

EARLY-NEURO

A STEPCARE substudy on early neuroprognostication



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EARLY-NEURO



Confounding factors?

A



Level of consciousness?

B

Unconscious patient,
FOUR-M \leq 2 at \geq 72h without confounders

YES

Poor outcome criteria

C

At least TWO of:
C1. No pupillary and corneal reflexes at \geq 72h
C2. Bilaterally absent SSEP N20 potentials
C3. Early generalised and persisting myoclonus \leq 72h
C4. Highly malignant and unreactive EEG $>$ 24h
C5. Diffuse and extensive hypoxic injury on CT/MRI
C6. High NSE $>$ 60 ng/mL at 48h and/or 72h

YES

Poor
outcome
likely (*)

NO

Observe and re-evaluate

Adapted from Nolan et al. Resuscitation. 2021 Apr;161:220-269.

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3

At least TWO of:

- ✓
- ✓
- ✓
- ✓
- ✓

- ~~No pupillary (2) and corneal reflexes at $\leq 72h$~~
- Bilaterally absent N20 SSEP wave
- Highly malignant (3) EEG at $>24h$
- NSE $>60 \mu g/L$ (4) at 48h and/or 72h
- Status myoclonus (5) $\leq 72h$
- Diffuse and extensive anoxic injury on brain CT/MRI

YES

Poor outcome likely (*)

NO

Observe and re-evaluate

ERC/ESICM

Sedation och tidsaspekt?

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stepcare

Poor outcome

Indeterminate outcome

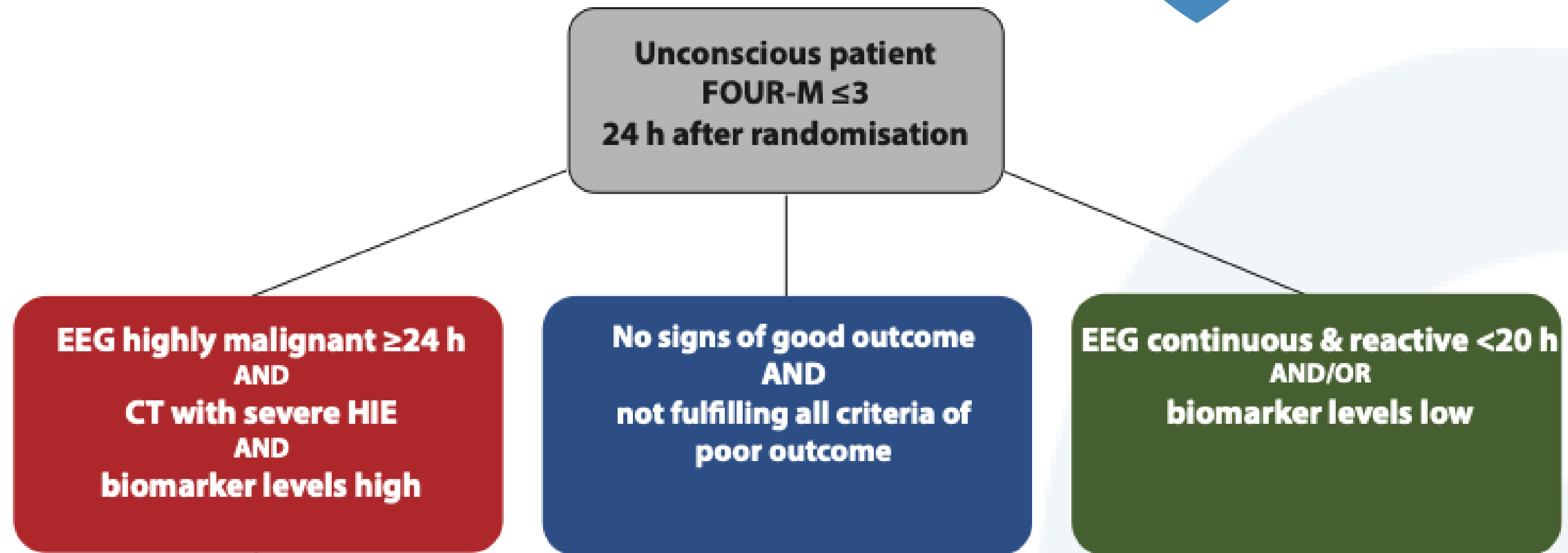
Good outcome

Discontinue treatment?

