

Curriculum Vitae

Michael Jeltsch

Handledare för doktorandprogram, biträdande professor, andra skedet

Avdelningen för farmaceutiska biovetenskaper

Centret för hållbarhetsvetenskap (HELSUS)

Helsinki One Health (HOH)

Drug Research Program

Doctoral Programme in Drug Research

Doctoral Programme in Integrative Life Science

Adresstyp: Postadress.

PL 56 (Viikinkaari 5 E)

00014

Finland

Adresstyp: Postadress.

Finland

E-post: michael.jeltsch@helsinki.fi

Mobil: +358504486364

Telefon: +358294125514



Kvalifikationer

Protein Chemistry, Docent, Helsingfors universitet

21 dec. 2002 → 13 dec. 2011

Tilldelningsdatum: 13 dec. 2011

Biochemistry, Ph.D., Helsingfors universitet

17 maj 1997 → 20 dec. 2002

Tilldelningsdatum: 20 dec. 2002

Biochemistry, M.Sc., Helsingfors universitet

1995 → 16 maj 1997

Tilldelningsdatum: 16 maj 1997

Molecular Biology/Biochemistry, Vordiplom, University of Hamburg

1 sep. 1990 → 15 okt. 1992

Tilldelningsdatum: 15 okt. 1992

Baccalaureate, Gymnasium An Der Stenner, Iserlohn

4 aug. 1980 → 17 maj 1989

Tilldelningsdatum: 17 maj 1989

Forskningsledare (Principal Investigator)

Tidsperiod : 27.05.2013 - * i Medicum

Forskningsledare (Principal Investigator)

Tidsperiod : 01.08.2020 - * i Farmaceutiska fakulteten

Anställning

biträdande professor, andra skedet

Avdelningen för farmaceutiska biovetenskaper

Helsingfors universitet

Finland

1 aug. 2020 → present

Centret för hållbarhetsvetenskap (HELSUS)

Helsingfors universitet

Helsingin yliopisto, Finland

30 maj 2023 → present

Helsinki One Health (HOH)

Helsingfors universitet

HELSINGIN YLIOPISTO, Finland

9 sep. 2019 → present

Drug Research Program

Helsingfors universitet
Finland

1 aug. 2020 → present

Handledare för doktorandprogram

Doctoral Programme in Drug Research
Helsingfors universitet
Finland

1 jan. 2021 → present

Handledare för doktorandprogram

Doctoral Programme in Integrative Life Science
Helsingfors universitet
Finland

1 jan. 2021 → present

Postdoctoral Research Fellow

Wihuri Research Institute
Finland

1 jan. 2013 → 31 aug. 2013

Contract Researcher

Vegenics Limited

1 feb. 2007 → 1 dec. 2011

Researcher

Lymphatix Oy

Finland

1 apr. 2006 → 1 jan. 2007

Contract Researcher

Licentia Ltd

1 dec. 1999 → 1 dec. 2005

Research Assistant

Univ Hamburg, Heinrich Pette Inst Expt Virol & Immunol

Tyskland

1 jan. 1994 → 1 jan. 1995

Publikationer

Gliflozins, sucrose and flavonoids are allosteric activators of lecithin-cholesterol acyltransferase

Niemelä, A., Giorgi, L., Nouri, S., Yurttas, B., Rauniyar, K., Jeltsch, M. & Koivuniemi, A., dec. 2024, I: Scientific Reports. 14, 1, 26085.

Study of the Synergistic Immunomodulatory and Antifibrotic Effects of Dual-Loaded Budesonide and Serpine1 siRNA Lipid-Polymer Nanoparticles Targeting Macrophage Dysregulation in Tendinopathy

López-Cerdá, S., Molinaro, G., Pareja Tello, R., Rebelo Correia, A. M., König, S., Steinberger, P., Jeltsch, M., Hirvonen, J. T., Barreto, G., Stöckl, J. & Santos, H. A., 2024, I: ACS Applied Materials & Interfaces. 16, 15, s. 18643–18657 15 s.

The relationship between the secondary vascular system and the lymphatic vascular system in fish

Panara, V., Varaliová, Z., Wilting, J., Koltowska, K. & Jeltsch, M., 2024, I: *Biological Reviews*. 26 s.

Expansion and collapse of VEGF diversity in major clades of the animal kingdom

Rauniyar, K., Bokharaie, H. & Jeltsch, M., aug. 2023, I: *Angiogenesis*. 26, 3, s. 437-461 25 s.

Bioactive VEGF-C from *E. coli*

Rauniyar, K., Akhondzadeh, S., Gaciarz, A., Künnapuu, J. & Jeltsch, M., 28 okt. 2022, I: *Scientific Reports*. 12, 1, 16 s., 18157.

