Table S4. Total treatment-emergent and treatment-related adverse events of any grade occurring in selpercatinib-treated patients with RET fusion-positive NSCLC with and without intracranial metastases.

| | Treatment-emergent AEs, n (%) a | | Treatment-related AEs, n (%) b | |
|--------------------------------------|---|------------------------------------|---|------------------------------------|
| | Pts with RET fusion+ NSCLC and intracranial metastases (N=80) | Pts with RET fusion+ NSCLC (N=253) | Pts with RET fusion+ NSCLC and intracranial metastases (N=80) | Pts with RET fusion+ NSCLC (N=253) |
| Diarrhoea | 38 (48) | 111 (44) | 21 (26) | 66 (26) |
| Dry mouth | 38 (48) | 102 (40) | 35 (44) | 91 (36) |
| Alanine aminotransferase increased | 31 (39) | 78 (31) | 25 (31) | 65 (26) |
| Aspartate aminotransferase increased | 31 (39) | 85 (34) | 23 (29) | 69 (27) |
| Hypertension | 28 (35) | 83 (33) | 18 (23) | 54 (21) |
| Fatigue | 25 (31) | 65 (26) | 13 (16) | 33 (13) |
| Thrombocytopenia | 21 (26) | 46 (18) | 15 (19) | 33 (13) |
| Nausea | 20 (25) | 61 (24) | 5 (6) | 20 (8) |
| Pyrexia | 20 (25) | 53 (21) | 6 (8) | 16 (6) |
| Rash | 20 (25) | 56 (22) | 15 (19) | 38 (15) |
| Constipation | 17 (21) | 55 (22) | 9 (11) | 20 (8) |
| Cough | 16 (20) | 45 (18) | 1 (1) | 3(1) |
| Urinary tract infection | 16 (20) | 36 (14) | 0 | 1 (0.4) |
| Insomnia | 15 (19) | 29 (11) | 1(1) | 1 (0.4) |
| Oedema peripheral | 15 (19) | 65 (26) | 9 (11) | 35 (14) |
| Headache | 14 (18) | 51 (20) | 1 (1) | 11 (4) |
| Dizziness | 13 (16) | 34 (13) | 0 | 11 (4) |
| Dyspnoea | 13 (16) | 41 (16) | 1(1) | 4 (2) |
| Hyponatraemia | 13 (16) | 25 (10) | 1(1) | 2(1) |
| Decreased appetite | 12 (15) | 33 (13) | 3 (4) | 16 (6) |
| Electrocardiogram QT prolonged | 12 (15) | 43 (17) | 9 (11) | 31 (12) |
| Hypomagnesaemia | 12 (15) | 28 (11) | 5 (6) | 7 (3) |
| Vomiting | 12 (15) | 44 (17) | 0 | 7 (3) |

Abbreviations: AE, adverse event; NSCLC, non-small cell lung cancer; pts, patients a The adverse events listed here are those that occurred in \geq 15% of patients with NSCLC and intracranial metastases at any grade level, independent of attribution. b The relatedness of adverse events to treatment was determined by the investigators.