

2023 SigN Publications (with impact factor >4)

Last updated: 20 December 2023

[Impact factor of immunology journals \(JCR 2022\)](#)

Adriani G, Cappello P, Lovisa S. Editorial: Preclinical models and emerging technologies to study the effects of the tumor microenvironment on cancer heterogeneity and drug resistance. *Front Oncol*. 2023 Sep 28;13:1289756.

Bied M, Ho WW, Ginhoux F, Blériot C. Roles of macrophages in tumor development: a spatiotemporal perspective. *Cell Mol Immunol*. 2023 Jul 10.

Blériot C, Dalmas É, Ginhoux F, Venteclef N. Inflammatory and immune etiology of type 2 diabetes. *Trends Immunol*. 2023 Feb;44(2):101-109.

Brouiller F, Nadalin F, Bonté PE, Ait-Mohamed O, Delaugerre C, Lelièvre JD, Ginhoux F, Ruffin N, Benaroch P. Single-cell RNA-seq analysis reveals dual sensing of HIV-1 in blood Axl⁺ dendritic cells. *iScience*. 2023 Jan 20;26(2):106019.

Cansever D, Petrova E, Krishnarajah S, Mussak C, Welsh CA, Mildemberger W, Mulder K, Kreiner V, Roussel E, Stifter SA, Andreadou M, Zwicky P, Jurado NP, Rehrauer H, Tan G, Liu Z, Blériot C, Ronchi F, Macpherson AJ, Ginhoux F, Natalucci G, Becher B, Greter M. Lactation-associated macrophages exist in murine mammary tissue and human milk. *Nat Immunol*. 2023 Jul;24(7):1098-1109.

Caronni N, La Terza F, Vittoria FM, Barbiera G, Mezzanzanica L, Cuzzola V, Barresi S, Pellegatta M, Canevazzi P, Dunsmore G, Leonardi C, Montaldo E, Lusito E, Dugnani E, Citro A, Ng MSF, Schiavo Lena M, Drago D, Andolfo A, Brugiapaglia S, Scagliotti A, Mortellaro A, Corbo V, Liu Z, Mondino A, Dellabona P, Piemonti L, Taveggia C, Doglioni C, Cappello P, Novelli F, Iannacone M, Ng LG, Ginhoux F, Crippa S, Falconi M, Bonini C, Naldini L, Genua M, Ostuni R. IL-1 β ⁺ macrophages fuel pathogenic inflammation in pancreatic cancer. *Nature*. 2023 Nov;623(7986):415-422.

Chang ZW, Goh YS, Rouers A, Fong SW, Tay MZ, Chavatte JM, Hor PX, Loh CY, Huang Y, Tan YJ, Neo V, Kam IKJ, Yeo NK, Tan EX, Huang D, Wang B, Salleh SNM, Ngoh EZX, Wang CI, Leo YS, Lin RTP, Lye DCB, Young BE, Muthiah M, Ng LFP, Rénia L; COVID-19 Study Group. Third dose of BNT162b2 improves immune response in liver transplant recipients to ancestral strain but not Omicron BA.1 and XBB. *Front Immunol*. 2023 Jul 3;14:1206016.

Chua C, Sethi R, Ong J, Low JH, Yew YW, Tay A, Howland SW, Ginhoux F, Chen J, Common JEA, Andiappan AK. Late inflammatory monocytes define circulatory immune dysregulation observed in skin microbiome-stratified atopic dermatitis. *J Dermatol Sci*. 2023 Nov 3:S0923-1811(23)00236-0.

Chen J, Gascoigne N, Borger JG. Singapore's diverse immunology landscape: interconnected research networks enabling blue sky ideas through to translation. *Immunol Cell Biol*. 2023 Aug 7.

Chen Z, Tong L, Neo SY, Li S, Gao J, Schlisio S, Lundqvist A. CD25^{bright} NK cells display superior function and metabolic activity under regulatory T cell-mediated suppression. *Oncoimmunology*. 2023 Mar 22;12(1):2175517.

Cheung CCL, Seah YHJ, Fang J, Orpilla NHC, Lau MC, Lim CJ, Lim X, Lee JNLW, Lim JCT, Lim S, Cheng Q, Toh HC, Choo SP, Lee SY, Lee JJX, Liu J, Lim TKH, Tai D, Yeong J. Immunohistochemical scoring of LAG-

3 in conjunction with CD8 in the tumor microenvironment predicts response to immunotherapy in hepatocellular carcinoma. *Front Immunol*. 2023 Jun 5;14:1150985.

Cismas S, Pasca S, Crudden C, Troccoli Drakensjo I, Suleymanova N, Zhang S, Gebhard B, Song D, Neo S, Shibano T, Smith TJ, Calin GA, Girnita A, Girnita L. Competing engagement of β -arrestin isoforms balances IGF1R/p53 signaling and controls melanoma cell chemotherapeutic responsiveness. *Mol Cancer Res*. 2023 Aug 16:MCR-22-0871.

Coenen I, de Jong E, Jones AC, Khoo SK, Foo S, Howland SW, Ginhoux F, Le Souëf PN, Holt PG, Strickland DH, Laing IA, Leffler J. Impaired interferon response in plasmacytoid dendritic cells from children with persistent wheeze. *J Allergy Clin Immunol*. 2023 Dec 16:S0091-6749(23)02448-X.

Du BX, Long Y, Li X, Wu M, Shi JY. CMMS-GCL: Cross-Modality Metabolic Stability Prediction with Graph Contrastive Learning. *Bioinformatics*. 2023 Aug 12:btad503.

