Supplementary Table 1. Baseline and Clinical Characteristics according to All-Cause Mortality

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| --- | --- | --- | --- | --- |
|  | **Mortality (-)****(n = 105)** | **Mortality (+)****(n = 19)** | **Total****(n = 124)** | ***P*-value\*** |
| Age (year, ± SD) | 68.1 ± 11.0 | 76.2 ± 8.1 | 69.4 ± 10.9 | 0.001 |
| Male: female, n | 89:16 | 14:5 | 103:21 | 0.236 |
| DAPT type, n (%) |  |  |  | 1.000 |
|  Aspirin + clopidogrel | 94 (89.5) | 17 (89.5) | 111 (89.5) |  |
|  Aspirin + others\*\* | 11 (10.5) | 2 (10.5) | 13 (10.5) |  |
| Comorbidities, n (%) |  |  |  |  |
|  Heart failure | 12 (11.4) | 3 (15.8) | 15 (12.1) | 0.592 |
|  Ischemic heart disease | 59 (56.2) | 9 (47.4) | 68 (54.8) | 0.477 |
|  Diabetes | 41 (39.0) | 9 (47.4) | 50 (40.3) | 0.496 |
|  Chronic kidney disease | 20 (19.0) | 4 (21.1) | 24 (19.4) | 0.839 |
|  Liver cirrhosis | 4 (3.8) | 0 (0.0) | 4 (3.2) | 0.387 |
|  Underlying malignancy | 33 (31.4) | 12 (63.2) | 45 (36.3) | 0.008 |
|  Cerebrovascular attack | 37 (35.2) | 8 (42.1) | 45 (36.3) | 0.567 |
|  Hypertension | 72 (68.6) | 12 (63.2) | 84 (67.7) | 0.624 |
| Charlson comorbidity index (± SD) | 5.1 ± 2.6 | 6.0 ± 2.5 | 5.4 ± 2.6 | 0.063 |
| Symptom or sign, n (%) |  |  |  | 0.098 |
|  Anemia | 22 (21.0) | 9 (47.4) | 31 (25.0) |  |
|  Hematemesis | 14 (13.3) | 2 (10.5) | 16 (12.9) |  |
|  Melena | 66 (62.8) | 8 (42.1) | 74 (59.7) |  |
|  Hematochezia | 3 (2.9) | 0 (0.0) | 3 (2.4) |  |
| Previous UGI bleeding history, n (%) | 7 (6.7) | 1 (5.3) | 8 (6.5) | 0.819 |
| Combination of other drug\*\*\*, n (%) | 11 (10.5) | 5 (26.3) | 16 (12.9) | 0.071 |
| Location of bleeding, n (%) |  |  |  | 0.457 |
| Esophagus | 7 (6.7) | 0 (0.0) | 7 (5.6) |  |
| Stomach | 78 (74.5) | 16 (84.2) | 94 (75.8) |  |
| Duodenum | 20 (19.0) | 3 (15.8) | 23 (18.5) |  |
| Cause of bleeding, n (%) |  |  |  | 0.109 |
| Peptic ulcer | 64 (61.0) | 8 (42.1) | 72 (58.1) |  |
| UGI malignancy | 24 (22.9) | 10 (52.6) | 34 (27.4) |  |
| Mallory-Weiss | 5 (4.8) | 0 (0.0) | 5 (4.0) |  |
| Angiodysplasia | 6 (5.7) | 0 (0.0) | 6 (4.8) |  |
| Anastomosis site bleeding | 3 (2.9) | 1 (5.3) | 4 (3.2) |  |
| Others\*\* | 3 (2.9) | 0 (0.0) | 3 (2.4) |  |
| Heart rate (/minute, ± SD) | 87.5 ± 17.0 | 90.7 ± 11.9 | 88.2 ± 16.4 | 0.331 |
| SBP (mmHg, ± SD) | 117.3 ± 21.3 | 111.7 ± 24.0 | 116.5 ± 22.5 | 0.315 |
| Hemoglobin (g/dL, ± SD) | 8.6 ± 2.5 | 8.9 ± 1.1 | 8.6 ± 2.3 | 0.601 |
| Platelet count (×103/µL, ± SD) | 246.0 ± 119.6 | 268.4 ± 123.3 | 249.4 ± 120.0 | 0.471 |
| International normalized ratio | 1.1 ± 0.1 | 1.1 ± 0.1 | 1.1 ± 0.1 | 0.471 |
| BUN (mg/dL, ± SD) | 36.8 ± 25.3 | 33.8 ± 23.6 | 36.3 ± 24.9 | 0.634 |
| Serum creatinine (mg/dL, ± SD) | 1.5 ± 1.9 | 1.4 ± 1.2 | 1.5 ± 1.8 | 0.875 |
| eGFR (mL/min/1.73 m², ± SD) | 82.2 ± 40.4 | 73.3 ± 41.1 | 80.8 ± 40.4 | 0.391 |
| Rockall score | 5.9 ± 1.5 | 6.4 ± 1.6 | 6.0 ± 1.6 | 0.237 |
| Glasgow-Blatchford score | 9.9 ± 3.7 | 10.3 ± 2.6 | 9.9 ± 3.6 | 0.602 |
| Endoscopic findings, n (%) |  |  |  | 0.149 |
| Active bleeding or exposed vessel | 52 (49.5) | 6 (31.6) | 58 (46.8) |  |
|  Fresh or old blood clots | 53 (50.5) | 13 (68.4) | 66 (53.2) |  |
| Endoscopic hemostasis, n (%) | 39 (37.1) | 5 (26.3) | 44 (35.5) | 0.364 |
| Angiographic hemostasis, n (%) | 3 (2.9) | 0 (0.0) | 3 (2.4) | 0.456 |
| RBC transfusion, n (%) | 74 (71.2) | 12 (63.2) | 86 (69.9) | 0.485 |
| *H. pylori* positivity, n (%) | 30/69 (43.5) | 1/8 (12.5) | 31/77 (40.3) | 0.091 |
| Length of hospital stay (days, ± SD) | 8.7 ± 10.7 | 9.2 ± 15.6 | 8.9 ± 11.5 | 0.903 |
| Resumption of antiplatelet agent, n (%) | 91/96 (94.8) | 17/19 (89.5) | 108/115(93.9) | 0.376 |
| Rebleeding episode, n (%) | 27 (25.7) | 9 (47.4) | 36 (29.0) | 0.056 |

