8. REFERENCES

Abdelwahid, E., Kalvelyte, A., Stulpinas, A., de Carvalho, K. A., Guarita-Souza, L. C., & Foldes, G. (2016). Stem cell death and survival in heart regeneration and repair. *Apoptosis: an international journal on programmed cell death*, *21*(3), 252–268.

Adams, A. K., Bolanos, L. C., Dexheimer, P. J., Karns, R. A., Aronow, B. J., Komurov, K., Jegga, A. G., Casper, K. A., Patil, Y. J., Wilson, K. M., Starczynowski, D. T., & Wells, S. I. (2015). IRAK1 is a novel DEK transcriptional target and is essential for head and neck cancer cell survival. *Oncotarget*, *6*(41), 43395–43407.

Ahmed, A., Redmond, H. P., & Wang, J. H. (2013). Links between Toll-like receptor 4 and breast cancer. *Oncoimmunology*, *2*(2), e22945.

Ahmed, M. W., Kayani, M. A., Shabbir, G., Ali, S. M., Shinwari, W. U., & Mahjabeen, I. (2016). Expression of PTEN and its correlation with proliferation marker Ki-67 in head and neck cancer. *The International journal of biological markers*, *31*(2), e193–e203.

Alkanani, A. K., Rewers, M., Dong, F., Waugh, K., Gottlieb, P. A., & Zipris, D. (2012). Dysregulated toll-like receptor–induced interleukin-1β and interleukin-6 responses in subjects at risk for the development of Type 1 diabetes. *Diabetes*, *61*(10), 2525-2533.

Alsahafi, E., Begg, K., Amelio, I., Raulf, N., Lucarelli, P., Sauter, T., & Tavassoli, M. (2019). Clinical update on head and neck cancer: molecular biology and ongoing challenges. *Cell death & disease*, *10*(8), 1-17.

Amaral, M. V. S., DE Sousa Portilho, A. J., DA Silva, E. L., DE Oliveira Sales, L., DA Silva Maués, J. H., DE Moraes, M. E. A., & Moreira-Nunes, C. A. (2019). Establishment of Drug-resistant Cell Lines as a Model in Experimental Oncology: A Review. *Anticancer research*, *39*(12), 6443–6455.

Anwar, M. A., Shah, M., Kim, J., & Choi, S. (2019). Recent clinical trends in Toll-like receptor targeting therapeutics. *Medicinal research reviews*, *39*(3), 1053-1090.

Aparna, M., Rao, L., Kunhikatta, V., & Radhakrishnan, R. (2015). The role of MMP-2 and MMP-9 as prognostic markers in the early stages of tongue squamous cell carcinoma. *Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology*, *44*(5), 345–352.

Argiris, A., Karamouzis, M. V., Raben, D., & Ferris, R. L. (2008). Head and neck cancer. *The Lancet*, *371*(9625), 1695-1709.

Arumugam, J., Jeddy, N., Ramamurthy, A., & Thangavelu, R. (2017). The expression of Bcl-2 in oral squamous cell carcinoma—A review. *Journal of Orofacial Sciences*, *9*(2), 71.

Atashi, F., Vahed, N., Emamverdizadeh, P., Fattahi, S., & Paya, L. (2021). Drug resistance against 5-fluorouracil and cisplatin in the treatment of head and neck squamous cell carcinoma: A systematic review. *Journal of dental research, dental clinics, dental prospects*, *15*(3), 219–225.

Behrens, C., Feng, L., Kadara, H., Kim, H. J., Lee, J. J., Mehran, R., Hong, W. K., Lotan, R., & Wistuba, I. I. (2010). Expression of interleukin-1 receptor-associated kinase-1 in non-small cell lung carcinoma and preneoplastic lesions. *Clinical cancer research: an official journal of the American Association for Cancer Research*, *16*(1), 34–44.

Bennett, J., & Starczynowski, D. T. (2022). IRAK1 and IRAK4 as emerging therapeutic targets in hematologic malignancies. *Current Opinion in Hematology*, *29*(1), 8.

Beutler, B. A. (2009). TLRs and innate immunity. *Blood, The Journal of the American Society of Hematology*, *113*(7), 1399-1407.

Blasco, M.A., Svider, P.F., Raza, S.N., Jacobs, J.R., Folbe, A.J., Saraf, P., Eloy, J.A., Baredes, S. & Fribley, A.M. (2017). Systemic therapy for head and neck squamous cell carcinoma: Historical perspectives and recent breakthroughs. *The Laryngoscope*, *127*(11), 2565-2569.

