

REFERENCES

(No date) *Characteristics of patients with nasopharyngeal carcinoma in ...*
Available at: <https://repository.unair.ac.id/126624/1/4.%20Artikel.pdf>
(Accessed: 01 May 2025).

Abdul-Huseen, S.D. and Alabassi, H.M. (2024) ‘Estimate the relationship between CXCR4-sdf-1 axis and inhibitory molecules (CTLA4 and PD-1) in patients with colon cancer’, *Narra J*, 4(3). doi:10.52225/narra.v4i3.992. F

Adham, M. *et al.* (no date) *Nasopharyngeal Carcinoma in Indonesia: epidemiology, incidence, signs, and symptoms at presentation*, 31(4). doi:10.5732/cjc.011.10328.

ALLAMI, R.H. *et al.* (2016) ‘Analysis of the expression of SDF-1 splicing variants in human colorectal cancer and normal mucosa tissues’, *Oncology Letters*, 11(3), pp. 1873–1878. doi:10.3892/ol.2016.4139.

Amene, C. *et al.* (2013) ‘Johann Christian Rosenmüller (1771-1820): A historical perspective on the man behind the Fossa’, *Journal of Neurological Surgery Part B: Skull Base*, 74(04), pp. 187–193. doi:10.1055/s-0033-1342927.

Amene, C. *et al.* (2013) ‘Johann Christian Rosenmüller (1771-1820): A historical perspective on the man behind the Fossa’, *Journal of Neurological Surgery Part B: Skull Base*, 74(04), pp. 187–193. doi:10.1055/s-0033-1342927.

Anderson, N.M. and Simon, M.C. (2020) *Tumor Microenvironment* [Preprint]. doi:10.1016/j.cub.2020.06.081.

Arneth, B. (2019) ‘Tumor microenvironment’, *Medicina*, 56(1), p. 15. doi:10.3390/medicina56010015.

Bauer, M. *et al.* (2021) ‘Epstein–Barr virus—associated malignancies and immune escape: The role of the tumor microenvironment and tumor cell evasion strategies’, *Cancers*, 13(20), p. 5189. doi:10.3390/cancers13205189.

Berger, N.A. *et al.* (2006) *Cancer in the elderly, Transactions of the American Clinical and Climatological Association*. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC1500929/> (Accessed: 01 May 2025).

Cai, T.-T. *et al.* (2017) 'LMP1-mediated glycolysis induces myeloid-derived suppressor cell expansion in nasopharyngeal carcinoma', *PLOS Pathogens*, 13(7). doi:10.1371/journal.ppat.1006503.

canreg.fkkmk, O. (2024) *RKBR Desember 2023, Universitas Gadjah Mada*. Available at: <https://canreg.fk.ugm.ac.id/laporan-data/registrasi-kanker-berbasis-rumah-sakit-dr-sardjito-fkkmk-ugm/rkbr-desember-2023/> (Accessed: 01 May 2025).

Chan, A.T.C. (2010) 'Nasopharyngeal carcinoma', *Annals of Oncology*, 21, pp. vii308–vii312. doi:10.1093/annonc/mdq277.

Ek, E.T. *et al.* (2006) 'Outcome of patients with osteosarcoma over 40 years of age: Is angiogenesis a marker of survival?', *International Seminars in Surgical Oncology*, 3(1). doi:10.1186/1477-7800-3-7.

Grimm, D., Bauer, J. and Schoenberger, J. (2009) 'Blockade of neoangiogenesis, a new and promising technique to control the growth of malignant tumors and their metastases', *Current Vascular Pharmacology*, 7(3), pp. 347–357. doi:10.2174/157016109788340640.

Guo, L.-F. *et al.* (2024) 'Gender-specific survival of nasopharyngeal carcinoma in endemic and non-endemic areas based on the US seer database and a Chinese single-institutional registry', *Clinical Epidemiology*, Volume 16, pp. 769–782. doi:10.2147/clep.s490023.

Iwasa, S. *et al.* (2009) *Expression of CXCR4 and its ligand SDF-1 in intestinal-type gastric cancer is associated with lymph node and liver metastasis, Anticancer Research*. Available at: <https://ar.iiarjournals.org/content/29/11/4751> (Accessed: 01 May 2025).

Jackson, S.S. *et al.* (2022) 'Sex disparities in the incidence of 21 cancer types: Quantification of the contribution of risk factors', *Cancer*, 128(19), pp. 3531–3540. doi:10.1002/cncr.34390.

Jiang, C. *et al.* (2020) 'Distribution pattern and prognosis of metastatic lymph nodes in cervical posterior to level V in nasopharyngeal carcinoma patients', *BMC Cancer*, 20(1). doi:10.1186/s12885-020-07146-z.

Kim, J.-O. *et al.* (2009) 'Expression of CXCR4 and sdf-1 α in primary breast cancers and metastatic lymph nodes', *Journal of Breast Cancer*, 12(4), p. 249. doi:10.4048/jbc.2009.12.4.249.