Duan X, Boo ZZ, Chua SL, Chong KHC, Long Z, Yang R, Zhou Y, Janela B, Chotirmall SH, Ginhoux F, Hu Q, Wu B, Yang L. A Bacterial Quorum Sensing Regulated Protease Inhibits Host Immune Responses by Cleaving Death Domains of Innate Immune Adaptors. *Adv Sci (Weinh)*. 2023 Oct 23:e2304891

Evrard M, Becht E, Fonseca R, Obers A, Park SL, Ghabdan-Zanluqui N, Schroeder J, Christo SN, Schienstock D, Lai J, Burn TN, Clatch A, House IG, Beavis P, Kallies A, Ginhoux F, Mueller SN, Gottardo R, Newell EW, Mackay LK. Single-cell protein expression profiling resolves circulating and resident memory T cell diversity across tissues and infection contexts. *Immunity*. 2023 Jun 27:S1074-7613(23)00262-5.

Fan Z, Chang J, Liang Y, Zhu H, Zhang C, Zheng D, Wang J, Xu Y, Li QJ, Hu H. Neural mechanism underlying depressive-like state associated with social status loss. *Cell*. 2023 Feb 2;186(3):560-576.e17.

Fong SW, Goh YS, Torres-Ruesta A, Chang ZW, Chan YH, Neo VK, Lee B, Duan K, Amrun SN, Yeo NK, Chen HV, Tay MZ, Carissimo G; COVID-19 Study Group; NCID Study Group; Tan SY, Leo YS, Lye DC, Renia L, Young BE, Ng LFP. Prolonged inflammation in patients hospitalized for coronavirus disease 2019 (COVID-19) resolves 2 years after infection. *J Med Virol*. 2023 May;95(5):e28774.

Gainullina A, Mogilenko DA, Huang LH, Todorov H, Narang V, Kim KW, Yng LS, Kent A, Jia B, Seddu K, Krcma K, Wu J, Crozat K, Tomasello E, Dress R, See P, Scott C, Gibbings S, Bajpai G, Desai JV, Maier B, This S, Wang P, Aguilar SV, Poupel L, Dussaud S, Zhou TA, Angeli V, Blander JM, Choi K, Dalod M, Dzhagalov I, Gautier EL, Jakubzick C, Lavine K, Lionakis MS, Paidassi H, Sieweke MH, Ginhoux F, Williams M, Benoist C, Merad M, Randolph GJ, Sergushichev A, Artyomov MN; ImmGen Consortium. Network analysis of large-scale ImmGen and Tabula Muris datasets highlights metabolic diversity of tissue mononuclear phagocytes. *Cell Rep*. 2023 Jan 27;42(2):112046.

Gautam N, Wojciech L, Yap J, Chua YL, Ding EM, Sim DC, Tan AS, Ahl PJ, Prasad M, Tung DW, Connolly JE, Adriani G, Brzostek J, Gascoigne NR. Themis controls T cell activation, effector functions, and metabolism of peripheral CD8+ T cells. *Life Sci Alliance*. 2023 Sep 22;6(12):e202302156.

Giustarini G, Teng G, Pavesi A, Adriani G. Characterization of 3D heterocellular spheroids of pancreatic ductal adenocarcinoma for the study of cell interactions in the tumor immune microenvironment. *Front Oncol*. 2023 Jul 14;13:1156769.

Goh YS, Fong SW, Tay MZ, Rouers A, Chang ZW, Chavatte JM, Hor PX, Loh CY, Huang Y, Tan YJ, Wang B, Ngoh EZX, Mohd Salleh SN, Lee RTC, Lim G; NCID Study Group; COVID-Study Group; Maurer-Stroh S, Wang CI, Leo YS, Lin RTP, Lam MC, Lye DC, Young BE, Ng LFP, Renia L. Higher Delta variant-specific neutralizing antibodies prevented infection in close contacts vaccinated with ancestral mRNA vaccines during the SARS-CoV-2 Delta wave. *Sci Rep*. 2023 Nov 7;13(1):19331.

Goh YS, Fong SW, Hor PX, Loh CY, Wang B, Salleh SNM, Ngoh EZX, Lee RTC, Poh XY, Rao S, Chia PY, Ong SWX, Lee TH, Lim C, Teo J, Pada S, Sun LJ, Ong DLS, Somani J, Lee ES, Maurer-Stroh S, Wang CI, Leo YS, Lye DC, Young BE, Ng LFP, Renia L; NCID Study Group; COVID-19 Cohort Study Group. Variant-specific IgA protects against Omicron infection. *J Infect Dis*. 2023 Nov 23:jiad525.

Grey AC, Lin Q, Low TY, Wu W, Haynes PA, Chung MCM, Chen YJ, Cordwell SJ, Ishihama Y, Xu P, Hoffmann P, Kwon HJ, Poon TCW. 11th Asia Oceania Human Proteome Organization (AOHUPO) Congress Report. *Mol Cell Proteomics*. 2023 Jul 31:100627.

Guan XL, Loh JY, Lizwan M, Chan SCM, Kwan JMC, Lim TP, Koh TH, Hsu LY, Lee BTK. LipidA-IDER to Explore the Global Lipid A Repertoire of Drug-Resistant Gram-Negative Bacteria. *Anal Chem*. 2023 Jan 17;95(2):602-611.

