

NAME Gili Kenet, MD

POSITION Director, Israeli National Hemophilia Center and Coagulation unit, Sheba Medical Center, Tel Hashomer, head- The Amalia Biron Thrombosis Research Institute, Tel Aviv University

Education

Institution	Degree	Completion date	Field of study
Hebrew University, Hadassah medical school Jerusalem, Israel	BSc and MD	1983 1987	Medicine
Wolfson Medical Center Holon, Israel Affiliated to Tel Aviv University Medical School	MD (board certified Pediatrician)	1988-1992	Pediatrics
Sheba Medical Center, Ramat Gan, Israel, Affiliated to Tel Aviv University Medical School	MD (Board certified Hematologist)	1992-1995	Pediatric Hemato- Oncology
Sheba Medical Center, Ramat Gan, Israel, Affiliated to Tel Aviv University Medical School	M.D.	1995-1998	Thrombosis/ hemostasis sub- specialty
Visiting programs: Sick-kids hospital, Toronto, Canada. Also: Munster University, Germany	Continued Medical Education	1998-2001	Intermittent short visits/ exchange programs

Personal Statement

As a clinical and research trained Pediatric Hemato-Oncologist, I started working in the Israeli National Hemophilia Center (that serves 700 patients with hemophilia, about 1500 patients with rare bleeding disorders and thousands of thrombosis cases) in Sheba Medical Center since 1996. I also direct the Thrombosis Research Institute of Tel Aviv University.

My overall goal is to combine basic laboratory, preclinical studies and clinical research elements, going from the patients into the lab and back to the clinic, in order to individualize the best care for any patient with coagulopathy. Over the last decades, I have been fortunate to make some contributions to the field of hemophilia research and pediatric thrombosis and hemostasis. I have served as chair of the pediatric- perinatal scientific subcommittee (SSC) of ISTH and co- chair of the FVIII/ FIX/rare bleeding disorders SSC, took part in many trials (including international steering committees for several pediatric anticoagulant multicenter randomized controlled trials and DMC 's for clinical gene therapy trials) and

pioneered involvement in clinical gene therapy trials in hemophilia patients in Sheba, the largest tertiary referral center in Israel, already known for its GLP/ GMP/ translational medicine facilities. With my clinical expertise along with keen interest in research and a proven success in conducting and leading numerous pre-clinical and clinical studies in the last decades, I feel that I have the required proficiency to conduct the proposed research project. For this grant application, the reviewer is respectfully directed to my publication PubMed records. These records assure the reviewers that the PI's collaborations proposed here are very well founded.

Positions and Honors

Clinical:

1988-1992	Board certified Pediatrician, E Wolfson medical Center, Israel
1992-1995	Board certified Pediatric Hemato-Oncologist, Sheba medical Center, Israel
2001-2007	Director, Pediatric Coagulation Service, Sheba medical Center, Israel
2007-2013	Director, Thrombosis Unit, Sheba medical Center, Israel
07/2013– Center	Director, National Hemophilia Center & Thrombosis Institute, Sheba medical Center

Academic:

2010-2014	Associate Professor, Hematology, Tel Aviv University
2012	Invited guest- Aflac Visiting Lecture Series, Atlanta, US
2014-	Full Professor, Hematology, Tel Aviv University
2015-	Member, Faculty Research Committee, Tel Aviv University
2014-2016	Head, Hematology Faculty, Sackler Medical School, Tel Aviv University
2017-	Head, The Amalia Biron Thrombosis Research Institute, Tel Aviv University

Professional International Memberships and Positions:

1995-	American Society of Hematology (ASH)
1998-	World Federation of Hemophilia (WFH)
2001 –	International Society of Thrombosis and Hemostasis (ISTH)
2002 –	Scientific subcommittees (SSC) of ISTH
2004-2008	Co-chair, pediatric perinatal hemostasis SSC of ISTH
2006	Acta Hematologica- guest editor
2006-	Scientific advisory board, ISTH
2008-	Scientific advisory board, WFH
2008-2011	Chair, pediatric perinatal hemostasis SSC of ISTH
2010-2014	Chair, Israeli Society of Thrombosis and Hemostasis
2011 –	FVIII/FIX/Rare bleeding disorders (RBD) SSC of ISTH
2011	Seminars in Thrombosis and Hemostasis- guest editor
2013	Seminars in Perinatology - guest editor
2014-	Scientific advisory board, EMLTD
2015 –2021	Co- Chair FVIII/FIX/Rare bleeding disorders (RBD) SSC of ISTH
2015-	Faculty 1000, section head, Hematology

