

NAME: Rima Dardik, PhD

POSITION Head, Molecular Biology Unit, Coagulation Laboratory, Israeli National Hemophilia Center and Coagulation Unit, Sheba Medical Center, Tel Hashomer; Researcher, The Amalia Biron Thrombosis Research Institute, Tel Aviv University

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
The Hebrew University, Jerusalem	B.Sc.	1981	Chemistry and Biochemistry
Weizmann Institute of Science, Rehovot	M.Sc.	1983	Life Sciences, Department of Membrane Research
Weizmann Institute of Science, Rehovot	Ph.D.	1989	Life Sciences, Department of Polymer Research
Weizmann Institute of Science, Rehovot	Postdoctoral fellowship	1993	Department of Chemical Immunology

Education/Training

Academic and professional experience

1. Cross-talk between hemostasis and angiogenesis
2. Genetics of bleeding disorders – mutation analysis, functional studies

List of selected publications (out of 95 peer-reviewed publications)

1. **Dardik R**, Lahav J. The structure of endothelial cell thrombospondin. Characterization of the heparin-binding domains. *Eur J Biochem*. 1987;168(2):347-55.
2. **Dardik R**, Lahav J. Multiple domains are involved in the interaction of endothelial cell thrombospondin with fibronectin. *Eur J Biochem*. 1989;185(3):581-8.
3. **Dardik R**, Lahav J. Cell-binding domain of endothelial cell thrombospondin: localization to the 70-kDa core fragment and determination of binding characteristics. *Biochemistry*. 1991; 30(38):9378-86

4. **Dardik R**, Ruggeri ZM, Savion N, Gitel S, Martinowitz U, Chu V, Varon D. Platelet aggregation on extracellular matrix: effect of a recombinant GPIb-binding fragment of von Willebrand factor. *Thromb Haemost*. 1993;70(3):522-6.
5. **Dardik R**, Peretz H, Usher S, Seligsohn U, Martinowitz U. Current strategy for genetic analysis of haemophilia A families. *Haemophilia* 1996; 2: 11-17.
6. **Dardik R**, Kaufmann Y, Savion N, Rosenberg N, Shenkman B, Varon D. Platelets mediate tumor cell adhesion to the subendothelium under flow conditions: involvement of platelet GPIIb-IIIa and tumor cell alpha(v) integrins. *Int J Cancer*. 1997;70(2):201-7.
7. **Dardik R**, Savion N, Kaufmann Y, Varon D. Thrombin promotes platelet-mediated melanoma cell adhesion to endothelial cells under flow conditions: role of platelet glycoproteins P-selectin and GPIIb-IIIa. *Br J Cancer*. 1998;77(12):2069-75.
8. **Dardik R**, Lahav J. Functional changes in the conformation of thrombospondin-1 during complexation with fibronectin or heparin. *Exp Cell Res*. 1999;248(2):407-14.
9. **Dardik R**, Varon D, Eskaraev R, Tamarin I, Inbal A. Recombinant fragment of von Willebrand factor AR545C inhibits platelet binding to thrombin and platelet adhesion to thrombin-treated endothelial cells. *Br J Haematol*. 2000;109(3):512-8.
10. **Dardik R**, Shenkman B, Tamarin I, Eskaraev R, Harsfalvi J, Varon D, Inbal A. Factor XIII mediates adhesion of platelets to endothelial cells through alpha(v)beta(3) and glycoprotein IIb/IIIa integrins. *Thromb Res*. 2002;105(4):317-23.
11. **Dardik R**, Savion N, Gal N, Varon D. Flow conditions modulate homocysteine induced changes in the expression of endothelial cell genes associated with cell-cell interaction and cytoskeletal rearrangement. *Thromb Haemost*. 2002;88:1047-53.
12. **Dardik R**, Solomon A, Loscalzo J, Eskaraev R, Bialik A, Goldberg I, Schiby G, Inbal A. Novel Proangiogenic Effect of Factor XIII Associated With Suppression of Thrombospondin 1 Expression. *Arterioscler Thromb Vasc Biol*. 2003;23:1472-7.
13. **Dardik R**, Loscalzo J, Eskaraev R, Inbal A. Molecular mechanisms underlying the proangiogenic effect of factor XIII. *Arterioscler Thromb Vasc Biol*. 2005 25:526-32.
14. **Dardik R**, Loscalzo J, Inbal A. Factor XIII (FXIII) and angiogenesis. *J Thromb Haemost*. 2006 4:19-25.
15. **Dardik R**, Leor J, Skutelsky E, Castel D, Holbova R, Schiby G, Shaish A, Dickneite G, Loscalzo J, Inbal A. Evaluation of the pro-angiogenic effect of factor XIII in heterotopic mouse heart allografts and FXIII-deficient mice. *Thromb Haemost*. 2006; 95:546-50.
16. **Dardik R**, Inbal A. Complex formation between tissue transglutaminase II (tTG) and vascular endothelial growth factor receptor 2 (VEGFR-2): proposed mechanism for modulation of endothelial cell response to VEGF. *Exp Cell Res*. 2006; 312:2973-82.
17. **Dardik R**, Krapp T, Rosenthal E, Loscalzo J, Inbal A. Effect of FXIII on monocyte and fibroblast function. *Cell Physiol Biochem*. 2007;19:113-20.

18. **Dardik R**, Livnat T, Seligsohn U. Variable effects of alpha v suppression on VEGFR-2 expression in endothelial cells of different vascular beds. *Thrombosis and Hemostasis* 2009; 102:975-82.
19. **Dardik R**, Livnat T, Nisgav Y, Weinberger D. Enhancement of angiogenic potential of endothelial cells by contact with retinal pigment epithelial cells in a model simulating pathological conditions. *Invest Ophthalmol Vis Sci*. 2010; 51:6188-95
20. Levkovich-Verbin H, Spierer O, Vander S, **Dardik R**. Similarities and differences between primary and secondary degeneration of the optic nerve and the effect of minocycline. *Graefes Arch Clin Exp Ophthalmol*. 2011;249:849-57.
21. **Dardik R**, Livnat T, Halpert G, Jawad S, Nisgav Y, Azar-Avivi S, Liu B, Nussenblatt RB, Weinberger D, Sredni B. The small tellurium-based compound SAS suppresses inflammation in human retinal pigment epithelium. *Mol Vis*. 2016;22:548-62
22. Barg AA, **Dardik R**, Levin C, Koren A, Levy-Mendelovich S, Pode-Shakked B, Kenet G. Severe protein C deficiency due to novel biallelic variants in PROC and their phenotype correlation. *Acta Haematol*. 2021;144:327-331.
23. Rosenberg N, **Dardik R**, Hauschner H, Nakav S, Barel O, Luboshitz J, Yacobovich J, Tamary H, Kenet G. Mutations in RASGRP2 gene identified in patients misdiagnosed as Glanzmann thrombasthenia patients. *Blood Cells Mol Dis*. 2021;89:102560.
24. **Dardik R**, Salomon O. Maternal Anti-HPA-1a Antibodies Increase Endothelial Cell Apoptosis and Permeability. *J Vasc Res*. 2021;58:321-329.
25. **Dardik R**, Avishai E, Lalezari S, Barg AA, Levy-Mendelovich S, Budnik I, Barel O, Khavkin Y, Kenet G, Livnat T. Molecular Mechanisms of Skewed X-Chromosome Inactivation in Female Hemophilia Patients-Lessons from Wide Genome Analyses. *Int J Mol Sci*. 2021;22:9074.