

Improving immunotherapy for melanoma: models, biomarkers and regulatory T cells

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List of publications

IMPemBra: a phase 2 study comparing pembrolizumab with intermittent/ short-term dual MAPK pathway inhibition plus pembrolizumab in patients with melanoma harboring the BRAF^{V600} mutation.

Rozeman EA, Versluis JM, Sikorska K, Hoefsmit EP, Dimitriadis P, <u>Rao D</u>, Lacroix R, Grijpink-Ongering LG, Lopez-Yurda M, Heeres BC, van de Wiel BA, Flohil C, Sari A, Heijmink SWTPJ, van den Broek D, Broeks A, de Groot JWB, Vollebergh MA, Wilgenhof S, van Thienen JV, Haanen JBAG, Blank CU.

J Immunother Cancer. 2023 Jul;11(7):e006821. doi: 10.1136/jitc-2023-006821.

IFN-γ signature enables selection of neoadjuvant treatment in patients with stage III melanoma.

Reijers ILM^{*}, <u>Rao D^{*}</u>, Versluis JM, Menzies AM, Dimitriadis P, Wouters MW, Spillane AJ, Klop WMC, Broeks A, Bosch LJW, Lopez-Yurda M, van Houdt WJ, Rawson RV, Grijpink-Ongering LG, Gonzalez M, Cornelissen S, Bouwman J, Sanders J, Plasmeijer E, Elshot YS, Scolyer RA, van de Wiel BA, Peeper DS, van Akkooi ACJ, Long GV, Blank CU. J Exp Med. 2023 May 1;220(5):e20221952. doi: 10.1084/jem.20221952.

Acidity-mediated induction of FoxP3⁺ regulatory T cells.

<u>Rao D</u>, Stunnenberg JA, Lacroix R, Dimitriadis P, Kaplon J, Verburg F, van Royen PT, Hoefsmit EP, Renner K, Blank CU^{*}, Peeper DS^{*}.

Eur J Immunol. 2023 Feb 14:e2250258. doi: 10.1002/eji.202250258.

Inhibitor of apoptosis proteins (IAP) antagonist induces T-cell proliferation after cross-presentation by dendritic cells.

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Cancer Immunol Res. 2023 Feb 8:CIR-22-0494. doi: 10.1158/2326-6066.CIR-22-0494.

MeVa2.1.dOVA and MeVa2.2.dOVA: two novel BRAF^{V600E}-driven mouse melanoma cell lines to study tumor immune resistance.

<u>Rao D</u>, Lacroix R, Rooker A, Gomes T, Stunnenberg JA, Valenti M, Dimitriadis P, Lin CP, de Bruijn B, Krijgsman O, Ligtenberg MA, Peeper DS^{*}, Blank CU^{*}.

Melanoma Res. 2023 Feb 1;33(1):12-26. doi: 10.1097/CMR.00000000000863.

Metabolic profiles of regulatory T cells in the tumour microenvironment.

<u>Rao D</u>, Verburg F, Renner K, Peeper DS, Lacroix R, Blank CU. Cancer Immunol Immunother. 2021 Sep;70(9):2417-2427. doi: 10.1007/s00262-021-02881-z

B cells and tertiary lymphoid structures promote immunotherapy response.

Helmink BA, Reddy SM, Gao J, Zhang S, Basar R, Thakur R, Yizhak K, Sade-Feldman M, Blando J, Han G, Gopalakrishnan V, Xi Y, Zhao H, Amaria RN, Tawbi HA, Cogdill AP, Liu W, LeBleu VS, Kugeratski FG, Patel S, Davies MA, Hwu P, Lee JE, Gershenwald JE, Lucci A, Arora R, Woodman S, Keung EZ, Gaudreau PO, Reuben A, Spencer CN, Burton EM, Haydu LE, Lazar AJ, Zapassodi R, Hudgens CW, Ledesma DA, Ong S, Bailey M, Warren S, <u>Rao D</u>, Krijgsman O, Rozeman EA, Peeper D, Blank CU, Schumacher TN, Butterfield LH, Zelazowska MA, McBride KM, Kalluri R, Allison J, Petitprez F, Fridman WH, Sautès-Fridman C, Hacohen N, Rezvani K, Sharma P, Tetzlaff MT, Wang L, Wargo JA. Nature. 2020 Jan;577(7791):549-555. doi: 10.1038/s41586-019-1922-8.

* Equal contribution

Curriculum vitae

Disha Rao was born on the 27th of August 1992, in Bangalore, India. She completed high school at Canara School, Mangalore, in 2008 and pre-university at Mount Carmel College, Bangalore, in 2010. She obtained her bachelor's degree in Biotechnology Engineering from R V College of Engineering, Bangalore, in 2014. Thereafter, Disha worked in the Drug Discovery Lab at Biocon Research Ltd., Bangalore, where she explored the efficacy and Fc functions of CD6 blocking monoclonal antibody in autoimmune disorders. Supported by the Swedish Institute Scholarship, Disha pursued a master's program in Biomedicine at Karolinska Institute in Stockholm, which she completed in 2018. During her internship in the group of Prof. dr. Rolf Kiessling, she studied the potential role of soluble CRIPTO1 as a prognostic biomarker in melanoma. Her master's thesis was conducted in the groups of Prof. dr. Rolf Kiessling and Prof. dr. Andreas Lundqvist and involved identification of T cell reactivity to tumor associated antigens in the peripheral blood of patients with advanced stage melanoma. Since 2018, Disha started working at the Netherlands Cancer Institute as a PhD candidate. She was jointly supervised by Prof. dr. Christian U. Blank and Prof. dr. Daniel S. Peeper. The work conducted during this time has been described in this thesis. From 2023 onwards, Disha will work as Scientist Il at Charles River Laboratories, Leiden,

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