**Reevaluate daily for signs
of improvement**

Continue treatment

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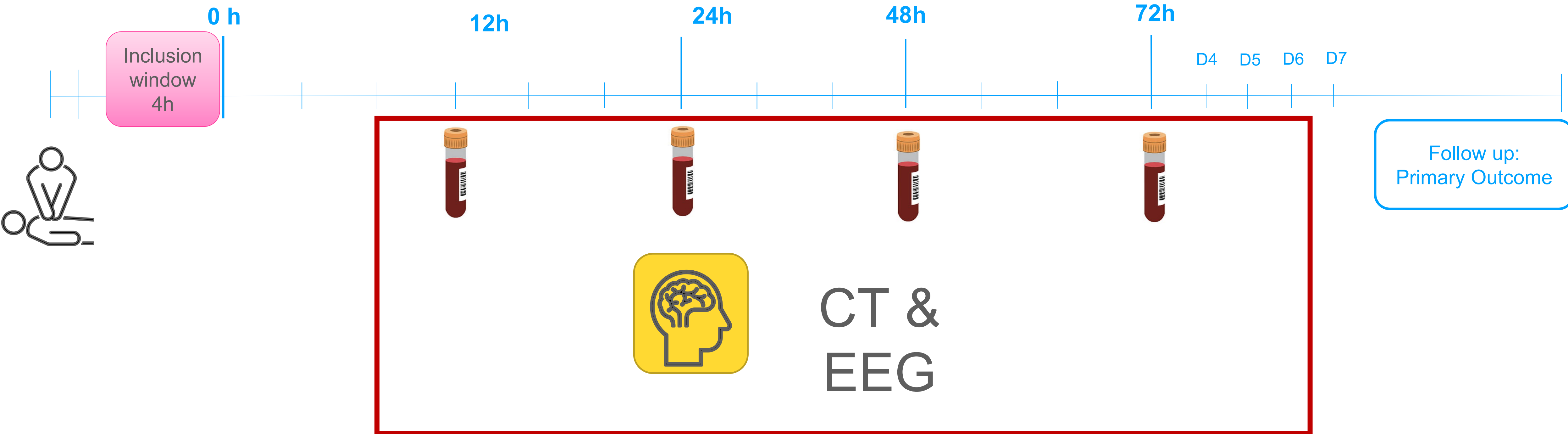


Continuous sedation for 36 hours OR minimal sedation (SED-CARE)

Fever management with OR without a feedback-controlled device (TEMP-CARE)*

A mean arterial pressure target of >85 mmHg OR >65 mmHg (MAP-CARE)*

Prognostication



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≥72 hours?!



Data collection



- DICOM CT/MRI
- EDF/EDF+ cEEG/EEG (Brainstatus)
- SSEP reports



Checklist EARLY-NEURO and biomarker substudies

Hospital name:

Country:

Contact details:

Please fill out the form for the substudies you are interested in. Send the completed checklist to helena.levin@med.lu.se and marion.moseby_knappe@med.lu.se for further discussion.

EARLY-NEURO SUBSTUDY
<p>Will unconscious patients routinely be examined with head CT as early as possible after 24 hours after randomization?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>Please specify who will be responsible for referring patients to examinations (ie which profession): <input type="text"/></p>
<p>Will unconscious patients routinely be examined with EEG (full-montage or simplified montage) as early as possible after 24 hours after randomization?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>Please specify who will be responsible for referring patients to examinations: <input type="text"/></p>
<p>Will you be able to export pseudonymized DICOM images for all CT/MRI examinations performed on patients randomized at your site?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>Please specify who will be responsible for exporting images: <input type="text"/></p>
<p>Will you be able to export pseudonymized EEG examinations (EDT format) performed on patients randomized at your site?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>Please specify who will be responsible for exporting EEG files: <input type="text"/></p>

www.stepcare.org/biomarkers

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English

A blue square containing a collage of flags representing English-speaking countries: the United Kingdom, Australia, New Zealand, and Ireland.

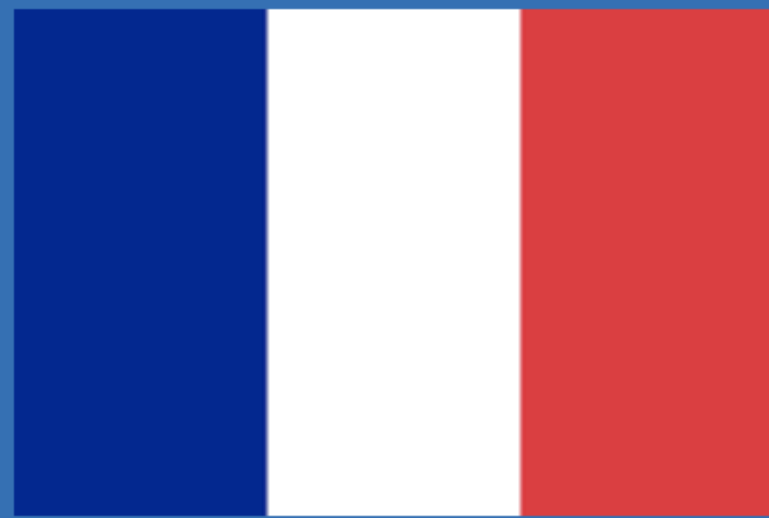
Svenska

A blue square containing the flag of Sweden, which is a blue field with a yellow Scandinavian cross.

Suomeksi

A blue square containing the flag of Finland, which is a white field with a blue Scandinavian cross.

Deutsch

A blue square containing the flag of Germany, which consists of three horizontal stripes of black, red, and gold.

French

A blue square containing the flag of France, which consists of three vertical stripes of blue, white, and red.

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