Aetiology, Pathogenesis & Consequences of Severe Anaemia in Malawian Children: HIV and other factors
Calis, J.C.J.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Acknowledgements
The preparations for this PhD started in 2001. Now, seven years later, a big task lies behind me and many have contributed to the thesis you are currently reading. Because it is impossible to mention every person by name, I would like to express my gratitude to all who supported me during this period. I will try however to focus on those who have contributed to the coming about of this thesis in particular.

Firstly I would like to thank the parents and children who participated in the study. Without their contribution this study would not have been possible in the first place.

The recruitment and follow up of these children has been a major task, which has been done by a great group of people in Chikwawa and Blantyre: Alex Siyasiya, Andrew Naunje, Ben Nkumbira, Bridget Mangochi, David Kachala, Davis Kazembe, Ernest Nkhoma, Francis Munthali, Geoffrey Chipungu, Georgina Makuta, Harriet Khozi, Inez Kavinga, Isaac Chirambo, Kate Sapanga, Linda Bwanali, Mary Kandeya, Mercy Kamdolozi, Miriam Nkhoma, Miriam Khoka, Tapika Mwafulirwa and William Kachina.

In addition I would like to thank all colleagues in the Queen Elizabeth Central Hospital in Blantyre and Chikwawa District Hospital for their collaboration, especially those in the paediatric departments (special thanks to Professor Elizabeth Molyneux), surgical department, and the laboratory and blood transfusion service.

The people working at the Wellcome Trust Research Laboratories, the (Malaria Project) research ward and the College of Medicine were essential in completing this research. One really learns to value facilities such as water, power, supplies, IT- and statistical support (special thanks to Pelani Malange, Lucia Nuka, Mavuto Mukaka and Sarah White), human resources (special thanks Mrs Grace Mapunda), finances, security, serviced equipment, transport, know-how and many more that were all facilitated by you. Even more important, especially during the few times that one of these facilities was lacking, was the great atmosphere and camaraderie. There are really too many names to mention here, but to all staff, colleagues and friends a big thanks. A special word of thanks should go out to Professor Malcolm Molyneux, not only for founding the WTRL, a great place to work, but also for the support and the extraordinary ability in helping to write proposals and manuscripts.

Other African support came from Tom Williams in Kilifi (Thalassaemia) and Morgan Maxwell who talked us through several technical problems from his home in Cape Town and came over when necessary.

In Europe I received support from Professor Dominic Kwiatkowski’s genetics unit of the Wellcome Trust Centre for Human Genetics in Oxford (special thanks to Anna Richardson, Kirk Rockett, Yik-Ying Teo and Miguel Sanjoaquin). Most UK support came
from Liverpool, where they do not only play great football, but also have a wonderful School of Tropical Medicine. Many people helped out on different occasions (in particular Alison Ardrey, Nynke van den Broek, Luis Cuevas, Greg Harper, Feiko ter Kuile, Professor Steve Ward and Professor Peter Winstanley). Special thanks goes out to Imelda Bates who really shaped the haematology sections in these chapters and to Brian Faragher whose statistical support and knowledge of structural equation modelling has been essential.

In the Netherlands I am thankful to Rob Kraaijenhagen’s department of clinical chemistry of the Meander Medisch Centrum, Amersfoort, especially Ferdinand Wijnberg, for running the Erythropoietin assays; Paul Hulshof’s Division of Human Nutrition, Wageningen University, for running the Vitamin A assays; Lisette van Lieshout’s department of Parasitology, LUMC, Leiden (Jaco Verweij, Pieter Boele van Hensbroek, Caroline Voskens, Jessica Bakker and Sanne Stravens and Sandra Hesselink) for taking care of the parasitological stool investigations; Professor Ellen van der Schoot and her group at Sanquin, Amsterdam, for helping to develop our flow cytometry analyses; Winny van Lülling’s “protocollen lab”, and department of clinical chemistry, Academic Medical Centre, Amsterdam, for running the clinical chemistry assays out of office ours (at night!); Marcel Beld and the department of clinical virology, Academic Medical Centre, Amsterdam (special thanks to Alex van Breda and Ayde Zelleke); Susanne Jurriaans’ and Marion Cornelissen’s department of retrovirology where Hellen Rotteveel has done most of the laboratory and analytical work on HIV strains with help of Joke Brouwer, Tonja van der Kuyl, Fokla Zorgdrager, Georgios Pollakis, Katja Wolthers, Bill Paxton and many others; and finally I would like to thank the staff of the ‘Speciële Hematologie’ department, Academic Medical Centre, Amsterdam. I am especially thankful to Raymond Vet, who even sacrificed holidays towards our project and has contributed greatly to the bone marrow analysis in our study.

Returning from Africa I had support from Professor Hugo Heymans who brought me in contact with Professor Rob de Haan, who has been a great help with the statistical analyses of our monstrous dataset. The reintegration into Dutch society and the AMC was facilitated by many colleagues of the research departments of the Emma Kinderziekenhuis, with special thanks to Xandra van den Tweel and Liesbeth Osterop. During the last year I combined writing my PhD thesis with clinical duties. I would like to thank my colleagues of the Emma Kinderziekenhuis and the paediatric department of the St Lucas Andreas Ziekenhuis for their considerate attitude towards me in my struggle to combine these two jobs.

Of course I thank all friends and family whom we met in Malawi, who visited us or who kept us up to date. I would like to thank Afitha Voeten for creating such a beautiful cover; all who helped revising the content of this thesis (especially Steve Graham, Maarten
Schim van der Loeff and Henriëtte Scherpbier) and those who financially supported the research (Nutricia research foundation and the Ter Meulen Fund, Royal Netherlands Academy of Arts and Sciences). A special word of thanks should go out to my parents, who supported me for the past 30 years, who showed their enthusiasm by visiting Malawi and will hopefully continue to do so in near future.

I thank both paranymfen whose contributions expand far beyond this day in May. Martijn, you have shown to be a great friend over the last years. We shared a great time doing our research electives in the district hospital in Phalombe. When I came back to do research you visited and did a clinical rotation in the paediatric department in Blantyre. I would not be surprised if, in future, our shared interest will make us work together once again. Kamija you have been a great colleague, sparring partner and friend. Much of the work presented is yours as well as mine. Although you have already obtained you PhD in Liverpool, I hope you will feel to have obtained another degree.

Of course I am thankful to professor Bernard Brabin, who supported me throughout this PhD, coping with all the deadlines for revisions of manuscripts, proposals and chapters. His enthusiasm and extensive knowledge of tropical paediatrics has been an encouragement throughout the years.

Obtaining a PhD is a big compliment to a co-promotor. It is needless to say that without Michaël Boele van Hensbroek I would not have started nor completed this PhD. Michaël you have been a great almost daily support during these seven years. Your endless enthusiasm and optimism, your trust and constructive criticism and your effort towards me and this study make you an ideal mentor. In addition I would like to stress that the warm-heartedness and hospitality of you and your family have made our stay in Malawi really enjoyable.

Lastly I would like to thank Brechje for the love, support and patience over the years. You gave up your job to move to Malawi but, gladly, never regretted doing so. You indirectly and directly contributed to the study in many ways and in return had to life with being Mrs Doctor Calis. I hope you will rightly and proudly share this new degree with me.