

## Supplementary Online Content

Papa L, Brophy GM, Welch RD, et al. Time course and diagnostic accuracy of glial and neuronal blood biomarkers GFAP and UCH-L1 in a large cohort of trauma patients with and without mild traumatic brain injury. *JAMA Neurol*. Published online March 28, 2016. doi:10.1001/jamaneurol.2016.0039.

**eTable.** Results of ROC Curve Analysis at Each Time-Point for Distinguishing TBI From No TBI

**eFigure.** Temporal Profile of GFAP and UCH-L1 in Trauma Patients Without Loss of Consciousness (LOC)

This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable.** Results of ROC Curve Analysis at Each Time-Point for Distinguishing TBI From No TBI. Area under the curve for distinguishing between trauma patients with and without TBI at each time-point. Shown is the performance of GFAP and UCH-L1 alone and in combination.

<b>HOURS POST-INJURY</b>	<b>GFAP</b>	<b>UCH-L1</b>	<b>COMBINATION GFAP AND UCH-L1</b>
<b>Enrolment (n=584)</b>	0.73 (0.69-0.77)	0.66 (0.62-0.70)	0.75 (0.71-0.79)
<b>4 hours (n=429)</b>	0.73 (0.68-0.77)	0.63 (0.58-0.69)	0.73 (0.68-0.78)
<b>8 hours (n=136)</b>	0.78 (0.70-0.86)	0.65 (0.55-0.75)	0.79 (0.72-0.87)
<b>12 hours (n=107)</b>	0.77 (0.68-0.87)	0.63 (0.51-0.75)	0.77 (0.68-0.87)
<b>16 hours (n=96)</b>	0.83 (0.74-0.91)	0.67 (0.53-0.81)	0.82 (0.73-0.91)
<b>20 hours (n=88)</b>	0.79 (0.69-0.90)	0.53 (0.38-0.67)	0.78 (0.68-0.89)
<b>24 hours (n=81)</b>	0.80 (0.70-0.90)	0.52 (0.37-0.67)	0.79 (0.69-0.90)
<b>36 hours (n=57)</b>	0.81 (0.70-0.93)	0.61 (0.44-0.78)	0.82 (0.71-0.94)
<b>48 hours (n=50)</b>	0.86 (0.76-0.96)	0.58 (0.40-0.75)	0.85 (0.75-0.96)
<b>60 hours (n=41)</b>	0.88 (0.78-0.99)	0.60 (0.43-0.77)	0.89 (0.79-0.99)
<b>72 hours (n=38)</b>	0.84 (0.71-0.97)	0.52 (0.31-0.72)	0.81 (0.66-0.96)
<b>84 hours (n=28)</b>	0.90 (0.79-1.00)	0.50 (0.28-0.72)	0.85 (0.71-0.99)
<b>96 hours (n=25)</b>	0.85 (0.70-1.00)	0.40 (0.17-0.63)	0.80 (0.63-0.97)
<b>108 hours (n=13)</b>	0.82 (0.57-1.00)	0.36 (0.10-0.65)	0.64 (0.35-0.92)
<b>120 hours (n=13)</b>	0.90 (0.73-1.00)	0.42 (0.10-0.73)	0.88 (0.70-1.00)
<b>132 hours (n=10)</b>	0.94 (0.78-1.00)	0.31 (0-0.63)	0.88 (0.65-1.00)
<b>144 hours (n=12)</b>	0.90 (0.72-1.00)	0.30 (0.02-0.58)	0.80 (0.55-1.00)
<b>156 hours (n=11)</b>	0.83 (0.58-1.00)	0.50 (0.17-0.83)	0.83 (0.59-1.00)
<b>168 hours (n=8)</b>	0.83 (0.54-1.00)	0.46 (0.04-0.88)	0.88 (0.62-1.00)

**eFigure.** Temporal Profile of GFAP and UCH-L1 in Trauma Patients Without Loss of Consciousness (LOC). Comparison of the temporal profiles of GFAP and UCH-L1 in MMTBI (without LOC) versus no MMTBI. Means with error bars representing standard error of the mean (SEM).

