

2025 SIgN Publications (with impact factor >4)

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Impact factor of immunology journals (JCR 2024)

Behmoaras J, Mulder K, Ginhoux F, Petretto E. The spatial and temporal activation of macrophages during fibrosis. *Nat Rev Immunol*. 2025 Jun 4.

Carrera-Bravo C, Zhou T, Chu T, Hang JW, Modh H, Huang C, Zhang S, Hao H, Cabada-García MJ, Malleret B, Wacker MG, Wang JW, Rénia L, Tan KSW. Chloroquine induces eryptosis in *P. falciparum*-infected red blood cells and the release of extracellular vesicles with a unique protein profile. *Front Cell Infect Microbiol*. 2025 May 26;15:1553123.

Chan FHM, Yeap HW, Liu Z, Rosli SN, Low KE, Bonne I, Wu Y, Chong SZ, Chen KW. Plasticity of cell death pathways ensures GSDMD activation during *Yersinia pseudotuberculosis* infection. *Cell Rep*. 2025 Jan 16;44(1):115216.

Cheng JN, Jin Z, Su C, Jiang T, Zheng X, Guo J, Li X, Chu H, Jia J, Zhou Q, Ding X, Zhang Y, Xu S, Dong F, Zhang Q, Yang X, Yang T, Cheng X, Zha H, Chen D, Wan YY, Liu X, Ye L, Tang H, Symonds ALJ, Li QJ, Jia Q, Zhu B. Bone metastases diminish extraosseous response to checkpoint blockade immunotherapy through osteopontin-producing osteoclasts. *Cancer Cell*. 2025 Apr 17:S1535-6108(25)00137-0.

Cipta NO, Zeng Y, Wong KW, Zheng ZH, Yi Y, Warrier T, Teo JZ, Teo JJJ, Kok YJ, Bi X, Taneja R, Ong DST, Xu J, Ginhoux F, Li H, Liou YC, Loh YH. Rewiring of SINE-MIR enhancer topology and Esrrb modulation in expanded and naive pluripotency. *Genome Biol*. 2025 Apr 28;26(1):107.

Corral D, Ansaldo E, Delaleu J, Pichler AC, Kabat J, Oguz C, Teijeiro A, Yong D, Abid M, Rivera CA, Link VM, Yang K, Chi L, Nie J, Kamenyeva O, Fan Y, Chan JKY, Ginhoux F, Bosselut R, Belkaid Y. Mammary intraepithelial lymphocytes promote lactogenesis and offspring fitness. *Cell*. 2025 Feb 11:S0092-8674(25)00097-2.

Hoppe R, Winter S, Lo WY, Michailidou K, Bolla MK, Keeman R, Wang Q, Dennis J, Lush M, Kalari KR, Goetz MP, Wang L, Cairns J, Weinshilboum R, Shepherd L, Chen BE, Häberle L, Ruebner M, Beckmann MW, He W, Larson NL, Armasu SM, Schroth W, Chowbay B, Khor CC, Abubakar M, Antoniou AC, Brüning T, Castelao JE, Chang-Claude J, Nbcs Collaborators, Dörk T, Eccles DM, Figueroa JD, Gago-Dominguez M, García-Sáenz JA, Gündert M, Hack CC, Hamann U, Han S, Hooning MJ, Huebner H, Abctb Investigators, John EM, Ko YD, Kristensen VN, Linn S, Margolin S, Mavroudis D, Nevanlinna H, Neven P, Obi N, Park-Simon TW, Pylkäs K, Rashid MU, Romero A, Saloustros E, Sawyer EJ, Tapper WJ, Tomlinson I, Wendt C, Winqvist R, Dunning AM, Simard J, Hall P, Pharoah PDP, Schwab M, Couch FJ, Czene K, Fasching PA, Easton DF, Schmidt MK, Ingle JN, Brauch H. Lessons learned from a candidate gene study investigating aromatase inhibitor treatment outcome in breast cancer. *NPJ Breast Cancer*. 2025 Feb 19;11(1):18.

