

VU Research Portal

Traditional and pharmacologic resuscitation in traumatic brain injury: targeting inflammatory and hemostatic pathways

Dekker, S.E.

2017

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Dekker, S. E. (2017). *Traditional and pharmacologic resuscitation in traumatic brain injury: targeting inflammatory and hemostatic pathways*. [PhD-Thesis - Research and graduation internal, Vrije Universiteit Amsterdam].

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

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

Contents

List of abbreviations

Chapter 1	11
General introduction	

Part I: Traumatic brain injury-related coagulopathy

Chapter 2	27
Relationship between tissue perfusion and coagulopathy in traumatic brain injury	

Chapter 3	47
Lysis onset time as diagnostic rotational thromboelastometry parameter for fast detection of hyperfibrinolysis	

Part II: Conventional treatments for traumatic brain injury and hemorrhagic shock

Chapter 4	69
Normal saline influences coagulation and endothelial function after traumatic brain injury and hemorrhagic shock in pigs	

Chapter 5	87
Fresh Frozen Plasma resuscitation provides neuroprotection compared with normal saline in a large animal model of traumatic brain injury and polytrauma	

Chapter 6	107
Early resuscitation with fresh frozen plasma for traumatic brain injury combined with hemorrhagic shock improves neurologic recovery	

Part III: Novel resuscitation techniques - epigenetic modulation using valproic acid

Chapter 7	133
Effect of pharmacological resuscitation on brain gene expression profiles in a large animal model of combined traumatic brain injury and hemorrhagic shock	
Chapter 8	153
Resuscitation with valproic acid alters inflammatory genes in a porcine model of combined traumatic brain injury and hemorrhagic shock	
Chapter 9	177
Treatment with a histone deacetylase inhibitor, valproic acid, is associated with increased platelet activation in a large animal model of traumatic brain injury and hemorrhagic shock	
Chapter 10	195
General discussion and conclusion	
English summary	219
Nederlandse samenvatting (Dutch summary)	223
Appendices	
Acknowledgements	227
Curriculum vitae auctoris	232
List of publications	233