### Examination committee

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# Curriculum vitae

## Education

Master of Medicine // UGent // 2018 // cum laude

Honours Programme "Quetelet lectures" // UGent // 2013-2015

## Publications

#### Included in this thesis.

HES6 knockdown in human hematopoietic precursor cells reduces their in vivo engraftment potential and their capacity to differentiate into erythroid cells, B cells, T cells and plasmacytoid dendritic cells De Vos Tamara et al., published, Haematologica, 2024

Phenotypic characterization of early T- and pDC-lineage differentiation in the human postnatal thymus reveals novel surface markers for the distinction of developmental stages. De Vos Tamara et al., submitted

#### Not included in this thesis.

Evaluation of the applicability of internal controls on selfcollected samples for high-risk human papillomavirus is needed Verberckmoes Bo, De Vos Tamara et al., published, BMC Women's Health, 2023

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## FACULTY OF MEDICINE AND HEALTH SCIENCES

New molecular drivers and cell surface markers that characterize normal human hematopoiesis

Promotor: Prof. Dr. Tom Taghon Co-promotor: Prof. Dr. Jan Philippé

## Tamara De Vos

## Academic year: 2024-2025

Public defense to obtain the degree of "Doctor in Health Sciences" November 7 2024 // 16h30 The Core, UZ Ghent





- 1. What are the characteristics of T-cell precursors in the human thymus?
- → Revealed complexity of surface marker expression profiles
- → Revealed surface marker expression profile for rare IRF8<sup>+</sup> precursor population
- ➔ A reference for future research, increasing compatibility within research groups

- 2. What is the role of HES6 in normal human hematopoiesis?
- Development of red blood cells, megakaryocytes, pDCs, B and T cells
- → Bone marrow engraftment
- ➔ Proliferation during early hematopoiesis

## Translational impact

- Stem cell therapy → increasing knowledge on stem cell biology
- Transfusion therapy → increasing knowledge on blood cell development may increase efficiency of production of lab-derived blood products
- Improving T-cell reconstitution after stem cell transplantation → supporting the characterization of true thymus seeding precursors
- Increased understanding of normal development can help to understand, diagnose and treat blood-cell related diseases

Access to thesis:



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