Huang H, Balzer NR, Seep L, Splichalova I, Blank-Stein N, Viola MF, Franco Taveras E, Acil K, Fink D, Petrovic F, Makdissi N, Bayar S, Mauel K, Radwaniak C, Zurkovic J, Kayvanjoo AH, Wunderling K, Jessen M, Yaghmour MH, Kenner L, Ulas T, Grein S, Schultze JL, Scott CL, Guilliams M, Liu Z, Ginhoux F, Beyer MD, Thiele C, Meissner F, Hasenauer J, Wachten D, Mass E. Kupffer cell programming by maternal obesity triggers fatty liver disease. *Nature*. 2025 Jun 18

Jia G, He P, Dai T, Goh D, Wang J, Sun M, Wee F, Li F, Lim JCT, Hao S, Liu Y, Lim TKH, Ngo NT, Tao Q, Wang W, Umar A, Nashan B, Zhang Y, Ding C, Yeong J, Liu L, Sun C. Spatial immune scoring system predicts hepatocellular carcinoma recurrence. *Nature*. 2025 Mar 12.

Kalimuddin S, Tham CYL, Chan YFZ, Hang SK, Kunasegaran K, Chia A, Chan CYY, Ng DHL, Sim JXY, Tan HC, Syenina A, Ngoh AQ, Hamis NZ, Chew V, Leong YS, Yee JX, Low JG, Chan KR, Ong EZ, Bertoletti A, Ooi EE. Vaccine-induced T cell responses control Orthoflavivirus challenge infection without neutralizing antibodies in humans. *Nat Microbiol*. 2025 Jan 10.

Kim JS, Trzebanski S, Shin SH, Schori L, Frumer Friedman GR, Ilani NC, Kadam A, Vicario R, Aust O, Bugaeva P, Piatek S, Ismajli LK, Hoffmann CJ, Scheller M, Boura-Halfon S, Kaushansky N, Golani O, Solomon A, Liu Z, Amann L, Böhm-Sturm P, Koch SP, Wenger N; Netherlands Brain Bank; Ginhoux F, Prinz M, Avraham R, Harms C, Geissmann F, Müller-Tidow C, Uderhardt S, Milenkovic I, Shlush L, Jung S. Clonal hematopoiesis-associated motoric deficits caused by monocyte-derived microglia accumulating in aging mice. *Cell Rep*. 2025 Apr 24;44(5):115609.

Kock KH, Tan LM, Han KY, Ando Y, Jevapatarakul D, Chatterjee A, Lin QXX, Buyamin EV, Sonthalia R, Rajagopalan D, Tomofuji Y, Sankaran S, Park MS, Abe M, Chantaraamporn J, Furukawa S, Ghosh S, Inoue G, Kojima M, Kouno T, Lim J, Myouzen K, Nguantad S, Oh JM, Rayan NA, Sarkar S, Suzuki A, Thungsatianpun N, Venkatesh PN, Moody J, Nakano M, Chen Z, Tian C, Zhang Y, Tong Y, Tan CTY, Tizazu AM, Loh M, Hwang YY, Ho RC, Larbi A, Ng TP, Won HH, Wright FA, Villani AC, Park JE, Choi M, Liu B, Maitra A, Pithupakorn M, Suktitipat B, Ishigaki K, Okada Y, Yamamoto K, Carninci P, Chambers JC, Hon CC, Matangkasombut P, Charoensawan V, Majumder PP, Shin JW, Park WY, Prabhakar S. Asian diversity in human immune cells. *Cell*. 2025 Mar 18:S0092-8674(25)00202-8.

Layton E, Goldsworthy S, Yang E, Ong WY, Sutherland TE, Bancroft AJ, Thompson S, Au VB, Griffiths-Jones S, Grencis RK, Fairhurst AM, Roberts IS. An optimised faecal microRNA sequencing pipeline reveals fibrosis in *Trichuris muris* infection. *Nat Commun*. 2025 Feb 12;16(1):1589.

