# Article information:

Intensity of continuous renal-replacement therapy in critically ill patients - PubMed
<https://pubmed.ncbi.nlm.nih.gov/19846848/>

# Article summary:

1. The optimal intensity of continuous renal-replacement therapy (CRRT) in critically ill patients with acute kidney injury remains unclear.

2. A multicenter, randomized trial compared two different levels of CRRT intensity and found that higher-intensity therapy did not reduce mortality at 90 days.

3. Hypophosphatemia was more common in the higher-intensity group compared to the lower-intensity group.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article titled "Intensity of continuous renal-replacement therapy in critically ill patients" presents the findings of a randomized controlled trial comparing two different levels of intensity of continuous renal-replacement therapy (CRRT) on 90-day mortality among critically ill patients with acute kidney injury. The study was conducted by the RENAL Replacement Therapy Study Investigators and published in the New England Journal of Medicine in 2009.

The article starts with a brief abstract summarizing the background, methods, results, and conclusions of the study. It states that the optimal intensity of CRRT remains unclear and that higher-intensity therapy did not reduce mortality at 90 days in critically ill patients with acute kidney injury.

One potential bias in this article is the lack of information about conflicts of interest or funding sources. It is important to know if any financial or other interests may have influenced the design, conduct, or reporting of the study. Without this information, it is difficult to assess any potential biases that may exist.

The article reports that 1508 patients were enrolled in the study and randomly assigned to receive either higher-intensity or lower-intensity CRRT. However, it does not provide information on how these patients were selected or whether they were representative of all critically ill patients with acute kidney injury. This lack of information makes it difficult to generalize the findings to a broader population.

The primary outcome measure was death within 90 days after randomization. The article reports that there was no significant difference in mortality between the two groups (44.7% in each group). However, it does not provide any information on other important clinical outcomes such as length of hospital stay, need for mechanical ventilation, or development of complications related to CRRT. These additional outcomes could provide a more comprehensive assessment of the effectiveness and safety of different intensities of CRRT.

Another limitation is that the article does not discuss potential reasons for why higher-intensity CRRT did not reduce mortality. It does mention that hypophosphatemia was more common in the higher-intensity group, but it does not explore whether this or other factors may have contributed to the lack of difference in mortality. This omission limits the reader's understanding of the study findings and their implications.

The article also does not present any counterarguments or alternative perspectives on the optimal intensity of CRRT. It would be helpful to include a discussion of other studies or expert opinions that may have different conclusions or recommendations. This would provide a more balanced view of the topic and help readers make informed decisions.

Overall, while the article provides some valuable information on the intensity of CRRT in critically ill patients, it has several limitations and biases that should be considered. The lack of information on conflicts of interest, selection criteria for patients, and additional clinical outcomes limits the generalizability and applicability of the findings. Additionally, the article does not explore potential reasons for why higher-intensity CRRT did not reduce mortality or present alternative perspectives on the topic.

# Topics for further research:

* Conflicts of interest in renal replacement therapy studies
* Selection criteria for patients in CRRT studies
* Clinical outcomes of CRRT in critically ill patients
* Factors contributing to mortality in CRRT patients
* Alternative perspectives on optimal intensity of CRRT
* Critiques of the RENAL Replacement Therapy Study

# Report location:

<https://www.fullpicture.app/item/a64deac2ef5b2aef8834ba6c071f6094>