Borse, V., Konwar, A. N., & Buragohain, P. (2020). Oral cancer diagnosis and perspectives in India. *Sensors international*, *1*, 100046.

Burchhardt, D. M., & Sukari, A. (2016). Chemotherapy in head and neck squamous cell cancer. *Targeting oral cancer*, 53-68.

Cai, D., Cao, J., Li, Z., Zheng, X., Yao, Y., Li, W., & Yuan, Z. (2009). Up-regulation of bone marrow stromal protein 2 (BST2) in breast cancer with bone metastasis. *BMC cancer*, *9*(1), 1-10.

Canning, M., Guo, G., Yu, M., Myint, C., Groves, M. W., Byrd, J. K., & Cui, Y. (2019). Heterogeneity of the Head and Neck Squamous Cell Carcinoma Immune Landscape and Its Impact on Immunotherapy. *Frontiers in cell and developmental biology*, *7*, 52.

Cassell, A., & Grandis, J. R. (2010). Investigational EGFR-targeted therapy in head and neck squamous cell carcinoma. *Expert opinion on investigational drugs*, *19*(6), 709–722.

Chen, G., Umelo, I. A., Lv, S., Teugels, E., Fostier, K., Kronenberger, P., Dewaele, A., Sadones, J., Geers, C., & De Grève, J. (2013). miR-146a inhibits cell growth, cell migration and induces apoptosis in non-small cell lung cancer cells. *PloS one*, *8*(3), e60317.

Chen, C., Zhao, S., Karnad, A., & Freeman, J. W. (2018). The biology and role of CD44 in cancer progression: therapeutic implications. *Journal of hematology & oncology*, *11*(1), 64.

Cheng, B. Y., Lau, E. Y., Leung, H. W., Leung, C. O., Ho, N. P., Gurung, S., Cheng, L. K., Lin, C. H., Lo, R. C., Ma, S., Ng, I. O., & Lee, T. K. (2018). IRAK1 Augments Cancer Stemness and Drug Resistance via the AP-1/AKR1B10 Signaling Cascade in Hepatocellular Carcinoma. *Cancer research*, *78*(9), 2332–2342.

Cheng, Y. L. B., Ng, O. L. I., & Lee, K. W. T. (2016). Inhibition of TLR/IRAK pathway in hepatocellular carcinoma augmented therapeutic responses. *Cancer Research*, *76*(14_Supplement), 5152-5152.

Cho, J., Johnson, D. E., & Grandis, J. R. (2018). Therapeutic Implications of the Genetic Landscape of Head and Neck Cancer. *Seminars in radiation oncology*, *28*(1), 2–11.

Choudhary, M. M., France, T. J., Teknos, T. N., & Kumar, P. (2016). Interleukin-6 role in head and neck squamous cell carcinoma progression. *World journal of otorhinolaryngology - head and neck surgery*, *2*(2), 90–97.

Chuang, H. C., Chou, M. H., Chien, C. Y., Chuang, J. H., & Liu, Y. L. (2018). Triggering TLR3 pathway promotes tumor growth and cisplatin resistance in head and neck cancer cells. *Oral Oncology*, *86*, 141-149.

Chukka, K., Sailaja, B., Naidu, D. R., Dasari, S., Zakkula, V., & Atturu, G. (2021). Study on CD44 as a Cancer Stem Cell Marker for Head and Neck Squamous Cell Carcinoma. *Highlights on Medicine and Medical Science Vol. 12*, 118-123.

Cognetti, D. M., Weber, R. S., & Lai, S. Y. (2008). Head and neck cancer: an evolving treatment paradigm. *Cancer*, *113*(S7), 1911-1932.

Cohen, E. E. W., Bell, R. B., Bifulco, C. B., Burtness, B., Gillison, M. L., Harrington, K. J., Le, Q. T., Lee, N. Y., Leidner, R., Lewis, R. L., Licitra, L., Mehanna, H., Mell, L. K., Raben, A., Sikora, A. G., Uppaluri, R., Whitworth, F., Zandberg, D. P., & Ferris, R. L. (2019). The Society for Immunotherapy of Cancer consensus statement on immunotherapy for the treatment of squamous cell carcinoma of the head and neck (HNSCC). *Journal for immunotherapy of cancer*, *7*(1), 184.