Lymphatic-to-blood vessel transdifferentiation in zebrafish

Jeltsch, M. & Alitalo, K., 25 maj 2022, I: *Nature Cardiovascular Research*. 1, s. 539-541 3 s.

KLK3 in the Regulation of Angiogenesis—Tumorigenic or Not?

Koistinen, H., Künnapuu-Vulli, J. & Jeltsch, M., 17 dec. 2021, I: *International Journal of Molecular Sciences*. 22, 24, 14 s., 13545.

Outside in and brakes off for lymphatic growth

Künnapuu-Vulli, J. & Jeltsch, M., 10 aug. 2021, I: *Science signaling*. 14, 695, 2 s., 5058.

Proteolytic Cleavages in the VEGF Family: Generating Diversity among Angiogenic VEGFs, Essential for the Activation of Lymphangiogenic VEGFs

Künnapuu, J., Bokharaie, H. & Jeltsch, M., feb. 2021, I: *Biology*. 10, 2, 23 s., 167.

VEGF-C protects the integrity of the bone marrow perivascular niche in mice

Fang, S., Chen, S., Nurmi, H., Leppänen, V.-M., Jeltsch, M., Scadden, D. T., Silberstein, L., Mikkola, H. & Alitalo, K., 15 okt. 2020, I: *Blood*. 136, 16, s. 1871–1883 13 s.

Investigation on the role of biallelic variants in VEGF-C found in a patient affected by Milroy-like lymphedema

Mukenge, S., Jha, S. K., Catena, M., Manara, E., Leppänen, V.-M., Lenti, E., Negrini, D., Bertelli, M., Brendolan, A., Jeltsch, M. & Aldrighetti, L., sep. 2020, I: *Molecular Genetics & Genomic Medicine*. 8, 9, 10 s., 1389.

Imusuonet ja silmä

Gucciardo, E., Lehti, T. A., Korhonen, A., Salven, P., Lehti, K., Jeltsch, M. & Loukovaara, S., 26 aug. 2020, I: *Duodecim*. 136, 16, s. 1777-1788 12 s.

Die proteolytische Aktivierung des Vaskulären Endothelzellwachstumsfaktors-C

Lackner, M., Schmotz, C. & Jeltsch, M., 18 dec. 2019, I: *Lymphologie in Forschung und Praxis*. 23, 2, s. 88 98 s.

KLK3/PSA and cathepsin D activate VEGF-C and VEGF-D

Jha, S. K., Rauniyar, K., Chronowska, E., Mattonet, K., Maina, E., Koistinen, H., Stenman, U. H., Alitalo, K. & Jeltsch, M., 17 maj 2019, I: *eLife*. 8, 30 s., 44478.

Was man in der Lymphologie über VEGF-C wissen sollte

Jeltsch, M., 1 juli 2018, I: *Vasomed : die Fachzeitschrift für Gefäßkrankungen*. 30, 4, s. 172-173 2 s.

Biology of Vascular Endothelial Growth Factor C in the Morphogenesis of Lymphatic Vessels

Rauniyar, K., Jha, S. K. & Jeltsch, M. M., 12 feb. 2018, I: *Frontiers in Bioengineering and Biotechnology*. 6, 12 s., 7.

Key molecules in lymphatic development, function, and identification

Jha, S. K., Rauniyar, K. & Jeltsch, M., 2018, I: *Annals of Anatomy*. 219, s. 25-34 10 s.

Efficient activation of the lymphangiogenic growth factor VEGF-C requires the C-terminal domain of VEGF-C and the N-terminal domain of CCBE1

Jha, S. K., Rauniyar, K., Kärpänen, T., Leppänen, V.-M., Brouillard, P., Vikkula, M., Alitalo, K. & Jeltsch, M., 7 juli 2017, I: *Scientific Reports*. 7, 13 s., 4916.

Factors regulating the substrate specificity of cytosolic phospholipase A(2)-alpha in vitro

Batchu, K. C., Hänninen, S., Jha, S. K., Jeltsch, M. & Somerharju, P., nov. 2016, I: *Biochimica and Biophysica Acta. Molecular and Cell Biology of Lipids*. 1861, 11, s. 1597-1604 8 s.

Functional Importance of a Proteoglycan Coreceptor in Pathologic Lymphangiogenesis

Johns, S. C., Yin, X., Jeltsch, M., Bishop, J. R., Schuksz, M., El Ghazal, R., Wilcox-Adelman, S. A., Alitalo, K. & Fuster, M. M., 8 juli 2016, I: *Circulation Research*. 119, 2, s. 210-+ 24 s.

From Molecular Genetics and Biology to Effective Treatments of Lymphatic Disorders

Jeltsch, M., 13 maj 2016, *The European Journal of Lymphology and Related Problems*. Vol. 28. s. 11 1 s.

