Supplementary materials

Table S1 Table of exon 20 insertion types

|  |  |  |
| --- | --- | --- |
|  | Patient's  ID | Types of exon20 insertion |
| EGFR20ins | 1 | NM\_005228.c.2311\_2319dupAACCCCCACp.Asn771\_His773dup |
| 2 | NM\_005228.3 c.2314\_2319dupCCCCAC p.Pro772\_His773dup |
| 3 | NM\_005228.3 c.2300\_2308dupCCAGCGTGG p.Ala767\_Val769dup |
| 4 | NM\_005228.3 c.2313delinsAGGT p.Asn771delinsLysGly |
| 5 | NM\_005228.3 c.2310\_2311insGGGTTA p.Asp770\_Asn771insGlyLeu |
| 6 | NM\_005228.3 c.2303\_2311dup p.Ser768\_Asp770dup |
| 7 | NM\_005228.3 c.2310\_2311insGGG p.Asp770\_Asn771insGly |
| 8 | NM\_005228.3 c.2308\_2309insGTTGTGTGG p.Val769\_Asp770insGlyCysVal |
| 10 | NM\_005228.3，c.2303\_2311dup，p.Ser768\_Asp770dup |
| 11 | NM\_005228.3 c.2300\_2308dup p.Ala767\_Val769dup |
| 12 | NM\_005228.3,c.2300\_2308dup，p.Ala767\_Val769dup |
| 13 | NM\_005228.3,c.2303\_2311dup(p.Ser768\_Asp770dup) |
| 15 | NM\_005228.3 c.2284-5\_2290dup p.Ala763\_Tyr764insPheGlnGluAla |
| 16 | NM\_005228.3 c.2308\_2309insGCGGCACAC p.Asp770delinsGlyGlyThrHis |
| 17 | NM\_005228.3 c.2310\_2311insGGT(p.Asp770\_Asn771insGly) |
| 18 | NM\_005228.3 c.2303\_2311dup p.Ser768\_Asp770dup |
| 19 | NM\_005228.3 c.2300\_2308dup p.Ala767\_Val769dup |
| 20 | NM\_005228.3，c.2284-5\_2290dup，p.Ala763\_Tyr764insPheGlnGluAla |
| 22 | NM\_005228.3，c.2311\_2319dup，p.Asn771\_His773dup |
| 23 | NM\_005228.3,c.2315\_2320dup(p.His773\_Val774insAlaHis) |
| 24 | NM\_005228.3,c.2300\_2308dup(p.Ala767\_Val769dup) |
| 25 | NM\_005228.3, c.2308\_2309insGTT(p.D770delinsGY) |
| 26 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 27 | NM\_005228.3, c.2317\_2319dup(p.H773dup) |
| 28 | NM\_005228.3, c.2290\_2291insTCCGGGAAGCCT(p.A763\_Y764insFREA) |
| 29 | NM\_005228.3, c.2302\_2303insCGCTGGCCA(p.A767\_S768insTLA) |
| 31 | NM\_005228.3, c.2284-5\_2290dup(p.A763\_Y764insFQEA) |
| 32 | NM\_005228.3, c.2314\_2319dup(p.P772\_H773dup) |
| 33 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 34 | NM\_005228.3, c.2310\_2311insGGT(p.D770\_N771insG) |
| 35 | NM\_005228.3, c.2315\_2320dup(p.H773\_V774insAH) |
| 36 | NM\_005228.3, c.2303\_2311dup(p.S768\_D770dup) |
| 37 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 39 | NM\_005228.3, c.2303\_2311dup(p.S768\_D770dup) |
| 41 | NM\_005228.3, c.2311\_2319dup(p.N771\_H773dup) |
| 42 | NM\_005228.3, c.2284-5\_2290dup(p.A763\_Y764insFQEA) |
| 43 | NM\_005228.3, c.2315\_2317delinsACAACCCCT(p.P772\_H773delinsHNPY) |
| 44 | NM\_005228.3, c.2314\_2319dup(p.P772\_H773dup) |
| 45 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 46 | NM\_005228.3, c.2317\_2319dup(p.H773dup) |
| 47 | NM\_005228.3, c.2284-5\_2290dup(p.A763\_Y764insFQEA) |
| 48 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 49 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 50 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 51 | NM\_005228.3, c.2303\_2311dup (p.S768\_D770dup) |
| 52 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 53 | NM\_005228.3, c.2284-5\_2290dup(p.A763\_Y764insFQEA) |
| 54 | NM\_005228.3, c.2300\_2308dup(p.A767\_V769dup) |
| 56 | NM\_005228.3, c.2300\_2308dup (p.A767\_V769dup) |
| 57 | NM\_005228.3, c.2317\_2319dup (p.H773dup) |
| 58 | NM\_005228.3, c.2310\_2311insGGG (p.D770\_N771insG) |
| HER2 20ins | 61 | NM\_004448.c.2313\_2324dupATACGTGATG（p.Ala775\_Gly776insTyrValMetAla |
| 62 | NM\_004448.3 c.2326\_2327insTGTp.Gly776delinsValCys |
| 63 | NM\_004448.3 c.2313\_2324dupATACGTGATGGC p.Ala775\_Gly776insTyrValMetAla |
| 64 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 65 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 66 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 67 | NM\_004448.3，c.2332\_2340dup p.Gly778\_Pro780dup |
| 68 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 69 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 70 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 71 | NM\_004448.3 c.2326\_2327insTGT p.Gly776delinsValCys |