Cohen, M. H., Chen, H., Shord, S., Fuchs, C., He, K., Zhao, H., Sickafuse, S., Keegan, P. & Pazdur, R. (2013). Approval Summary: Cetuximab in Combination With Cisplatin or Carboplatin and 5-Fluorouracil for the First-Line Treatment of Patients With Recurrent Locoregional or Metastatic Squamous Cell Head and Neck Cancer. *The oncologist*, *18*(4), 460-466.

Cohen, N., Fedewa, S., & Chen, A. Y. (2018). Epidemiology and demographics of the head and neck cancer population. *Oral and Maxillofacial Surgery Clinics*, *30*(4), 381-395.

Cramer, J. D., Burtness, B., & Ferris, R. L. (2019). Immunotherapy for head and neck cancer: Recent advances and future directions. *Oral oncology*, *99*, 104460.

Cramer, J. D., Burtness, B., Le, Q. T., & Ferris, R. L. (2019). The changing therapeutic landscape of head and neck cancer. *Nature reviews Clinical oncology*, *16*(11), 669-683.

Current clinical status on clinicaltrials.gov, NCT00142454 (March 2023)

Current clinical status on clinicaltrials.gov, NCT00273910 (March 2023)

Current clinical status on clinicaltrials.gov, NCT00470379 (March 2023)

Current clinical status on clinicaltrials.gov, NCT01527136 (March 2023)

Current clinical status on clinicaltrials.gov, NCT01584115 (March 2023)

Current clinical status on clinicaltrials.gov, NCT01836029 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02077868 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02252146 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02363439 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02363491 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02873338 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02873338 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02995655 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02995655 (March 2023)

Current clinical status on clinicaltrials.gov, NCT02996500 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03328078 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03328078 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03337451 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03403634 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03410901 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03617328 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03789097 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03835533 (March 2023)

Current clinical status on clinicaltrials.gov, NCT03899987 (March 2023)

Current clinical status on clinicaltrials.gov, NCT04093323 (March 2023)

Current clinical status on clinicaltrials.gov, NCT04278768 (March 2023)

Current clinical status on clinicaltrials.gov, NCT04278768 (March 2023)

Current clinical status on clinicaltrials.gov, NCT04413617 (March 2023)

Cui, N., Hu, M., & Khalil, R. A. (2017). Chapter One-Biochemical and Biological Attributes of Matrix Metalloproteinases. Prog Mol Biol and Transl Sci 147: 1–73.

Da Costa, C. A. M., & Moraes, A. M. (2003). Encapsulation of 5-fluorouracil in liposomes for topical administration. *Maringá*, *25*(1), 53-61.

Dai, H., Meng, X. W., Ye, K., Jia, J., & Kaufmann, S. H. (2022). Therapeutics targeting BCL2 family proteins. In *Mechanisms of Cell Death and Opportunities for Therapeutic Development* (pp. 197-260). Academic Press.

Dasari, S., & Tchounwou, P. B. (2014). Cisplatin in cancer therapy: molecular mechanisms of action. *European journal of pharmacology*, *740*, 364-378.

De Nardo, D., Balka, K. R., Gloria, Y. C., Rao, V. R., Latz, E., & Masters, S. L. (2018). Interleukin-1 receptor–associated kinase 4 (IRAK4) plays a dual role in myddosome formation and Toll-like receptor signaling. *Journal of Biological Chemistry*, *293*(39), 15195-15207.

de Vicente, J. C., Rodríguez-Santamarta, T., Rodrigo, J. P., Allonca, E., Vallina, A., Singhania, A., Donate-Pérez Del Molino, P., & García-Pedrero, J. M. (2019). The Emerging Role of NANOG as an Early Cancer Risk Biomarker in Patients with Oral Potentially Malignant Disorders. *Journal of clinical medicine*, *8*(9), 1376.

Deschler, D. G., & Day, T. (2008). TNM staging of head and neck cancer and neck dissection classification. *American Academy of Otolaryngology–Head and Neck Surgery Foundation*, 10-23.

Di Lorenzo, A., Bolli, E., Tarone, L., Cavallo, F., & Conti, L. (2020). Toll-like receptor 2 at the crossroad between cancer cells, the immune system, and the microbiota. *International Journal of Molecular Sciences*, *21*(24), 9418.

Dong, Y., Ochsenreither, S., Cai, C., Kaufmann, A. M., Albers, A. E., & Qian, X. (2017). Aldehyde dehydrogenase 1 isoenzyme expression as a marker of cancer stem cells correlates to histopathological features in head and neck cancer: A meta-analysis. *PloS one*, *12*(11), e0187615.

