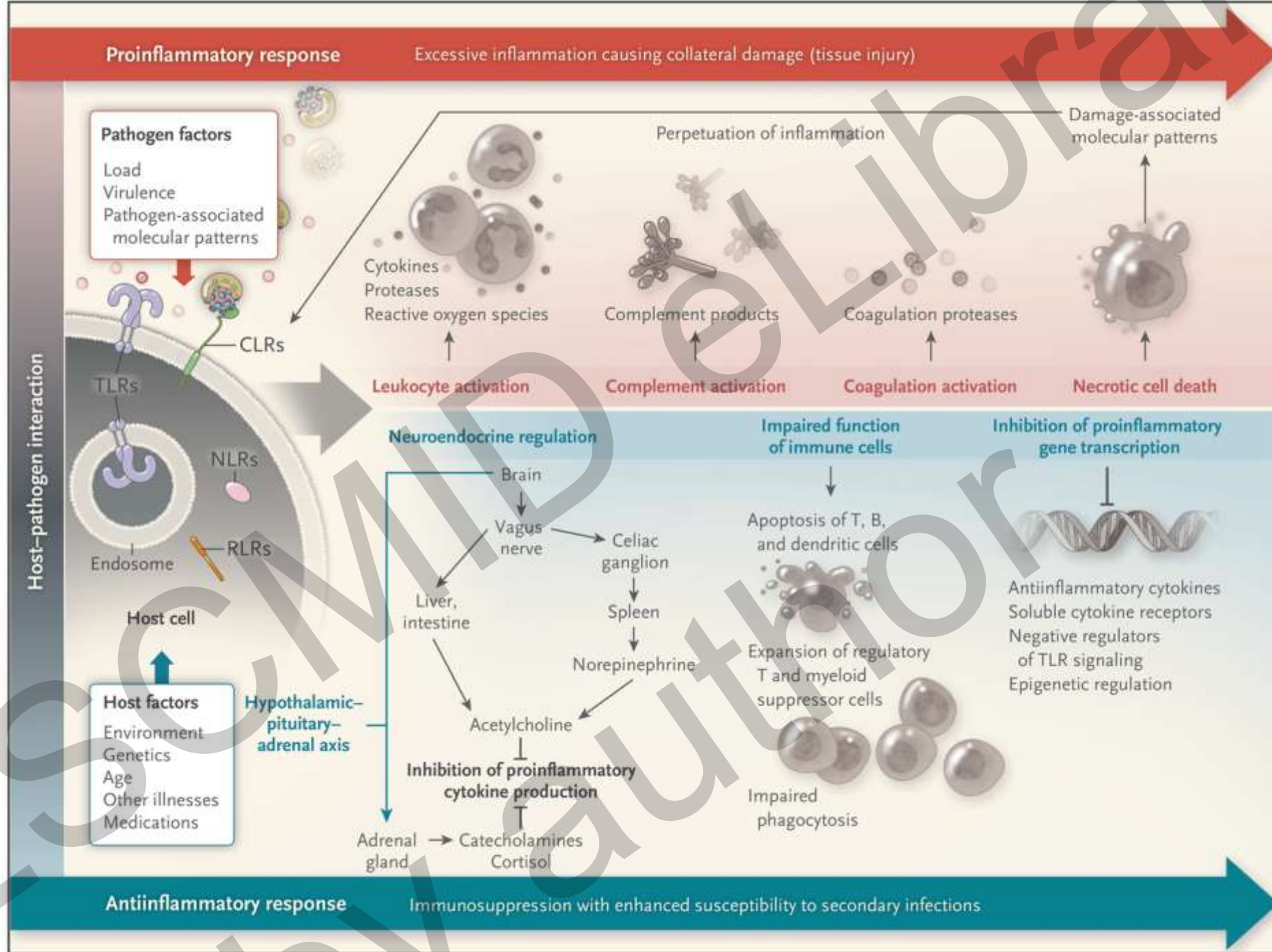
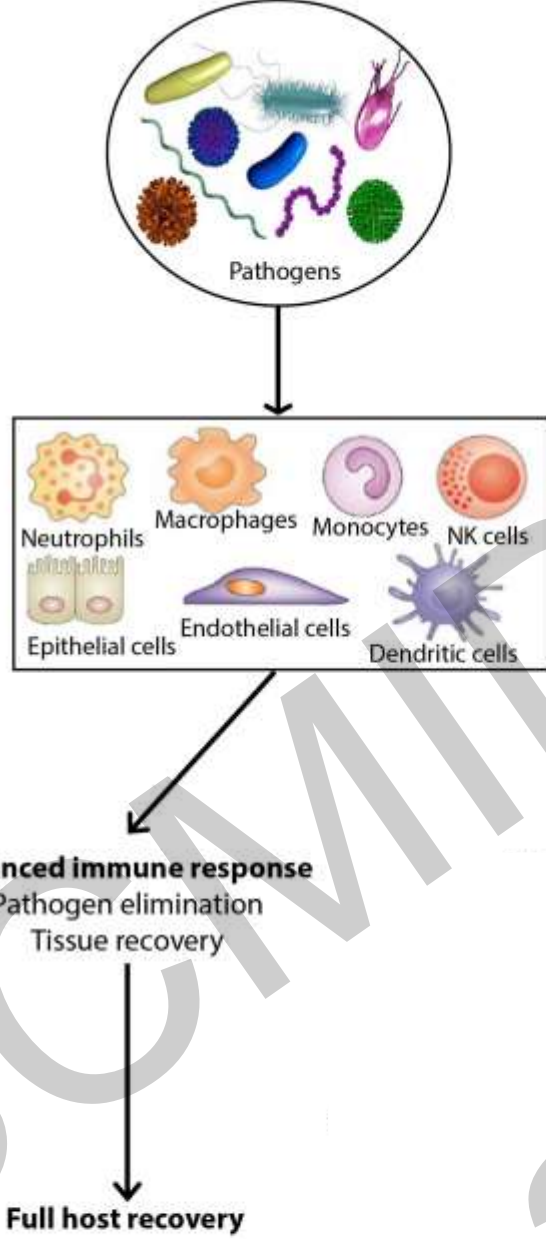


