## Appendix 1 Laboratory results of patients who underwent an resuscitative or emergency thoracotomy

| Laboratory results upon arrival hospital | Total n = 56 (100%) | Survived first 30 days n = 18 (32%) | Deceased within first 30 days n = 38 (68%) | Resuscitative thoracotomy n = 45 (80%) | Emergency thoracotomy n = 11 (20%) |
|------------------------------------------|---------------------|-------------------------------------|---------------------------------------------|---------------------------------------|----------------------------------|
| Hemoglobin in mmol/L, median (IQR)      | 7.2 (5.5 – 8.1)     | 7.8 (6.0 – 8.6)                     | 7.0 (5.1 – 7.6)                             | 7.2 (5.1 – 8.0)                       | 7.1 (6.1 – 8.6)                   |
| < 7.4 mmol/L, n (%)                     | 28 (56)             | 8 (29)                              | 20 (71)                                     | 22 (79)                               | 6 (21)                           |
| Hematocrit in %, median (IQR)           | 34 (26 – 39)        | 37 (29 – 41)                        | 34 (24 – 38)                                | 34 (24 – 38)                          | 36 (29 – 41)                     |
| < 36%, n (%)                            | 28 (57)             | 7 (25)                              | 21 (75)                                     | 23 (82)                               | 5 (18)                           |
| Leukocytes in x10^9/L, median (IQR)     | 12 (8 – 19)         | 15 (11 – 19)                        | 10 (6 – 18)                                 | 12 (7 – 18)                           | 15 (11 – 20)                     |
| >10 x10^9/L, n (%)                      | 23 (62)             | 13 (57)                             | 10 (43)                                     | 16 (70)                               | 7 (30)                           |
| Thrombocytes in x10^9/L, median (IQR)   | 149 (113 – 237)     | 211 (154 – 277)                     | 122 (82 – 159)                              | 131 (112 – 211)                       | 174 (119 – 269)                  |
| <150 x10^9/L, n (%)                     | 20 (50)             | 4 (20)                              | 16 (80)                                     | 15 (75)                               | 5 (25)                           |
| PT in seconds, median (IQR)             | 22 (15 – 34)        | 16 (13 – 22)                        | 27 (17 – 57)                                | 22 (17 – 35)                          | 16 (15 – 23)                     |
| >13 seconds, n (%)                      | 29 (85)             | 10 (34)                             | 19 (66)                                     | 22 (76)                               | 7 (24)                           |
| aPTT in seconds, median (IQR)           | 53 (36 – 111)       | 33 (30 – 42)                        | 72 (54 – 120)                               | 60 (38 – 120)                         | 36 (30 – 74)                     |
| >34 seconds, n (%)                      | 25 (76)             | 6 (24)                              | 19 (76)                                     | 20 (80)                               | 5 (20)                           |
| pH, median (IQR)                        | 7.06 (6.95 – 7.32)  | 7.33 (7.09 – 7.37)                  | 7.00 (6.87 – 7.15)                          | 7.03 (6.95 – 7.20)                    | 7.33 (7.11 – 7.38)               |
| < 7.37, n (%)                           | 42 (89)             | 12 (29)                             | 30 (71)                                     | 35 (83)                               | 7 (17)                           |
| Bicarbonate in mmol/L, median (IQR)     | 17 (12 – 22)        | 19 (16 – 22)                        | 14 (11 – 21)                                | 16 (11 – 21)                          | 20 (16 – 23)                     |
| <22 mmol/L, n (%)                       | 35 (74)             | 10 (29)                             | 25 (71)                                     | 29 (83)                               | 6 (17)                           |
| Base deficit in mmol/L, median (IQR)    | 11 (4 – 19)         | 8 (4 – 14)                          | 15 (7 – 21)                                 | 14 (7 – 20)                           | 6 (3 – 11)                       |
| >3 mmol/L, n (%)                        | 37 (80)             | 12 (32)                             | 25 (68)                                     | 30 (81)                               | 7 (19)                           |
| >15 mmol/L, n (%)                       | 15 (33)             | 1 (7)                               | 14 (93)                                     | 13 (87)                               | 2 (13)                           |
| Lactate in mmol/L, median (IQR)         | 7.7 (4.2 – 10.9)    | 6.1 (4.4 – 10.4)                    | 9.3 (3.9 – 15.0)                            | 9.3 (4.4 – 13)                        | 5.2 (4.2 – 6.5)                  |
| > 2.2 mmol/L, n (%)                     | 32 (94)             | 13 (41)                             | 19 (59)                                     | 25 (78)                               | 7 (22)                           |
| pCO2 in mmHg, median (IQR)              | 49 (42 – 61)        | 42 (35 – 56)                        | 56 (45 – 65)                                | 52 (44 – 63)                          | 43 (34 – 50)                     |
| > 45 mmHg, n (%)                        | 30 (64)             | 7 (41)                              | 23 (74)                                     | 25 (83)                               | 5 (17)                           |
| Potassium in mmol/L, median (IQR)       | 4.1 (3.6 – 5.3)     | 3.6 (3.5 – 4.0)                     | 4.9 (3.8 – 6.6)                             | 4.4 (3.6 – 6.1)                       | 3.6 (3.5 – 3.9)                  |
| > 5.0 mmol/L, n (%)                     | 15 (31)             | 0 (0)                               | 15 (100)                                    | 15 (100)                              | 0 (0)                            |

Abbreviations: aPTT = Activated Partial Thromboplastin Time; IQR = Interquartile Range; PT = Prothrombin Time.

Missing variables: * 6 missing; ‡ 7 missing; # 19 missing; † 16 missing; ¤ 22 missing; § 23 missing; ¶ 9 missing; †† 10 missing.

*References values: Hemoglobin 7.4 – 9.6 mmol/L, Hematocrit 36 – 46%, Leukocytes 4.0 – 10.0 x10^9/L, Thrombocytes 150 – 450 x10^9/L, PT 10-13 seconds, aPTT 24 – 34 seconds, pH 7.37 – 7.45, Bicarbonate 22 – 29 mmol/L, Base deficit -3.0 – 3.0 mmol/L, Lactate 0.0-2.2 mmol/L, pCO2 35 – 45 mmHg, Potassium 3.8 – 5.0 mmol/L.