**Department of Intensive Care, Nordsjællands Hospital, Denmark**



**GODIF Hotline**

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**or**

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**GODIF trial is approved by the Danish Medical Agency and Independent Ethics Committee of the Capital Region.**

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# Contact information:

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**Goal directed fluid removal with furosemide in intensive care patients with fluid overload – A randomised, blinded, placebo-controlled trial.**

Information for clinical staff

**Your department includes patients**

**in the GODIF trail**

**The GODIF trial investigates fluid removal in patients with fluid overload of 5% or more.**

**The GODIF trial will in total include 1000 patients in European Intensive Care Units.**

Version 1.2 06.05.2021

# Information about GODIF

# Background

Fluid overload is a known risk factor for organ dysfunction and mortality. The evidence for when and how fluid overload should be treated is sparse and insufficient.

# Method

1000 acutely admitted, adult intensive care patients with ≥ 5% fluid overload and clinically stable will be randomised to one of the following treatments:

Furosemid (10 mg/ml)

**OR**

Placebo (isotonic saline)

The trial drug is administered as an initial bolus injection followed by a continuous infusion. The infusion is regulated according to effect and the GODIF-algorithm. The goal is a daily negative fluid balance until neutral fluid balance is achieved. When it is achieved it must be maintained for the rest of the admittance or maximum 90 days.

# Results

Outcomes:

* Days alive and out of hospital at day 90 after randomisation
* Days alive at day 90 without life support (vasopressor/inotropic support, mechanical ventilation, or renal replacement therapy)
* All-cause mortality after 90 days and 1 year
* Number of participants with one or more serious adverse reaction/events.
* Health related quality of life and cognitive function 1 year after randomisation.

**Funding**

The trial has a budget of 9.2 mio. DDK and is partly funded by the Novo Nordisk Foundation and Jakob Madsens and wife Olga Madsens foundation**.** Further fundraising is ongoing.

# Ethics

Informed consent according to national regulations.

**The physician’s role in GODIF**

**Screening**

Inclusion criteria:

* 18 years or above
* Acute admission to the ICU
* Clinical stable assessed by clinician (minimum criteria: MAP > 50 mmHg, maximum noradrenaline infusion of 0.2 mikrog/kg/min, and lactate < 4.0 mmol/L)
* Minimum fluid accumulation estimated by treating clinician according to chart (fluid accumulation must be assessed according to cumulative fluid balance, daily fluid balance, changes in body weight and clinical examination (oedema, congestion on X-ray e.c.t.)):

|  |  |  |
| --- | --- | --- |
| **Height**  | **Men** | **Women** |
| ≤ 159 cm | +3000 mL | +2500 mL |
| 160 – 169 cm | +3500 mL | +3000 mL |
| 170 – 179 cm | +4000 mL | +3500 mL |
| 180 – 189 cm | +4500 mL | +4000 mL |
| ≥ 190 cm | +5000 mL | +4500 mL |

Screening on www.cric.nu/godif/

**Randomisation**:

**Remember always to obtain informed consent according to national regulations.** When all inclusion criteria and no exclusion criteria is met the patient can be randomised.

Note in the patient file that the patient is included in GODIF and the assessment of fluid overload and goal for minimum daily fluid removal, which must be according to following chart:

|  |  |  |
| --- | --- | --- |
| **Height**  | **Men** | **Women** |
| ≤ 159 cm | -1300 mL | -1200 mL |
| 160-169 cm | -1500 mL | -1400 mL |
| 170-179 cm | -1700 mL | -1600 mL |
| 180-189 cm | -1900 mL | -1800 mL |
| ≥ 190 cm | -2000 mL | -1900 mL |

On randomisation the first vial of trial drug will be allocated to the patient. When more trial drug is needed - go to the homepage to draw a new vial number. (www.cric.nu/godif/)

Remember to prescribe the trial drug and remove/pause other diuretics (not habitual diuretics if the treating physician find indication for them).

**The nurse’s role in GODIF**

**Trial drug:**

Starting dose is a bolus of 0.5-4.0 mL of trial drug according to the treating physician’s discretion, followed by infusion with 2 mL/hour. The infusion must be adjusted according to effect to reach the target of a negative fluid balance according to the chart mentioned. Infusion rate is 0-4 mL/hour. Fluid removal must continue until neutral fluid balance is achieved assessed by the clinical team according the cumulative fluid balance, daily fluid charts, changes in body weight, and clinical examination. This must be documented in patient file. The patient must be held in neutral fluid balance for the rest of the admittance or maximum 90 days. In case of new fluid accumulation, the trial drug must be restarted.

In case of circulatory instability, the resuscitations-algorithm must be used and trial drug paused.

**Escape-procedures**:

**Open label furosemid must only be used in case of:**

* Hyperkalaemia (p-K > 6.0 mmol/L).
* Respiratory failure (P/F-ratio < 26 kPa (200 mm)) due to fluid overload assessed by treating physician

**Renal replacement therapy (RRT) may only be started in case of:**

* Hyperkalaemia (p-K > 6.0 mmol/L).
* Respiratory failure (P/F-ratio < 26 kPa (200 mm)) due to fluid overload assessed by treating physician
* Severe metabolic acidosis attributable to acute kidney injury (AKI) (pH < 7.20 and SBE < -10 mmol/L)
* Persistent AKI > 72 hours (defined as: oliguria/anuria or S-creatinine has not declined to 50% from peak value)

The trial drug infusion must continue in case open label furosemide is used. If RRT is started – trial drug must be paused as long as RRT is continued.

**Adverse events or reactions**

In case of serious adverse reactions or unsuspected serious adverse reactions to the trial drug please contact the coordinating investigator, Sine Wichmann within 24 hours at phone no: +45 4829 6773 or email: godif@cric.nu.

**Guidelines to the trial and other relevant documents can be found on the homepage:** [**www.cric.nu/godif/**](http://www.cric.nu/godif/)