Prognostication Checklist

1 FOUR-score

Questions	Answers
1. Eye Response?	☐ **4.** Eyelids open and tracking, or blinking on command ☐ **3.** Eyelids open but not tracking ☐ **2.** Eyelids closed but open to loud voice ☐ **1.** Eyelids closed but open to pain ☐ **0.** Eyelids remain closed with pain
2. Motor Response?	☐ **4.** Makes sign (thumbs-up, fist, peace) ☐ **3.** Localises painful stimulus ☐ **2.** Flexion response to pain ☐ **1.** Extension response to pain ☐ **0.** No response to pain or myoclonus
3. Brainstem Reflexes?	☐ **4.** Pupillary and corneal reflexes present ☐ **3.** One pupil wide and fixed ☐ **2.** Pupillary *corneal* reflexes absent ☐ **1.** Pupillary *and* corneal reflexes absent ☐ **0.** Absent pupillary, corneal, and cough reflex
4. Respiration?	☐ **4.** Not intubated, regular breathing pattern ☐ **3.** Not intubated, Cheyne-Stokes breathing ☐ **2.** Not intubated, irregular breathing ☐ **1.** Intubated - breathes above ventilator settings ☐ **0.** Intubated - breathes below ventilator settings

2 Criteria A and B

Confounding factors such as severe metabolic derangement and lingering sedation has been ruled out	Yes ☐ No ☐
No response or a stereotypic extensor response to bilateral central and peripheral painful stimulation at 96h after randomisation	Yes ☐ No ☐

3 Criteria C (At least 2)

Corneal and Pupillary reflexes	Performed ☐	Poor ☐	Not conclusive ☐
Early status myoclonus (within 48h)		Present ☐	Not Present ☐
EEG	Performed ☐	Poor ☐	Not conclusive ☐
Brain CT*	Performed ☐	Poor ☐	Not conclusive ☐
Brain MRI*	Performed ☐	Poor ☐	Not conclusive ☐
High serial NSE	Performed ☐	Poor ☐	Not conclusive ☐
SSEP	Performed ☐	Poor ☐	Not conclusive ☐
EEG	Performed ☐	Poor ☐	Not conclusive ☐

*CT and MRI should be considered **one** criterion (Neuroimaging)

Does this patient fulfil the criteria for a likely poor neurological outcome? Yes ☐ No ☐

4 The TTM2-trial criteria for a likely poor neurological outcome

In the TTM2 trial the prognosis is considered likely poor if criteria A, B and C are all fulfilled.

A Confounding factors such as severe metabolic derangement and lingering sedation has been ruled out.

B The patient has no response or a stereotypic extensor response to bilateral central and peripheral painful stimulation at ≥96 hours after randomisation.

C At least two of the below mentioned signs of a poor prognosis are present:

- **C1** Bilateral absence of pupillary and corneal reflexes at 96h after randomisation or later
- **C2** A prospectively documented early status myoclonus (within 48h of randomisation)
- **C3** A highly malignant EEG-pattern according to the TTM2 definition without reactivity to sound and painful stimulation. Patterns that are considered highly malignant are:
  - i. Suppressed background (amplitude <10mV, 100% of the recording) without discharges.
  - ii. Suppressed background with superimposed continuous periodic discharges.
  - iii. Burst-suppression (periods of suppression with amplitude <10mV constituting 50% of the recording) without discharges.
  - iv. Burst-suppression with superimposed discharges.
- **C4** CT brain with signs of global ischaemic injury, such as: generalised oedema with reduced grey/white matter differentiation and sulcal effacement or MRI-brain with signs of global, diffuse, or bilateral multifocal ischaemic lesions
- **C5** Serial serum-NSE samples consistently higher than locally established levels associated with a poor outcome
- **C6** Bilaterally Absent SSEP N20-responses more than 48 hours after randomisation