Supplementary Table 1. Frequency of true positives, false negatives, false positives and true negatives.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Concussion with positive sign | Concussion with negative sign | No Concussion with positive sign | No Concussion with negative sign |
| **Sign or Mechanism** | **True Positive** | **False Negative** | **False Positive** | **True Negative** |
| LOC/MOTIONLESS | 13 | 81 | 12 | 755 |
| INCOORDINATION/BALANCE PROBLEMS | 35 | 59 | 77 | 690 |
| FIGHT | 7 | 87 | 5 | 762 |
| INITIAL HIT BY STICK | 4 | 90 | 231 | 536 |
| INITIAL HIT BY SHOULDER | 47 | 47 | 165 | 602 |
| SECONDARY CONTACT ON ICE | 20 | 74 | 25 | 742 |
| NO SECONDARY CONTACT | 41 | 53 | 467 | 300 |
| Elevated Risk Cut Score (At or above .5) | 76 | 18 | 218 | 549 |
| High Risk Cut Score (At or above 2) | 34 | 60 | 46 | 721 |

Note: Risk Cut scores derived from decision rules outlined in Figure 1.

Supplemental Figure 1. Receiver Operating Characteristic Curve for Concussion Prediction Log Total Score (see Figure 1) predicting subsequent concussion diagnosis.



Note: AUC = .818 (95% CI = .77-.86). Youden’s Index was used to identify a cut point that maximized sensitivity and specificity.

Total Score = .5