Douglas, J. L., Gustin, J. K., Viswanathan, K., Mansouri, M., Moses, A. V., & Früh, K. (2010). The great escape: viral strategies to counter BST-2/tetherin. *PLoS pathogens*, *6*(5), e1000913.

Dussiau, C., Trinquand, A., Lhermitte, L., Latiri, M., Simonin, M., Cieslak, A., Bedjaoui, N., Villarèse, P., Verhoeyen, E., Dombret, H., Ifrah, N., Macintyre, E., & Asnafi, V. (2015). Targeting IRAK1 in T-cell acute lymphoblastic leukemia. *Oncotarget*, *6*(22), 18956–18965.

Eashwar, V. M. A., Umadevi, R., & Gopalakrishnan, S. (2020). Alcohol consumption in India-An epidemiological review. *Journal of family medicine and primary care*, *9*(1), 49–55.

El-Zayat, S. R., Sibaii, H., & Mannaa, F. A. (2019). Toll-like receptors activation, signaling, and targeting: an overview. *Bulletin of the National Research Centre*, *43*(1), 1-12.

Fan, Z., Li, M., Chen, X., Wang, J., Liang, X., Wang, H., Wang, Z., Cheng, B., & Xia, J. (2017). Prognostic Value of Cancer Stem Cell Markers in Head and Neck Squamous Cell Carcinoma: a Meta-analysis. *Scientific reports*, *7*, 43008.

Fan, C. C., Wang, T. Y., Cheng, Y. A., Jiang, S. S., Cheng, C. W., Lee, A. Y., & Kao, T. Y. (2013). Expression of E-cadherin, Twist, and p53 and their prognostic value in patients with oral squamous cell carcinoma. *Journal of cancer research and clinical oncology*, *139*(10),

Farooq, M., Batool, M., Kim, M. S., & Choi, S. (2021). Toll-like receptors as a therapeutic target in the era of immunotherapies. *Frontiers in Cell and Developmental Biology*, *9*, 756315.

Fasano, M., Della Corte, C. M., Viscardi, G., Di Liello, R., Paragliola, F., Sparano, F., Iacovino, M. L., Castrichino, A., Doria, F., Sica, A., Morgillo, F., Colella, G., Tartaro, G., Cappabianca, S., Testa, D., Motta, G., & Ciardiello, F. (2021). Head and neck cancer: the role of anti-EGFR agents in the era of immunotherapy. *Therapeutic advances in medical oncology*, *13*, 1758835920949418.

Fei, F., Qu, J., Zhang, M., Li, Y., & Zhang, S. (2017). S100A4 in cancer progression and metastasis: A systematic review. *Oncotarget*, *8*(42), 73219.

Feller, L., Chandran, R., Khammissa, R. A. G., Meyerov, R., & Lemmer, J. (2013). Alcohol and oral squamous cell carcinoma: clinical review. *South African Dental Journal*, *68*(4), 176-180.

Ferrari, D., Ghi, M. G., Franzese, C., Codecà, C., Gau, M., & Fayette, J. (2020). The Slippery Role of Induction Chemotherapy in Head and Neck Cancer: Myth and Reality. *Frontiers in oncology*, *10*, 7.

Figen, M., Çolpan Öksüz, D., Duman, E., Prestwich, R., Dyker, K., Cardale, K., Ramasamy, S., Murray, P., & Şen, M. (2020). Radiotherapy for Head and Neck Cancer: Evaluation of Triggered Adaptive Replanning in Routine Practice. *Frontiers in oncology*, *10*, 579917.

Flannery, S., & Bowie, A. G. (2010). The interleukin-1 receptor-associated kinases: critical regulators of innate immune signalling. *Biochemical pharmacology*, *80*(12), 1981-1991.

Funk, S., Mark, R., Bayo, P., Flechtenmacher, C., Grabe, N., Angel, P., Plinkert, P. K., & Hess, J. (2015). High S100A8 and S100A12 protein expression is a favorable prognostic factor for survival of oropharyngeal squamous cell carcinoma. *International journal of cancer*, *136*(9), 2037–2046.

Gao, W., Xiong, Y., Li, Q., & Yang, H. (2017). Inhibition of Toll-Like Receptor Signaling as a Promising Therapy for Inflammatory Diseases: A Journey from Molecular to Nano Therapeutics. *Frontiers in physiology*, *8*, 508.

