**Appendix 1** Outcome clinical probabilities for all model events with ibuprofen, indomethacin and paracetamol

**TABLE 1.** Clinical probability of events with oral/ intravenous (IV) ibuprofen and indomethacin with their sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Clinical probability | Oral ibuprofen | IV indomethacin | IV ibuprofen | Souces of evidence |
| Success (PDA closure) | 0.9034 | 0.7546 | 0.7256 | 34 |
| Success with AE | 0.4049 | 0.5347 | 0.5308 |  |
| * ROP >II | 0.2799 | 0.4547 | 0.3619 | 32 |
| * PVL | 0.1895 | 0.1079 | 0.1446 | 32 |
| * BPD >36 W | 0.5306 | 0.4374 | 0.4936 | 32 |
| Success without AE1 | 0.5951 | 0.4653 | 0.4692 |  |
| Failure 2 | 0.0966 | 0.2454 | 0.2744 | 32 |
| Failed to close | 0.0162 | 0.0669 | 0.0965 |  |
| * Retreatment | 0.6771 | 0.5803 | 0.6599 | 32, 34 |
| * Surgical ligation | 0.3229 | 0.4197 | 0.3401 | 32 |
| Death | 0.0156 | 0.0347 | 0.0424 | 32 |
| Premature discontinuation | 0.0649 | 0.1438 | 0.1356 |  |
| * Pulmonary hemorrhage | 0.0207 | 0.1003 | 0.1602 | 32 |
| * IVH | 0.2638 | 0.1657 | 0.2645 | 32, 34 |
| * NEC >1 | 0.1049 | 0.1288 | 0.1319 | 32, 34 |
| * GIB | 0.5562 | 0.1844 | 0.2081 | 32 |
| * intestinal perforation | 0.0425 | 0.1830 | 0.1436 | 32 |
| * Oliguria <1 | 0.0119 | 0.2378 | 0.0916 | 32 |
| PDA: patent ductus arteriosus , AE: adverse event, PVL: periventricular leukomalacia, ROP: retinopathy of prematurity, BPD: bronchopulmonary dysplasia, IVH: intraventricular hemorrhage, NEC: necrotizing enterocolitis, GIB: gastrointestinal bleeding.  1Probability of success without adverse event is one minus overall probability of success with adverse event.  2The overall probability of all failure events is equal to one minus the overall probability of success. | | | | |

**TABLE 2.** Clinical probability of events with oral/ intravenous (IV) ibuprofen and paracetamol with their sources

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Clinical probability | Oral ibuprofen | Oral paracetamol | IV ibuprofen | Source of evidence |
| Success (PDA closure) | 0.6258 | 0.6327 | 0.4706 | 34 |
| Success with AE | 0.2972 | 0.1911 | 0.4250 |  |
| * ROP >II | 0.5234 | 0.3500 | 0.6204 | 20 |
| * PVL | 0.1758 | 0.2733 | 0.1229 | 20 |
| * BPD >36 W | 0.3009 | 0.3767 | 0.2566 | 34, 20 |
| Success without AE1 | 0.7028 | 0.8089 | 0.5750 |  |
| Failure2 | 0.3742 | 0.3673 | 0.5294 | 20 |
| Failed to close | 0.1625 | 0.1810 | 0.2133 |  |
| * Retreatment | 0.8644 | 0.9230 | 0.8551 | 34 |
| * Surgical ligation | 0.1356 | 0.0770 | 0.1449 | 20 |
| Death | 0.0663 | 0.0726 | 0.0398 | 20 |
| Premature discontinuation | 0.1455 | 0.1138 | 0.2762 |  |
| * pulmonary hemorrhage | 0.2154 | 0.2863 | 0.4041 | 20 |
| * IVH | 0.1085 | 0.1582 | 0.0264 | 34, 20 |
| * NEC >1 | 0.1605 | 0.2560 | 0.0490 | 34, 20 |
| * GIB | 0.2423 | 0.1254 | 0.0220 | 20 |
| * intestinal perforation | 0.0137 | 0.0000 | 0.0112 | 20 |
| * Oliguria <1 | 0.2596 | 0.1741 | 0.4871 | 20 |
| PDA: patent ductus arteriosus, AE: adverse event, PVL: periventricular leukomalacia, ROP: retinopathy of prematurity, BPD: bronchopulmonary dysplasia, IVH: intraventricular hemorrhage, NEC: necrotizing enterocolitis, GIB: gastrointestinal bleeding.  1Probability of success without adverse event is one minus overall probability of success with adverse event.  2The overall probability of all failure events is equal to one minus the overall probability of success. | | | | |