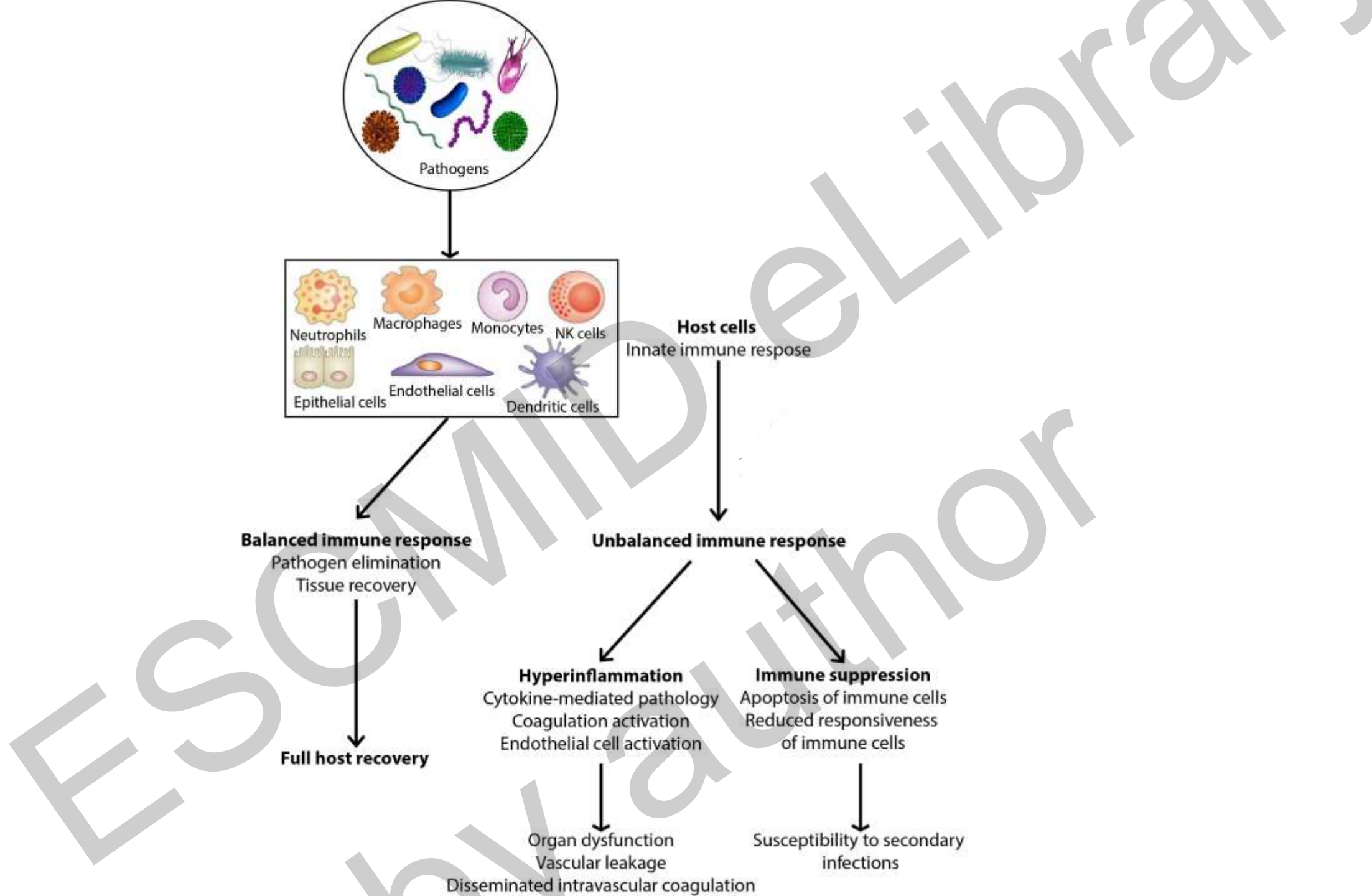


Sepsis in the intensive care unit: epidemiology, outcome and host response

Lonneke van Vught
April 13th 2019









Molecular Diagnosis and Risk Stratification of Sepsis

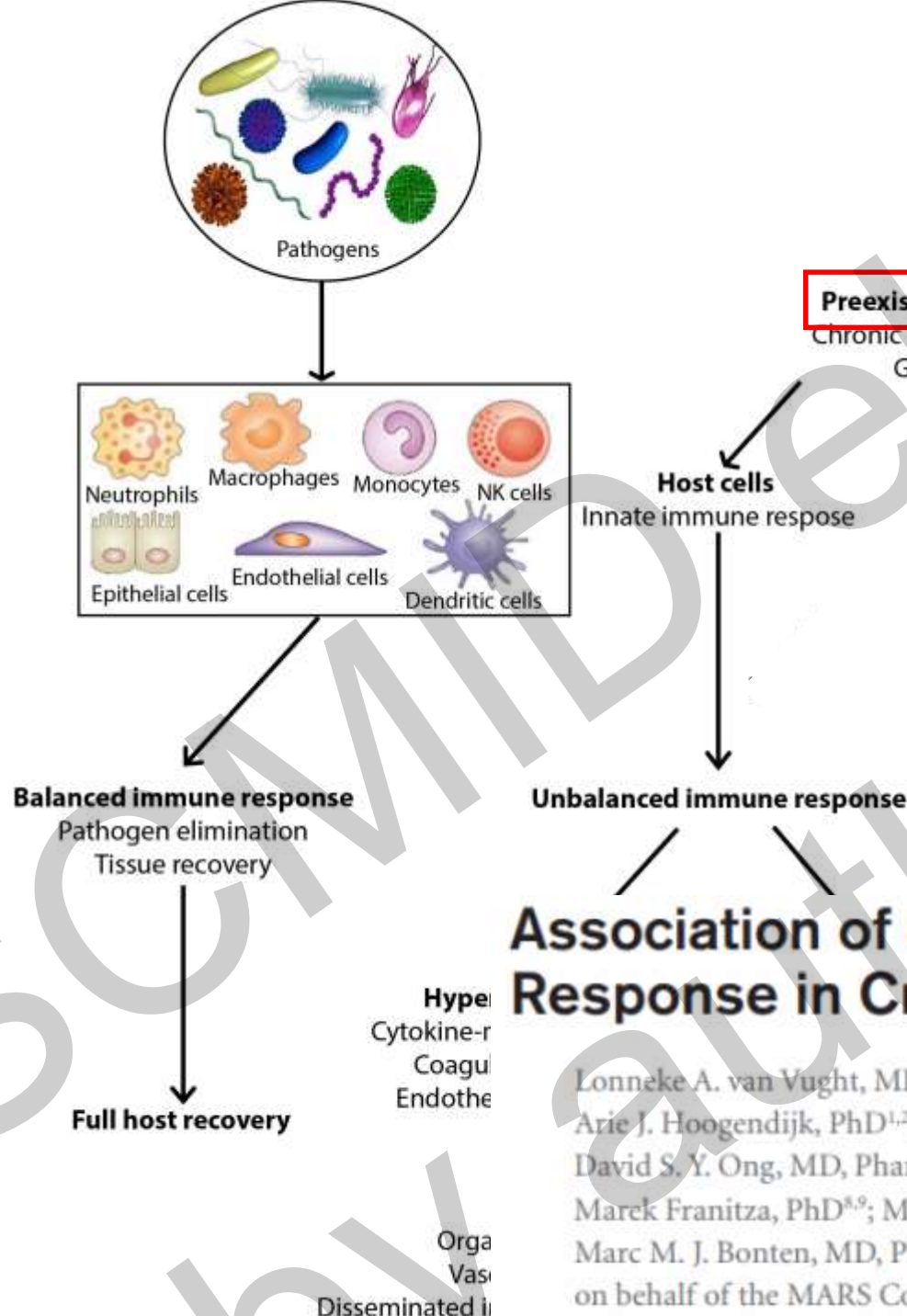
8331 ICU admissions (7008 patients)

