**Supplementary Table 1. Characteristic of studies included in meta-analysis of incidence in burn patients**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ID | **country, centers** | **eventa** | **nb** | **study style** | **Inclusion** | **definitiond** | **mean age(y)** | **TBSAe****(%)** | **quality scoref**  | **FTg****(%)** | **IIh****(%)** |
| **mechanical ventilation c** | **minimal TBSA (%)** |
| Cartotto 2016 (5)i | Canada,1 | 70 | 162 | - | with | - | Berlin | 48 | 28 | 85 | 13.0  | 62.0  |
| Clemens 2016 (6) | USA，1 | 299 | 830 | - | with | - | Berlin | 39.4 | 27.6 | 77 | 10.3  | 38.1  |
| Waters 2015 (7) | USA,1 | 304 | 891 | retrospective | with | - | Berlin | 39.5 | 30 | 69 | 17.3  | 38.3  |
| Jeschke 2015 (8) | USA，6 | 116 | 573 | - | without | 20 | - | - | 48 | 85 | - | 41.0  |
| Belenkiy 2014 (9) | USA,1 | 95 | 291 | - | with | - | Berlin | 26.3 | 33.7 | 88 | 25.5  | 44.0  |
| Béchir 2013 (10) | Switzerland,1 | 12 | 45 | - | without | - | - | 48 | 31.5 | 81 | - | - |
| Liffner 2005 (11) | Sweden,1 | 36 | 91 | - | with | - | AECC | 44.7 | 31 | 77 | 22.3  | - |
| McCormick 2003 (12) | USA,1 | 18 | 84 | - | without | - | - | 49.5 | 34.1 | 65 | - | 42.9  |
| Chen 2002 (13) | China,1 | 34 | 339 | retrospective | without | - | - | 36.7 | 40.9 | 50 | 0.2  | 19.0  |
| Aharoni 1989 (14) | Israel,1 | 12 | 482 | - | without | - | - | - | - | 65 | - | - |
| Çakırca 2019 (15) | Ankara-Turkey,1 | 6 | 61 | - | without | 30 | - | 36.5 | 51 | 77 | - | - |
| Chong 2018 (16) | Singapore,1 | 42 | 202 | retrospective | without | - | Berlin | 43 | 12.1 | 81 | - | 17.3  |
| Lin 2018 (17) | China,1 | 16 | 53 | - | without | - | Berlin | - | 42.2 | 81 | - | 56.6  |
| Yeong 2018 (18) | China,1 | 4 | 33 | - | without | - | - | 22 | 43.2 | 65 | - | 36.0  |
| Liu 2018 (19) | Canada,1 | 9 | 92 | - | with | - | - | 51 | 35 | - | 7.0  | 45.0  |
| Wang 2019 (20) | China,1 | 32 | 72 | - | without | 50 | Berlin | 40.3 | 69.3 | 88 | 26.1  | - |
| Ziolkowski 2017(21) | Canada,1 | 49 | 983 | - | without | - | - | 48 | 14 | 85 | 49.0  | 14.0  |
| Herrero 2015 (22) | Spain,1 | 11 | 143 | prospective | without | - | - | 46.98  | 22.82 | - | - | - |
| Mokline 2015 (23) | Tunisia,1 | 10 | 20 | - | without | 20 | - | 36 | 44 | - | - | - |
| Li 2014 (24) | Canada,1 | 70 | 147 | retrospective | with | - | Berlin | 47 | 28 | - | 12.0  | 67.0  |
| Castilla 2014 (25) | Spain,1 | 9 | 25 | - | without | 20 | AECC | 42 | 33 | 88 | 40.0  | 72.0  |
| Thamm 2013 (26) | Germany,1 | 35 | 1637 | retrospective | without | - | AECC | 41 | 21 | 77 | 37.9  | 36.5  |
| Guallar 2012 (27) | Spain,1 | 38 | 362 | retrospective | without | - | - | 46.96 | 20.95 | - | - | 23.2  |
| Cachafeiro 2012 (28) | Spain,1 | 20 | 64 | prospective | without | 20 | - | 48 | 40 | - | - | 35.9  |
| Klein 2007 (29) | USA,5 | 25 | 72 | - | without | 20 | AECC | 40.6 | 44.5 | 69 | 30.7  | 41.7  |
| Cochran 2007 (30) | USA,1 | 104 | 202 | retrospective | without | 20 | - | 36.9 | 41.1 | 69 | 18.6  | 34.7  |
| Cartotto 2003 (31) | Canada,1 | 5 | 38 | prospective | without | 20 | AECC | 39 | 36 | 69 | 16.7  | 30.0  |
| Dancey 1999 (32) | Canada,1 | 67 | 126 | retrospective | with | - | AECC | 46.9 | 37.3 | 85 | 61.9  | 34.9  |
| Haddadi 2021 (33) | North Iran,1 | 19 | 392 | retrospective | without | - | - | 37.14 | 29.31 | 88 | - | - |
| Klein 2021 (34) | Switzerland,1 | 29 | 90 | retrospective | without | 15 | Berlin | 52 | 31.5 | 88 | - | 27 |
| Ren 2021 (35) | China,1 | 54 | 131 | retrospective |  | 10 | - | - | - | 69 | - | - |
| Zhang 2014 (36) | China,1 | 62 | 922 | retrospective | without | 10 | - | - | - | 65 | - | - |
| Chen 2020 (37) | China,1 | 20 | 48 | retrospective | without | 10 | - | 51.05 | 22.13 | 88 | 7.41 | - |
| Li 2009 (38) | China,1 | 62 | 581 | retrospective | without | - | - |  |  |  |  |  |
| Tang 2017 (39) | China,1 | 64 | 615 | retrospective | without | 10 | - | - | 48.9% | 88 | 19.8 | - |
|  | (a) event: occur acute respiratory distress syndrome (b) n: total sample size (c) inclusion criteria of patients with mechanical ventilation or without (d) definition: which definition of acute respiratory distress syndrome used in the studies, the American-European Consensus Conference (AECC) definition or the Berlin definition(e) TBSA: total body surface area (f) quality score: the score of methodological quality of the study (g) FT: full-thickness (FT) burn injury (h) II: the proportion of patients combined inhalation injury of the total sample(i) Numbers in parentheses refer to the reference numbers in the main manuscript (j) “-” means the date is not available |  |  | without |