Haberman ER, Sarker G, Arús BA, Ziegler KA, Meunier S, Martínez-Sánchez N, Freiburgerová E, Yilmaz-Özcan S, Fernández-González I, Zentai C, O'Brien CJO, Grainger DE, Sidarta-Oliveira D, Chakarov S, Raimondi A, Iannaccone M, Engelhardt S, López M, Ginhoux F, Domingos AI. Immunomodulatory leptin receptor+ sympathetic perineurial barrier cells protect against obesity by facilitating brown adipose tissue thermogenesis. *Immunity*. 2023 Dec 5:S1074-7613(23)00488-0.

Hamashima K, Wong KW, Sam TW, Teo JHJ, Taneja R, Le MTN, Li QJ, Hanna JH, Li H, Loh YH. Single-nucleus multiomic mapping of m6A methylomes and transcriptomes in native populations of cells with sn-m6A-CT. *Mol Cell*. 2023 Aug 25:S1097-2765(23)00649-4.

Honda T, Kabashima K, Kunisawa J. Exploring the roles of prostanoids, leukotriens, and dietary fatty acids in cutaneous inflammatory diseases: Insights from pharmacological and genetic approaches. *Immunol Rev*. 2023 Feb 23. [Epub ahead of print]

Hong JH, Yong CH, Heng HL, Chan JY, Lau MC, Chen J, Lee JY, Lim AH, Li Z, Guan P, Chu PL, Boot A, Ng SR, Yao X, Wee FYT, Lim JCT, Liu W, Wang P, Xiao R, Zeng X, Sun Y, Koh J, Kwek XY, Ng CCY, Klanrit P, Zhang Y, Lai J, Tai DWM, Pairojkul C, Dima S, Popescu I, Hsieh SY, Yu MC, Yeong J, Kongpetch S, Jusakul A, Loilome W, Tan P, Tan J, Teh BT. Integrative multiomics enhancer activity profiling identifies therapeutic vulnerabilities in cholangiocarcinoma of different etiologies. *Gut*. 2023 Nov 24:gutjnl-2023-330483.

Hoppe MM, Jaynes P, Shuangyi F, Peng Y, Sridhar S, Hoang PM, Liu CX, De Mel S, Poon L, Chan EHL, Lee J, Ong CK, Tang T, Lim ST, Nagarajan C, Grigoropoulos NF, Tan SY, Hue SS, Chang ST, Chuang SS, Li S, Khoury JD, Choi H, Harris C, Bottos A, Gay LJ, Runge HFP, Moutsopoulos I, Mohorianu I, Hodson DJ, Farinha P, Mottok A, Scott DW, Pitt JJ, Chen J, Kumar G, Kannan K, Chng WJ, Chee YL, Ng SB, Tripodo C, Jeyasekharan AD. Patterns of Oncogene Coexpression at Single-Cell Resolution Influence Survival in Lymphoma. *Cancer Discov*. 2023 May 4;13(5):1144-1163.

Huan X, Zhuo N, Lee HY, Ren EC. Allopurinol non-covalently facilitates binding of unconventional peptides to HLA-B*58:01. *Sci Rep*. 2023 Jun 9;13(1):9373

Huang H, Li Y, Zhang G, Ruan GX, Zhu Z, Chen W, Zou J, Zhang R, Wang J, Ouyang Y, Xu S, Ou X. The RNA-binding protein hnRNP F is required for the germinal center B cell response. *Nat Commun*. 2023 Mar 30;14(1):1731.

Jahmunah V, Chen S, Oh SL, Acharya UR, Chowbay B. Automated warfarin dose prediction for Asian, American, and Caucasian populations using a deep neural network. *Comput Biol Med*. 2023 Feb;153:106548.

Kalimuddin S, Chan YFZ, Sessions OM, Chan KR, Ong EZ, Low JG, Bertolotti A, Ooi EE. An experimental medicine decipher of a minimum correlate of cellular immunity: Study protocol for a double-blind randomized controlled trial. *Front Immunol*. 2023 Mar 10;14:1135979.

Karnik I, Her Z, Neo SH, Liu WN, Chen Q. Emerging Preclinical Applications of Humanized Mouse Models in the Discovery and Validation of Novel Immunotherapeutics and Their Mechanisms of Action for Improved Cancer Treatment. *Pharmaceutics*. 2023 May 26;15(6):1600.

Kandasamy K, Johana NB, Tan LG, Tan Y, Yeo JSL, Yusof NNB, Li Z, Koh J, Ginhoux F, Chan JKY, Choolani M, Mattar CNZ. Maternal dendritic cells influence fetal allograft response following murine in-utero hematopoietic stem cell transplantation. *Stem Cell Res Ther*. 2023 May 24;14(1):136.

Kaya NA, Tai D, Lim X, Lim JQ, Lau MC, Goh D, Phua CZJ, Wee FYT, Joseph CR, Lim JCT, Neo ZW, Ye J, Cheung L, Lee J, Loke KSH, Gogna A, Yao F, Lee MY, Shuen TWH, Toh HC, Hilmer A, Chan YS, Lim TK, Tam WL, Choo SP, Yeong J, Zhai W. Multimodal molecular landscape of response to Y90-resin microsphere radioembolization followed by nivolumab for advanced hepatocellular carcinoma. *J Immunother Cancer*. 2023 Aug;11(8):e007106.

Keith YH, Egawa G, Honda T, Kabashima K. Mast cells in type 2 skin inflammation - maintenance and function. *Eur J Immunol*. 2023 Mar 18:e2250359.