Gawlik-Rzemieniewska, N., & Bednarek, I. (2016). The role of NANOG transcriptional factor in the development of malignant phenotype of cancer cells. *Cancer biology & therapy*, *17*(1), 1–10.

Gergen, A. K., Kohtz, P. D., Halpern, A. L., Li, A., Meng, X., Reece, T. B., Fullerton, D. A., & Weyant, M. J. (2020). Activation of Toll-Like Receptor 2 Promotes Proliferation of Human Lung Adenocarcinoma Cells. *Anticancer research*, *40*(10), 5361–5369.

Ghafouri-Fard, S., Abak, A., Tondro Anamag, F., Shoorei, H., Fattahi, F., Javadinia, S. A., Basiri, A., & Taheri, M. (2021). 5-Fluorouracil: A Narrative Review on the Role of Regulatory Mechanisms in Driving Resistance to This Chemotherapeutic Agent. *Frontiers in oncology*, *11*, 658636.

Ghosh, S., Saha, B., & Banerjee, R. (2020). Significance of heterodimerization if TLR2/BB and TLR1/TLR6 DD loops within TIR domain of TLR cytoplasmic region in mammals. *Journal of Biomolecular Structure & Dynamics*.

Global Cancer Observatory: Cancer Today. International Agency for Research on Cancer; 2020. gco.iarc.fr/today

Gohda, J., Matsumura, T., & Inoue, J. (2004). Cutting edge: TNFR-associated factor (TRAF) 6 is essential for MyD88-dependent pathway but not toll/IL-1 receptor domain-containing adaptor-inducing IFN-beta (TRIF)-dependent pathway in TLR signaling. *Journal of immunology (Baltimore, Md.: 1950)*, *173*(5), 2913–2917.

Gonzalez, R. M. S., Shehata, H., O'connell, M. J., Yang, Y., Moreno-Fernandez, M. E., Chougnet, C. A., & Aliberti, J. (2014). Toxoplasma gondii-derived profilin triggers human toll-like receptor 5-dependent cytokine production. *Journal of innate immunity*, *6*(5), 685-694.

Goto, Y., Arigami, T., Kitago, M., Nguyen, S.L., Narita, N., Ferrone, S., Morton, D.L., Irie, R.F. & Hoon, D.S. (2008). Activation of Toll-like receptors 2, 3, and 4 on human melanoma cells induces inflammatory factors. *Molecular cancer therapeutics*, *7*(11), 3642-3653.

Götz, C., Bissinger, O., Nobis, C., Wolff, K. D., Drecoll, E., & Kolk, A. (2018). ALDH1 as a prognostic marker for lymph node metastasis in OSCC. *Biomedical reports*, *9*(4), 284–290.

Govindan, S. V., Kulsum, S., Pandian, R. S., Das, D., Seshadri, M., Hicks, W., Jr, Kuriakose, M. A., & Suresh, A. (2015). Establishment and characterization of triple drug resistant head and neck squamous cell carcinoma cell lines. *Molecular medicine reports*, *12*(2), 3025–3032.

Grigoreva, T., Sagaidak, A., Romanova, A., Novikova, D., Garabadzhiu, A., & Tribulovich, V. (2021). Establishment of drug-resistant cell lines under the treatment with chemicals acting through different mechanisms. *Chemico-Biological Interactions*, *344*, 109510.

Grimmig, T., Matthes, N., Hoeland, K., Tripathi, S., Chandraker, A., Grimm, M., Moench, R., Moll, E. M., Friess, H., Tsaur, I., Blaheta, R. A., Germer, C. T., Waaga-Gasser, A. M., & Gasser, M. (2015). TLR7 and TLR8 expression increases tumor cell proliferation and promotes chemoresistance in human pancreatic cancer. *International journal of oncology*, *47*(3), 857–866.

Guigay, J., Le Caer, H., Ortholan, C., Aupérin, A., Michel, C., & Mertens, C. (2019). Treatment of inoperable elderly head and neck cancer patients. *Current opinion in oncology*, *31*(3), 152-159.

Haddad, R. I., Posner, M., Hitt, R., Cohen, E. E. W., Schulten, J., Lefebvre, J. L., & Vermorken, J. B. (2018). Induction chemotherapy in locally advanced squamous cell carcinoma of the head and neck: role, controversy, and future directions. *Annals of Oncology*, *29*(5), 1130-1140.

