Supplemental Digital Content 5

Automated Identification and Quantification of Traumatic Brain Injury from CT Scans: Are We There Yet?

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[Input] Slice: single CT slice, Volumetric: multiple CT slices, CV: Clinical variables
[Evaluation metric] Sen: Sensitivity, recall, Spe: Specificity, Pre: Precision, F1: F1-value, AUC: Area under curve, Acc: Accuracy, Dice: Dice coefficient, IOU: Intersection over union

Table S4. Multi-class 2D-segmentation task

| Input                  | Output                              | Algorithm                   | Performance                        | Dataset     | Total data size | Reference |
|------------------------|-------------------------------------|-----------------------------|------------------------------------|-------------|----------------|-----------|
| Slice                  | ICH, EDH, SDH                       | CNN (Dense U-net)           | Dice: 0.90(ICH), 0.88(EDH), 0.82(SDH) | Private     | 3000 scans     | 52        |
| Slice                  | EDH, SDH, intracerebral hemorrhage  | Image processing + random forest | Sen: 0.870, Pre: 0.854, F1: 0.862, Acc: 0.811 for SDH | Private     | 150 scans      | 34        |
| Slice                  | IPH, hemorrhagic contusion, SDH + EDH | CNN (U-net++2D)             | Dice: 0.942(IPH), 0.901(contusion), 0.858(SDH+EDH) | Private     | 30700 slices   | 46        |