Table 5. Comparison with our study against existing published researches on neonatal brain injury in literature

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Author | Number of features | Number of neonates | Foetal age | Span | Channels | Categories/  Classifier | Acc (%) |
| Cao  et al., 2023b | 23 | 2126 | <37 weeks | - | - | 3/XGBoost | 91 |
| Raurale  et al.,  2021 | 55 | 54 | Full-  term neonates | 1h | 8 | 4/CNNs | 88.9 |
| Ahmed  et al.,  2016 | 55 | 54 | Full-  term neonates | 1h | 8 | 4/SVM+GMM | 87 |
| Mooney  et al.,  2021 | 45 | 409 | ≥36 weeks | 6h | - | 4/RF | 83 |
| O’Sullivan et al.,  2023 | - | 181 | Full-  term neonates | 6h | 8 | 4/CNN | 83.6 |
| Dong  et al.,  2021 | 722 | 1851 | 29+0  to  44+6 weeks | - | 8 | 4/GBM | 82.9 |
| Proposed Method | 94 | 168 | Full-  term neonates | 6h | 12 | 4/SVM | **91.94** |