Lam MSY, Reales-Calderon JA, Ow JR, Aw JYJ, Tan D, Vijayakumar R, Ceccarello E, Tabaglio T, Lim YT, Chien WL, Lai F, Tanoto AT, Chen Q, Sobota RM, Adriani G, Bertolotti A, Guccione E, Pavesi A. G9a/GLP inhibition during ex vivo lymphocyte expansion increases in vivo cytotoxicity of engineered T cells against hepatocellular carcinoma. *Nat Commun*. 2023 Feb 2;14(1):563.

LaMarche NM, Hegde S, Park MD, Maier BB, Troncoso L, Le Berichel J, Hamon P, Belabed M, Mattiuz R, Hennequin C, Chin T, Reid AM, Reyes-Torres I, Nemeth E, Zhang R, Olson OC, Doroshov DB, Rohs NC, Gomez JE, Veluswamy R, Hall N, Venturini N, Ginhoux F, Liu Z, Buckup M, Figueiredo I, Roudko V, Miyake K, Karasuyama H, Gonzalez-Kozlova E, Gnjatic S, Passequé E, Kim-Schulze S, Brown BD, Hirsch FR, Kim BS, Marron TU, Merad M. An IL-4 signalling axis in bone marrow drives pro-tumorigenic myelopoiesis. *Nature*. 2023 Dec 6.

Lee NYS, Li M, Ang KS, Chen J. Establishing a human bone marrow single cell reference atlas to study ageing and diseases. *Front Immunol*. 2023 Mar 15;14:1127879.

Lee RY, Wu Y, Goh D, Tan V, Ng CW, Lim JCT, Lau MC, Yeong JPS. Application of Artificial Intelligence to In Vitro Tumor Modeling and Characterization of the Tumor Microenvironment. *Adv Healthc Mater*. 2023 Apr 15:e2202457.

Lee RY, Ng CW, Rajapakse MP, Ang N, Yeong JPS, Lau MC. The promise and challenge of spatial omics in dissecting tumour microenvironment and the role of AI. *Front Oncol*. 2023 May 1;13:1172314.

Lee WWL, Puan KJ, Lee B, Chua C, Koh SM, Yusof N, Tan KP, Luis BS, Ong J, Merid SK, Ang R, Chan XY, Hui LJ, Terenzani E, Lum J, Foo S, Zolezzi F, Yan ATS, Melen E, Yi SJ, Rotzschke O, Andiappan AK. Eosinophilic allergic rhinitis is strongly associated with the CD45RBlo subset of CD161+ Th2 cells that secretes IL-2, IL-3, IL-4, IL-5, IL-9, and IL-13. *Allergy*. 2023 Aug 7

Leung NYT, Wang LW. Targeting Metabolic Vulnerabilities in Epstein-Barr Virus-Driven Proliferative Diseases. *Cancers (Basel)*. 2023 Jun 29;15(13):3412.

Li L, Cui L, Lin P, Liu Z, Bao S, Ma X, Nan H, Zhu W, Cen J, Mao Y, Ma X, Jiang L, Nie Y, Ginhoux F, Li Y, Li H, Hui L. Kupffer-cell-derived IL-6 is repurposed for hepatocyte dedifferentiation via activating progenitor genes from injury-specific enhancers. *Cell Stem Cell*. 2023 Mar 2;30(3):283-299.e9.

Li M, Ng M, Ng LG. Firing up neutrophil anti-tumor immunity with cocktails. *Cancer Cell*. 2023 Feb 13;41(2):227-229.

Liang Y, Pan C, Yin T, Wang L, Gao X, Wang E, Quang H, Huang D, Tan L, Xiang K, Wang Y, Alexander PB, Li QJ, Yao TP, Zhang Z, Wang XF. Branched-Chain Amino Acid Accumulation Fuels the Senescence-Associated Secretory Phenotype. *Adv Sci (Weinh)*. 2023 Nov 15:e2303489.

Liu M, Bertolazzi G, Mulder K, Sridhar S, Lee RX, Patrick Jaynes P, Hoppe MM, Fan S, Yanfen Peng Y, Thng J, Chua R, De Mel S, Poon L, Chan E, Lee J, Hue SSS, Ng SB, Chandy KG, Ginhoux F, Chee YL, Tripodo C, Jeyasekharan AD. Spatially-Resolved Transcriptomics Define Clinically Relevant Subsets of Macrophages in Diffuse Large B-cell Lymphoma. *MedRxiv*. 2023.03.05.23286445

Liu Z, Wang H, Li Z, Dress RJ, Zhu Y, Zhang S, De Feo D, Kong WT, Cai P, Shin A, Piot C, Yu J, Gu Y, Zhang M, Gao C, Chen L, Wang H, Vétillard M, Guermontprez P, Kwok I, Ng LG, Chakarov S, Schlitzer A, Becher B, Dutertre CA, Su B, Ginhoux F. Dendritic cell type 3 arises from Ly6C+ monocyte-dendritic cell progenitors. *Immunity*. 2023 Aug 8;56(8):1761-1777.e6.

Loh HP, Mahfut FB, Chen SW, Huang Y, Huo J, Zhang W, Lam KP, Xu S, Yang Y. Manufacturability and functionality assessment of different formats of T-cell engaging bispecific antibodies. *MAbs*. 2023 Jan-Dec;15(1):2231129.

Loh JT, Lam KP. Fungal infections: Immune defense, immunotherapies and vaccines. *Adv Drug Deliv Rev*. 2023 Mar 14;196:114775.

Loh JT, Teo JKH, Kannan S, Verma CS, Lim HH, Lam KP. Disrupting the Dok3-Card9 Interaction with Synthetic Peptides Enhances Antifungal Effector Functions of Human Neutrophils. *Pharmaceutics*. 2023 Jun 21;15(7):1780.

