

Bleeding-related conditions and complications in extracorporeal life support

Citation for published version (APA):

Willers, A. (2023). *Bleeding-related conditions and complications in extracorporeal life support*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20230525aw>

Document status and date:

Published: 01/01/2023

DOI:

[10.26481/dis.20230525aw](https://doi.org/10.26481/dis.20230525aw)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Propositions belonging to the dissertation

**“Bleeding-related conditions and complications
in extracorporeal life support”**

Anne Willers

Maastricht, May 25th of May, 2023

1. Bleeding complications are among the most common complications during the use of extracorporeal life support (Chapter 2, 3)
2. Over the past twenty years, bleeding-related complications have been decreasing, but remain around 25% (Chapter 3)
3. Prediction of bleeding complications during ECLS is difficult, and further investigation including anticoagulation and laboratory data is needed to improve the prediction models (Chapter 4, 5)
4. Further development of circuit system and optimal coating and surfaces could potentially lead to a decrease in systemic anticoagulation need (Chapter 6)
5. Extracorporeal life support could potentially break the vicious circle of the lethal triad in trauma (Chapter 7, 8)
6. Management of hemorrhagic shock includes rapid hemostasis and balanced resuscitation with crystalloids and blood. Early identification and control of the source of hemorrhage is essential (Advanced Trauma Life Support)
7. Respiratory arrest and cardiac arrest are distinct, but inevitably if untreated, one leads to the other (Moll, 2021)
8. In unproper clinical environment, patients may be distinguished between those who survive despite interventions, and those who do bad because of interventions (Roberto Lorusso 2018)
9. “Afgeschoven is nicht aufgehoben” - *Postponing is not equal to canceling* (Justyna Swol, 2020)
10. Camping, where you spend a small fortune, to live like a homeless person
11. I generally avoid temptation, unless I can't resist it