|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Time of ONSD performance** | **N** | **Measured Outcome** | **ONSD Measurements - mm**  **(IQR or SD)** | | | | **Prognostic performance** | | | |
| **Cut-off (mm)** | **Se**  **(%)** | **Sp**  **(%)** | **AUC**  **(95%CI)** |
| You Y et al., 2018 [1] | Before initiation of TTM | 83 | CPC at 3 months   * CPC 1-2 (good): 28 (34%) * CPC 3-5 (poor): 55 (66%) | ***Time (N)*** | ***Good outcome*** | ***Poor outcome*** |  |  |  |  |  |
| d1 | 4.48  (4.27-5.09) | 5.29  (4.5-5.76) | .008 | 5.11 | 56.4 | 78.6 | .677  (.56-.78) |
| Ueda T et al., 2015 [2] | 12-72 hrs post CA  (retrospective) | 17 | GOS at 28 days   * GOS 4-5 (good): 6 (35%) * GOS 1-3 (poor): 11 (65%) | d1-3 | 5.00  (4.4-6.1) | 6.1  (5.4-7.2) |  | 5.4 | 83 | 73 | .88  (.69-1) |
| Ertl M et al., 2018 [3] | 4 measurements (admission day x 2, day 2 and day 3) | 49 | Survival: S 46%/NS 54%   * CPC 1-2 (good): 15 (31%) * CPC 3-4 (poor): 8 (15%) * CPC 5 (death): 26 (54%) |  | ***Survivors*** | ***Non-survivors*** |  |  |  |  |  |
| Adm (49) | 5.36 (± .43) | 5.88 (± .44) | < .001 | 5.75 | 60 | 100 | NR |
| d1B (28) | 5.54 (± .31) | 5.88 (± .39) | .021 |
| d2 (37) | 5.56 (± .60) | 6.01 (± .39) | .011 | - | - | - | - |
| d3 (32) | 5.63 (± .58) | 6.00 (± 0.37) | .047 | - | - | - | - |
| Chelly J et al., 2016 [4] | 3 measurements (day 1, 2 and 3) | 36 | Survival: S 53%/NS 47%  CPC 1-2: 14 (39%) | d1 (36) | 6.5 (6.4-7.2) | 7.2 (6.8-7.4) | P= .008 | 6.7 | 88 | 79 | 0.91 |
| d2 (21) | 6.7 (6.2-6.9) | 7.1 (6.9-7.4) | P= .1 | - | - | - | - |
| d3 (14) | 6.1 (6.0-6.6) | 7.3 (7.2-7.5) | P= .05 | - | - | - | - |
| ESMTable2a . Summary of studies exploring US-ONSD prognostic performance | | | | | | | | | | | |
| Adm: Admission; AUC: Area Under the Curve; CI: Confidence Interval; CPC: Cerebral Performance Category; d: Day; GOS: Glasgow Outcome Scale; IQR: Inter-Quartile Range; SD: Standard Deviation; Se: Sensitivity; Sp: Specificity; TTM: Targeted Temperature Management | | | | | | | | | | | |

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3. Ertl M, Weber S, Hammel G, et al (2018) Transorbital Sonography for Early Prognostication of Hypoxic-Ischemic Encephalopathy After Cardiac Arrest. J Neuroimaging 28:542–548. https://doi.org/10.1111/jon.12528

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