

**Supplementary Table S1. List of subjects who experienced serious adverse event (SAE)**

| Subject ID | Institution | Treatment Group | Sex | Age | Type of SAE                     | Duration of SAE (d) | Severity |
|------------|-------------|-----------------|-----|-----|---------------------------------|---------------------|----------|
| 01S-10     | SH          | Tachosil        | M   | 67  | Hematoma                        | 6                   | Moderate |
| 01S-17     | SH          | Stopad          | M   | 68  | Wound evisceration              | 1                   | Moderate |
| 01S-24     | SH          | Stopad          | M   | 62  | Vomiting                        | 9                   | Mild     |
| 03S-03     | SNUBH       | Tachosil        | M   | 66  | Portal vein thrombosis          | 3                   | Mild     |
| 03S-06     | SNUBH       | Stopad          | M   | 48  | Perihepatic fluid collection    | 5                   | Moderate |
| 03S-08     | SNUBH       | Stopad          | M   | 54  | Portal vein thrombosis          | 8                   | Moderate |
| 03S-12     | SNUBH       | Tachosil        | M   | 64  | Biliary fistula                 | 14                  | Moderate |
| 03S-27     | SNUBH       | Stopad          | F   | 64  | Respiratory failure             | 5                   | Moderate |
| 03S-29     | SNUBH       | Stopad          | M   | 68  | Ileus                           | 15                  | Mild     |
| 03S-35     | SNUBH       | Stopad          | M   | 65  | Ileus                           | 8                   | Mild     |
| 04S-03     | GSH         | Tachosil        | M   | 58  | Upper gastrointestinal bleeding | 7                   | Moderate |
| 04S-16     | GSH         | Stopad          | F   | 83  | Nausea                          | 4                   | Mild     |
| 04S-23     | GSH         | Stopad          | F   | 47  | Adrenal hemorrhage              | 7                   | Moderate |
| 04S-34     | GSH         | Stopad          | M   | 75  | Ileostomy site bleeding         | 8                   | Mild     |

Abbreviations: SAE, serious adverse event; SH, Severance Hospital; SNUBH: Seoul National University Bundang Hospital; GSH: Gangnam Severance Hospital

Note: All SAEs were classified as definitely not related to the experimental or control products, and all patients with SAE recovered without sequelae.