Ischemia-Reperfusion Injury Enhances Lymphatic Endothelial VEGFR3 and Rejection in Cardiac Allografts

Dashkevich, A., Raissadati, A., Syrjala, S. O., Zarkada, G., Keranen, M. A. I., Tuuminen, R., Krebs, R., Anisimov, A., Jeltsch, M., Leppanen, V.-M., Alitalo, K., Nykanen, A. I. & Lemstrom, K. B., apr. 2016, I: *American Journal of Transplantation*. 16, 4, s. 1160-1172 13 s.

Lymphatic Vessels in Regenerative Medicine and Tissue Engineering

Schaupper, M., Jeltsch, M., Rohringer, S., Redl, H. & Holthoner, W., 2016, I: *Tissue Engineering. Part B. Reviews*. 22, 5, s. 395-407 13 s.

Methods and uses related to ADAMTS3

Alitalo, K., Jeltsch, M., Jha, S. K. & Tvorogov, D., 30 juli 2015, WIPO, Patentnr WO2015/110707, 30 juli 2015, Prioritetsdatum 24 jan. 2014, Prioritetsnummer 20145073 (FI)

Lymphangiogenesis in Health and Disease

Jeltsch, M., 13 maj 2015, *The European Journal of Lymphology and Related Problems*. Vol. 26. s. 8 1 s.

Functional Dissection of the CCBE1 Protein A Crucial Requirement for the Collagen Repeat Domain

Roukens, M. G., Peterson-Maduro, J., Padberg, Y., Jeltsch, M., Leppanen, V.-M., Bos, F. L., Alitalo, K., Schulte-Merker, S. & Schulte, D., 8 maj 2015, I: *Circulation Research*. 116, 10, s. 1660-U153 22 s.

Substrate Efflux Propensity Is the Key Determinant of Ca²⁺-independent Phospholipase A-beta (iPLA beta)-mediated Glycerophospholipid Hydrolysis

Batchu, K. C., Hokynar, K., Jeltsch, M., Somerharju, P. & Mattonet, K., 17 apr. 2015, I: *Journal of Biological Chemistry*. 290, 16, s. 10093-10103 11 s.

Therapeutic use of VEGF-C and CCBE1

Alitalo, K., Jeltsch, M. & Anisimov, A., 19 feb. 2015, WIPO, Patentnr WO2015/022447, 15 feb. 2015, Prioritetsdatum 14 aug. 2013, Prioritetsnummer 20135832 (FI)

Die genetischen Ursachen des primären Lymphödems: Erkrankungen des Lymphgefäßsystems

Wiltling, J., Jeltsch, M. & Mattonet, K., 2015, *Erkrankungen des Lymphgefäßsystems*. Weissleder, H. & Schuchhardt, C. (red.). 6 red. Cologne: Viavital Verlag, s. 210-229 20 s.

The TIE Receptor Family

Saharinen, P. I., Jeltsch, M. M., Santoyo, M. M., Leppänen, V.-M. & Alitalo, K. K., 2015, *Receptor Tyrosine Kinases: Family and Subfamilies*. Wheeler, D. L. & Yarden, Y. (red.). Springer-Verlag, s. 743-775 33 s.

Über die heterogene Herkunft des Lymphgefäßsystems

Jeltsch, M. M. & Mattonet, K., 2015, I: *Lymphologie in Forschung und Praxis*. 19, 2, s. 84-88 5 s.

CCBE1 Enhances Lymphangiogenesis via A Disintegrin and Metalloprotease With Thrombospondin Motifs-3-Mediated Vascular Endothelial Growth Factor-C Activation

Jeltsch, M., Jha, S. K., Tvorogov, D., Anisimov, A., Leppanen, V.-M., Holopainen, T., Kivela, R., Ortega, S., Karpanen, T. & Alitalo, K., 13 maj 2014, I: *Circulation* . 129, 19, s. 1962-1971 10 s.

Die lymphangiogenen Wachstumsfaktoren VEGF-C und VEGF-D: Teil 2: Die Rolle von VEGF-C und VEGF-D bei Krankheiten des Lymphgefäßsystems

Jeltsch, M., Lackner, M. & Krebs, R., 1 feb. 2014, I: *Vasomed : die Fachzeitschrift für Gefäßerkrankungen*. 26, 1, s. 48-50 3 s.

Die lymphangiogenen Wachstumsfaktoren VEGF-C und VEGF-D: Teil 1: Grundlagen und Embryonalentwicklung

Jeltsch, M. & Krebs, R., 1 dec. 2013, I: *Vasomed : die Fachzeitschrift für Gefäßerkrankungen*. 25, 6, s. 335-336 2 s.

Die lymphangiogenen Wachstumsfaktoren VEGF-C und VEGF-D. Teil 2. Die Rolle von VEGF-C und VEGF-D bei Krankheiten des Lymphgefäßsystems

Krebs, R. & Jeltsch, M., 1 dec. 2013, I: *Lymphologie in Forschung und Praxis*. 17, 2, s. 96-104 9 s.

