFR3-TACC3                     | F17T10 (COSF1434)                                           |
| 7        | HCC         | FGFR3-TACC3                     | F17T10 (COSF1434)                                           |
| 8        | HCC         | FGFR3-TACC3                     | F17T11 (COSF1348.1)                                         |
| 9        | BDC         | FGFR3-TACC3                     | F17T8 (COSF1353)                                            |

Abbreviations: BDC, bile duct cancer; HCC, hepatocellular carcinoma; NEN, neuroendocrine neoplasm.