Supplementary Table 1. Patient characteristics of included studies for each of the meta-analysis outcomes.

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| --- | --- | --- | --- | --- |
| **Characteristic** | **Studies on sepsis/severe sepsis/septic shock outcome**  **n=16** | **Patients included in sepsis/severe sepsis/septic shock outcome**  **N=9,629** | **Studies on mortality outcome**  **n=69** | **Patients included in mortality outcome**  **n=145,461** |
|  | n (%) | n (%) | n (%) | n (%) |
| Age groups includeda |  |  |  |  |
| Neonates (0 – 30 days) | 11 (68.8) | 7,582 (78.7) | 31 (44.9) | 119,662 (82.3) |
| Babies (31 – 90 days) | 14 (87.5) | 8,328 (86.5) | 60 (87.0) | 143,818 (98.9) |
| Infants (91 days - 1 year)) | 16 (100.0) | 9,629 (100.0) | 68 (98.6) | 145,239 (99.8) |
| Toddlers (2 - 5 years) | 15 (93.8) | 9,557 (99.3) | 68 (98.6) | 145,239 (99.8) |
| School age (6 - 12 years) | 11 (68.8) | 8,238 (85.6) | 65 (94.2) | 144,900 (99.6) |
| Adolescents (13 – 16 years) | 9 (56.3) | 7,918 (82.2) | 55 (79.7) | 143,493 (98.6) |
| Young adults (17 – 18 years) | 6 (37.5) | 6,991 (72.6) | 39 (56.5) | 137,289 (94.4) |
| Population studied |  |  |  |  |
| Bronchiolitis | 1 (6.3) | 72 (0.7) | 0 (0) | 0 (0) |
| Meningococcal infections | 0 (0) | 0 (0) | 2 (2.9) | 1,151 (0.8) |
| Pneumonia | 0 (0) | 0 (0) | 1 (1.4) | 222 (0.2) |
| Diarrheal illness | 1 (6.3) | 88 (0.9) | 2 (2.9) | 279 (0.2) |
| Severe acute malnutrition | 1 (6.3) | 50 (0.5) | 0 (0) | 0 (0) |
| Bone marrow transplant | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Oncology - general | 0 (0) | 0 (0) | 4 (5.8) | 768 (0.5) |
| Oncology – febrile neutropenia | 1 (6.3) | 151 (1.6) | 0 (0) | 0 (0) |
| Emergency Department patients | 2 (12.5) | 180 (1.9) | 3 (4.3) | 1,484 (1.0) |
| Hospital Ward patients | 2 (12.5) | 1,207 (12.5) | 4 (5.8) | 23,571 (16.2) |
| All PICU patients | 8 (50.0) | 7,881 (81.8) | 53 (76.8) | 117,986 (81.1) |
| Sepsis definition usedb |  |  |  |  |
| 2001 SCCM/ACCP criteria | 0 (0) | 0 (0) | 7 (10.1) | 2,317 (1.6) |
| 2005 IPSCC criteria | 12 (75.0) | 3,116 (32.4) | 48 (69.6) | 53,589 (36.8) |
| ACCM 2002 | 0 (0) | 0 (0) | 2 (2.9) | 126 (0.1) |
| ACCM 2007 | 0 (0) | 0 (0) | 1 (1.4) | 1,299 (0.9) |
| ICD-9 codes | 0 (0) | 0 (0) | 6 (8.7) | 86,594 (59.5) |
| Bone criteria | 1 (6.3) | 72 (0.7) | 1 (1.4) | 359 (0.2) |
| Sepsis-3 | 1 (6.3) | 6,303 (65.5) | 1 (1.4) | 788 (0.5) |
| Other | 2 (12.5)c | 138 (1.4) | 3 (4.3)d | 389 (0.3) |

aValues for age groups from eligible articles were included in category that provided the closest approximation to the classification used in the article. Articles could have patients from more than one age group resulting in totals being greater than 100%.

b1. Bone RC et al. Definitions for sepsis and organ failure and guidelines for the use of innovative therapies in sepsis. The ACCP/SCCM Consensus Conference Committee. American College of Chest Physicians/Society of Critical Care Medicine. Chest. 1992 Jun;101(6):1644-55. 2. Levy MM et al. SCCM/ESICM/ACCP/ATS/SIS. 2001 SCCM/ESICM/ACCP/ATS/SIS International Sepsis Definitions Conference. Crit Care Med. 2003 Apr;31(4):1250-6. 3. Carcillo JA et al. Clinical practice parameters for hemodynamic support of pediatric and neonatal patients in septic shock. Crit Care Med. 2002 Jun;30(6):1365-78. 4. Goldstein B et al. International Consensus Conference on Pediatric Sepsis. International pediatric sepsis consensus conference: definitions for sepsis and organ dysfunction in pediatrics. Pediatr Crit Care Med. 2005 Jan;6(1):2-8. 5. Brierley J et al. Clinical practice parameters for hemodynamic support of pediatric and neonatal septic shock: 2007 update from the American College of Critical Care Medicine. Crit Care Med. 2009 Feb;37(2):666-88. 6. Singer M et al. The Third International Consensus Definitions for Sepsis and Septic Shock

(Sepsis-3). JAMA. 2016 Feb 23;315(8):801-10.

cThree papers referred to hospital guidelines and one defined sepsis as tachycardia plus hypothermia (35.0°C) or hyperthermia (38.5°C), or abnormal WBC count plus poor peripheral perfusion (mean arterial pressure 50 mm of Hg and/or absent peripheral pulses or capillary refilling time !3 seconds) in the absence of clinical dehydration.

dOne paper used Carrol ED et al: The role of RANTES in meningococcal disease. J Infect Dis 2000; 182:363-366 and one referenced Abraham E et al: Consensus conference definitions for sepsis, septic shock, acute lung injury, and acute respiratory distress syndrome: Time for a re-evaluation. Crit Care Med 2000; 28:232-235.

eAbbreviations: SCCM = Society of Critical Care Medicine; ACCP = American College of Chest Physicians; ACCM = American College of Critical Care Medicine; ICD-International Classification of Diseases; IPSCC = International Pediatric Sepsis Consensus Conference; PICU = Pediatric Intensive Unit.