2016-	Editorial board, Haemophilia journal
2016	Thrombosis Research, guest editor
2016-	Secretary (board member), PedNet, Hemophilia International Foundation
2017-	Blood Cells Molecules Diseases- guest editor
2018-	ICTIC (International Cancer & Thrombosis in Cancer) editorial board
2021-	Counselor, European Mediterranean League against Thromboembolic Diseases-
EMLTD	
2021-	Educational Committee for Pediatric Hematology, European Hematology
Association	
2022	Seminars Thrombosis Hemostasis- guest editor
2022	International Journal of Molecular Sciences- guest editor

Honors

1993	The Stanley Levin foundation research award of the society of Pediatrics, Israel
2013, 2014, 2017	Thrombosis Research/ seminars in thrombosis awards for publications/ reviews

Selected Peer Reviewed Publications (selected from 263 peer- reviewed publications)

Kenet G, Freedman J, Shenkman B, Brok-Simoni F, Holzman F, Brand N, Michelson A, Loscalzo J, Inbal A. Plasma glutathione peroxidase deficiency and platelet insensitivity to nitric oxide in children with familial stroke. *Arterioscler Thromb Vasc Biol* 19:2017-2023, 1999

Kenet G, Sadetzki S, Murad H, Martinowitz U, Rosenberg N, Gitel S, Rechavi G, Inbal A. Factor V Leiden and antiphospholipid antibodies are significant risk factors for ischemic stroke in children. *Stroke* 31:1283-1288, 2000

Kenet G, Maayan A, Rosenberg N, Sela BA, Mazkereth R, Yifra A, Kuint J. Thrombophilia does not increase the risk for neonatal complications in preterm infants. *Thromb Haemost* 90:823-828, 2003

Berkun Y, Padeh S, Barash J, Uziel Y, Harel L, Mukamel M, Revel-Vilk S, **Kenet G**. Antiphospholipid syndrome in children and recurrent thrombosis. *Arthritis Rheum* 55:850-855, 2006

Kenet G, Kirkham F, Niederstadt T, Heinecke A, Saunders D, Stoll M, Brenner B, Bidlingmaier C, Heller C, Knöfler R, Schobess R, Zieger B, Sébire G, Nowak-Göttl U. European collaborative paediatric database on cerebral venous thrombosis: Risk factors for recurrent venous thromboembolism. *Lancet Neurol* 6:595-603, 2007

Simchen M, Goldstein G, Lubetsky A, Strauss Z, Schiff E, **Kenet G**. Factor V Leiden and antiphospholipid antibodies in either mothers or infants increase the risk for perinatal arterial ischemic stroke. *Stroke* 40:65-70, 2009.

Kenet G, Stenmo CB, Blemings A, Wegert W, Goudemand J, Krause M, Schramm W, Kirchmaier C, Martinowitz U. Intra-patient variability of thromboelastographic parameters following in vivo and ex vivo administration of recombinant activated factor VII in haemophilia patients: A multi-centre, randomized trial. *Thromb Haemost* 103:351-359, 2010.

Strauss T, Levy-Shraga Y, Ravid B, Schushan-Eisen I, Maayan-Metzger A, Kuint J, **Kenet G**. Clot formation of neonates tested by thromboelastography correlates with gestational age. *Thromb Haemost* 103:344-350, 2010.

Kenet G, Lutkhoff LK, Albisetti M, Bernard T, Bonduel M, Brandao L, Chabrier S, Chan A, Cowan F, de Veber G, Fiedler B, Fullerton HJ, Ganesan V, Goldenberg NA, Golomb MR, Grabowski E, Heller C, Holzhauser S, Iorio A,

Journeycake J, Junker R, Kirkham F, Kurnik K, Lynch JK, Male C, Manco-Hohnson M, Mesters R, Monagle P, van Ommen H, Rafini L, Simioni P, Strater RD, Young G, Nowak-Göttl U. Impact of thrombophilia on arterial ischemic stroke or cerebral sinusvenous thrombosis in children: A systematic review and meta-analysis of observational studies. *Circulation* 121:1838-1847, 2010.