Lee CY, Huang CW, De Falco L Jr, Minhat RA, Traversier A, Wang B, Mohd Salleh SN, Ngoh EZX, Huang Y, Kim J, Tay MZ, Rosa-Calatrava M, Pizzorno A, Huber RG, Wang CI. A combinatorial and computational Tandem approach towards a universal therapeutics against ACE2-mediated coronavirus infections. *iScience*. 2025 May 16;28(6):112687.

Lehtonen H, Jokela H, Hofmann J, Tola L, Mehmood A, Ginhoux F, Becher B, Greter M, Yegutkin GG, Salmi M, Gerke H, Rantakari P. Early precursor-derived pituitary gland tissue-resident macrophages play a pivotal role in modulating hormonal balance. *Cell Rep*. 2025 Jan 21;44(2):115227.

Li X, Pan L, Li W, Liu B, Xiao C, Chew V, Zhang X, Long W, Ginhoux F, Loscalzo J, Buggert M, Zhang X, Sheng R, Wang Z. Deciphering immune predictors of immunotherapy response: A multiomics approach at the pan-cancer level. *Cell Rep Med*. 2025 Feb 26:101992.

Ma W, Chen H, Gao F, Zhao H, Wu N, Zhang S, Zhu Y, Xu Z, Lan Y, Liu B, Ye Y, Liu Z, Ginhoux F, Su B. Embryonic mast cells arise from the Cpa3-expressing precursors but not granulocyte-monocyte progenitors. *Sci China Life Sci*. 2025 May 22.

Marcos-Kovandzic L, Avagliano M, Ben Khelil M, Srikanthan J, Abdallah R, Petrocelli V, Rengassamy J, Alfaro A, Bied M, Fidelle M, Ferrere G, Daillere R, Arbab A, Amine-Hneineh R, Pages A, Dartigues P, Ly P, Simon S, Durand S, Gottschlich A, Ginhoux F, Bleriot C, Liu P, Zhao L, Creusot L, Rolhion N, Kroemer

G, Menger L, Kobold S, Castilla-Llorente C, Sokol H, Casola S, Pasolli E, Zitvogel L, Bigenwald C. Gut microbiota modulation through Akkermansia spp. supplementation increases CAR-T cell potency. *Cancer Discov.* 2025 Jun 11.

Mauvais FX, Hamel Y, Silvin A, Mulder K, Hildner K, Akyol R, Dalod M, Koumantou D, Saveanu L, Garfa M, Cagnard N, Bertocci B, Ginhoux F, van Endert P. Metallophilic marginal zone macrophages cross-prime CD8+ T cell-mediated protective immunity against blood-borne tumors. *Immunity.* 2025 Mar 18:S1074-7613(25)00094-9.

Mobach S, Bergkamp ND, Ma Z, Haselager MV, Anbuhl SM, Jurriens D, van den Bor J, Wang Z, Crudden C, Roos JL, Perez Almeria CV, Boergonje RA, Lohse MJ, Bosma R, Eldering E, Siderius M, Wu W, Spaargaren M, Tonino SH, Kater AP, Smit MJ, Heukers R. Disruption of constitutive CXCR4 oligomers impairs oncogenic properties in lymphoid neoplasms. *Proc Natl Acad Sci U S A.* 2025 Jun 17;122(24):e2424186122.

Murali TM, Gu Y, Minhat RA, Yap J, Wood KJ, Wang CI, Gascoigne NRJ, Anantharaman V, MacAry PA. Antigen-antibody complex density and antibody-induced HLA protein unfolding influence Fc-mediated antibody effector function. *Front Immunol.* 2024 Dec 18;15:1438285.

Nakajima S, Yonekura S, Kabashima K. Targeting OX40-OX40L pathway: A new era in atopic dermatitis management by T cell rebalancing. *J Allergy Clin Immunol.* 2025 Feb 18:S0091-6749(25)00174-5.

