

Supplementary Materials

Summary of Eligibility Criteria

The Period 1 major inclusion criteria were: Japanese men and women aged ≥ 20 years; hemodialysis or hemodiafiltration three times per week for at least 12 weeks prior to the start of the screening period (Scr Visit 1); erythropoietin-stimulating agent (ESA) therapy for at least 4 weeks prior to Scr Visit 1; mean hemoglobin (Hb) level at Scr Visit 1 and 2 weeks later (Scr Visit 2) of 9.5–12.0 g/dL with an absolute difference of ≤ 1.0 g/dL; and transferrin saturation (TSAT) $>20\%$ or ferritin >75 ng/mL at either Scr Visit 1.

The Period 1 major exclusion criteria were: concurrent presence of uncontrolled hypertension or severe hepatobiliary disease; onset of myocardial infarction, cerebral infarction, or venous thromboembolism within 24 weeks prior to Scr Visit 1; intact-parathyroid hormone (PTH) ≥ 500 pg/mL at Scr Visit 1; receipt of an erythrocyte transfusion or surgery involving massive blood loss in the 12 weeks prior to Scr Visit 1; receipt of intravenous iron therapy in the 4 weeks prior to Scr Visit 1, or initiation of or withdrawn from oral iron therapy or receipt of oral iron therapy at different doses in the 4 weeks prior to Scr Visit 1; receipt of protein anabolic hormones, testosterone enanthate, or mepitiostane in the 12 weeks prior to Scr Visit 1; severe infection, systemic blood disorder, hemolytic anemia, or obvious bleeding lesions such as gastrointestinal hemorrhage; and suspected anemia caused by noninfectious chronic inflammatory disease.

The Period 2 inclusion criteria were: participating in Period 1 and suitable for prolonged receipt of study treatment according to the judgment of the principal investigator or the subinvestigator; and Hb level ≥ 8.0 g/dL and <13.0 g/dL at Week 6.

Table S1. Iron-related parameters at Week 0.

| Iron-related parameters at Week 0 Median (Q1, Q3) | Placebo (<i>n</i> = 22) | Enarodustat 2 mg (<i>n</i> = 21) | Enarodustat 4 mg (<i>n</i> = 20) | Enarodustat 6 mg (<i>n</i> = 22) |
|--|-----------------------------|---|---|---|
| Serum iron (µg/dL) | 62.5 (52.0, 76.0) | 67.0 (54.0, 71.0) | 70.5 (57.0, 83.5) | 63.5 (52.0, 77.0) |
| Ferritin (µg/L) | 81.0 (37.9, 115.0) | 85.1 (36.5, 166.0) | 53.5 (32.1, 80.6) | 98.6 (36.7, 169.0) |
| Hepcidin (µg/L) | 67.1 (24.6, 127.0) | 130.0 (38.3, 199.0) | 59.9 (26.1, 79.3) | 64.9 (37.0, 156.0) |
| TIBC (µg/dL) | 248.0 (216.0, 273.0) | 248.0 (217.0, 262.0) | 258.0 (222.5, 275.0) | 231.5 (207.0, 250.0) |
| TSAT (%) | 23.7 (22.1, 30.0) | 26.7 (20.2, 33.5) | 26.5 (23.1, 30.2) | 27.5 (23.3, 35.4) |

TIBC, total iron-binding capacity; TSAT, transferrin saturation

Table S2. Descriptive statistics of EPO and VEGF in Period 1.

| | | Placebo | Enarodustat 2 mg | Enarodustat 4 mg | Enarodustat 6 mg |
|----------------|--------|-------------|---------------------|---------------------|---------------------|
| EPO (IU/L) | Week 0 | <i>n</i> 22 | 21 | 20 | 22 |
| | | Median | 20.00 | 17.80 | 19.20 |
| | | Q1, Q3 | 14.60, 38.00 | 13.80, 26.90 | 14.90, 30.95 |
| | Week 2 | <i>n</i> 21 | 18 | 20 | 21 |
| | | Median | 13.30 | 17.95 | 27.30 |
| | | Q1, Q3 | 12.10, 16.20 | 12.70, 20.90 | 20.00, 91.35 |
| | Week 4 | <i>n</i> 21 | 18 | 18 | 19 |
| | | Median | 13.80 | 15.95 | 24.05 |
| | | Q1, Q3 | 12.40, 15.50 | 14.30, 19.70 | 16.50, 36.10 |
| | Week 6 | <i>n</i> 17 | 17 | 19 | 15 |
| | | Median | 14.50 | 18.40 | 22.50 |
| | | Q1, Q3 | 13.50, 15.70 | 13.60, 21.10 | 18.80, 33.30 |
| VEGF (ng/L) | Week 0 | <i>n</i> 22 | 21 | 20 | 22 |
| | | Median | 41.95 | 45.70 | 44.80 |
| | | Q1, Q3 | 35.00, 56.00 | 38.90, 70.10 | 32.40, 56.15 |
| | Week 2 | <i>n</i> 21 | 18 | 20 | 21 |
| | | Median | 43.70 | 43.80 | 45.85 |
| | | Q1, Q3 | 38.60, 54.90 | 34.70, 50.50 | 39.20, 68.90 |
| | Week 4 | <i>n</i> 21 | 18 | 18 | 19 |
| | | Median | 45.20 | 46.50 | 49.95 |
| | | Q1, Q3 | 42.40, 54.40 | 36.40, 52.70 | 32.40, 53.90 |
| | Week 6 | <i>n</i> 17 | 17 | 19 | 15 |
| | | Median | 46.10 | 44.20 | 46.00 |
| | | Q1, Q3 | 31.50, 55.00 | 37.10, 50.80 | 34.40, 63.60 |