	Protocolized Reduction of Non-resuscitation Fluids vs Usual Care in Septic Shock
Tracking Information	Clinicaltrials.gov, No. NCT05249088.
First Submitted Date ICMJE	February 8, 2022
First Posted Date ICMJE	February 21, 2022
Last Update Posted Date	April 5, 2022
Actual Study Start Date ICMJE	March 1, 2022
Estimated Primary Completion Date	August 31, 2022 (Final data collection date for primary outcome measure)
Current Primary Outcome Measures ICMJE **(submitted: February 18, 2022)**	Difference in fluid administration [Time Frame: Within the first three days after inclusion (days 0-3)] Total difference in litres of administered fluids between groups
Original Primary Outcome Measures ICMJE	*Same as current*

Change History	Complete list of historical versions of study NCT05249088 on ClinicalTrials.gov Archive Site
Current Secondary Outcome Measures ICMJE **(submitted: February 18, 2022)**	• Proportion of participants with sufficient clinical outcome data [Time Frame: Within 90 days after inclusion] Fraction of randomised patients with sufficient data for the following clinical outcomes: all-cause mortality, days alive and free of mechanical ventilation, acute kidney injury, and ischemic events in the ICU (cerebral, cardiac, intestinal or limb ischemia) • Proportion of participants assessed by EQ5D-5L and MoCA [Time Frame: 6 months after inclusion] Fraction of surviving randomized patients who were assessed by European Quality of Life-5 Dimensions 5- Level questionnaire (EQ5D-5L) and The Montreal Cognitive Assessment (MoCA) • Inclusion of eligible patients [Time Frame: During inclusion] Fraction of all eligible patients who were randomised and consented • Protocol violations [Time Frame: Within 90 days after inclusion] Fraction of patients experiencing at least one protocol violation
Original Secondary Outcome Measures ICMJE	*Same as current*
Current Other Pre-specified Outcome Measures (submitted: February 18, 2022)	• Mortality [Time Frame: 90 days after inclusion] All-cause mortality • Complications in the ICU [Time Frame: from randomization until final discharge from ICU or death, whichever comes first, assessed up to 90 days]

	Number of patients with one or more of the following complications in the ICU: cerebral, cardiac, intestinal or limb ischemia, or any acute kidney injury • Days alive and free of mechanical ventilation [Time Frame: Within 90 days after inclusion] Days alive and free of mechanical ventilation • Cognitive function [Time Frame: 6 months after inclusion] Cognitive function measured using MoCA • Health-Related Quality of Life [Time Frame: 6 months after inclusion] Health-Related Quality of Life measured using the EQ5D-5L questionnaire • Total volume of non-resuscitation fluids administered [Time Frame: Within the first three days (days 0-3) and within the first five days (days 0-5) after inclusion] Total volume of non-resuscitation fluids administered • Renal function [Time Frame: Within 90 days after inclusion] Acute kidney injury stages according to Kidney Disease Improving Global Outcomes [KDIGO] criteria, urea, and days alive and free of renal replacement therapy [RRT] • Gastrointestinal function [Time Frame: Within 90 days after inclusion] Days alive with full enteral nutrition • Total volume of resuscitation fluids administered [Time Frame: Within the first three days (days 0-3) and within the first five days (days 0-5) after inclusion] Total volume of resuscitation fluids administered • Cumulative fluid balance [Time Frame: On day 3 and day 5 after inclusion] Cumulative fluid balance (excluding evaporation) • Diuretics administered [Time Frame: Within the first five days (days 0-5) after inclusion]

	Daily dose and type of diuretics administered • Hemodynamic stability [Time Frame: Within the first five days (days 0-5) after inclusion] Daily highest dose of noradrenaline, daily lactate, and cardiovascular sequential organ failure assessment [SOFA] score • Ischemic events [Time Frame: from randomization until final discharge from ICU or death, whichever comes first, assessed up to 90 days] Number of patients with one or more ischemic events while in the ICU (cerebral, cardiac, intestinal or limb ischemia) • GOSE score [Time Frame: 6 months after inclusion] Glasgow Outcome Scale Extended (GOSE) score
Original Other Pre-specified Outcome Measures	*Same as current*
Descriptive Information	
Brief Title ICMJE	Protocolized Reduction of Non-resuscitation Fluids vs Usual Care in Septic Shock
Official Title ICMJE	Protocolized Reduction of Non-resuscitation Fluids Versus Usual Care in Septic Shock Patients: A Multicentre Feasibility Trial
Brief Summary	The objectives of this feasibility trial are to assess the efficacy and feasibility of methods and procedures of a protocol purposed to compare a reduction of administration of non-resuscitation fluids to usual care in patients with septic shock.
Detailed Description	*Not Provided*
Study Type ICMJE	Interventional

