Cover Page



Universiteit Leiden



The handle http://hdl.handle.net/1887/32849 holds various files of this Leiden University dissertation

Author: Kocatürk, Begüm

Title: Tissue factor isoforms in cancer and blood coagulation

Issue Date: 2015-04-29

Publications

- **Kocaturk B**, Versteeg HH. Orthotopic Injection of Breast Cancer Cells into the Mammary Fat Pad of Mice to Study Tumor Growth. JoVE, Accepted.
- Unruh D, Turner K, Srinivasan R, **Kocaturk B**, Qi X, Chu Z, et al. Alternatively spliced tissue factor contributes to tumor spread and activation of coagulation in pancreatic ductal adenocarcinoma. Int J Cancer 2014 Jan 1;134(1):9-20.
- Kocaturk B, Van den Berg YW, Tieken C, Mieog JS, de Kruijf EM, Engels CC, et al. Alternatively spliced tissue factor promotes breast cancer growth in a beta1 integrindependent manner. Proc Natl Acad Sci U S A 2013 Jul 9;110(28):11517-22.
- **Kocaturk B**, Versteeg HH. Tissue factor-integrin interactions in cancer and thrombosis: every Jack has his Jill. J Thromb Haemost 2013 Jun;11 Suppl 1:285-93.
- **Kocaturk B**, Versteeg HH. Tissue factor isoforms in cancer and coagulation: may the best isoform win. Thromb Res 2012 Apr;129 Suppl 1:S69-S75.
- van den Hengel LG, **Kocaturk B**, Reitsma PH, Ruf W, Versteeg HH. Complete abolishment of coagulant activity in monomeric disulfide-deficient tissue factor. Blood 2011 Sep 22;118(12):3446-8.

Acknowledgements

This PhD dissertation is one of the most important steps in my academic career. It is definetely a team work and I would like to extend *my* sincerest thanks and *appreciation* to those who helped me accomplish writing it. First of all, I would like thank Leiden University Medical Center for giving me a chance to be a part of your scientific family. Next, I am obliged to Prof. Rogier Bertina for taking my PhD application into consideration. Prof. Reitsma, I am thankful for your gracious hospitality and valuable discussions. Henri, my big brother, I have wholeheartedly enjoyed working with you. Thanks for all the support and guidance. Dr. Bogdanov, working on my projects became much more exciting thanks to your collaboration and kindness.

I would also like to thank my roommates in LUMC a.k.a C7 club: Yuana, Bernardine, Patricia and Chunyu. Thanks for all the encouragement and laughter. As a foreigner, I am grateful for all the help that you provided to solve challenges.

I would like to extend my gratitude to my wonderful colleagues in Einthoven Laboratory: Betül, you have been a colleague but also a sister to me. I will always remember those fun moments that we spent in the culture room. I am also thankful for your patience during my shopping sprees. Huma, I would like to thank you for being an amazing colleague and friend. Alev, thanks for your support and amity. Yascha/Lisa/Chris, the TF team, it was an honour working with you all. Jiong-Wei and Daniel thanks for all the fun times that we spent together. Aat thanks for ELISAs, Annemarie thanks for FACS, Caroline thanks for the plasmids, Lejla, Brechje and Sherida thanks for your positive energy.

I also want to thank my students: Rind (my star), Dianne, Paoline, Varsha and Safiera. I am proud of you girls. You all did a good job.

I want to thank my Turkish friends who also became my family in the Netherlands: Semra, Melek, Saliha, Buket, Nurdan, Nuran the angel, Nuran the crazy, Nurten, Nuri, Venhar, Tuğba, Ayşegül, Yaşar, Bayram, Savaş, Mustafa, Zeynep, Fatma. You are all very special to me. I also want to thank my best friend Büşra, even though we were thousands of kilometers apart, you have always been there for me.

I am going to proceed my career in Turkey and work with wonderful researchers. Among them there is one who who inspired me the most: Prof. Tayfun Özçelik. He is not only my mentor but also my idol. Hocam, thank you is not enough to express my appreciation to you. You have always helped me and showed me the right way. I can

not thank you enough. And my new supervisor: Dr. Ebru Erbay. I really appreciate that you gave me the chance to work with you on an amazing field.

Last but not least, special recognition goes out to my family. Dad, I know you are proud of me and I want to thank you for all the support that you gave me during my study. I would not be here today without you. Mom, I know that me being away was really tough for you ,and I admire your patience. You are the most special person in my life.

Curriculum Vitae

The author of this thesis was born in 15 october 1986 in Ankara, Turkey. She studied at Arı Science High School with scholarship and graduated with full marks. Later, she studied at Bilkent University Molecular Biology and Genetics department (2003-2008). Bilkent university awarded her with full scholarship and she graduated as a high honor student (cum laude). During her bachelor study, she had a chance to do her senior Project with the dean of the science faculty (Prof. Dr. Tayfun Özçelik) at Bilkent University. Her study was orally presented at Çanakkale Medical Genetics conference, 2008. The author also did internships in several other countries: She worked on the functional characterization of Strubellig gene family members at Munich Techinal University, Germany (Prof. Kay Schneitz). In addition, she investigated the role of TGF-β pathway and BMP9 protein in osteoarthritis at McGill University, Canada (Dr. Anie Philip).

In the begining of 2009, she started working as a researcher at Einthoven Laboratory for Experimental Vascular Medicine, Leiden University Medical Center, The Netherlands. In 2010, she joined the PhD program in the same laboratory and investigated role of TF isoforms in cancer and coagulation under the supervision of Dr. Henri H. Versteeg and Prof. Dr. Pieter H. Reitsma. The work described in this thesis was presented orally and as a poster in the congresses such as International Society on Thrombosis and Hemostasis (Kyoto, 2011 and Amsterdam,2013), ICTHIC(Bergamo,2012) and NVTH (Koudekerke, 2012). During her PhD, the author also did a 3 months study with the leading name in the Tissue Factor field, Prof. Dr. Wolfram Ruf at Scripps Research Institute.

Since May 2014, the author works at Bilkent University as a Post-Doc with Dr. Ebru Erbay in close collaboration with Harvard University. The Project investigates new treatment strategies for atherosclerosis and supported by an ERC grant.