Kim, S.-W., Roh, J. and Park, C.-S. (2016) *Immunohistochemistry for pathologists: Protocols, pitfalls, and Tips, Journal of Pathology and Translational Medicine*. Available at: <https://synapse.koreamed.org/articles/1152220> (Accessed: 02 April 2024).

Kokkat, T.J. *et al.* (2013) ‘Archived formalin-fixed paraffin-embedded (FFPE) blocks: A valuable underexploited resource for extraction of DNA, RNA, and protein’, *Biopreservation and Biobanking*, 11(2), pp. 101–106. doi:10.1089/bio.2012.0052.

Kryczek, I. *et al.* (2007) ‘Stroma-derived factor (SDF-1/CXCL12) and human tumor pathogenesis’, *American Journal of Physiology-Cell Physiology*, 292(3). doi:10.1152/ajpcell.00406.2006.

Kumar, V. *et al.* (2016) *The nature of myeloid-derived suppressor cells in the tumor microenvironment* [Preprint]. doi:10.1016/j.it.2016.01.004.

Li, Z.-L. *et al.* (2015) ‘COX-2 promotes metastasis in nasopharyngeal carcinoma by mediating interactions between cancer cells and myeloid-derived suppressor cells’, *OncoImmunology*, 4(11). doi:10.1080/2162402x.2015.1044712.

Li J, Zhang XS, Xie D, Deng HX, Gao YF, Chen QY, Huang WL, Masucci MG, Zeng YX. Expression of immune-related molecules in primary EBV-positive Chinese nasopharyngeal carcinoma: associated with latent membrane protein 1 (LMP1) expression. *Cancer Biol Ther*. 2007 Dec;6(12):1997-2004. doi: 10.4161/cbt.6.12.5160. Epub 2007 Oct 13. PMID: 18087217.

Liu, B.Y. *et al.* (2010) ‘Stromal cell-derived factor-1/CXCL12 contributes to MMTV-WNT1 tumor growth involving GR1+CD11B+ cells’, *PLoS ONE*, 5(1). doi:10.1371/journal.pone.0008611.

Liu, J.-Q. *et al.* (2017) ‘Central nervous system leukemia in a patient with concurrent nasopharyngeal carcinoma and acute myeloid leukaemia’, *Medicine*, 96(52). doi:10.1097/md.00000000000009199.

Lo, K.W., To, K.F. and Huang, D.P. (2004) ‘Focus on nasopharyngeal carcinoma’, *Cancer Cell*, 5(5), pp. 423–428. doi:10.1016/s1535-6108(04)00119-9.

Lo, K.W., Dawson, C.W., Lung, H.L., Wong, A.Y., Young, L.S. (2021). The Role of EBV-Encoded LMP1 in the NPC Tumor Microenvironment. *Frontiers in Oncology*, 11, 640207.

Luo, Y. *et al.* (2021) ‘Signaling pathways of EBV-induced oncogenesis’, *Cancer Cell International*, 21(1). doi:10.1186/s12935-021-01793-3.

Lugano, R., Ramachandran, M. and Dimberg, A. (2019) *Tumor angiogenesis: Causes, consequences, challenges and opportunities - cellular and Molecular Life Sciences*, SpringerLink. Available at: <https://link.springer.com/article/10.1007/s00018-019-03351-7> (Accessed: 01 May 2025).

Ma, T. *et al.* (2022) *Myeloid-derived suppressor cells in solid tumors*, MDPI. Available at: <https://www.mdpi.com/2073-4409/11/2/310> (Accessed: 26 March 2024).

Magaki, S. *et al.* (2018) ‘An introduction to the performance of Immunohistochemistry’, *Methods in Molecular Biology*, pp. 289–298. doi:10.1007/978-1-4939-8935-5_25.

Magar, A.G. *et al.* (2024) ‘A molecular perspective on HIF-1 α and angiogenic stimulator networks and their role in solid tumors: An update’, *International Journal of Molecular Sciences*, 25(6), p. 3313. doi:10.3390/ijms25063313.

Mankowski, N.L. and Bordoni, B. (2023) *Anatomy, head and neck, nasopharynx*, StatPearls [Internet]. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK557635/>

Morris, M.A. (2019) ‘Cancer-associated fibroblasts in undifferentiated nasopharyngeal carcinoma: A putative role for the EBV-encoded oncoprotein, LMP1’, *Pathogens*, 9(1), p. 8. doi:10.3390/pathogens9010008.

Mujaddid, I., Pratama, A.A. and Alimah, Y. (2025) *Characteristics of nasopharyngeal carcinoma patients in Indonesia*, Jurnal EduHealth. Available at: <https://ejournal.seaninstitute.or.id/index.php/health/article/view/6346> (Accessed: 01 May 2025).

