Elecsys® S100
A valuable addition to the diagnosis of traumatic brain injury
S100 for improved emergency management

Traumatic brain injury: A diagnostic challenge

Following minor traumatic brain injury (MTBI) only about 5% of the patients are affected from intracranial lesions such as bleeding, edema. However, nausea, amnesia and other symptoms are highly unspecific.1,2

S100 – The lab parameter for objective management of MTBI patients

S100, a neuroglial protein, rules out intracranial lesions (CCT positive findings) with a high degree of reliability. The management of MTBI patients is facilitated by the use of an objective marker and reduces the workload in your hospital.3,4,5,6

Elecsys® S100 – Objective and reliable

<table>
<thead>
<tr>
<th>CCT positive</th>
<th>CCT negative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>S100 positive</td>
<td>83</td>
<td>670</td>
</tr>
<tr>
<td>S100 negative</td>
<td>1*</td>
<td>329</td>
</tr>
<tr>
<td></td>
<td>84</td>
<td>999</td>
</tr>
</tbody>
</table>

* = 0.098 μg/L

Sensitivity: 98.8%  NPV (negative predictive value): 99.7%
Specificity: 32.9% PPV (positive predictive value): 11.0%

S100 – Your first step to rule-out MTBI

Traumatic Brain Injury

GCS <13

CCT

GCS 13-15

S100*

≥ 0.1 µg/L

< 0.1µg/L

Currently used procedures

Intracranial lesion unlikely

* Measure the S100 value within 3 hours after trauma. A negative result from a sample collected more than 3 hours after trauma should not be used.

References
4 Müller, K. et al. (2007). J Trauma 62(6), 1452-1456