Loh JT, Teo JKH, Kannan S, Verma CS, Andiappan AK, Lim HH, Lam KP. DOK3 promotes atopic dermatitis by enabling the phosphatase PP4C to inhibit the T cell signaling mediator CARD11. *Sci Signal*. 2023 Oct 31;16(809):eadg5171.

Long Y, Ang KS, Li M, Chong KLK, Sethi R, Zhong C, Xu H, Ong Z, Sachaphibulkij K, Chen A, Zeng L, Fu H, Wu M, Lim LHK, Liu L, Chen J. Spatially informed clustering, integration, and deconvolution of spatial transcriptomics with GraphST. *Nat Commun*. 2023 Mar 1;14(1):1155.

Ludi Z, Sule AA, Samy RP, Putera I, Schrijver B, Hutchinson PE, Gunaratne J, Verma I, Singhal A, Nora RD, van Hagen PM, Dik WA, Gupta V, Agrawal R. Diagnosis and biomarkers for ocular tuberculosis: From the present into the future. *Theranostics*. 2023 Apr 1;13(7):2088-2113.

Martinez N, Smulan LJ, Jameson ML, Smith CM, Cavallo K, Bellerose M, Williams J, West K, Sasseti CM, Singhal A, Kornfeld H. Glycerol contributes to tuberculosis susceptibility in male mice with type 2 diabetes. *Nat Commun*. 2023 Sep 20;14(1):5840.

McKendrick JG, Jones GR, Elder SS, Watson E, T'Jonck W, Mercer E, Magalhaes MS, Rocchi C, Hegarty LM, Johnson AL, Schneider C, Becher B, Pridans C, Mabbott N, Liu Z, Ginhoux F, Bajenoff M, Gentek R, Bain CC, Emmerson E. CSF1R-dependent macrophages in the salivary gland are essential for epithelial regeneration after radiation-induced injury. *Sci Immunol*. 2023 Nov 3;8(89):eadd4374.

Miao B, Hu Z, Mezzadra R, Hoeijmakers L, Fauster A, Du S, Yang Z, Sator-Schmitt M, Engel H, Li X, Broderick C, Jin G, Gomez-Eerland R, Rozeman L, Lei X, Matsuo H, Yang C, Hofland I, Peters D, Broeks A, Laport E, Fitz A, Zhao X, Mahmoud MAA, Ma X, Sander S, Liu HK, Cui G, Gan Y, Wu W, Xiao Y, Heck AJR, Guan W, Lowe SW, Horlings HM, Wang C, Brummelkamp TR, Blank CU, Schumacher TNM, Sun C. CMTM6 shapes antitumor T cell response through modulating protein expression of CD58 and PD-L1. *Cancer Cell*. 2023 Aug 31:S1535-6108(23)00284-2.

Miao N, Wang Z, Wang Q, Xie H, Yang N, Wang Y, Wang J, Kang H, Bai W, Wang Y, He R, Yan K, Wang Y, Hu Q, Liu Z, Li F, Wang F, Ginhoux F, Zhang X, Yin J, Lu L, Wang J. Oxidized mitochondrial DNA induces gasdermin D oligomerization in systemic lupus erythematosus. *Nat Commun*. 2023 Feb 16;14(1):872.

Neo SY, Xu S, Chong J, Lam KP, Wu J. Harnessing novel strategies and cell types to overcome immune tolerance during adoptive cell therapy in cancer. *J Immunother Cancer*. 2023 Apr;11(4):e006434. doi: 10.1136/jitc-2022-006434.

Ng LG, Liu Z, Kwok I, Ginhoux F. Origin and Heterogeneity of Tissue Myeloid Cells: A Focus on GMP-Derived Monocytes and Neutrophils. *Annu Rev Immunol*. 2023 Apr 26;41:375-404.

Om Naphade, Kaitlyn Barham, Richard Spencer, Nancy C. Baker, Todd J. Zurlinden, Katerine S. Saili, Kelly Carstens, Aymeric Silvin, Florent Ginhoux, Thomas B. Knudsen. Microglial Dynamics, Blood-Brain Barrier Morphogenesis, and Developmental Toxicity: a brief review and computational model. *Current Opinion in Toxicology*, 2023, 36: 100419.

Orr ME, Kotkowski E, Ramirez P, Bair-Kelps D, Liu Q, Brenner C, Schmidt MS, Fox PT, Larbi A, Tan C, Wong G, Gelfond J, Frost B, Espinoza S, Musi N, Powers B. A randomized placebo-controlled trial of nicotinamide riboside in older adults with mild cognitive impairment. *Geroscience*. 2023 Nov 23.

Park DS, Kozaki T, Tiwari SK, Moreira M, Khalilnezhad A, Torta F, Olivié N, Thiam CH, Liani O, Silvin A, Phoo WW, Gao L, Triebel A, Tham WK, Gonçalves L, Kong WT, Raman S, Zhang XM, Dunsmore G, Dutertre CA, Lee S, Ong JM, Balachander A, Khalilnezhad S, Lum J, Duan K, Lim ZM, Tan L, Low I, Utami KH, Yeo XY, Di Tommaso S, Dupuy JW, Varga B, Karadottir RT, Madathummal MC, Bonne I, Malleret B, Binte ZY, Wei Da N, Tan Y, Wong WJ, Zhang J, Chen J, Sobota RM, Howland SW, Ng LG, Saltel F, Castel D, Grill J, Minard V, Albani S, Chan JKY, Thion MS, Jung SY, Wenk MR, Pouladi MA, Pasqualini C, Angeli V, Cexus ONF, Ginhoux F. iPS-cell-derived microglia promote brain organoid maturation via cholesterol transfer. *Nature*. 2023 Nov;623(7986):397-405.

