**Online Supplementary Material:**

**Supplementry Appendix Table S1.**

|  |  |
| --- | --- |
|  | ICD 9 & 10 codes |
| Thrombocytopenia | 287.0–287.5, D69.0–D69.6 |
| Platelet transfusion | 99.05, 30230R0, 30230R1, 30233R0, 30233R1, 30240R0, 30240R1, 30243R0, 30243R1 |
| Gestational age (GA) | * GA ≤24: 765.21, 765.22, P07.21, P07.22, P07.23
* GA 25–26: 765.23, P07.24, P07.25
* GA 27–28: 765.24, P07.26, P07.31
* GA 29–30: 765.25, P07.32, P07.33
* GA 31–32: 765.26, P07.34, P07.35
 |
| Birth weight (BW) | * BW <500g: 765.01, 765.11, V21.31, P07.01, P05.01, P05.11
* BW 500–999g: 765.02, 765.03, 765.12, 765.13, V21.32, P07.02, P07.03, P05.02, P05.03, P05.12, P05.13
* BW 1000–1499g: 765.04, 765.05, 765.14, 765.15, V21.33, P05.04, P05.05, P05.14, P05.15, P07.14, P07.15
 |
| Acute kidney injury (AKI) | 5845, 5846, 5847, 5848, 5849, 586, N170, N171, N172, N178, N179, N19, N990, O904 |
| Retinopathy of prematurity (ROP) | * ROP, stage 1: [362.23](http://www.icd9data.com/2014/Volume1/320-389/360-379/362/362.23.htm), H35.121, H35.122, H35.123, H35.129
* ROP, stage 2: [362.24](http://www.icd9data.com/2014/Volume1/320-389/360-379/362/362.24.htm), H35.131, H35.132, H35.133, 35.139
* ROP, stage 3: [362.25](http://www.icd9data.com/2014/Volume1/320-389/360-379/362/362.25.htm), H35.141, H35.142, H35.143, H35.149
* ROP, stage 4: [362.26](http://www.icd9data.com/2014/Volume1/320-389/360-379/362/362.26.htm), H35.151, H35.152, H35.153, H35.159
* ROP, stage 5: [362.27](http://www.icd9data.com/2014/Volume1/320-389/360-379/362/362.27.htm), H35.161, H35.162, H35.163, H35.169
* Retrolental fibroplasia: [362.21](http://www.icd9data.com/2014/Volume1/320-389/360-379/362/362.21.htm), H35.171, H35.172, H35.173, H35.179
* ROP, unspecified: [362.20](http://www.icd9data.com/2014/Volume1/320-389/360-379/362/362.20.htm), H35.101, H35.102, H35.103, H35.109
 |
| Necrotizing enterocolitis (NEC) | 777.5, 777.50, 777.51, 777.52, 777.53, P77, P77.1, P77.2, P77.3, P77.9 |
| Intraventricular hemorrhage (IVH) | * IVH, grade I: [772.11](http://www.icd9data.com/2014/Volume1/760-779/764-779/772/772.11.htm), P52.0
* IVH, grade II: [772.12](http://www.icd9data.com/2014/Volume1/760-779/764-779/772/772.12.htm), P52.1
* IVH, grade III: [772.13](http://www.icd9data.com/2014/Volume1/760-779/764-779/772/772.13.htm), P52.21
* IVH, grade IV: [772.14](http://www.icd9data.com/2014/Volume1/760-779/764-779/772/772.14.htm), P52.22
* IVH, unspecified: [772.10](http://www.icd9data.com/2014/Volume1/760-779/764-779/772/772.10.htm), P52.3
 |
| Septicemia | 0031, 0202, 0223, 0362, 0380, 0381, 03810, 03811, 03812, 03819, 0382, 0383, 03840, 03841, 03842, 03843, 03844, 03849, 0388, 0389, 0545, 449, 77181, 7907, 99591, 99592, A021, A207, A227, A267, A327, A392, A393, A394, A400, A401, A403, A408, A409, A4101, A4102, A411, A412, A413, A414, A4150, A4151, A4152, A4153, A4159, A4181, A4189, A419, A427, A5486, B007, B377, I76, O0337, O0387,O0487, O0737, O0882, O85, O8604, P360, P3610, P3619, P362, P3630, P3639, P364, P365, P368, P369, R6520, R6521, T8112XA, T8144XA |
| Mechanical ventilation | 96.71, 96.72, 5A09357, 5A09358, 5A09359, 5A0935B, 5A0935Z, 5A09457, 5A09458, 5A09459, 5A0945B, 5A0945Z, 5A09557, 5A09558, 5A09559, 5A0955B, 5A0955Z  |