Petit, I., Jin, D. and Rafii, S. (2007) ‘The SDF-1–CXCR4 signaling pathway: A molecular hub modulating neo-angiogenesis’, *Trends in Immunology*, 28(7), pp. 299–307. doi:10.1016/j.it.2007.05.007.

Shah, A.B. (2024) *Nasopharyngeal carcinoma*, *StatPearls [Internet]*. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK554588/> (Accessed: 06 May 2025).

Song, Z. *et al.* (2017) ‘High expression of stromal cell-derived factor 1 (SDF-1) and NF-KB predicts poor prognosis in cervical cancer’, *Medical Science Monitor*, 23, pp. 151–157. doi:10.12659/msm.899319.

Teicher, B.A. and Fricker, S.P. (2010) ‘CXCL12 (SDF-1)/CXCR4 pathway in cancer’, *Clinical Cancer Research*, 16(11), pp. 2927–2931. doi:10.1158/1078-0432.ccr-09-2329.

Tsao, S.W., Tsang, C.M. and Lo, K.W. (2017) ‘Epstein–Barr virus infection and nasopharyngeal carcinoma’, *Philosophical Transactions of the Royal Society B: Biological Sciences*, 372(1732), p. 20160270. doi:10.1098/rstb.2016.0270.

Utomo, A.W. and Romdhoni, A.C. (2023) *Characteristics of patients with nasopharyngeal carcinoma in Dr. Soetomo General Academic Hospital Surabaya* Available at: <https://repository.unair.ac.id/126624/1/4.%20Artikel.pdf> (Accessed: 01 May 2025).

Walentowicz-Sadlecka, M. *et al.* (2014) ‘Stromal derived factor-1 (SDF-1) and its receptors CXCR4 and CXCR7 in endometrial cancer patients’, *PLoS ONE*, 9(1). doi:10.1371/journal.pone.0084629.

Wang, N. *et al.* (2005) ‘Expression of chemokine receptor CXCR4 in nasopharyngeal carcinoma: Pattern of expression and correlation with clinical outcome’, *Journal of Translational Medicine*, 3(1). doi:10.1186/1479-5876-3-26.

Wang S, Ma N, Kawanishi S, Hiraku Y, Oikawa S, Xie Y, Zhang Z, Huang G, Murata M. Relationships of alpha-SMA-positive fibroblasts and SDF-1-positive tumor cells with neoangiogenesis in nasopharyngeal carcinoma. *Biomed Res Int*. 2014;2014:507353. doi: 10.1155/2014/507353. Epub 2014 Apr 27. PMID: 24877105; PMCID: PMC4020556.

White, M.C. *et al.* (2014) ‘Age and cancer risk’, *American Journal of Preventive Medicine*, 46(3). doi:10.1016/j.amepre.2013.10.029.

Xie, R. *et al.* (2011) 'Factors influencing the degradation of archival formalin-fixed paraffin-embedded tissue sections', *Journal of Histochemistry & Cytochemistry*, 59(4), pp. 356–365. doi:10.1369/0022155411398488.

Xu, M. *et al.* (2019) 'Genome sequencing analysis identifies Epstein–Barr virus subtypes associated with high risk of nasopharyngeal carcinoma', *Nature Genetics*, 51(7), pp. 1131–1136. doi:10.1038/s41588-019-0436-5.

Yahaya, J. *et al.* (2019) 'The role of a minimum immunohistochemical antibody panel in confirming undifferentiated nasopharyngeal carcinoma: a cross-sectional study at the Muhimbili National Hospital, Dar-es-Salaam, Tanzania', *Nigerian Medical Journal*, 60(6), p. 279. doi:10.4103/nmj.nmj_134_19.

Yang H. *et al.* (2022) 'Synergistic effect of VEGF and SDF-1 α in endothelial progenitor cells and vascular smooth muscle cells', *Front Pharmacol*. 2022 Jul 15;13:914347. doi: 10.3389/fphar.2022.914347. PMID: 35910392; PMCID: PMC9335858.

Young, L.S. and Dawson, C.W. (2014) 'Epstein-Barr virus and nasopharyngeal carcinoma', *Chinese Journal of Cancer* [Preprint]. doi:10.5732/cjc.014.10197.

Zanoni, D.K., Patel, S.G. and Shah, J.P. (2019) 'Changes in the 8th edition of the American Joint Committee on Cancer (AJCC) staging of head and neck cancer: Rationale and implications', *Current Oncology Reports*, 21(6). doi:10.1007/s11912-019-0799-x.

Zhao, C.-X. *et al.* (2018) *The regulatory network of nasopharyngeal carcinoma metastasis with a focus on EBV, lncrnas and mirnas*, *American journal of cancer research*. Available at: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6291648/> (Accessed: 01 May 2025).

Zimna, A. and Kurpisz, M. (2015) 'Hypoxia-inducible factor-1 in physiological and pathophysiological angiogenesis: Applications and therapies', *BioMed Research International*, 2015, pp. 1–13. doi:10.1155/2015/549412.

