**Supplementary Table 1. Individual patient characteristics**

| Patient ID | Age | Sex | ECOG PS | EGFR mutation subtype | Brain metastasis | Treatment line | Prior EGFR-TKIs | Interval since last EGFR-TKI discontinuation, months | Cumulative duration of prior EGFR-TKI therapy, months | Prior platinum-based chemotherapy | CGP | BOR | TTF | Treatment ongoing |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P01 | 52 | F | 0 | Exon 19 del | Y | 3 | Osimertinib | 11.1 | 18.0 | Y | N | SD | 11.5 | Y |
| P02 | 54 | F | 1 | Exon 19 del | N | 4 | Osimertinib | 3.5 | 26.0 | Y | N | non-CR/non-PD | 11.0 | Y |
| P03 | 58 | F | 0 | Exon 19 del | Y | 4 | Erlotinib, Osimertinib | 13.5 | 144.0 | Y | Y | PR | 9.2 | N |
| P04 | 34 | F | 0 | Exon 19 del | Y | 3 | Osimertinib | 10.6 | 69.0 | Y | N | non-CR/non-PD | 9.8 | N |
| P05 | 73 | F | 1 | Exon19 del | N | 5 | Erlotinib | 14.8 | 163.1 | Y | N | non-CR/non-PD | 8.9 | Y |
| P06 | 66 | M | 1 | L858R | Y | 2 | Osimertinib | 1.4 | 45.0 | N | N | non-CR/non-PD | 8.2 | Y |
| P07 | 48 | F | 0 | Exon 19 del | N | 3 | Osimertinib | 9.1 | 56.0 | Y | N | SD | 8.1 | N |
| P08 | 59 | F | 0 | Exon 19 del | Y | 6 | Osimertinib | 37.4 | 33.0 | Y | N | PD | 8.4 | N |
| P09 | 68 | M | 0 | Exon 19 del | N | 3 | Osimertinib | 8.6 | 18.0 | Y | Y | SD | 7.0 | Y |
| P10 | 80 | F | 1 | L858R | Y | 6 | Osimertinib, Gefitinib | 80.7 | 7.0 | Y | Y | non-CR/non-PD | 6.6 | Y |
| P11 | 74 | F | 0 | L858R | N | 4 | Osimertinib | 13.3 | 38.0 | Y | Y | non-CR/non-PD | 3.1 | N |
| P12 | 58 | F | 0 | L858R | N | 4 | Erlotinib | 109.6 | 1.9 | Y | N | SD | 2.1 | Y |
| P13 | 58 | F | 1 | L858R | Y | 2 | Osimertinib | 0.8 | 2.0 | Y | N | PD | 2.3 | N |
| P14 | 68 | M | 1 | Exon 19 del | Y | 2 | Osimertinib | 0.7 | 17.0 | Y | N | NE | 1.5 | N |
| P15 | 80 | M | 3 | L858R+E709X | Y | 8 | Osimertinib | 0.4 | 24.1 | Y | Y | NE | 0.8 | N |
| P16 | 85 | F | 0 | Exon 19 del | N | 3 | Osimertinib, Erlotinib | Not available | Not available | N | Y | NE | 0.7 | N |
| P17 | 68 | M | 1 | G719A + S768I | Y | 3 | Osimertinib | 0.8 | 8.0 | Y | N | NE | 0.1 | N |
| P18 | 64 | F | 2 | Exon 19 del | Y | 9 | Osimertinib | 30.9 | 30.0 | Y | N | NE | 0.2 | N |

Abbreviations: BOR, best overall response; F, female; M, male; NA, not available; NE, not evaluable; non-CR/non-PD, non-complete response/non-progressive disease; PD, progressive disease; PR, partial response; SD, stable disease; TTF, time to treatment failure.