Peiseler M, Araujo David B, Zindel J, Surewaard BGJ, Lee WY, Heymann F, Nusse Y, Castanheira FVS, Shim R, Guillot A, Bruneau A, Atif J, Perciani C, Ohland C, Ganguli Mukherjee P, Niehrs A, Thuenauer R, Altfeld M, Amrein M, Liu Z, Gordon PMK, McCoy K, Deniset J, MacParland S, Ginhoux F, Tacke F, Kubers P. Kupffer cell-like syncytia replenish resident macrophage function in the fibrotic liver. *Science*. 2023 Sep 8;381(6662):eabq5202.

Quah HS, Cao EY, Suteja L, Li CH, Leong HS, Chong FT, Gupta S, Arcinas C, Ouyang JF, Ang V, Celhar T, Zhao Y, Tay HC, Chan J, Takahashi T, Tan DSW, Biswas SK, Rackham OJL, Iyer NG. Single cell analysis in head and neck cancer reveals potential immune evasion mechanisms during early metastasis. *Nat Commun*. 2023 Mar 27;14(1):1680.

Ramirez-Valdez RA, Baharom F, Khalilnezhad A, Fussell SC, Hermans DJ, Schragger AM, Tobin KKS, Lynn GM, Khalilnezhad S, Ginhoux F, Van den Eynde BJ, Leung CSK, Ishizuka AS, Seder RA. Intravenous heterologous prime-boost vaccination activates innate and adaptive immunity to promote tumor regression. *Cell Rep*. 2023 Jun 4;42(6):112599.

Ren EC, Zhuo NZ, Goh ZY, Bonne I, Malleret B, Ko HL. cccDNA-Targeted Drug Screen Reveals a Class of Antihistamines as Suppressors of HBV Genome Levels. *Biomolecules*. 2023 Sep 24;13(10):1438.

Roefs MT, Bauzá-Martinez J, van de Wakker SI, Qin J, Olijve WT, Tuinte R, Rozeboom M, Snijders Blok C, Mol EA, Wu W, Vader P, Sluijter JPG. Cardiac progenitor cell-derived extracellular vesicles promote angiogenesis through both associated- and co-isolated proteins. *Commun Biol*. 2023 Aug 1;6(1):800.

Shafi AM, Végvári Á, Howland SW, Zubarev RA, Rénia L, Penha-Gonçalves C. Brain endothelial cells exposure to malaria parasites links type I interferon signalling to antigen presentation, immunoproteasome activation, endothelium disruption, and cellular metabolism. *Front Immunol*. 13 March 2023

Shi X, Zhu J, Long Y, Liang C. Identifying spatial domains of spatially resolved transcriptomics via multi-view graph convolutional networks. *Brief Bioinform*. 2023 Aug 7:bbad278.

Siddiqui AA, Peter S, Ngoh EZX, Wang CI, Ng S, Dangerfield JA, Gunzburg WH, Dröge P, Makhija H. A versatile genomic transgenesis platform with enhanced λ integrase for human Expi293F cells. *Front Bioeng Biotechnol*. 2023 Jun 22;11:1198465.

Sieow JL, Penny HL, Gun SY, Tan LQ, Duan K, Yeong JPS, Pang A, Lim D, Toh HC, Lim TKH, Engleman E, Rotzschke O, Ng LG, Chen J, Tan SM, Wong SC. Conditional Knockout of Hypoxia-Inducible Factor 1-Alpha in Tumor-Infiltrating Neutrophils Protects against Pancreatic Ductal Adenocarcinoma. *Int J Mol Sci*. 2023 Jan 1;24(1):753.

Silvin A, Qian J, Ginhoux F. Brain macrophage development, diversity and dysregulation in health and disease. *Cell Mol Immunol*. 2023 Jun 26.

Strickland M, Lee S, Neo SY, Balachander A, Low I, Mustafah S, Goh WI, Wright GD, Larbi A, Pender SLF. Mitochondrial Dysfunction in CD4⁺ T Effector Memory RA⁺ Cells. *Biology (Basel)*. 2023 Apr 14;12(4):597.

Sun C, Wen K, Zhang B, Dong Y, Chen C, Neo SY, Leng B, Gao TT, Wu J. DSC2 suppresses the growth of gastric cancer through the inhibition of nuclear translocation of γ -catenin and PTEN/PI3K/AKT signaling pathway. *Aging (Albany NY)*. 2023 Jul 8;15.

Takahashi S, Ochiai S, Jin J, Takahashi N, Toshima S, Ishigame H, Kabashima K, Kubo M, Nakayama M, Shiroguchi K, Okada T. Sensory neuronal STAT3 is critical for IL-31 receptor expression and inflammatory itch. *Cell Rep*. 2023 Nov 28:113433.

Tadepalli S, Clements DR, Saravanan S, Arroyo Hornero R, Lütke A, Blackmore B, Paulo JA, Gottfried-Blackmore A, Seong D, Park S, Chan L, Kopecky BJ, Liu Z, Ginhoux F, Lavine KJ, Murphy JP, Mack M,

Graves EE, Idoyaga J. Rapid recruitment and IFN-I-mediated activation of monocytes dictate focal radiotherapy efficacy. *Sci Immunol*. 2023 Jun 2;8(84):eadd7446.

