Supplemental Table 1. Characteristics of patients between patients without and with data missing.

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| Variable | Missing-(n=3551) | Missing+(n=1386) | *p* |
| Age (years) | 59 (39-73) | 58 (41-72) | 0.704\* |
| Gender (male) | 2270/3551 (64%) | 870/1386 (63%) | 0.448† |
| Onset year2004-20072008-20112012-2015 | 537/3551 (15%)1304/3551 (37%)1710/3551 (48%) | 181/1386 (13%)545/1386 (39%)660/1386 (48%) |  |
| Mechanism of Injury (blunt) | 3002/3549 (85%) | 1159/1381 (84%) | 0.565† |
| Cause of injury Motor vehicle Bike Bicycle Pedestrian Fall from high place†† Fall down‡ Fall at same level Assault Others§ | 656/3545 (19%)425/3545 (12%)182/3545 (5.1%)408/3545 (12%)636/3545 (18%)196/3545 (5.5%)159/3545 (4.5%)112/3545 (3.2%)771/3545 (22%) | 232/1372 (17%)144/1372 (11%)44/1372 (3.2%)163/1372 (12%)231/1372 (17%)65/1372 (4.7%)46/1372 (3.4%)40/1372 (2.9%)407/1372 (30%) | <0.001† |
| Transport type Ambulance Ambulance with physician Helicopter with physician Other | 2933/3508 (84%)139/3508 (4.0%)405/3508 (12%)31/3508 (0.9%) | 1032/1356 (76%)137/1356 (10%)177/1356 (13%)10/1356 (0.7%) | <0.001† |
| Vital signs at prehospital sBP (mmHg) HR (bpm) RR (bpm) | 92 (80-115)96 (78-117)24 (20-30) | 92 (78-112)96 (80-116)24 (20-30) | 0.484\*0.381\*0.337\* |
| Vital signs at emergency department GCS valuesBP (mmHg) HR (bpm) RR (bpm) | 14 (10-15)73 (61-81)100 (80-120)24 (20-30) | 14 (10-15)74 (61-82)100 (80-120)24 (20-30) | 0.084\*0.890\*0.542\*0.901\* |
| RTS | 6.4 (5.4-6.8) | 6.2 (5.2-6.8) | 0.311\* |
| AIS Head (n=1081) Face (n=767) Neck (n=333) Thorax (n=2574) Abdomen and Pelvis (n=2292) Cervical Spine (n=1201) Upper extremity (n=1578) Lower extremity (n=2937) Others (n=237) | 3 (2-3)1 (1-2)3 (1-3)4 (3-4)3 (3-4)2 (2-3)2 (2-3)3 (3-4)1 (1-1) | 3 (2-3)2 (1-2)2 (1-3)4 (3-4)3 (3-4)2 (2-3)2 (2-3)3 (3-4)1 (1-1) | 0.141\*0.047\*0.619\*0.511\*0.817\*0.772\*0.093\*0.556\*0.095\* |
| ISS | 22 (13-34) | 25 (14-34) | 0.069\* |
| TRISS (Probability of survival) (%) | 83 (61-94) | 82 (59-94) | 0.388\* |
| Premorbid medical conditions Stroke Dementia Coronary heart disease Congestive heart failure Chronic obstructive lung disease Chronic hepatitis Liver cirrhosis Peptic ulcer Chronic renal failure Diabetes Malignancy Hematologic disorders Use of anticoagulant or antiplatelet drugs Use of corticosteroids or immunosuppressant drugs | 116/3551 (3.3%)114/3551 (3.2%)107/3551 (3.0%)55/3551 (1.5%)29/3551 (0.8%)73/3551 (2.1%)70/3551 (2.0%)57/3551 (1.6%)34/3551 (1.0%)296/3551 (8.3%)65/3551 (1.8%)8/3551 (0.2%)54/3551 (1.5%)24/3551 (0.7%) | 29/1386 (2.1%)27/1386 (1.9%)25/1386 (1.8%)10/1386 (0.7%)12/1386 (0.9%)20/1386 (1.4%)12/1386 (0.9%)14/1386 (1.0%)11/1386 (0.8%)75/1386 (5.4%)7/1386 (0.5%)2/1386 (0.1%)13/1386 (0.9%)7/1386 (0.5%) | 0.028†0.017†0.018†0.022†0.864†0.155†0.006†0.115†0.586†<0.001†<0.001†0.570†0.112†0.495† |
| Prehospital treatment Intravenous fluid | 295/3551 (8.3%) | 104/1386 (7.5%) | 0.352† |
| FAST Positive Negative Not conducted | 1168/3394 (34%)1776/3394 (52%)450/3394 (13%) | 449/1298 (35%)695/1298 (54%)154/1298 (12%) | 0.429† |
| Blood Transfusion The amount of blood transfusion (U) Massive Transfusion | 10 (6-20)1055/3551 (30%)  | 12 (6-22)69/204 (34%) | 0.081\*0.212† |
| Operation at initial evaluation Thoracotomy Laparotomy | 237/3551 (6.7%)839/3551 (24%) | 101/1386 (7.3%)356/1386 (26%) | 0.443†0.129† |
| Angiography Chest Abdomen Pelvis | 159/3551 (4.5%)691/3551 (20%)715/3551 (20%) | 93/1386 (6.7%)288/1386 (21%)311/1386 (22%) | 0.001†0.296†0.073† |
| TAE | 784/3551 (22%) | 319/1386 (23%) | 0.477 |
| Vasopressor | 459/3551 (13%) | 162/1386 (12%) | 0.129† |
| Mortality | 677/3551 (19%) | 231/1085 (21%) | 0.106† |

IQR, interquartile range; sBP, systolic blood pressure; HR, heart rate; RR, respiratory rate; GCS. Glasgow coma scale; RTS, revised trauma score; AIS, abbreviated injury scale; ISS, injury severity score; TRISS, trauma and injury severity score; FAST, focused assessment with sonography for trauma; TAE, transcatheter arterial embolization.

\*Man -Whitney U test, †Chi-Square test, ††Free falls from high place like a building, ‡Falls from a stair or slope and so on, §Train, machine, falling object, explosion, compression and others.