Nakamizo S, Kabashima K. Cutaneous Granulomas: Mechanisms, Cellular Interactions, and Therapeutic Insights. *Br J Dermatol.* 2025 Mar 13:Ijaf096.

Neo SY, Shuen TWH, Khare S, Chong J, Lau M, Shirgaonkar N, Chua L, Zhao J, Lee K, Tan C, Ba R, Lim J, Chua J, Cheong HS, Chai HM, Chan CY, Chung AYF, Cheow PC, Jeyaraj PR, Teo JY, Koh YX, Chok AY, Chow PKH, Goh B, Wan WK, Leow WQ, Loh TJZ, Tang PY, Karunananithi J, Ngo NT, Lim TKH, Xu S, Dasgupta R, Toh HC, Lam KP. Atypical memory B cells acquire Breg phenotypes in hepatocellular carcinoma. *JCI Insight.* 2025 Feb 25:e187025.

Ng LG, Kwok I. Transcending life and death: The ultimate cargo of aged neutrophils. *Cell.* 2025 Mar 20;188(6):1460-1462.

Ng M, Cerezo-Wallis D, Ng LG, Hidalgo A. Adaptations of neutrophils in cancer. *Immunity.* 2025 Jan 14;58(1):40-58.

Nguyen RH, Newton M, Kratofil RM, Scott BNV, Castanheira F, Kim JS, Ginhoux F, Jung S, Kubes P. Imaging a concussion and the ensuing immune response at the blood-brain barrier. *Proc Natl Acad Sci U S A.* 2025 May 27;122(21):e2414316122.

Qin D, Lei Y, Shu P, Zhang Y, Loh YH, Wang Y, Li Q. Supercharging CAR-T cells through transcriptional and epigenetic armoring. *Theranostics.* 2025 Feb 18;15(8):3345-3367.

Sen TK, Jing L, Anand A, Zhang Ryan LZ, Ting HT, Hui OH, Douglas T, Qin AZ, Bowen Y, Mohd FA, Thinesshware Y, Pei Carmen LC, Jang Hann CJ, Vincent T C, Mookhan P, De-Yun W. Unique Immune and Other Responses of Human Nasal Epithelial Cells Infected with H5N1 Avian Influenza Virus Compared to Seasonal Human Influenza A and B Viruses. *Emerg Microbes Infect.* 2025 Mar 24:2484330.

Shao Y, Gao Q, Wang L, Li D, Nixon AB, Chan C, Li QJ, Xie J. B-Lightning: using bait genes for marker gene hunting in single-cell data with complex heterogeneity. *Brief Bioinform.* 2024 Nov 22;26(1):bbaf033.

Strijker JGM, Pascual-Pasto G, Grothusen GP, Kalmeijer YJ, Kalaitsidou E, Zhao C, McIntyre B, Matlaga S, Visser LL, Barisa M, Himsworth C, Shah R, Muller H, Schild LG, Hains PG, Zhong Q, Reddel RR, Robinson PJ, Catena X, Soengas MS, Margaritis T, Dekker FJ, Anderson J, Molenaar JJ, Bosse KR, Wu W, Wienke J. Blocking MIF secretion enhances CAR T-cell efficacy against neuroblastoma. *Eur J Cancer.* 2025 Jan 27;218:115263.

Sun Y, Rodgers Furones A, Gultekin O, Khare S, Neo SY, Shi W, Moyano-Galceran L, Lam KP, Dasgupta R, Fuxe J, Salehi S, Lehti K, Sarhan D. Adaptive NK Cells Exhibit Tumor-Specific Immune Memory and Cytotoxicity in Ovarian Cancer. *Cancer Immunol Res.* 2025 Apr 28.

Talele NP, Kumra H, Gomes-Santos IL, Ho WW, Andersson P, Siwicki M, Huang P, Duda DG, Pittet MJ, Fukumura D, Jain RK. IL-1 β blockade prevents cardiotoxicity and improves the efficacy of immune checkpoint blockers and chemotherapy against pancreatic cancer in mice with obesity. *J Immunother Cancer.* 2025 May 24;13(5):e011404.

