

Survey of anticoagulation use in Continuous Renal Replacement Therapy (CRRT) in UK adult general Critical Care Units
(Part of a research project funded by the NIHR Health Technology Assessment Programme: 16/111/136)

The overall aim of the study is to compare the clinical and cost effectiveness of CRRT using heparin or citrate anticoagulation in adult general critical care units.

This survey asks about CRRT in your unit. The survey consists of a maximum of 13 questions. We would be very grateful for your help with this important study. Your answers will help us determine which records to analyse from the ICNARC Case Mix Programme.

1. Please enter your contact details in case we need to verify any information

Name

Work Email Address

Work Phone Number

2. Which Critical Care Unit are you answering for? (Please answer one survey per adult general critical care unit)

3. How many CRRT machines are available on your adult general Critical Care Unit?

4. Are you currently using heparin or citrate based anticoagulation for CRRT? (if you use one mode predominantly but still use the other occasionally to treat patients, please tick both)

Heparin

Citrate

Both

You have answered that the unit in question uses only *Heparin* based CRRT (this might include adjuncts such as Flolan/prostacyclin). Please answer questions 5 & 6 and click "NEXT" to complete the survey. If this is not the case, please click "PREV" to go back to the previous page and select correct option from Question 4.

5. What is the most commonly used effluent flow rate on your unit for *heparin* based CRRT?

- <20ml/kg/hour
- 25ml/kg/hour
- 30ml/kg/hour
- 35ml/kg/hour
- Other (please specify)
- 40ml/kg/hour
- 45ml/kg/hour
- >45ml/kg/hour

6. What *heparin* system is in use?

- Multifiltrate (Fresenius)
- Prismaflex (Baxter)
- Other (please specify)
- Aquarius (Nikkiso)

You have answered that the unit in question uses only *Citrate* based CRRT. Please answer questions 5-9 and click "NEXT" to complete the survey. If this is not the case, please click "PREV" to go back to the previous page and select correct option from Question 4.

7. Please indicate an approximate date when the unit first implemented ***citrate*** based anticoagulation for CRRT

Date / Time

DD/MM/YYYY

8. Please indicate an approximate date when the unit completed implementation to ***citrate*** based CRRT anticoagulation

Date / Time

DD/MM/YYYY

9. What is the most commonly used effluent flow rate on your unit for ***citrate*** based CRRT?

- <20ml/kg/hour
- 25ml/kg/hour
- 30ml/kg/hour
- 35ml/kg/hour
- Other (please specify)
- 40ml/kg/hour
- 45ml/kg/hour
- >45ml/kg/hour

10. What was the most commonly used effluent flow rate on your unit before switching to citrate based CRRT?

- <20ml/kg/hour
- 25ml/kg/hour
- 30ml/kg/hour
- 35ml/kg/hour
- Other (please specify)
- 40ml/kg/hour
- 45ml/kg/hour
- >45ml/kg/hour

11. Which ***citrate*** system is in use?

- Multifiltrate (Fresenius)
- Prismaflex (Baxter)
- Other (please specify)
- Aquarius (Nikkiso)

You have answered that the unit in question uses both *Citrate* and *Heparin* based CRRT. Please answer questions 5-13 and click "DONE" to complete the survey. If this is not the case, please click "PREV" to go back to the previous page and select correct option from Question 4.

12. Please indicate an approximate date when the unit first implemented ***citrate*** based anticoagulation for CRRT

Date / Time

13. Please indicate an approximate date when the unit completed implementation to ***citrate*** based CRRT anticoagulation

Date / Time

14. What is the most commonly used effluent flow rate on your unit for ***citrate*** based CRRT?

- <20ml/kg/hour
- 25ml/kg/hour
- 30ml/kg/hour
- 35ml/kg/hour
- Other (please specify)
- 40ml/kg/hour
- 45ml/kg/hour
- >45ml/kg/hour

15. Which **citrate** system is in use?

- Multifiltrate (Fresenius) Aquarius (Nikkiso)
- Prismaflex (Baxter)
- Other (please specify)

16. What is the the most commonly used effluent flow rate on your unit for **heparin** based CRRT?

- <20ml/kg/hour 40ml/kg/hour
- 25ml/kg/hr 45ml/kg/hour
- 30ml/kg/hour >45ml/kg/hour
- 35ml/kg/hour
- Other (please specify)

17. Has this flow rate (generally) remained constant since switching to citrate?

- Yes No

If no, what was the flow rate on your unit prior to switching to citrate? - please state below

18. What **heparin** system is in use?

- Multifiltrate (Fresenius) Aquarius (Nikkiso)
- Prismaflex (Baxter) Same machine as used for citrate
- Other (please specify)

19. Approximately what proportion of patients in your unit still receive **heparin** based anticoagulation for CRRT?

0 % 100

20. What are the conditions or indicators that identify patients to still receive **heparin** based anticoagulation for CRRT in your unit?

Patient already receiving systemic heparin infusion

Severe liver disease with inability to metabolise citrate

Severe multi-organ failure

Hepato-renal failure

Other (please specify)