## Supplementary Material

### Supplemental Table 1. Dose-escalation schedule of beinaglutide and metformin groups

| Group               | Time (d) | Pre-breakfast dose (mg) | Pre-lunch dose (mg) | Pre-dinner dose (mg) |
|---------------------|----------|-------------------------|---------------------|----------------------|
| **Beinaglutide**    | 0-2      | -                       | -                   | 0.1                  |
|                     | 3-4      | 0.1                     | -                   | 0.1                  |
|                     | 5-6      | 0.1                     | 0.1                 | 0.1                  |
| (Subcutaneous injection) | 7-9   | 0.1                     | 0.1                 | 0.2                  |
|                     | 10-11    | 0.2                     | 0.1                 | 0.2                  |
|                     | 12-14    | 0.2                     | 0.2                 | 0.2                  |
| **Metformin**       | 0-2      | -                       | -                   | 250                  |
|                     | 3-4      | 250                     | -                   | 250                  |
| (Oral administration) | 5-6   | 250                     | 250                 | 250                  |
|                     | 7-9      | 250                     | 250                 | 500                  |
|                     | 10-11    | 500                     | 250                 | 500                  |
|                     | 12-14    | 500                     | 500                 | 500                  |