2011

2014

44528 (63%) non-infectious admissions

3046 (37%) admission for sepsis



Preexisting factors

- Chronic comorbidities
- Gender
- Age
- Race

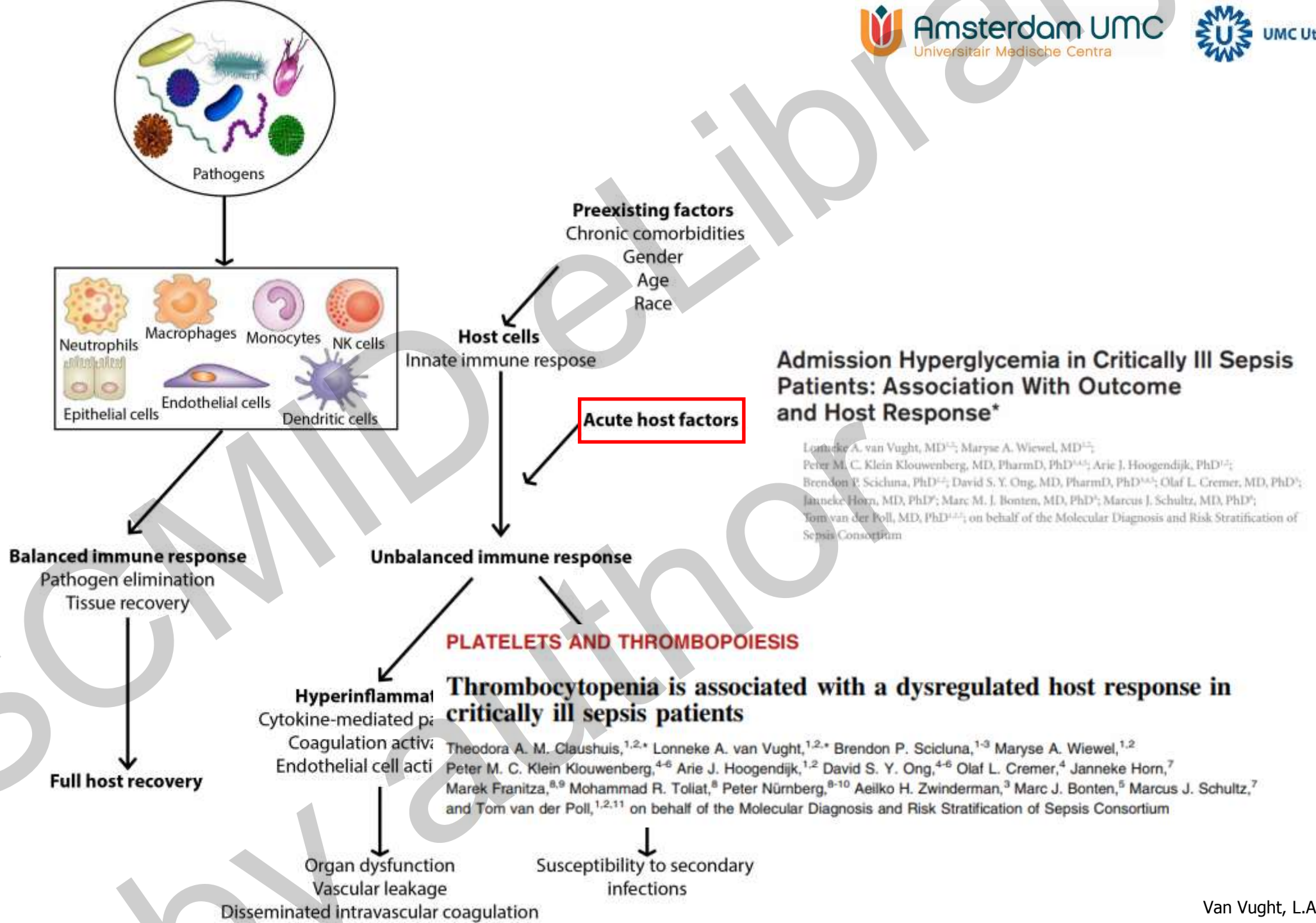


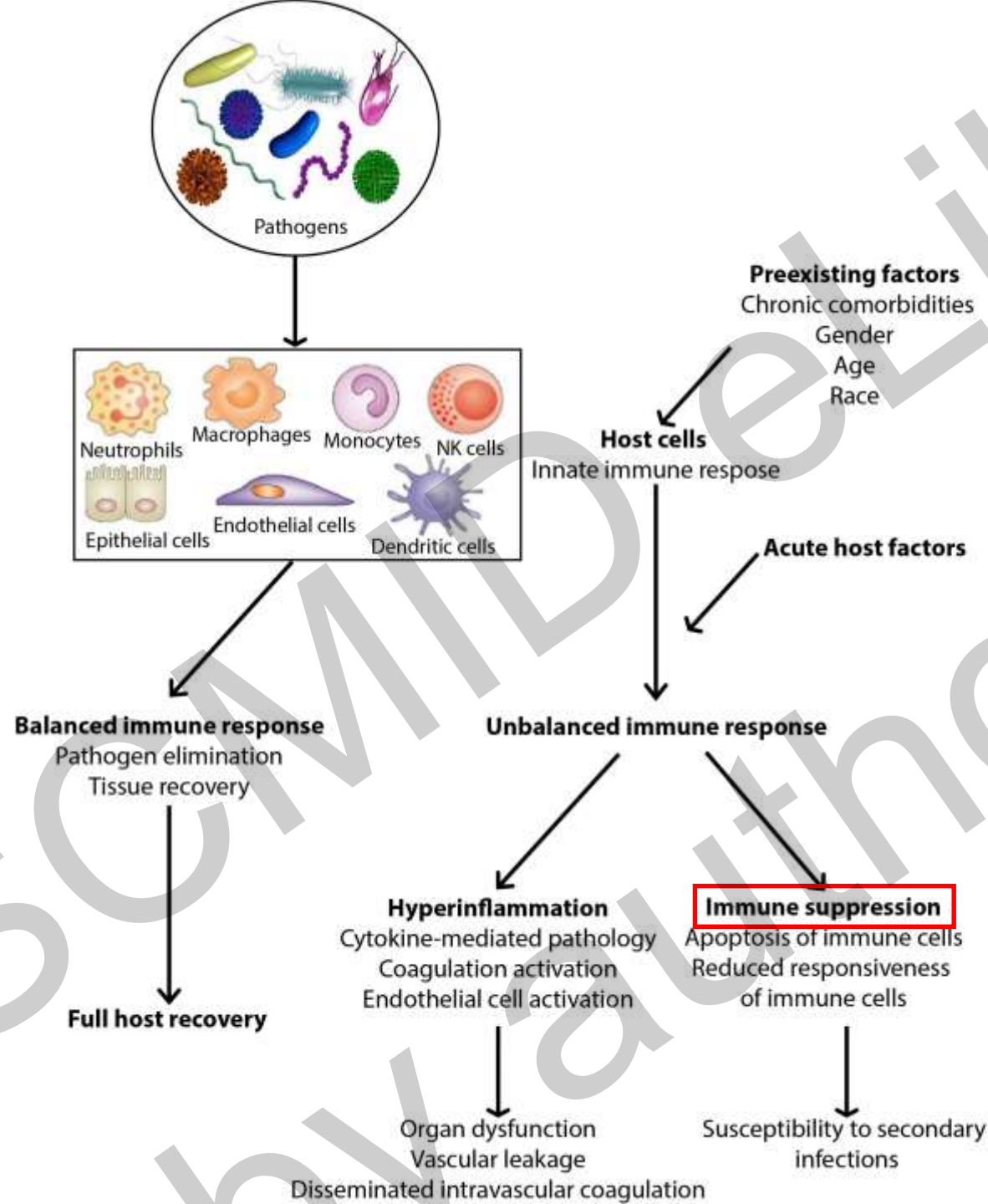
Diabetes Is Not Associated With Increased 90-Day Mortality Risk in Critically Ill Patients With Sepsis

