Patients with cancer are at high risk for venous thrombosis, the undesired formation of blood clots within the veins. Historically, this high risk was mainly attributed to patients with solid tumors, but recent studies have indicated that the risk is at least as high or even higher in patients with hematological malignancies, such as lymphoma, multiple myeloma and leukemia, especially acute lymphoblastic leukemia. Venous thrombosis can cause life-long morbidity or can be fatal, and requires anticoagulant treatment with the accompanying risk of bleeding. Moreover, thrombosis can lead to suboptimal treatment of the malignancy, due to the necessity to interrupt, delay or even discontinue treatment.

This thesis consists of three parts; in Part I, the relationship between venous thrombosis and cancer is highlighted and illustrated with a fascinating case. Part II focuses on two distinct risk factors for hypercoagulability, the JAK2V617F mutation and nucleosomes. In Part III, the incidence, pathogenesis and prevention of venous thrombosis in acute lymphoblastic leukemia are investigated. This thesis aims to increase insight in the risk factors and mechanisms behind the hypercoagulable state in hematological malignancies. This will help to improve prevention of venous thrombosis in patients with a hematological malignancy, particularly with acute lymphoblastic leukemia.
Hypercoagulability in Hematological Malignancies

Mandy N. Lauw
Hypercoagulability in Hematological Malignancies

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Universiteit van Amsterdam op gezag van de Rector Magnificus prof. dr. D.C. van den Boom
ten overstaan van een door het College van Promoties ingestelde commissie, in het openbaar te verdedigen in de Agnietenkapel

on vrijdag 4 september 2015, te 12:00 uur

door

Mandy Nicole Lauw

geboren te Hilversum
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Faculteit der Geneeskunde
“Our greatest glory is not in never falling, but in rising every time we fall.”

Confucius
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