Revel-Vilk S, Yacobovich J, Tamary H, Goldstein G, Nemet S, Weintraub M, Paltiel M, **Kenet G**. Risk factors for central venous catheter thrombotic complications in children and adolescents with cancer. *Cancer* 116:4197-4205, 2010.

Livnat T, Martinowitz U, Zivelin A, Rima D, **Kenet G**. A highly sensitive thrombin generation assay for assessment of recombinant activated factor VII therapy in hemophilia patients with inhibitor. *Thromb Haemost.* 105:688-695, 2011

Kenet G, Aronis S, Berkun Y, Bonduel M, Chan A, Goldenberg NA, Holzhauer S, Iorio A, Journeycake J, Junker R, Male C, Manco-Johnson M, Massicotte P, Mesters R, Monagle P, van Ommen H, Rafini L, Simioni P, Young G, Nowak-Göttl U. Impact of persistent antiphospholipid antibodies on risk of incident symptomatic thromboembolism in children: A systematic review and meta-analysis. *Semin Thromb Hemost.* 37:802-809, 2011

Berkun Y, Simchen MJ, Strauss T, Menascu S, Padeh S, **Kenet G**. Antiphospholipid antibodies in neonates with stroke - a unique entity or variant of antiphospholipid syndrome? *Lupus*. 23:986-993, 2014

Sidlik R, Strauss T, Morag I, Shenkman B, Tamarin I, Lubetsky A, Livnat T, **Kenet G**. Assessment of Functional Fibrinolysis in Cord Blood Using Modified Thromboelastography. *Pediatr Blood Cancer*. 63:839-43, 2016.

Barg AA, Livnat T, **Kenet G**. Inhibitors in Hemophilia: Treatment challenges and novel options. *Semin Thromb Hemost.* 44:544-550, 2018

Barg AA, Hauschner H, Misgav M, Lubetsky A, Levy-Mendelowitz S, Livnat T, Avishai E, Rosenberg N, **Kenet G**. A novel approach using ancillary tests to guide treatment of Glanzmann thrombasthenia patients undergoing surgical procedures. *Blood Cells Mol Dis*. 72:44-48, 2018

De Veber G, Kirkham F, Shannon K, Brandão L, Sträter R, **Kenet G**, Clausnizer H, Moharir M, Kausch M, Askalan R, MacGregor D, Stoll M, Torge A, Dlamini N, Ganesan V, Prenalder M, Singh J, Nowak-Göttl U. Recurrent stroke: the role of thrombophilia in a large international pediatric stroke population. *Haematologica*. 104(8):1676-1681, 2019

Kenet G, Cohen O, Bajorat T, Nowak-Göttl U. Insights into neonatal thrombosis. *Thromb Res* 2019;181, S1:S33-S36.

Male C, Lensing AWA, Palumbo JS, Kumar R, Nurmeev I, Hege K, Bonnet D, Connor P, Hooimeijer HL, Torres M, Chan AKC, **Kenet G**, Holzhauer S, Santamaría A, Amedro P, Chalmers E, Simioni P, Bhat RV, Yee DL, Lvova O, Beyer-Westendorf J, Biss TT, Martinelli I, Saracco P, Peters M, Kállay K, Gauger CA, Massicotte MP, Young G, Pap AF, Majumder M, Smith WT, Heubach JF, Berkowitz SD, Thelen K, Kubitza D, Crowther M, Prins MH, Monagle P; EINSTEIN-Jr Phase 3 Investigators. Rivaroxaban compared with standard anticoagulants for the treatment of acute venous thromboembolism in children: a randomised, controlled, phase 3 trial. *Lancet Haematol*. 2020;7(1):e18-e27.

van Ommen CH, Albisetti M, Chan AK, Estepp J, Jaffray J, **Kenet G**, Young G, Dave J, Grosso MA, Duggal A. The Edoxaban Hokusai VTE PEDIATRICS Study: An open-label, multicenter, randomized study of edoxaban for pediatric venous thromboembolic disease. *Res Pract Thromb Haemost*. 4:886-892, 2020.

Barg AA, **Kenet G**. Cancer associated thrombosis in pediatric patients. *Thromb Res*. S1:S22-S25, 2020.