Lonneke A. van Vught, MD^{1,2}; Rebecca Holman, PhD^{3,4}; Evert de Jonge, MD, PhD^{4,5}; Nicolette F. de Keizer, PhD^{3,4}; Tom van der Poll, MD, PhD^{1,2,6}

Association of Gender With Outcome and Host Response in Critically Ill Sepsis Patients*

Lonneke A. van Vught, MD, PhD^{1,2}; Brendon P. Scicluna, PhD^{1,2,3}; Maryse A. Wiewel, MD, PhD^{1,2}; Arie J. Hoogendijk, PhD^{1,2}; Peter M. C. Klein Klouwenberg, MD, PharmD, PhD^{4,5,6}; David S. Y. Ong, MD, PharmD, PhD^{4,5,6}; Olaf L. Cremer, MD, PhD⁴; Janneke Horn, MD, PhD⁷; Marek Franitza, PhD^{8,9}; Mohammad R. Toliat, PhD⁸; Peter Nürnberg, PhD^{8,9,10}; Marc M. J. Bonten, MD, PhD⁵; Marcus J. Schultz, MD, PhD⁷; Tom van der Poll, MD, PhD^{1,2,11}; on behalf of the MARS Consortium

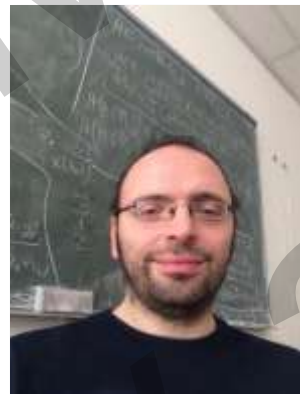




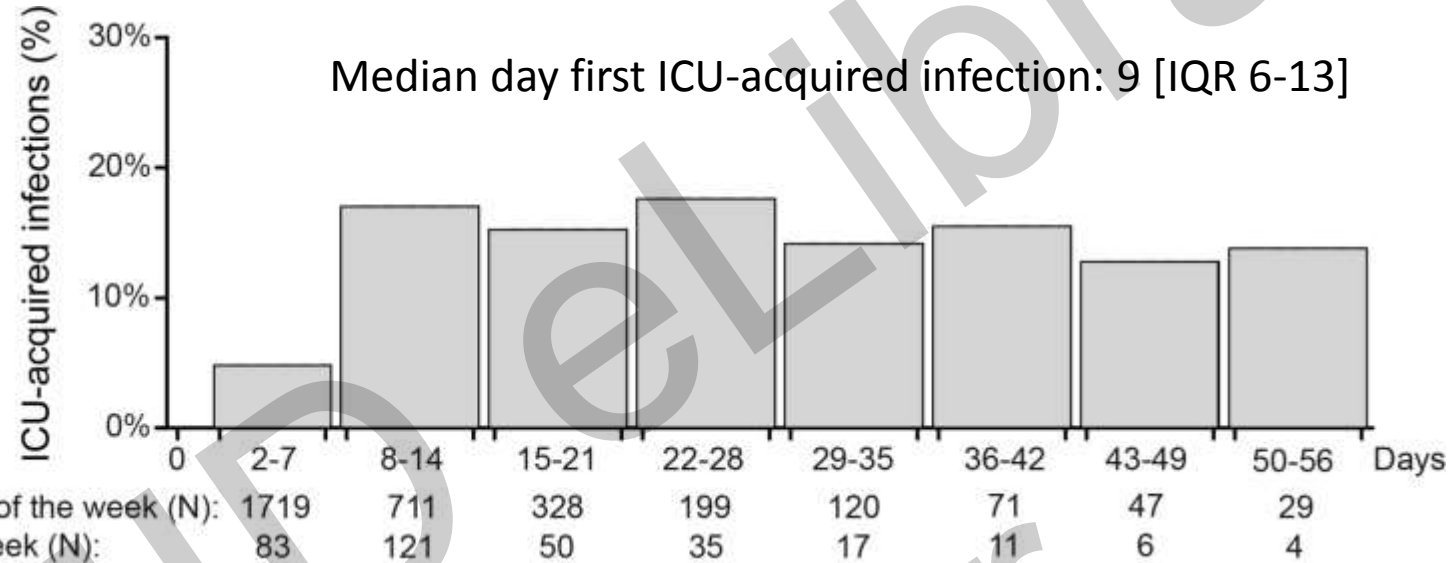
Original Investigation | CARING FOR THE CRITICALLY ILL PATIENT

Incidence, Risk Factors, and Attributable Mortality of Secondary Infections in the Intensive Care Unit After Admission for Sepsis