Receptor Tyrosine Kinase-Mediated Angiogenesis

Jeltsch, M., Leppänen, V.-M., Saharinen, P. & Alitalo, K., sep. 2013, I: *Cold Spring Harbor Perspectives in Biology*. 5, 9, s. Article Number: a009183 22 s.

Structural and mechanistic insights into VEGF receptor 3 ligand binding and activation

Leppänen, V.-M., Tvorogov, D., Kisko, K., Prota, A. E., Jeltsch, M., Anisimov, A., Markovic-Mueller, S., Stutfeld, E., Goldie, K. N., Ballmer-Hofer, K. & Alitalo, K., 6 aug. 2013, I: *Proceedings of the National Academy of Sciences of the United States of America*. 110, 32, s. 12960-12965 6 s.

The Basis for the Distinct Biological Activities of Vascular Endothelial Growth Factor Receptor-1 Ligands

Anisimov, A., Leppanen, V.-M., Tvorogov, D., Zarkada, G., Jeltsch, M., Holopainen, T., Kaijalainen, S. & Alitalo, K., 2 juli 2013, I: *Science signaling*. 6, 282, s. ra52 10 s.

Use of VEGF-D gene to prevent restenosis

Alitalo, K. K., Ylä-Herttua, S., Hiltunen, M., Jeltsch, M. M. & Achen, M. G., 4 juni 2013, US Patent and Trademark Office, Patentnr US 8,455,453 B2, 4 juni 2013, Prioritetsdatum 26 okt. 1998, Prioritetsnummer 60/105,587

Die lymphangiogenen Wachstumsfaktoren VEGF-C und VEGF-D: Teil 1: Grundlagen und Embryonalentwicklung

Krebs, R. & Jeltsch, M., 1 juni 2013, I: *Lymphologie in Forschung und Praxis*. 17, 1, s. 30-37 8 s.

A truncation allele in vascular endothelial growth factor c reveals distinct modes of signaling during lymphatic and vascular development

Villefranc, J. A., Nicoli, S., Bentley, K., Jeltsch, M., Zarkada, G., Moore, J. C., Gerhardt, H., Alitalo, K. & Lawson, N. D., 1 apr. 2013, I: *Development*. 140, 7, s. 1497-1506 10 s.

Vascular Endothelial Growth Factor-Angiopoietin Chimera With Improved Properties for Therapeutic Angiogenesis

Anisimov, A., Tvorogov, D., Alitalo, A., Leppänen, V.-M., An, Y., Han, E. C., Orsenigo, F., Gaal, E. I., Holopainen, T., Koh, Y. J., Tammela, T., Korpisalo, P., Kesitalo, S., Jeltsch, M., Ylä-Herttua, S., Dejana, E., Koh, G. Y., Choi, C., Saharinen, P. & Alitalo, K., 2013, I: *Circulation* . 127, 4, s. 424-434 11 s.

Critical Role of VEGF-C/VEGFR-3 Signaling in Innate and Adaptive Immune Responses in Experimental Obliterative Bronchiolitis

Krebs, R., Tikkanen, J. M., Ropponen, J. O., Jeltsch, M., Jokinen, J. J., Ylä-Herttua, S., Nykanen, A. I. & Lemstrom, K. B., nov. 2012, I: *The American Journal of Pathology*. 181, 5, s. 1607-1620 14 s.

Materials and methods involving hybrid vascular endothelial growth factor DNAs and proteins

Alitalo, K. K. & Jeltsch, M., 2 okt. 2012, US Patent and Trademark Office, Patentnr US 8,278,098 B2, 2 okt. 2012, Prioritetsdatum 25 feb. 2000, Prioritetsnummer 60/185,205

VEGFR-2-specific forms of VEGF-D and VEGF-C and uses thereof

Alitalo, K. K., Jeltsch, M. M., Leppänen, V.-M., Aho, K. K., Anisimov, A. & Tvorogov, D., 5 juli 2012, WIPO, Patentnr WO2012/088563, 2 juli 2012, Prioritetsdatum 24 nov. 2010, Prioritetsnummer 61/458,517 (US)

Modified VEGF-A with improved angiogenic properties

Alitalo, K. K., Tammela, T. L. H., Keskitalo, S. E., Pajusola, K. M., Jeltsch, M. M., Ylä-Herttua, S., Kärpänen, T. H., Eriksson, U. & Uutela, M. J. T., 27 sep. 2011, US Patent and Trademark Office, Patentnr US 8,025,886 B2, 27 sep. 2011, Prioritetsdatum 15 aug. 2005, Prioritetsnummer 60/708,226

Structural determinants of vascular endothelial growth factor-D receptor binding and specificity

Leppänen, V.-M., Jeltsch, M., Anisimov, A., Tvorogov, D., Aho, K., Kalkkinen, N., Toivanen, P., Ylä-Herttua, S., Ballmer-Hofer, K. & Alitalo, K., 2011, I: Blood. 117, 5, s. 1507-1515 9 s.