SD, standard deviation; DAPT, dual anti-platelet therapy; UGI, upper gastrointestinal; SBP, systolic blood pressure; BUN, blood urea nitrogen; eGFR, estimated glomerular filtration rate; RBC, red blood cell; *H. pylori*, *Helicobacter pylori*;

\*Comparing rebleeding (-) and (+) groups

\*\*Includes cilostazole and sarpogrelate

\*\*\*Includes nonsteroidal anti-inflammatory drug or steroid

**Supplementary Table 2. Baseline and Clinical Characteristics according to Rebleeding-Related Mortality**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Mortality (-)****(n = 105)** | **Mortality (+)****(n = 7)** | **Total****(n = 112)** | ***P*-value\*** |
| Age (year, ± SD) | 68.1 ± 11.0 | 79.6 ± 8.8 | 68.9 ± 11.1 | 0.013 |
| Male: female, n | 89:16 | 5:2 | 94:18 | 0.352 |
| DAPT type, n (%) |  |  |  | 0.966 |
|  Aspirin + clopidogrel | 94 (89.5) | 6 (85.7) | 100 (89.3) |  |
|  Aspirin + others\*\* | 11 (10.5) | 1 (14.3) | 12 (10.7) |  |
| Comorbidities, n (%) |  |  |  |  |
|  Heart failure | 12 (11.4) | 2 (28.6) | 14 (12.5) | 0.184 |
|  Ischemic heart disease | 59 (56.2) | 3 (42.9) | 62 (55.4) | 0.492 |
|  Diabetes | 41 (39.0) | 4 (57.1) | 45 (40.2) | 0.344 |
|  Chronic kidney disease | 20 (19.0) | 2 (28.6) | 22 (19.6) | 0.539 |
|  Liver cirrhosis | 4 (3.8) | 0 (0.0) | 4 (3.6) | 0.599 |
|  Underlying malignancy | 33 (31.4) | 5 (71.4) | 38 (33.9) | 0.030 |
|  Cerebrovascular attack | 37 (35.2) | 3 (42.9) | 40 (35.7) | 0.684 |
|  Hypertension | 72 (68.6) | 3 (42.9) | 75 (67.0) | 0.161 |
| Charlson comorbidity index (± SD) | 5.1 ± 2.6 | 6.0 ± 2.5 | 5.4 ± 2.6 | 0.063 |
| Symptom or sign, n (%) |  |  |  | 0.154 |
|  Anemia | 22 (21.0) | 4 (57.1) | 26 (23.2) |  |
|  Hematemesis | 14 (13.3) | 0 (0.0) | 14 (12.5) |  |
|  Melena | 66 (62.8) | 3 (42.9) | 69 (61.6) |  |
|  Hematochezia | 3 (2.9) | 0 (0.0) | 3 (2.7) |  |
| Previous UGI bleeding history, n (%) | 7 (6.7) | 0 (0.0) | 7 (6.3) | 0.480 |
| Combination of other drug\*\*\*, n (%) | 11 (10.5) | 1 (14.3) | 12 (10.7) | 0.752 |
| Location of bleeding, n (%) |  |  |  | 0.719 |
| Esophagus | 7 (6.7) | 0 (0.0) | 7 (6.3) |  |
| Stomach | 78 (74.5) | 6 (85.7) | 84 (75.0) |  |
| Duodenum | 20 (19.0) | 1 (14.3) | 21 (18.8) |  |
| Cause of bleeding, n (%) |  |  |  | 0.141 |