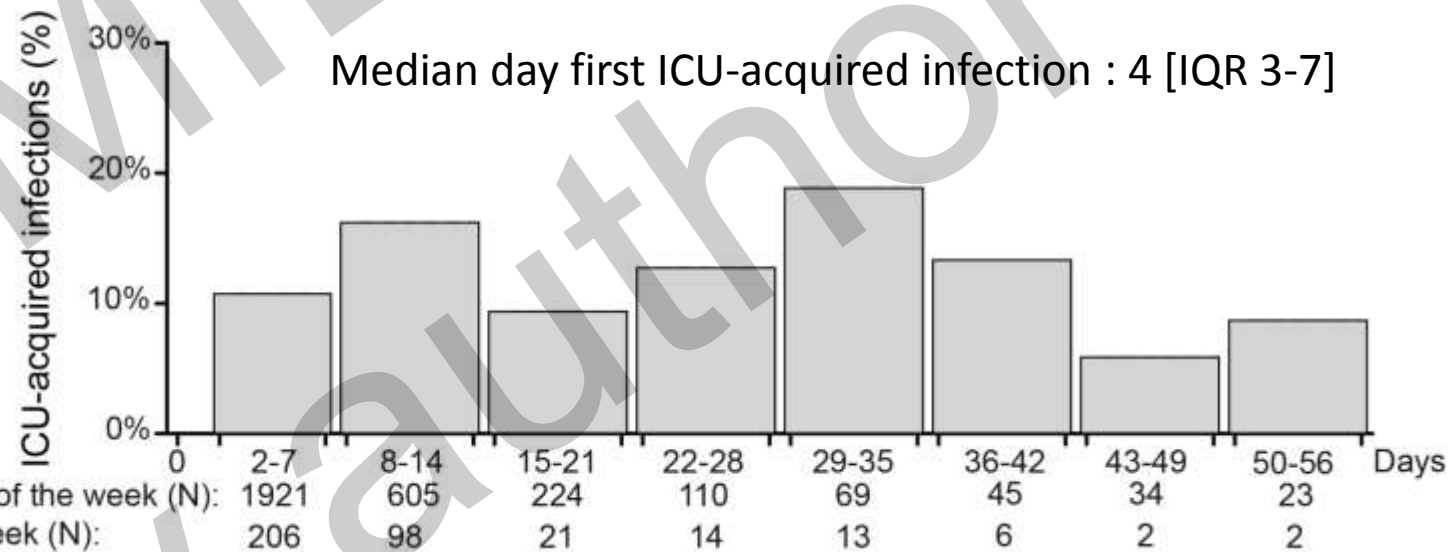
Lonneke A. van Vught, MD; Peter M. C. Klein Klouwenberg, MD, PharmD, PhD; Cristian Spitoni, PhD; Brendon P. Scicluna, PhD; Maryse A. Wiewel, MD; Janneke Horn, MD, PhD; Marcus J. Schultz, MD, PhD; Peter