Growth factor binding constructs, materials and methods

Alitalo, K. K. & Jeltsch, M. M., 21 dec. 2010, US Patent and Trademark Office, Patentnr US 7,855,178 B2, 21 dec. 2010, Prioritetsdatum 5 mars 2004, Prioritetsnummer 60/550,907

Claudin-like protein 24 interacts with the VEGFR-2 and VEGFR-3 pathways and regulates lymphatic vessel development

Saharinen, P. I., Heloterä, H., Miettinen, J., Norrmen, C., D Amico Lago, G. V., Jeltsch, M., Langenberg, T., Vandevelde, W., Ny, A., Dewerchin, M., Carmeliet, P. & Alitalo, K., 2010, I: Genes & Development. 24, 9, s. 875-880 6 s.

Effective suppression of vascular network formation by combination of antibodies blocking VEGFR ligand binding and receptor dimerization

Tvorogov, D., Anisimov, A., Zheng, W., Leppänen, V.-M., Tammela, T., Laurinavicius, S., Holthöner, W., Heloterä, H., Holopainen, T., Jeltsch, M., Kalkkinen, N., Lankinen, H., Ojala, P. M. & Alitalo, K., 2010, I: Cancer Cell. 18, 6, s. 630-640 11 s.

Structural determinants of growth factor binding and specificity by VEGF receptor 2

Leppänen, V.-M., Prota, A. E., Jeltsch, M., Anisimov, A., Kalkkinen, N., Strandin, T., Lankinen, H., Goldman, A., Ballmer-Hofer, K. & Alitalo, K., 2010, I: Proceedings of the National Academy of Sciences of the United States of America. 107, 6, s. 2425-2430 6 s.

Suppressive Effects of Vascular Endothelial Growth Factor-B on Tumor Growth in a Mouse Model of Pancreatic Neuroendocrine Tumorigenesis

Albrecht, I., Kopfstein, L., Strittmatter, K., Schomber, T., Falkevall, A., Hagberg, C. E., Lorentz, P., Jeltsch, M., Alitalo, K., Eriksson, U., Christofori, G. & Pietras, K., 2010, I: PLoS One. 5, 11, s. Article Number: e14109 13 s.

Vascular Endothelial Growth Factor-B Acts as a Coronary Growth Factor in Transgenic Rats Without Inducing Angiogenesis, Vascular Leak, or Inflammation

Bry, M., Kivelä, R., Holopainen, T., Anisimov, A., Tammela, T., Soronen, J., Silvola, J., Saraste, A., Jeltsch, M., Korpisalo, P., Carmeliet, P., Lemström, K. B., Shibuya, M., Ylä-Herttua, S., Alhonen, L., Mervaala, E., Andersson, L. C., Knuuti, J. & Alitalo, K., 2010, I: Circulation. 122, 17, s. 1725-1733 9 s.

Activated Forms of VEGF-C and VEGF-D Provide Improved Vascular Function in Skeletal Muscle

Anisimov, A., Alitalo, A., Korpisalo, P., Soronen, J., Kaijalainen, S., Leppänen, V.-M., Jeltsch, M., Ylä-Herttua, S. & Alitalo, K., 2009, I: Circulation Research. 104, s. 1302-U156 25 s.

VEGFR-3 fusion proteins

Alitalo, K. K. & Jeltsch, M. M., 9 sep. 2008, US Patent and Trademark Office, Patentnr US 7,422,741 B2, 9 sep. 2008, Prioritetsdatum 5 mars 2004, Prioritetsnummer 60/550,907

Overexpression of vascular endothelial growth factor-B in mouse heart alters cardiac lipid metabolism and induces myocardial hypertrophy

Kärpänen, T., Bry, M., Ollila, H., Seppänen-Laakso, T., Liimatta, E., Leskinen, H., Kivelä, R., Helkamaa, T., Merentie, M., Jeltsch, M., Paavonen, K., Andersson, L. C., Mervaala, E., Hassinen, I., Ylä-Herttua, S., Oresic, M. & Alitalo, K., 2008, I: Circulation Research. 103, 9, s. 1018-1026 9 s.

Reevaluation of the role of VEGF-B suggests a restricted role in the revascularization of the ischemic myocardium

Li, X., Tjwa, M., Van Hove, I., Enholm, B., Neven, E., Paavonen, K., Jeltsch, M., Juan, T. D., Sievers, R. E., Chorianopoulos, E., Wada, H., Vanwildemeersch, M., Noel, A., Foidart, J.-M., Springer, M. L., von Degenfeld, G., Dewerchin, M., Blau, H. M., Alitalo, K. & Eriksson, U. och 2 andra, Carmeliet, P. & Moons, L., 2008, I: *Arteriosclerosis, Thrombosis, and Vascular Biology*. 28, 9, s. 1614-1620 7 s.