Barg AA, Livnat T, Budnik I, Avishai E, Brutman-Barazani T, Tamarin I, Bashari D, Misgav M, **Kenet G**. Emicizumab treatment and monitoring in a paediatric cohort: real-world data. *Br J Haematol*. 2020;191(2):282-290.

Levy-Mendelovich S, Brutman-Barazani T, Budnik I, Avishai E, Barg AA, Levy T, Misgav M, Livnat T, **Kenet G**. Real-World Data on Bleeding Patterns of Hemophilia A Patients Treated with Emicizumab. *J Clin Med*. 2021, 22;10(19):4303.

Kenet G. Dabigatran etexilate and treatment of acute venous thromboembolism in children. *Lancet Haematol*. 2021 Jan;8(1):e2-e3

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(3):327-331.

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 Aug 23;22(16):9074.

Livnat, T., Weinberger, Y., Fernández, J. A., Bashir, A., Ben-David, G., Palevski, D., Levy-Mendelovich, S., **Kenet, G.**, Budnik, I., Nisgav, Y., Griffin, J. H., & Weinberger, D. (2021). Activated Protein C (APC) and 3K3A-APC-Induced Regression of Choroidal Neovascularization (CNV) Is Accompanied by Vascular Endothelial Growth Factor (VEGF) Reduction. *Biomolecules*, 11(3), 358. <https://doi.org/10.3390/biom11030358>

Additional Information: Research Support

Ongoing Research Support

Year	Granted by Inst/Co	Subject	PI	Amount
2020-2022	The Tel Aviv University Research Authority grant from the Meirbaum foundation	The protective effects of Activated Protein C (APC) in the retina	Livnat, T. PI Kenet, G. Co-PI	35,000 NIS
2020	Roche company Res grant	Evaluation of Hemlibra™ and its impact upon hemostasis. an <i>ex-vivo</i> thrombin generation guided study in patients with von willebrand disease	Kenet, G.	181,800 ILS
2020	Pfizer company Res grant	Anti TFPI for hemostasis induction in patients with rare bleeding disorders, an <i>ex-vivo</i> Thrombin Generation (TG) guided study	Kenet, G.	196,263 ILS
2020	Pfizer company Res grant	Thrombin generation assessment of COVID-19 patients- a potential predictor of thrombotic complications	Kenet, G.	179,010 ILS
2021	Pfizer company Res grant	Gene therapy for protein C deficiency in a murine model	Kenet G	170,820 ILS
2021	Roche company Res grant	Implementation of new tools for hemophilia data base	Kenet, G.	491,400 ILS

Completed Research Support

Years	Granted by Institute/Company	Subject / Co-Authors	Total Amount
2011-2013	The Tel Aviv University Research Authority grant from the Meirbaum foundation.	Development of a laboratory method for planning personalized combined medication therapy for hemophilia patients with inhibitors aimed at achieving effective hemostasis	37,000 ILS
2013	Bio Products Laboratory Limited (BPL)	Beyond the Bethesda assay - towards individualized FVIII therapy of inhibitor patients	100,000 Euro
2014-2015	The Tel Aviv University Research Authority grant from the Meirbaum foundation	Towards individualized interpretation of inhibitor patients' profiles: application of epitope mapping and development of new assays	38,000 ILS
2014-2015	Baxter company Res grant	Personalized therapy for hemophilia patients with inhibitors	100,000 USD
2015-2017	The Herman Shouder Research Fund: Tel Aviv University Research Authority	Evaluating the role of neutrophil extracellular traps (NETosis) in animal model of uveitis.	30,000 ILS
2016-2017	Pfizer company Res grant	Therapy tailoring for severe Hemophilia B patients with inhibitors – a thrombin generation/thromboelastography guided study.	52,000 Euro
2016	Bayer company Res grant	Comparative FVIII neutralization in plasma of hemophilia A patients with inhibitor- does pegylation affect rFVIII neutralization ?	55,000 USD
2016	Alnylam Pharmaceuticals, Inc. company Res grant	Ex vivo studies for hemophilia A patients with inhibitors, assessing impact of ALN-AT3, FVIII and rFVIIa - a Thrombin Generation (TG) based assay	50,140 USD
2019-2020	Claire and Amédée Maratier fund, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel	Activated protein C (APC) as a potential treatment for choroidal neovascularization (CNV); Is the anticoagulant activity necessary?	18,000 ILS