### Supplementary table 1. Background

|                     | Hospital S        | Hospital K        |
|---------------------|-------------------|-------------------|
|                     | \(S_1\)           | \(S_2\)           | \(K_1\)          |
| \((N=130)\)         | \((N=81)\)        | \((N=16)\)        |
| **Sex**             |                   |                   |
| Male                | 78                | 49                | 9                |
| Female              | 52                | 32                | 7                |
| **Age (years)**     |                   |                   |
| Mean                | 78.0              | 65.6              | 68.3             |
| Range               | 26–89             | 35–84             | 51–86            |
| **Hemodialysis period** |                   |                   |
| Mean                | 9.7               | 11.9              | 3.5              |
| Range               | 1–42              | 1–35              | 1–11             |
| **Primary disease** |                   |                   |
| Chronic glomerulonephritis (CGN) | 62 | 49 | 2 |
| Diabetes            | 32                | 19                | 8                |
| Renal sclerosis     | 15                | 10                | 3                |
| Cystic kidney       | 8                 | 0                 | 0                |
| Ureteral stone      | 1                 | 0                 | 0                |
| Other               | 12                | 3                 | 3                |
| **Erythropoiesis-stimulating agent** |                 |                   |
| Darbepoetin alfa    | 121               | 68                | 16               |
| Epoetin beta pegol  | 9                 | 11                | 0                |
| No administration   | 0                 | 2                 | 0                |
| **Iron supplement** |                   |                   |
| Sodium ferrous citrate | 32 | 22 | 1 |
| Ferrous fumarate    | 5                 | 4                 | 0                |
| Saccharated ferric oxide | 50 | 26 | 11 |
| Sodium ferrous citrate | 8 | 7 | 0 |
**Supplementary table 2.** Ranges of blood examination dataset

| Dataset   | Examination item | Start         | End          |
|-----------|------------------|---------------|--------------|
| Hospital S | S₁ (N=130)      | Hb (g/dl)     | 10.3±0.8     | 10.8±0.6     |
|           |                  | MCV (fl)      | 89.6±7.3     | 92.5±5.3     |
|           |                  | TSAT (%)      | 21.6±11.4    | 31.7±29.6    |
|           |                  | Ferritin (ng/ml) | 53.7±50.3 | 72.7±46.7    |
|           | S₂ (N=81)        | Hb (g/dl)     | 10.5±0.8     | 10.9±0.9     |
|           |                  | MCV (fl)      | 92.0±7.0     | 92.6±6.1     |
|           |                  | TSAT (%)      | 21.7±10.0    | 26.8±14.1    |
|           |                  | Ferritin (ng/ml) | 52.6±37.8 | 61.8±41.3    |
| Hospital K | K₁ (N=16)       | Hb (g/dl)     | 11.1±0.7     | 10.9±0.7     |
|           |                  | MCV (fl)      | 93.8±5.7     | 95.3±4.5     |
|           |                  | TSAT (%)      | 23.2±10.1    | 23.4±6.4     |
|           |                  | Ferritin (ng/ml) | 50.1±31.9 | 34.8±14.0    |

**Supplementary table 3.** Mean ESAs administered dosage

| Dataset   | Darbepoetin alfa | Epoetin beta pegol |
|-----------|------------------|--------------------|
| Hospital S | S₁ (N=130)      | 20.2±10.1 µg/week  |
|           |                  | 26.1±8.9 µg/2 weeks (N=120) |
|           | S₂ (N=81)        | 18.8±14.1 µg/week  |
|           |                  | 36.0±15.7 µg/2 weeks (N=68) |