Tan CY, Chiew CJ, Pang D, Lee VJ, Ong B, Wang LF, Ren EC, Lye DC, Tan KB. Effectiveness of bivalent mRNA vaccines against medically attended symptomatic SARS-CoV-2 infection and COVID-19-related hospital admission among SARS-CoV-2-naive and previously infected individuals: a retrospective cohort study. *Lancet Infect Dis*. 2023 Aug 2:S1473-3099(23)00373-0.

Tan I, Xu S, Huo J, Huang Y, Lim HH, Lam KP. *J Biol Chem*. 2023 Jun 9:104906.

Tan JHL, Hwang YY, Chin HX, Liu M, Tan SY, Chen Q. Towards a better preclinical cancer model - human immune aging in humanized mice. *Immun Ageing*. 2023 Sep 27;20(1):49.

Tauber M, Basso L, Martin J, Bostan L, Pinto MM, Thierry GR, Houmadi R, Serhan N, Loste A, Blériot C, Kamphuis JBJ, Grujic M, Kjellén L, Pejler G, Paul C, Dong X, Galli SJ, Reber LL, Ginhoux F, Bajenoff M, Gentek R, Gaudenzio N. Landscape of mast cell populations across organs in mice and humans. *J Exp Med*. 2023 Oct 2;220(10):e20230570.

Tay MZ, Goh YS, Fong SW, Chang ZW, Rouers A, Wong N, Torres-Ruesta A, Huang Y, Selvam SK, Hor PX, Loh CY, Wang B, Mohd Salleh SN, Ngoh EZX, Lee RTC, Neo V, Kam IKJ, Poh XY, Rao S, Chia PY, Ong SWX, Lee TH, Lim C, Teo J; NCID Study Group; PRIBIVAC Cohort Study Group; Maurer-Stroh S, Wang CI, Leo YS, Lin RTP, Lye DC, Young BE, Ng LFP, Renia L. Heterologous mRNA vaccine boosters induce a stronger and longer-lasting antibody response against Omicron XBB variant. *Lancet Reg Health West Pac*. 2023 Apr;33:100732.

Tay SH, Stephenson MC, Allameen NA, Ngo RYS, Ismail NAB, Wang VCC, Totman JJ, Cheong DL, Narayanan S, Lee BTK, Mak A. Combining Multimodal Magnetic Resonance Brain Imaging and Machine Learning to Unravel Neurocognitive Function in Non-Neuropsychiatric Systemic Lupus Erythematosus. *Rheumatology (Oxford)*. 2023 May 15:kead221.

Tay SH, Zharkova O, Lee HY, Toh MMX, Libau EA, Celhar T, Narayanan S, Ahl PJ, Ong WY, Joseph C, Lim JCT, Wang L, Larbi A, Liang S, Lateef A, Akira S, Ling LH, Thamboo TP, Yeong JPS, Lee BTK, Edwards SW, Wright HL, MacAry PA, Connolly JE, Fairhurst AM. Platelet TLR7 is essential for the formation of platelet-neutrophil complexes and low-density neutrophils in lupus nephritis. *Rheumatology (Oxford)*. 2023 Jun 21:kead296.

Teo KYW, Zhang S, Loh JT, Lai RC, Hey HWD, Lam KP, Lim SK, Toh WS. Mesenchymal Stromal Cell Exosomes Mediate M2-like Macrophage Polarization through CD73/Ecto-5'-Nucleotidase Activity. *Pharmaceutics*. 2023 May 13;15(5):1489.

Tong L, Kremer V, Neo SY, Liu Y, Chen Y, Wagner AK, Yang Y, Chen Z, Seitz C, Tobin NP, Ligtenberg MA, Alici E, Chen X, Haglund F, Seliger B, Harmenberg U, Colón E, Plogell AS, Liu LL, Lundqvist A. Renal cell carcinoma escapes NK cell-mediated immune surveillance through the downregulation of DNAM-1. *Cancer Commun (Lond)*. 2023 Jun 14.

Tulsian NK, Palur RV, Qian X, Gu Y, D/O Shunmuganathan B, Samsudin F, Wong YH, Lin J, Purushotorman K, Kozma MM, Wang B, Lescar J, Wang CI, Gupta RK, Bond PJ, MacAry PA. Defining neutralization and allostery by antibodies against COVID-19 variants. *Nat Commun*. 2023 Nov 1;14(1):6967.

Vanneste D, Bai Q, Hasan S, Peng W, Pirottin D, Schyns J, Maréchal P, Ruscitti C, Meunier M, Liu Z, Legrand C, Fievez L, Ginhoux F, Radermecker C, Bureau F, Marichal T. MafB-restricted local monocyte proliferation precedes lung interstitial macrophage differentiation. *Nat Immunol*. 2023 Mar 16. [Epub ahead of print]

Veldhoen M, Bertoletti A. SARS-CoV-2 clearance after breakthrough infection correlates with fit and happy T cells. *Immunol Cell Biol*. 2023 May 22.

Viola MF, Chavero-Pieres M, Modave E, Delfini M, Stakenborg N, Estévez MC, Fabre N, Appeltans I, Martens T, Vandereyken K, Theobald H, Van Herck J, Petry P, Verheijden S, De Schepper S, Sifrim A, Liu Z, Ginhoux F, Azhar M, Schlitzer A, Matteoli G, Kierdorf K, Prinz M, Berghe PV, Voet T, Boeckxstaens G. Dedicated macrophages organize and maintain the enteric nervous system. *Nature*. 2023 Jun 14.

von Richthofen HJ, Westerlaken GHA, Gollnast D, Besteman S, Delemarre EM, Rodenburg K, Moerer P, Stapels DAC, Andiappan AK, Röttschke O, Nierkens S, Leavis HL, Bont LJ, Rooijackers SHM, Meyaard L. Soluble Signal Inhibitory Receptor on Leukocytes-1 Is Released from Activated Neutrophils by Proteinase 3 Cleavage. *J Immunol*. 2023 Feb 15;210(4):389-397.