| Peptic ulcer | 64 (61.0) | 2 (28.6) | 66 (58.9) |  |
| UGI malignancy | 24 (22.9) | 5 (71.4) | 29 (25.9) |  |
| Mallory-Weiss | 5 (4.8) | 0 (0.0) | 5 (4.5) |  |
| Angiodysplasia | 6 (5.7) | 0 (0.0) | 6 (5.4) |  |
| Anastomosis site bleeding | 3 (2.9) | 0 (0.0) | 3 (2.7) |  |
| Others\*\* | 3 (2.9) | 0 (0.0) | 3 (2.7) |  |
| Heart rate (/minute, ± SD) | 87.5 ± 17.0 | 88.4 ± 12.8 | 87.6 ± 16.8 | 0.866 |
| SBP (mmHg, ± SD) | 117.3 ± 21.3 | 110.9 ± 28.1 | 117.0 ± 22.6 | 0.569 |
| Hemoglobin (g/dL, ± SD) | 8.6 ± 2.5 | 8.8 ± 0.9 | 8.6 ± 2.4 | 0.835 |
| Platelet count (×103/µL, ± SD) | 246.0 ± 119.6 | 276.6 ± 149.4 | 247.9 ± 121.1 | 0.613 |
| International normalized ratio | 1.1 ± 0.1 | 1.1 ± 0.2 | 1.1 ± 0.1 | 0.416 |
| BUN (mg/dL, ± SD) | 36.8 ± 25.3 | 30.3 ± 16.2 | 36.4 ± 24.8 | 0.368 |
| Serum creatinine (mg/dL, ± SD) | 1.5 ± 1.9 | 1.5 ± 1.4 | 1.5 ± 1.9 | 0.915 |
| eGFR (mL/min/1.73 m², ± SD) | 82.2 ± 40.4 | 66.7 ± 42.6 | 81.2 ± 40.5 | 0.385 |
| Rockall score | 5.9 ± 1.5 | 6.9 ± 1.8 | 6.0 ± 1.6 | 0.203 |
| Glasgow-Blatchford score | 9.9 ± 3.7 | 10.7 ± 1.3 | 9.9 ± 3.6 | 0.543 |
| Endoscopic findings, n (%) |  |  |  | 0.733 |
| Active bleeding or exposed vessel | 52 (49.5) | 3 (42.9) | 55 (49.1) |  |
|  Fresh or old blood clots | 53 (50.5) | 4 (57.1) | 57 (50.9) |  |
| Endoscopic hemostasis, n (%) | 39 (37.1) | 2 (28.6) | 41 (36.6) | 0.649 |
| Angiographic hemostasis, n (%) | 3 (2.9) | 0 (0.0) | 3 (2.7) | 0.650 |
| RBC transfusion, n (%) | 74 (71.2) | 5 (71.4) | 79 (71.2) | 0.988 |
| *H. pylori* positivity, n (%) | 30/69 (43.5) | 0/2 (0.0) | 30/71 (42.3) | 0.220 |
| Length of hospital stay (days, ± SD) | 8.7 ± 10.7 | 5.0 ± 3.9 | 8.4 ± 10.4 | 0.063 |
| Resumption of antiplatelet agent, n (%) | 91/96 (94.8) | 5/7 (71.4) | 96/103 (93.2) | 0.071 |
| Rebleeding episode, n (%) | 27 (25.7) | 5 (71.4) | 32 (28.6) | 0.010 |

SD, standard deviation; DAPT, dual anti-platelet therapy; UGI, upper gastrointestinal; SBP, systolic blood pressure; BUN, blood urea nitrogen; eGFR, estimated glomerular filtration rate; RBC, red blood cell; *H. pylori*, *Helicobacter pylori*;

\*Comparing rebleeding (-) and (+) groups

\*\*Includes cilostazole and sarpogrelate

\*\*\*Includes nonsteroidal anti-inflammatory drug or steroid