The tyrosine kinase inhibitor cediranib blocks ligand-induced vascular endothelial growth factor receptor-3 activity and lymphangiogenesis

Heckman, C. A., Holopainen, T., Wirzenius, M., Keskitalo, S., Jeltsch, M., Ylä-Herttuala, S., Wedge, S. R., Jurgensmeier, J. M. & Alitalo, K., 2008, I: *Cancer Research*. 68, 12, s. 4754-4762 9 s.

Distinct architecture of lymphatic vessels induced by chimeric vascular endothelial growth factor-C/vascular endothelial growth factor heparin-binding domain fusion proteins

Tammela, T., He, Y., Lyytikä, J., Jeltsch, M., Markkanen, J., Pajusola, K., Ylä-Herttuala, S. & Alitalo, K., 2007, I: *Circulation Research*. 100, 10, s. 1468-1475 8 s.

Enhanced capillary formation stimulated by a chimeric vascular endothelial growth factor/vascular endothelial growth factor-C silk domain fusion protein

Keskitalo, S., Tammela, T., Lyytikä, J., Kärpänen, T., Jeltsch, M., Markkanen, J., Ylä-Herttuala, S. & Alitalo, K., 2007, I: *Circulation Research*. 100, 10, s. 1460-1467 8 s.

Functional interaction of VEGF-C and VEGF-D with neuropilin receptors

Kärpänen, T., Heckman, C. A., Keskitalo, S., Jeltsch, M., Ollila, H., Neufeld, G., Tamagnone, L. & Alitalo, K., 2006, I: *FASEB Journal*. 20, 9, s. 1462.1472 1 s.

Sigma-RBI Handbook of Receptor Classification and Signal Transduction: VEGF Receptors

Jeltsch, M. & Alitalo, K., 2006, 5. red. Natick, MA: Sigma-Aldrich Research Biotechnology, L.P. 3 s.

Vascular endothelial growth factor (VEGF)/VEGF-C mosaic molecules reveal specificity determinants and feature novel receptor binding patterns

Jeltsch, M., Kärpänen, T., Strandin, T., Aho, K., Lankinen, H. & Alitalo, K., 2006, I: *Journal of Biological Chemistry*. 281, 17, s. 12187-12195 9 s.

Use of VEGF-C to prevent restenosis

Alitalo, K. K., Ylä-Herttuala, S., Hiltunen, M., Jeltsch, M. M. & Achen, M. G., 25 okt. 2005, US Patent and Trademark Office, Patentnr US 6,958,147 B1, 25 okt. 2005, Prioritetsdatum 26 okt. 1998, Prioritetsnummer 60/105,587

Dual role of vascular endothelial growth factor in experimental obliterative bronchiolitis

Krebs, R., Tikkanen, J. M., Nykänen, A. I., Wood, J., Jeltsch, M., Ylä-Herttuala, S., Koskinen, P. K. & Lemström, K., 2005, I: *American Journal of Respiratory and Critical Care Medicine*. 171, 12, s. 1421-1429 9 s.

Pathogenesis of persistent lymphatic vessel hyperplasia in chronic airway inflammation

Baluk, P., Tammela, T., Ator, E., Lyubynska, N., Achen, M. G., Hicklin, D. J., Jeltsch, M., Petrova, T., Pytowski, B., Stackner, S. A., Ylä-Herttuala, S., Jackson, D. G., Alitalo, K. & McDonald, D. M., 2005, I: *Journal of Clinical Investigation*. 115, 2, s. 247-257 11 s.

Vascular endothelial cell growth factor receptor 3-mediated activation of lymphatic endothelium is crucial for tumor cell entry and spread via lymphatic vessels

He, Y., Rajantie, I., Pajusola, K., Jeltsch, M., Holopainen, T. T., Ylä-Herttuala, S., Harding, T., Jooss, K., Takahashi, T. & Alitalo, K., 2005, I: *Cancer Research*. 65, 11, s. 4739-4746 8 s.

Vascular endothelial growth factor C is required for sprouting of the first lymphatic vessels from embryonic veins

Kärkkäinen, M. J., Haiko, P., Sainio, K. M. H., Partanen, J. M., Taipale, J., Petrova, T. V., Jeltsch, M., Jackson, D. G., Talikka, M., Rauvala, H., Betsholtz, C. & Alitalo, K., 2004, I: *Nature immunology*. 5, 1, s. 74-80 7 s.

Genesis and pathogenesis of lymphatic vessels

Jeltsch, M., Tammela, T., Alitalo, K. & Wiltling, J., 2003, I: Cell and Tissue Research. 314, s. 69-84 16 s.