Wang B, Luo J, Liu Y, Shi W, Xiong Z, Shen C, Long Y. Spatial-MGCN: a novel multi-view graph convolutional network for identifying spatial domains with attention mechanism. *Brief Bioinform*. 2023 Jul 18:bbad262.

Wang CQ, Choy FC, Sanny A, Murakami T, Tan AH, Lam KP. An Inhibitory Role for Human CD96 Endodomain in T Cell Anti-Tumor Responses. *Cells*. 2023 Jan 13;12(2):309.

Wang Z, Wu Z, Wang H, Feng R, Wang G, Li M, Wang SY, Chen X, Su Y, Wang J, Zhang W, Bao Y, Lan Z, Song Z, Wang Y, Luo X, Zhao L, Hou A, Tian S, Gao H, Miao W, Liu Y, Wang H, Yin C, Ji ZL, Feng M, Liu H, Diao L, Amit I, Chen Y, Zeng Y, Ginhoux F, Wu X, Zhu Y, Li H. An immune cell atlas reveals the dynamics of human macrophage specification during prenatal development. *Cell*. 2023 Sep 6:S0092-8674(23)00908-X.

Wu S, Chen J, Teo BHD, Wee SYK, Wong MHM, Cui J, Chen J, Leong KP, Lu J. The axis of complement C1 and nucleolus in antinuclear autoimmunity. *Front Immunol*. 2023 Jun 9;14:1196544.

Wu W, Krijgsveld J. Secretome analysis: Reading cellular sign language to understand intercellular communication. *Mol Cell Proteomics*. 2023 Dec 9:100692.

Xu H, Yi X, Fan X, Wu C, Wang W, Chu X, Zhang S, Dong X, Wang Z, Wang J, Zhou Y, Zhao K, Yao H, Zheng N, Wang J, Chen Y, Plewczynski D, Sham PC, Chen K, Huang D, Li MJ. Inferring CTCF-binding patterns and anchored loops across human tissues and cell types. *Patterns (N Y)*. 2023 Jul 12;4(8):100798.

Xue Y, San Luis B, Dress RJ, Murad KBA, Ginhoux F, Barker N, Lane D. Proteasome inhibitor bortezomib stabilizes and activates p53 in hematopoietic stem/progenitors and double-negative T cells in vivo. *Proc Natl Acad Sci U S A*. 2023 Mar 28;120(13):e2219978120.

Yan X, Zheng R, Chen J, Li M. scNCL: transferring labels from scRNA-seq to scATAC-seq data with neighborhood contrastive regularization. *Bioinformatics*. 2023 Aug 1;39(8):btad505.

Yashchenko A, Bland SJ, Song CJ, Ahmed UKB, Sharp R, Darby IG, Cordova AM, Smith ME, Lever JM, Li Z, Aloria EJ, Khan S, Maryam B, Liu S, Crowley MR, Jones KL, Zenewicz LA, George JF, Mrug M, Crossman

DK, Hopp K, Stavrakis S, Humphrey MB, Ginhoux F, Zimmerman KA. Cx3cr1 controls kidney resident macrophage heterogeneity. *Front Immunol*. 2023 May 15;14:1082078.

Yau JNN, Adriani G. Three-dimensional heterotypic colorectal cancer spheroid models for evaluation of drug response. *Front Oncol*. 2023 Jul 4;13:1148930.

Zhang B, Zhang B, Lai RC, Sim WK, Lam KP, Lim SK. MSC-sEV Treatment Polarizes Pro-Fibrotic M2 Macrophages without Exacerbating Liver Fibrosis in NASH. *Int J Mol Sci*. 2023 Apr 30;24(9):8092.

Zhang C, Kalaitidou E, Damen JMA, Grond R, Rabouille C, Wu W. Novel Components of the Stress Assembly Sec Body Identified by Proximity Labeling. *Cells*. 2023 Mar 30;12(7):1055.

Zhang M, Lam KP, Xu S. Natural Killer Cell Engagers (NKCEs): a new frontier in cancer immunotherapy. *Front Immunol*. 2023 Aug 9;14:1207276.

Zhang R, Wang D, Ruan GX, Wang R, Li Y, Chen W, Huang H, Wang J, Meng L, Zhu Z, Lei D, Xu S, Ou X. Spliceosome component PHD finger 5A is essential for the early B lymphopoiesis. *Development*. 2023 Dec 14;dev.202247.

Zhao J, Lee K, Toh HC, Lam KP, Neo SY. Unravelling the role of obesity and lipids during tumor progression. *Front Pharmacol*. 2023 Mar 30;14:1163160.

Zheng X, Wang X, Cheng X, Liu Z, Yin Y, Li X, Huang Z, Wang Z, Guo W, Ginhoux F, Li Z, Zhang Z, Wang X. Single-cell analyses implicate ascites in remodeling the ecosystems of primary and metastatic tumors in ovarian cancer. *Nat Cancer*. 2023 Jul 24.

Ziegler-Heitbrock L, Ohteki T, Ginhoux F, Shortman K, Spits H. Reply to 'Reclassification of plasmacytoid dendritic cells as innate lymphocytes is premature'. *Nat Rev Immunol*. 2023 Mar 23. [Epub ahead of print]