Nürnberg, PhD; Marc J. M. Bonten, MD, PhD; Olaf L. Cremer, MD, PhD; Tom van der Poll, MD, PhD; for the MARS Consortium



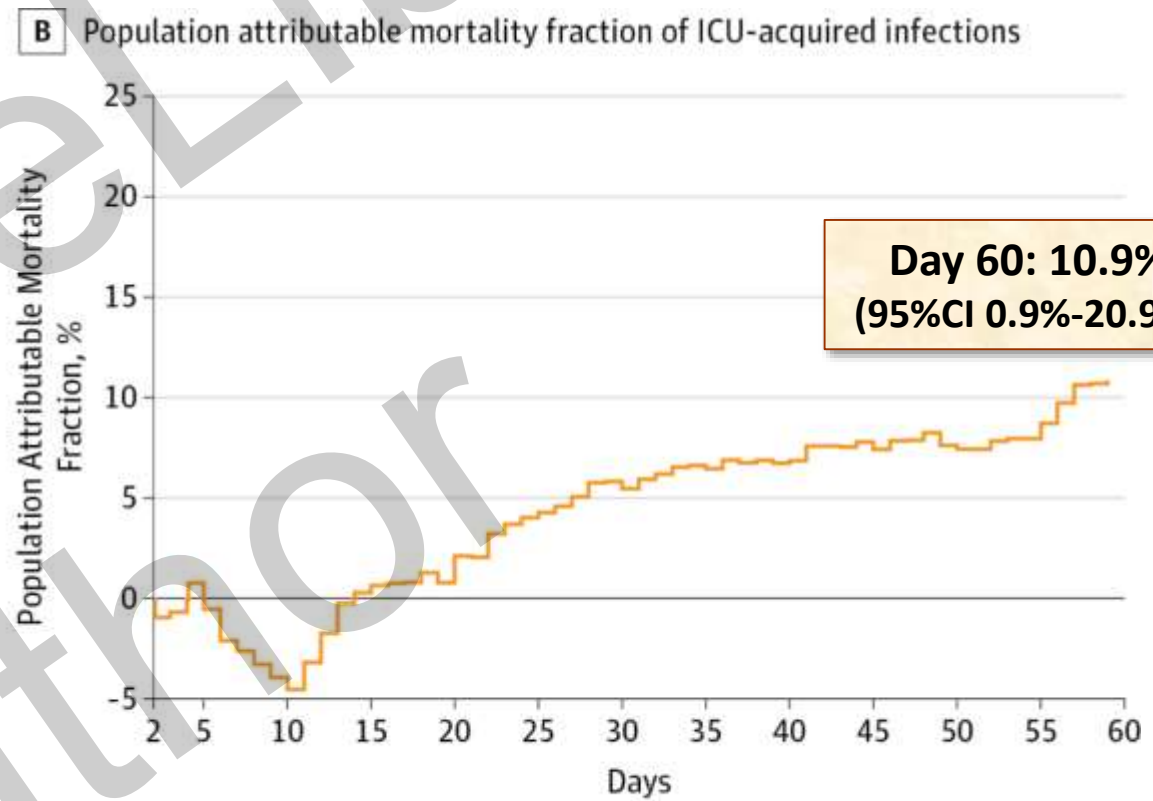
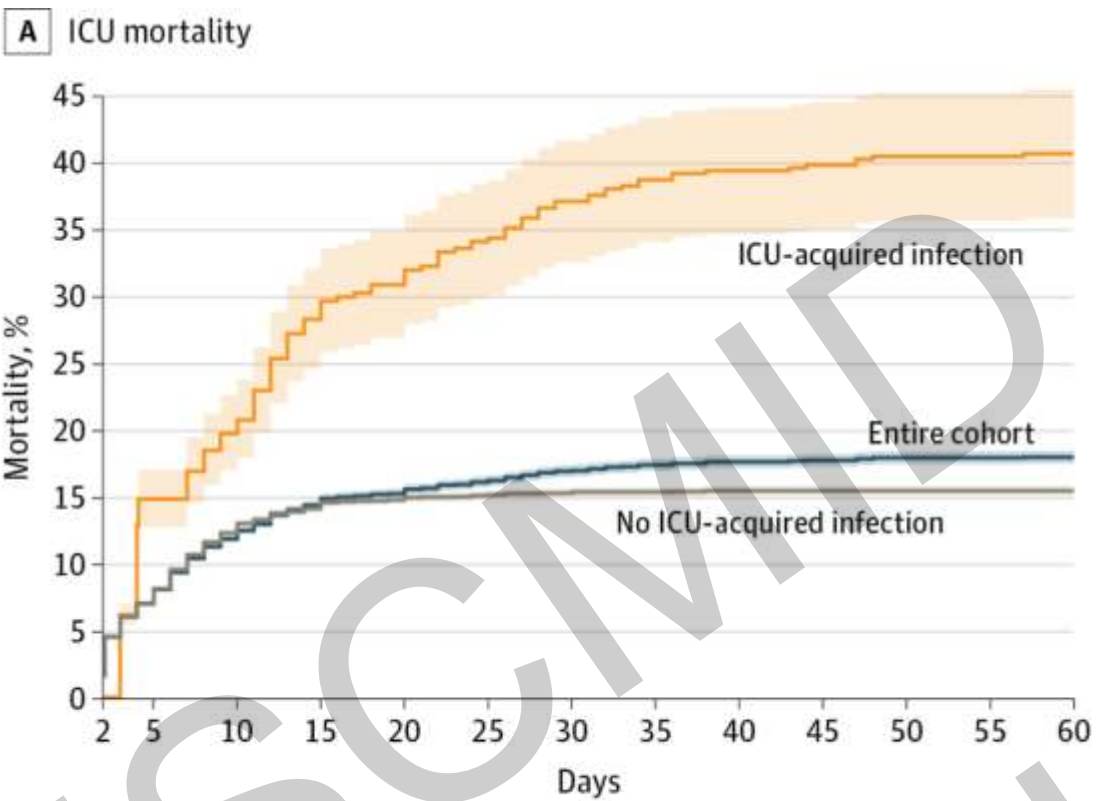
Sepsis admissions
13.5% ICU-AI