Tay RE, Ho CM, Ang NDZ, Tay HC, Lopez DZ, Na QR, Tan YW, Koh SM, Tan KP, Lee W, Lim J, Lau M, Toh HC, Rotzschke O, Rénia L. Serotonin receptor 5-HT2A as a potential target for HCC immunotherapy. *J Immunother Cancer.* 2025 Jun 23;13(6):e011088.

Tong L, Kremer V, Neo SY, Seitz C, Tobin NP, Seliger B, Harmenberg U, Colón E, Scherman Plogell AH, Liu LL, Lundqvist A. Cellular and secretome profiling uncover immunological biomarkers in the prognosis of renal cell carcinoma patients. *Oncoimmunology.* 2025 Dec;14(1):2481109.

Vasudevan J, Vijayakumar R, Reales-Calderon JA, Lam MSY, Ow JR, Aw J, Tan D, Tan AT, Bertoletti A, Adriani G, Pavesi A. In vitro integration of a functional vasculature to model endothelial regulation of chemotherapy and T-cell immunotherapy in liver cancer. *Biomaterials.* 2025 Feb 9;320:123175.

Vicanolo T, Özcan A, Li JL, Huerta-López C, Ballesteros I, Rubio-Ponce A, Dumitru AC, Nicolás-Ávila JÁ, Molina-Moreno M, Reyes-Gutierrez P, Johnston AD, Martone C, Greto E, Quílez-Alvarez A, Calvo E, Bonzon-Kulichenko E, Álvarez-Velez R, Chooi MY, Kwok I, González-Bermúdez B, Malleret B, Espinosa FM, Zhang M, Wang YL, Sun D, Zhen Chong S, El-Armouche A, Kim KK, Udalova IA, Greco V, Garcia R, Vázquez J, Dopazo A, Plaza GR, Alegre-Cebollada J, Uderhardt S, Ng LG, Hidalgo A. Matrix-producing neutrophils populate and shield the skin. *Nature.* 2025 Mar 19.

Wang CQ, Leong L, Yang L, Xu S, Lam KP, Choo AB, Tan AH. Nucleofection-based screening of chimeric antigen receptor candidates in human natural killer cells. *Front Immunol.* 2025 Apr 3;16:1557766. doi: 10.3389/fimmu.2025.1557766.

Wang J, Ruan GX, Li Y, Xiao X, Zhu Z, Chen W, Huang H, Zhang R, Wang R, Chen M, Guo L, Li Y, Xu S, Ou X. Minor Splicing Factor RNPC3 Is Essential for the Germinal Center B Cell Response. *Eur J Immunol.* 2025 Apr;55(4):e202451508.

Wong WJ, Zhu YW, Wang HT, Qian JW, Li Z, Li S, Liu ZY, Guo W, Zhang SY, Su B, He FP, Wang K, Ginhoux F. Modeling hereditary diffuse leukoencephalopathy with axonal spheroids using microglia-sufficient brain organoids. *Elife.* 2025 May 21;13:RP96693.

Yee TM, Wang LW. Metabolic Reprogramming in Epstein-Barr Virus Associated Diseases. *J Med Virol.* 2025 Feb;97(2):e70197.

Yee JY, Phua SX, See YM, Andiappan AK, Goh WWB, Lee J. Predicting antipsychotic responsiveness using a machine learning classifier trained on plasma levels of inflammatory markers in schizophrenia. *Transl Psychiatry.* 2025 Feb 14;15(1):51.

Zhang Z, Niu K, Huang T, Guo J, Xarbat G, Gong X, Gao Y, Liu F, Cheng S, Su W, Yang F, Liu Z, Ginhoux F, Zhang T. Microglia depletion reduces neurodegeneration and remodels extracellular matrix in a mouse Parkinson's disease model triggered by α -synuclein overexpression. *NPJ Parkinsons Dis.* 2025 Jan 9;11(1):15.