Intrinsic versus microenvironmental regulation of lymphatic endothelial cell phenotype and function

Veikkola, T., Lohela, M., Ikenberg, K., Makinen, T., Korff, T., Saaristo, A., Petrova, T., Jeltsch, M., Augustin, H. G. & Alitalo, K., 2003, I: FASEB Journal. 17, s. 2006-2013 8 s.

VEGF guides angiogenic sprouting utilizing endothelial tip cell filopodia

Gerhardt, H., Golding, M., Fruttiger, M., Ruhrberg, C., Lundkvist, A., Abramsson, A., Jeltsch, M., Mitchell, C., Alitalo, K., Shima, D. & Betsholtz, C., 2003, I: Journal of Cell Biology. 161, s. 1163-1177 15 s.

Glycosylated VEGF-B and method for increasing the amount of soluble VEGF-B: patent application

Jeltsch, M. M., Alitalo, K. K., Olofsson, B. & Eriksson, U., 6 juni 2002, US Patent and Trademark Office, Patentnr US 2001/0068694 A1, 6 juni 2002, Prioritetsdatum 26 juni 2000, Prioritetsnummer 60/220,824

Adenoviral VEGF-C overexpression induces blood vessel enlargement, tortuosity, and leakiness but no sprouting angiogenesis in the skin or mucous membranes

Saaristo, A., Veikkola, T., Enholm, B., Hytonen, M., Arola, J., Pajusola, K., Turunen, P., Jeltsch, M., Karkkainen, M. J., Kerjaschki, D., Bueler, H., Yla-Herttuala, S. & Alitalo, K., 2002, I: FASEB Journal. 16, s. 1041-1049 9 s.

Signalling via vascular endothelial growth factor receptor-3 is sufficient for lymphangiogenesis in transgenic mice

Veikkola, T. M., Jussila, L., Mäkinen, T. M., Kärpänen, T. H., Jeltsch, M., Petrova, T., Hajime, K., Hajime, K., Gavin, T., McDonald, D. M., Marc G, A., Stackner, S. A. & Alitalo, K., 15 mars 2001, I: EMBO Journal. 20, 6, s. 1223-1231 9 s.

Adenoviral expression of vascular endothelial growth factor-C induces lymphangiogenesis in the skin

Enholm, B., Karpanen, T., Jeltsch, M., Kubo, H., Stenback, F., Prevo, R., Jackson, D. G., Yla-Herttuala, S. & Alitalo, K., 2001, I: Circulation Research. 88, s. 623-629 7 s.

Signalling via VEGFR-3 is sufficient for lymphangiogenesis in transgenic mice.

Jussila, L., Veikkola, T., Jeltsch, M., Thurston, G., McDonald, D., Achen, M., Stackner, S. & Alitalo, K., 2001, I: Clinical Cancer Research. 7, s. 3762S-3762S 1 s.

Vascular endothelial growth factor-C-mediated lymphangiogenesis promotes tumour metastasis

Mandriota, S. J., Jussila, L., Jeltsch, M., Compagni, A., Baetens, D., Prevo, R., Banerji, S., Huarte, J., Montesano, R., Jackson, D. G., Orci, L., Alitalo, K., Christofori, G. & Pepper, M. S., 2001, I: EMBO Journal. 20, s. 672-682 11 s.

VEGF-C adenovirus gene transfer reduces intima formation in rabbits

Jeltsch, M., Hiltunen, M. O., Laitinen, M., Turunen, M. P., Hartikainen, J., Rissanen, T. T., Laukkanen, J., Niemi, M., Kossila, M., Häkkinen, T. P., Kivelä, A., Enholm, B. C., Mansukoski, H., Turunen, A.-M., Alitalo, K. & Ylä-Herttala, S., juli 2000, 1 red. 1 s. (Atherosclerosis; vol. 151, nr. 1)

Intravascular adenovirus-mediated VEGF-C gene transfer reduces neointima formation in balloon-denuded rabbit aorta

Hiltunen, M. O., Laitinen, M., Turunen, M. P., Jeltsch, M., Hartikainen, J., Rissanen, T. T., Laukkanen, J., Niemi, M., Kossila, M., Hakkinen, T. P., Kivela, A., Enholm, B., Mansukoski, H., Turunen, A. M., Alitalo, K. & Yla-Herttuala, S., 2000, I: Circulation . 102, s. 2262-2268 7 s.

Current biology of VEGF-B and VEGF-C

Olofsson, B., Jeltsch, M., Eriksson, U. & Alitalo, K., 1999, I: Current Opinion in Biotechnology. 1999/10, 6, s. 528-535 8 s.