Non-sepsis admissions
15.1% ICU-AI

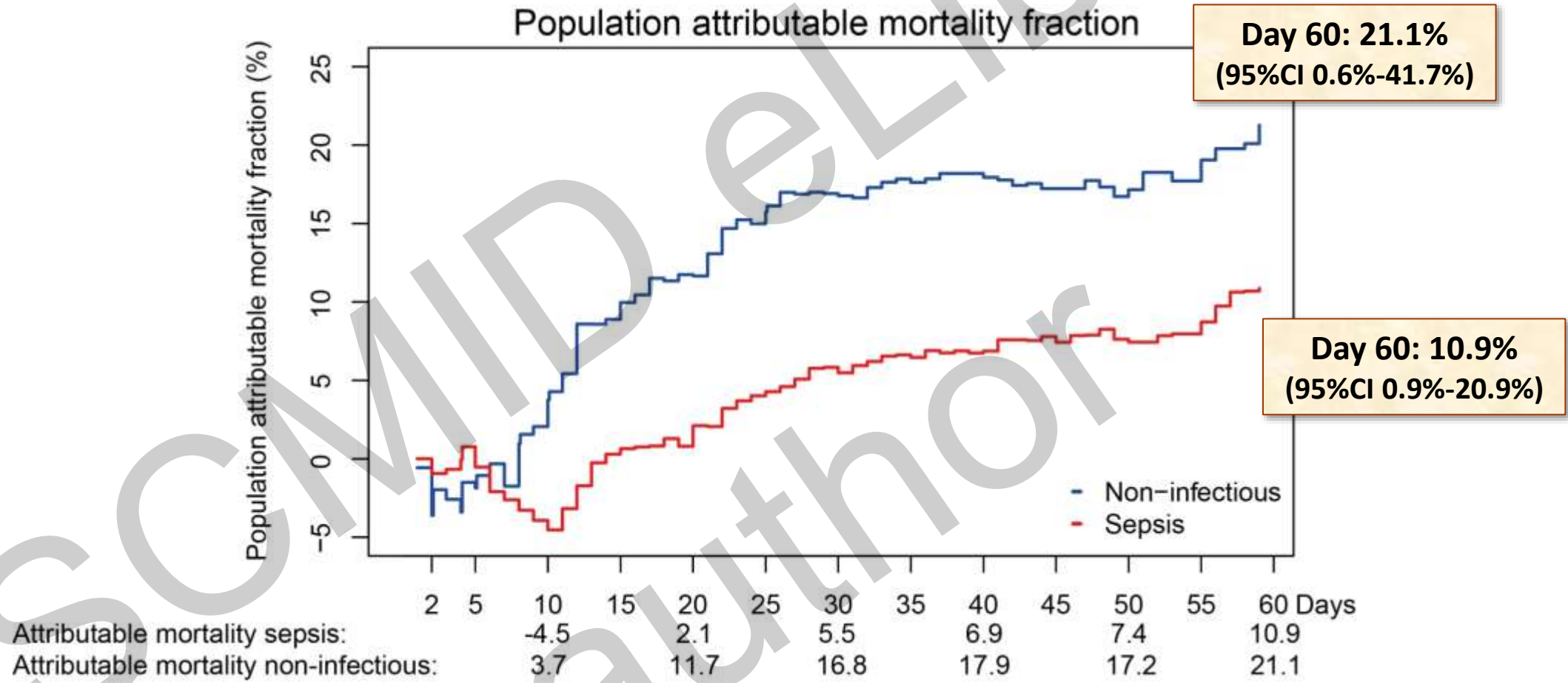


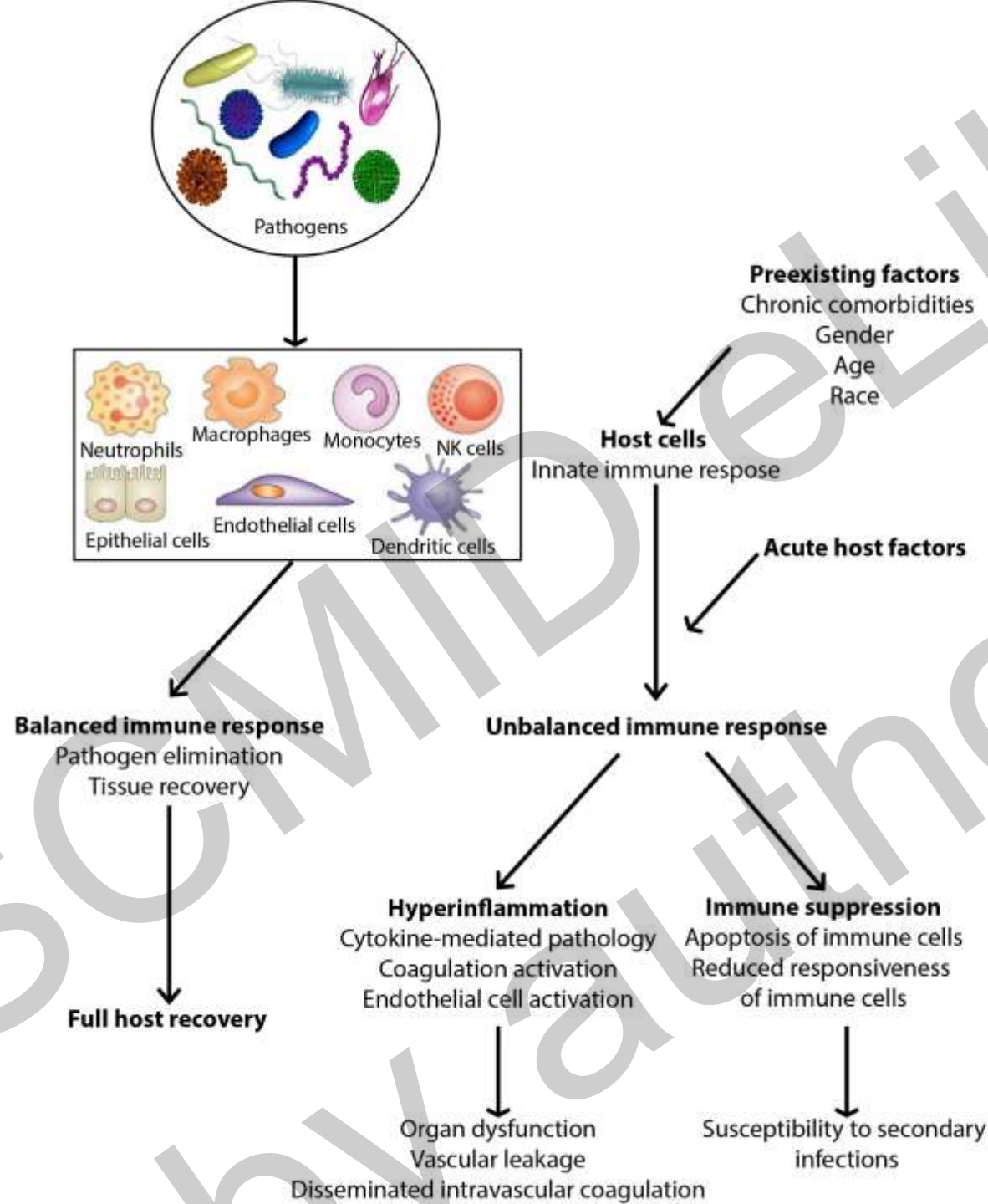
The difference between mortality in **all** patients and mortality in patients who did **not** develop an ICU-acquired infection was **2.0% (95% CI, 0.2%-3.8%)**



Day 60: 10.9% (95%CI 0.9%-20.9%)

Admissions at risk: 1719, 551, 328, 227, 155, 107, 74, 54, 43, 29, 23, 18





Acknowledgements



UMCU

Peter Klein Klouwenberg
Marc Bonten
Olaf Cremer
David Ong
Jos Frencken

Julius Centrum

Frank Boekamp
Jan Willem Maaskant



AMC

Tom van der Poll
Brendon Scicluna
Arjan Hoogendijk
Hakima Belkasim

Marcus Schultz
Laura Schouten
Janneke Horn
Luuk Wieske
Esther Witteveen
Friso de Beer
Gerie Glas
Lieuwe Bos
Marleen Straat
Roosmarijn van Hooijdonk
Mischa Huson
Maryse Wiewel