Study Phase ICMJE	Not Applicable
Study Design ICMJE	Allocation: Randomized Intervention Model: Parallel Assignment Masking: Triple (Participant, Investigator, Outcomes Assessor) Masking Description: The clinical team caring for participants will not be blinded due to nature of the intervention. The participants, their family and health personnel responsible for outcome assessment at follow-up will be blinded to the allocation of the intervention. The steering group, author group, trial statistician, outcome assessors, prognosticators, statisticians, and the trial coordinating team will be blinded to group allocation. Primary Purpose: Other
Condition ICMJE	Shock, Septic

Intervention ICMJE	• Other: Protocolised reduction of non-resuscitation fluids
	  ○ Maintenance fluids are discontinued in participants with positive cumulative fluid balance who are not dehydrated
	  ○ Intravenous fluid and enteral water are given as needed to correct electrolyte disturbances
	  ○ Enteral nutrition with energy density of at least 2 kcal/ml is administered according to local practice
	  ○ Starting 72 hours after inclusion, glucose at a concentration of at least 20% and a maximal dose of 1g/kg/day may be used as nutrition if enteral feeding is not tolerated. Glucose at this dose or lower may be started earlier in patients with insulin dependent diabetes if enteral feeding is not tolerated and local protocol mandates this
	  ○ Parenteral nutrition is administered according to local protocol
	  ○ Intravenous medications are concentrated according to a predefined protocol

	○ Patients with neutral or negative cumulative fluid balance receive maintenance and other fluids such that total dose of fluids covers the daily need of water (about 1ml/kg/h) • Other: Usual care Participants receive non-resuscitation fluids according to local routines, with the following stipulations: ○ Maintenance fluids (crystalloids and/or glucose and/or enteral water) are given at a dose of 1 ml/kg/h unless local protocol states otherwise ○ Glucose is used at maximal concentration of 10% unless local protocol states otherwise. ○ Medications are concentrated according to local protocol
Study Arms ICMJE	• Experimental: Protocolised reduction of non-resuscitation fluids Participants receive non-resuscitation fluids according to a pre-defined protocol starting within two hours of randomization. The intervention is continued for the duration of the ICU admission up to a maximum of 90 days. Intervention: Other: Protocolised reduction of non-resuscitation fluids • Usual Care Participants receive non-resuscitation fluids according to local routines. Intervention: Other: Usual care
Publications *	*Not Provided*

*** Includes publications given by the data provider as well as publications identified by ClinicalTrials.gov Identifier (NCT Number) in Medline.**

Recruitment Information	
Recruitment Status ICMJE	Recruiting
Estimated Enrollment ICMJE **(submitted: February 18, 2022)**	98
Original Estimated Enrollment ICMJE	*Same as current*
Estimated Study Completion Date ICMJE	May 31, 2023
Estimated Primary Completion Date	August 31, 2022 (Final data collection date for primary outcome measure)
Eligibility Criteria ICMJE	Inclusion Criteria: • Adult (≥ 18 years of age) • Septic shock according to the Sepsis 3 criteria: suspected or confirmed infection AND infusion of vasopressor/inotrope to maintain mean arterial pressure of 65 mmHg or above despite adequate fluid resuscitation AND lactate of 2 mmol/L or above at any time following ICU admission when there was a simultaneous need for vasopressor/inotrope. • Inclusion within 12 hours after ICU admission. Exclusion Criteria: • Confirmed or suspected pregnancy
Sex/Gender ICMJE	Sexes Eligible for Study: All

Ages ICMJE	18 Years and older (Adult, Older Adult)
Accepts Healthy Volunteers ICMJE	No
Contacts ICMJE	Contact: Peter Bentzer, MD, PhD +46 42-4061111 Peter.Bentzer@med.lu.se Contact: Jane Fisher, PhD jane.fisher@med.lu.se
Listed Location Countries ICMJE	Sweden
Removed Location Countries	

Administrative Information

NCT Number ICMJE	NCT05249088
Other Study ID Numbers ICMJE	REDUSE feasibility trial
Has Data Monitoring Committee	No
U.S. FDA-regulated Product	Studies a U.S. FDA-regulated Drug Product: No Studies a U.S. FDA-regulated Device Product: No
IPD Sharing Statement ICMJE	Plan to Share IPD: Yes Plan Description: Beginning 9 months after publication of the main report of this trial individual de-identified data will be available for sharing with researchers who provide a methodologically sound proposal as judged by the steering

	committee. To gain access, data requestors will need to sign a data access agreement.
Current Responsible Party	Region Skane
Original Responsible Party	*Same as current*
Current Study Sponsor ICMJE	Region Skane
Original Study Sponsor ICMJE	*Same as current*
Collaborators ICMJE	*Not Provided*
Investigators ICMJE	Principal Investigator: Peter Bentzer, MD, PhD Region Skåne
PRS Account	Region Skane
Verification Date	April 2022