Vascular endothelial growth factor B (VEGF-B) binds to VEGF receptor-1 and regulates plasminogen activator activity in endothelial cells

Olofsson, B., Korpelainen, E., Pepper, M. S., Mandriota, S. J., Aase, K., Kumar, V., Gunji, Y., Jeltsch, M., Shibuya, M., Alitalo, K. & Eriksson, U., 29 sep. 1998, I: Proceedings of the National Academy of Sciences of the United States of America. 1998/95, 20, s. 11709-11714 6 s.

Vascular endothelial growth factor D (VEGF-D) is a ligand for the tyrosine kinases VEGF receptor 2 (Flk1) and VEGF receptor 3 (Flt4)

Achen, M. G., Jeltsch, M., Kukk, E., Makinen, T., Vitali, A., Wilks, A. F., Alitalo, K. & Stacker, S. A., 1998, I: Proceedings of the National Academy of Sciences of the United States of America. 95, s. 548-553 6 s.

Vascular endothelial growth factor (VEGF)-C synergizes with basic fibroblast growth factor and VEGF in the induction of angiogenesis in vitro and alters endothelial cell extracellular proteolytic activity

Pepper, M. S., Mandriota, S. J., Jeltsch, M., Kumar, V. & Alitalo, K., 1998, I: Journal of Cellular Physiology. 177, s. 439-452 14 s.

Genomic organization of human and mouse genes for vascular endothelial growth factor C

Chilov, D., Kukk, E., Taira, S., Jeltsch, M., Kaukonen, J., Palotie, A., Joukov, V. & Alitalo, K., 1997, I: Journal of Biological Chemistry. 272, s. 25176-25183 8 s.

Hyperplasia of lymphatic vessels in VEGF-C transgenic mice

Jeltsch, M., Kaipainen, A., Joukov, V., Meng, X. J., Lakso, M., Rauvala, H., Swartz, M., Fukumura, D., Jain, R. K. & Alitalo, K., 1997, I: Science. 276, s. 1423-1425 3 s.

Proteolytic processing regulates receptor specificity and activity of VEGF-C

Joukov, V., Sorsa, T., Kumar, V., Jeltsch, M., Claesson-Welsh, L., Cao, Y. H., Saksela, O., Kalkkinen, N. & Alitalo, K., 1997, I: EMBO Journal. 16, s. 3898-3911 14 s.

Vascular endothelial growth factors VEGF-B and VEGF-C

Joukov, V., Kaipainen, A., Jeltsch, M., Pajusola, K., Olofsson, B., Kumar, V., Eriksson, U. & Alitalo, K., 1997, I: Journal of Cellular Physiology. 1997/173, s. 211-215 5 s.

VEGF and VEGF-C: Specific induction of angiogenesis and lymphangiogenesis in the differentiated avian chorioallantoic membrane

Oh, S. J., Jeltsch, M. M., Birkenhager, R., McCarthy, J. E. G., Weich, H. A., Christ, B., Alitalo, K. & Wiltling, J., 1997, I: Developmental Biology. 188, s. 96-109 14 s.

VEGF-C receptor binding and pattern of expression with VEGFR-3 suggests a role in lymphatic vascular development

Kukk, E., Lymboussaki, A., Taira, S., Kaipainen, A., Jeltsch, M., Joukov, V. & Alitalo, K., 1996, I: Sustainable Development. 122, s. 3829-3837 9 s.

Priser

Circulation's Best Paper Award 2015: Category "Basic Science"

Jeltsch, M. (!!Recipient), 8 nov. 2015

Innoopeli Prize 2022

Hanski, L. (!!Recipient), Airavaara, M. (!!Recipient), Bunker, A. E. (!!Recipient), Holmström, A.-R. (!!Recipient), Jeltsch, M. (!!Recipient), Rantamäki, T. (!!Recipient), Sikanen, T. (!!Recipient), Voutilainen, M. (!!Recipient), Lindstedt, H. P. (!!Recipient), Kuusinen, A. (!!Recipient), Haapalainen, J. T. V. (!!Recipient), Hintikka, S. J. (!!Recipient), Baramaki, I. (!!Recipient) & Kaukiainen, K. (!!Recipient), 9 dec. 2022

Mandatum Ph.D. Thesis Prize 2003

Jeltsch, M. (!!Recipient), 24 mars 2003

Medix Prize of the Minerva Foundation 1998: Best biomedical publication of the year from Finland

Jeltsch, M. (!!Recipient), 17 sep. 1998

Medix Prize of the Minerva Foundation 2004

Jeltsch, M. (!!Recipient), 22 sep. 2004

Medix Prize of the Minerva Foundation 2011

Jeltsch, M. (!!Recipient), 12 sep. 2011

TUKOKE

Bask, P. (!!Recipient), Siljander, O. (!!Recipient), Rasmus, P. (!!Recipient), Koppatz, N. (!!Recipient) & Jeltsch, M. (!!Recipient), 23 apr. 2021