| 72 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 73 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 74 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 75 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 76 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 77 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 78 | NM\_004448.3，c.2326\_2327insTAT，p.Gly776delinsValCys |
| 79 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 80 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 81 | NM\_004448.3 c.2326\_2327insTCT p.Gly776delinsValCys |
| 82 | NM\_004448.3 c.2314\_2325dup p.Tyr772\_Ala775dup |
| 83 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 84 | NM\_004448.3，c.2326\_2327insTGT(p.Gly776delinsValCys |
| 85 | NM\_004448.3，c.2313\_2324dup(p.A775\_G776insYVMA) |
| 86 | NM\_004448.3 ， c.2325\_2329delinsATACGTGA(p.G776\_V777delinsYVM） |
| 87 | NM\_004448.3 , c.2313\_2324dup(p.A775\_G776insYVMA) |
| 88 | NM\_004448.3, c.2313\_2324dup(p.A775\_G776insYVMA) |
| 89 | NM\_004448.3，c.2326\_2327insTCGTGATGGCTG(p.A775\_G776insVVMA) |
| 90 | NM\_004448.3, c.2325\_2329delinsATACGTGA(p.G776\_V777delinsYVM) |
| 91 | NM\_004448.3， c.2313\_2324dup(p.A775\_G776insYVMA) |
| 92 | NM\_004448.3，c.2313\_2324dup(p.A775\_G776insYVMA) |
| 93 | NM\_004448.3, c.2314\_2325dup(p.Y772\_A775dup) |
| 94 | NM\_004448.3, c.2326\_2327insTGT(p.G776delinsVC) |
| 95 | NM\_004448.3, c.2326\_2327insTGT(p.G776delinsVC) |
| 96 | NM\_004448.3, c.2313\_2324dup(p.A775\_G776insYVMA) |
| 97 | NM\_004448.3, c.2326\_2327insTGT(p.G776delinsVC) |
| 98 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 99 | NM\_004448.3，c.2314\_2325dup(p.Y772\_A775dup |
| 100 | NM\_004448.3 ，c.2326\_2327insTGT (p.G776delinsVC) |
| 101 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 102 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 103 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 104 | NM\_004448.3, c.2326\_2327insTTT(p.G776delinsVC) |
| 105 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 106 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 107 | NM\_004448.3, c.2313\_2324dup (p.Y772\_A775dup) |
| 108 | NM\_004448.3, c.2326\_2327insCTGTGGGCT(p.G776delinsAVGC) |
| 109 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 110 | NM\_004448.3, c.2313\_2324dup (p.Y772\_A775dup) |
| 112 | NM\_004448.3 c. 2324\_2325 insATACGTGATGGC |
| 115 | NM\_004448.3 c. 2324\_2325 insATACGTGATGGC |
| 119 | NM\_004448.3 ，c.2326\_2327insTGT (p.G776delinsVC) |
| 120 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 121 | NM\_004448.3 c. 2324\_2325 insATACGTGATGGC |
| 122 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 123 | NM\_004448.3 c.2339\_2340insGGGCTCCCC |
| 124 | NM\_004448.3 c. A775\_G776insYVMA |
| 125 | NM\_004448.3 c .2324\_2325 insATACGTGATGGC |
| 126 | NM\_004448.3 c .A775\_G776insYVMA |
| 127 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 128 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 129 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 130 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 136 | NM\_004448.3 c.A775\_G776insYVMA |
| 137 | NM\_004448.3 , c.2313\_2324dup(p.A775\_G776insYVMA) |
| 138 | NM\_004448.3, c.2313\_2324dup(p.A775\_G776insYVMA) |
| 139 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 140 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 141 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |
| 143 | NM\_004448.3, c.2313\_2324dup(p.Y772\_A775dup) |
| 144 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 145 | NM\_004448.3，c.2313\_2324dup，p.Ala775\_Gly776insTyrValMetAla |
| 146 | NM\_004448.3, c.2314\_2325dup(p.Y772\_A775dup) |
| 147 | NM\_004448.3 c.2313\_2324dup p.Ala775\_Gly776insTyrValMetAla |