Host-pathogen interactions in typhoid fever

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This thesis focuses on host-pathogen interactions in *Salmonella Typhi* and *Burkholderia pseudomallei* infections and explores the interplay between these bacteria and the innate immune system. Typhoid fever is one of the most common causes of bacterial infection in low-income countries. With adequate antibiotic treatment it has a low mortality rate. Melioidosis also commonly causes community-acquired sepsis in Southeast Asia and northern Australia but even with appropriate antibiotic treatment the mortality is high. During severe bacterial infections such as these uncontrolled activation of the innate immune response can lead to detrimental systemic inflammation, intravascular coagulation, tissue injury, and eventually death. This thesis presents clinical and experimental studies in which the effects of a variety of proteins involved in the hyper-inflammatory response of the innate immune system during severe typhoid fever and melioidosis are investigated and compared.
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Hanna Katrien de Jong
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## Contents

### Part I: Introduction

1. General introduction and outline of the thesis. 11

2. The systemic pro-inflammatory response in sepsis. 21
   *Journal of Innate Immunity, 2010*

### Part II: Host-pathogen interactions in invasive salmonellosis

3. Host-pathogen interaction in invasive salmonellosis. 39
   *Plos Pathogens, 2012*

4. Epidemiologic and diagnostic aspects of typhoid fever in Chittagong Medical College Hospital, Chittagong, Bangladesh. 61
   *Submitted*

5. The etiology of febrile illness in patients presenting to Chittagong Medical College Hospital in Chittagong, Bangladesh. 77
   *Submitted*

6. Activation of coagulation and endothelium with concurrent impairment of anticoagulant mechanisms in patients with typhoid fever. 93
   *Submitted*

7. Expression of intra- and extracellular granzymes in patients with typhoid fever. 109
   *Submitted*

8. Limited role for ASC and NLRP3 during in vivo *Salmonella Typhimurium* infection. 127
   *BMC Immunology, 2014*

9. Expression and function of S100A8/A9 (calprotectin) in human typhoid fever and the murine *Salmonella* model. 147
   *Plos Neglected Tropical Diseases, 2015*
Part III: Host responses in melioidosis

10. Neutrophil extracellular traps in the host defense against sepsis induced by *Burkholderia pseudomallei*.  
*Intensive Care Medicine Experimental, 2014*  
175

*Journal of Thrombosis and Haemostasis, 2014*  
197

12. S100A8/A9 (calprotectin) impairs host defense against pneumonia-derived septic melioidosis.  
*Submitted*  
209

Part IV: Epilogue

13. Summary, general discussion and conclusion  
231

14. Samenvatting voor niet-ingewijden (Dutch summary)  
243

Addendum

Common abbreviations  
251
Authors and affiliations  
255
PhD portfolio  
259
List of publications  
263
Dankwoord (Acknowledgements)  
265
About the author  
269