

Immune thrombocytopenia: exploring antibodies, scintigraphy and immune modulation. Moving towards a new era for patients with ITP

Amini. S.N.

### Citation

Amini, S. N. (2023, January 10). *Immune thrombocytopenia: exploring antibodies, scintigraphy and immune modulation. Moving towards a new era for patients with ITP*. Retrieved from https://hdl.handle.net/1887/3505699

Version: Publisher's Version

Licence agreement concerning inclusion of doctoral

License: thesis in the Institutional Repository of the University

of Leiden

Downloaded from: <a href="https://hdl.handle.net/1887/3505699">https://hdl.handle.net/1887/3505699</a>

**Note:** To cite this publication please use the final published version (if applicable).

# Immune Thrombocytopenia: Exploring antibodies, scintigraphy and immune modulation

Moving towards a new era for patients with ITP

Sufia Amini

### Colofon

ISBN: 978-94-6469-167-2

Cover design: www.proefschriftmaken.nl

Layout: Robbert Schouten

Printing: www.proefschriftmaken.nl

Financial support for the printing of this thesis was kindly provided by:

Hagaziekenhuis, SBOH, LUMC and ITP Patiëntenvereniging NL.

Copyright © Sufia Amini – 2022

## Immune Thrombocytopenia: Exploring antibodies, scintigraphy and immune modulation

Moving towards a new era for patients with ITP

### **Proefschrift**

ter verkrijging van de graad van doctor aan de Universiteit Leiden, op gezag van rector magnificus prof.dr.ir. H. Bijl, volgens besluit van het college voor promoties te verdedigen op dinsdag 10 januari 2023 klokke 11:15 uur

door

Sufia Nadjib Amini

geboren te Kunduz, Afghanistan in 1988 Promotor Prof. Dr. J.J. Zwaginga

Copromotoren Dr. M.R. Schipperus, UMCG

Dr. T. Netelenbos, Hagaziekenhuis

leden promotiecommissie Prof. Dr. J.E.A. Portielje

Prof. Dr. K. Meijer, UMCG

Prof. Dr. R.E.G. Schutgens, UMC Utrecht Dr. V.M.J. Novotný, Sanquin Amsterdam

### Contents

l.	General Introduction	6
The pathor	physiology of platelet destruction: antibodies and platelet scintigraphy	
II.	Anti-Glycoprotein Antibodies and Sequestration Pattern of Indium Labeled	18
	Platelets in Immune Thrombocytopenia	
III.	The interplay between GPIb/IX-antibodies, platelet hepatic sequestration	34
	and TPO levels in patients with chronic Immune thrombocytopenia	
IV.	Adalimumab-induced platelet antibodies resulting in severe	44
	thrombocytopenia	
V.	Autologous platelet scintigraphy and clinical outcome of splenectomy in	52
	immune thrombocytopenia: A systematic review and meta-analysis	
VI.	The Robustness of Indium-111 Labeled Platelet Scintigraphy Study for	74
	Immune Thrombocytopenia	
TPO-Recep	tor Agonists and immune modulation	
VII.	Risk of thrombosis with thrombopoietin receptor agonists for ITP patients:	90
	A systematic review and meta-analysis	
VIII.	Tapering and discontinuation of Romiplostim in patients with Immune	106
	Thrombocytopenia: a study protocol of the STIP trial	
IX.	Perioperative oral eltrombopag versus intravenous immunoglobulin in	120
	patients with immune thrombocytopenia: a non-inferiority, multicentre,	
	randomised trial	
Implement	ation of research and patient reported outcomes	
Χ.	Implementation, including Dutch Articles on PROMS, Decision Aid, and the	140
	New Dutch Guideline for ITP	
XI.	General Discussion	178
XII.	Appendices	
	English Summary	196
	Dutch Summary (Nederlandse samenvatting)	200
	Publication list	204
	Acknowledgements (Dankwoord)	208
	Short biography	212