**Table S2** Hospital outcomes in infants with birth weight <1000g (n=12,669)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Platelet transfusion(n = 3284) | No Platelet transfusion(n = 9385) | OR (95% CI) | *P*-value |
| Length of stay, days a | 66 (17–103) | 70 (22–104) |  | < 0.001 |
| Hospital cost of charge, $ a | 368,448 (145,502–716,930) | 313,419(135,290–658,156) |  | < 0.001 |
| Mortality | 1025 (31.3) | 1852 (19.7) | 1.85 (1.69–2.02) | < 0.001 |
| AKI | 279 (8.5) | 570 (6.1) | 1.44 (1.24–1.67) | < 0.001 |
| ROP | 893 (27.2) | 2541 (27.1) | 1.01 (0.92–1.10) | 0.896 |
| NEC | 428 (13.0) | 779 (8.3) | 1.66 (1.46–1.88) | < 0.001 |
| IVH |  |  |  |  |
| Overall | 1345 (41.0) | 2899 (30.9) | 1.55 (1.43–1.69) | < 0.001 |
| Grades 1 & 2 | 508 (15.5) | 1325 (14.1) | 1.11 (0.99–1.24) | 0.058 |
| Grades 3 & 4 | 778 (23.7) | 1348 (14.4) | 1.85 (1.68–2.04) | < 0.001 |
| Unspecified | 94 (2.9) | 271 (2.9) | 0.99 (0.78–1.26) | 0.996 |
| Mechanical ventilation |  |  |  |  |
| Overall | 2819 (85.8) | 7126 (75.9) | 1.92 (1.72–2.14) | < 0.001 |
| <96 hours | 724 (22.0) | 2169 (23.1) | 0.94 (0.86–1.04) | 0.208 |
| ≥96 hours | 2326 (70.8) | 5431 (57.9) | 1.77 (1.62–1.93) | < 0.001 |

Data are expressed in frequency (%); Chi-square or Fisher exact tests were used for analysis except with a data are expressed in median (interquartile range); Mann-Whitney U test was used for analysis. AKI: acute kidney injury; ROP: retinopathy of prematurity; NEC: necrotizing enterocolitis; IVH: intraventricular hemorrhage.

**Table S3** Hospital outcomes in infants with birth weight 1000–1499g (6265)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Platelet transfusion(n = 1167) | No Platelet transfusion(n = 4998) | OR (95% CI) | *P*-value |
| Length of stay, days a | 40 (26–63) | 38 (24–58) |  | 0.001 |
| Hospital cost of charge, $ a | 205,864 (100,603–442,194) | 151,260 (82,270–302,591) |  | < 0.001 |
| Mortality | 123 (10.6) | 294 (5.9) | 1.90 (1.53–2.37) | < 0.001 |
| AKI | 69 (5.9) | 89 (1.8) | 3.47 (2.52–4.78) | < 0.001 |
| ROP | 216 (18.5) | 714 (14.3) | 1.36 (1.15–1.61) | < 0.001 |
| NEC | 81 (6.9) | 219 (4.4) | 1.63 (1.25–2.12) | < 0.001 |
| IVH |  |  |  |  |
| Overall | 249 (21.3) | 800 (16.0) | 1.42 (1.21–1.67) | < 0.001 |
| Grades 1 & 2 | 135 (11.6) | 500 (10.0) | 1.18 (0.96–1.44) | 0.113 |
| Grades 3 & 4 | 100 (8.6) | 221 (4.4) | 2.03 (1.59–2.60) | < 0.001 |
| Unspecified | 25 (2.1) | 79 (1.6) | 1.36 (0.87–2.15) | 0.206 |
| Mechanical ventilation |  |  |  |  |
| Overall | 713 (61.1) | 2306 (46.1) | 1.83 (1.61–2.09) | < 0.001 |
| <96 hours | 322 (27.6) | 1225 (24.5) | 1.17 (1.02–1.36) | 0.029 |
| ≥96 hours | 474 (40.6) | 1163 (23.3) | 2.26 (1.97–2.58) | < 0.001 |

Data are expressed in frequency (%); Chi-square or Fisher exact tests were used for analysis except with a data are expressed in median (interquartile range); Mann-Whitney U test was used for analysis. AKI: acute kidney injury; ROP: retinopathy of prematurity; NEC: necrotizing enterocolitis; IVH: intraventricular hemorrhage.

**Table S4** Hospital outcomes in infants with weight <1000g and thrombocytopenia that survived the first 4 weeks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Platelet transfusion(n = 2160) | No Platelet transfusion(n = 6733) | OR (95% CI) | *P*-value |
| Mortality | 288 (13.3) | 533 (7.9) | 1.79 (1.54–2.08) | < 0.001 |
| ROP | 837 (38.8) | 2232 (33.2) | 1.28 (1.15–1.41) | < 0.001 |
| NEC | 290 (13.4) | 634 (9.4) | 1.49 (1.29–1.73) | < 0.001 |
| IVH | 831 (38.5) | 2059 (30.6) | 1.42 (1.28–1.57) | < 0.001 |

Data are expressed in frequency (%); Chi-square or Fisher exact tests were used for analysis. ROP: retinopathy of prematurity; NEC: necrotizing enterocolitis; IVH: intraventricular hemorrhage.

**Table S5** Hospital outcomes in infants with weight 1000-1499g and thrombocytopenia that survived the first 4 weeks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Platelet transfusion(n = 837) | No Platelet transfusion(n = 3446) | OR (95% CI) | *P*-value |
| Mortality | 49 (5.9) | 60 (1.7) | 3.52 (2.40–5.18) | < 0.001 |
| ROP | 187 (22.3) | 660 (19.2) | 1.21 (1.01–1.46) | 0.038 |
| NEC | 60 (7.2) | 164 (4.8) | 1.55 (1.14–2.10) | 0.007 |
| IVH | 183 (21.9) | 642 (18.6) | 1.22 (1.02–1.47) | 0.033 |

Data are expressed in frequency (%); Chi-square or Fisher exact tests were used for analysis. ROP: retinopathy of prematurity; NEC: necrotizing enterocolitis; IVH: intraventricular hemorrhage.