RNA splicing in breast cancer progression

Koedoot, E.

List of Publications

Uncovering the signaling landscape controlling breast cancer cell migration identifies novel metastasis driver genes.
Koedoot E*, Fokkelman M*, Rogkoti VM*, Smid M, van de Sandt I, de Bont H, Pont C, Klip JE, Wink S, Timmermans MA, Wiemer EAC, Stoilov P, Foekens JA, Le Dévédec SE, Martens JWM, van de Water B.
Nat Commun. 2019 Jul 5;10(1):2983.

Splicing factors and hallmarks of breast cancer
Koedoot E, Wolters L, van de Water B and Le Dévédec SE.
Accepted for Oncotarget

Co-regulated gene expression of splicing factors as drivers of cancer progression.
Koedoot E, Smid M, Foekens JA, Martens JWM, Le Dévédec SE, van de Water B.
Sci Rep. 2019 Apr 2;9(1):5484.

Unraveling the spliceosomal control of breast cancer cell motility behavior.
Koedoot E, Smid M, Stoilov P, González-Prieto R, Vertegaal ACO, Martens JWM, Le Dévédec SE, van de Water B.
Ready for submission.

Splicing factors control triple-negative breast cancer cell mitosis through SUN2 interaction and sororin intron retention.
Koedoot E, van Steijn E, Vermeer M, González-Prieto R, Vertegaal ACO, Martens JWM, Le Dévédec SE1, van de Water B
In submission.

Differential reprogramming of breast cancer subtypes in 3D cultures and implications for sensitivity to targeted therapy.
Koedoot E, Wolters L, Smid M, Stoilov P, Burger GA, Herpers B, Yan K, Price LS, Foekens JA, Martens JWM, Le Dévédec SE, van de Water B.
In submission.

Migration rather than proliferation transcriptomic signatures are strongly associated with breast cancer patient survival.
Nair NU, Das A, Rogkoti VM, Fokkelman M, Marcotte R, de Jong CG, **Koedoot E**, Lee JS, Meilijson I, Hannenhalli S, Neel BG, de Water BV, Le Dévédec SE, Ruppin E.
Sci Rep. 2019 Jul 29;9(1):10989.

Comprehensive Landscape of Nrf2 and p53 Pathway Activation Dynamics by Oxidative Stress and DNA Damage.
Hiemstra S, Niemeijer M, **Koedoot E**, Wink S, Klip JE, Vlasveld M, de Zeeuw E, van Os B, White A, van de Water B.
Chem Res Toxicol. 2017 Apr 17;30(4):923-933.

Alternative signaling network activation through different insulin receptor family members caused by pro-mitogenic antidiabetic insulin analogues in human mammary epithelial cells.
ter Braak B, Wink S, **Koedoot E**, Pont C, Siezen C, van der Laan JW, van de Water B.
Breast Cancer Res. 2015 Jul 19;17:97.

Mammary gland tumor promotion by chronic administration of IGF1 and the insulin analogue AspB10 in the p53R270H/$^{+}$WAPCre mouse model.
ter Braak B, Siezen C, Speksnijder EN, **Koedoot E**, van Steeg H, Salvatori DC, van de Water B, van der Laan JW.
Breast Cancer Res. 2015 Feb 18;17:14.

Classifying the adverse mitogenic mode of action of insulin analogues using a novel mechanism-based genetically engineered human breast cancer cell panel.
ter Braak B, Siezen CL, Kannegieter N, **Koedoot E**, van de Water B, van der Laan JW.
Arch Toxicol. 2014 Apr;88(4):953-66.

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About the author

Esmee Koedoot was born in Barendrecht, the Netherlands, on 14th January 1992. At the Christelijke Scholengemeenschap Prins Maurits, se obtained her VWO diploma with a major in Natuur & Gezondheid (Nature & Health) and Natuur & Techniek (Nature & Technique) with the additional subject Management and Organization. She obtained her bachelor's and master's degree (cum laude) in Bio-Pharmaceutical Sciences at Leiden University. During her master program, she performed her first internship at the Leiden Academic Center for Drug Research (LACDR) in the division of Drug Discovery and Safety (DDS) investigating the carcinogenicity of insulin analogues. Her results were implemented in three scientific publications in Archives of Toxicology (one) and Breast Cancer Research (two). After this internship, she worked for three months at the LACDR in a collaborative project with Unilever to investigate the interaction between DNA damage and oxidative stress responses in drug-induced liver injury, resulting in a publication in Chemical Research in Toxicology. Her second internship was in the Ludwig Institute for Cancer Research, Oxford, United Kingdom, where she studied the localization of Brn-2 in melanoma. During her literature study she investigated the potential use of liposomes as a universal delivery system for influenza vaccines. Upon acquiring her master's degree, she started with her PhD project investigating the role of RNA splicing in breast cancer progression under supervision of Prof. Bob van de Water and Dr. Sylvia Le Dévédec at the LACDR, Leiden University in the division of DDS. Currently, she is employed as a scientist at Charles River Laboratories, Leiden, The Netherlands.