Hadi, N. R., Shaker, S. R., & Alharis, N. R. (2021). Toll-like Receptor Signaling Pathways. *Important Aspects of Toll-like Receptors: Signaling Pathways in Diseases*, 26-44.

Han, S. J., Ahn, T. K., Choi, H. S., Shin, J. N., Piya, S., & Kim, T. H. (2009). TRAIL-induced cell death and caspase-8 activation are inhibited by cisplatin but not carboplatin. *Journal of gynecologic oncology*, *20*(2), 113–116.

Hans, S., Badoual, C., Gorphe, P., & Brasnu, D. (2012). Transoral robotic surgery for head and neck carcinomas. *European archives of oto-rhino-laryngology: official journal of the European Federation of Oto-Rhino-Laryngological Societies (EUFOS): affiliated with the German Society for Oto-Rhino-Laryngology - Head and Neck Surgery*, *269*(8), 1979–1984.

Hasan, U. A., Trinchieri, G., & Vlach, J. (2005). Toll-like receptor signaling stimulates cell cycle entry and progression in fibroblasts. *Journal of Biological Chemistry*, *280*(21), 20620-20627.

Hashibe, M., Brennan, P., Benhamou, S., Castellsague, X., Chen, C., Curado, M.P., Maso, L.D., Daudt, A.W., Fabianova, E., Wünsch-Filho, V. and Franceschi, S. (2007). Alcohol drinking in never users of tobacco, cigarette smoking in never drinkers, and the risk of head and neck cancer: pooled analysis in the International Head and Neck Cancer Epidemiology Consortium. *Journal of the National Cancer Institute*, *99*(10), 777-789.

He, X., Jing, Z., & Cheng, G. (2014). MicroRNAs: new regulators of Toll-like receptor signalling pathways. *BioMed research international*, *2014*, 945169.

He, W., Liu, Q., Wang, L., Chen, W., Li, N., & Cao, X. (2007). TLR4 signaling promotes immune escape of human lung cancer cells by inducing immunosuppressive cytokines and apoptosis resistance. *Molecular immunology*, *44*(11), 2850-2859.

Heft Neal, M. E., Haring, C. T., Mann, J. E., Brenner, J. C., Spector, M. E., & Swiecicki, P. L. (2019). Novel Immunotherapeutic Approaches in Head and Neck Cancer. *Journal of cancer metastasis and treatment*, *5*, 76.

Helfenstein, S., Riesterer, O., Meier, U. R., Papachristofilou, A., Kasenda, B., Pless, M., & Rothschild, S. I. (2019). 3-weekly or weekly cisplatin concurrently with radiotherapy for patients with squamous cell carcinoma of the head and neck - a multicentre, retrospective analysis. *Radiation oncology (London, England)*, *14*(1), 32.

Hirano T. (2021). IL-6 in inflammation, autoimmunity and cancer. *International immunology*, *33*(3), 127–148.

Huang, L., & Fu, L. (2015). Mechanisms of resistance to EGFR tyrosine kinase inhibitors. *Acta Pharmaceutica Sinica B*, *5*(5), 390-401.

Hutchinson, M. N. D., Mierzwa, M., & D'Silva, N. J. (2020). Radiation resistance in head and neck squamous cell carcinoma: dire need for an appropriate sensitizer. *Oncogene*, *39*(18), 3638–3649.

India against cancer (2016). http://cancerindia.org.in

Ilie, S. M., Ruginescu, I., Saada, E., Ferrand, F. R., Schilf, A., Janot, F., & Guigay, J. (2012). The tolerance of TPF chemotherapy regime standard or modified in head neck cancer patients over 65 years old. *Annals of Oncology*, *23*, ix341.

Isaza-Correa, J. M., Liang, Z., van Den Berg, A., Diepstra, A., & Visser, L. (2014). Toll-like receptors in the pathogenesis of human B cell malignancies. *Journal of hematology & oncology*, *7*(1), 1-10.

Izawa, N., Onozawa, Y., Hikosaka, T., Hamauchi, S., Tsushima, T., Todaka, A., Machida, N., Haraguchi, Y., Ogawa, H., Nishimura, T., Nakagawa, M., Fuke, T., Iida, Y., Kamijo, T., Onitsuka, T., Boku, N., Yasui, H., & Yokota, T. (2015). Efficacy and feasibility of docetaxel, cisplatin, and 5-fluorouracil induction chemotherapy for locally advanced head and neck squamous cell carcinoma classified as clinical nodal stage N2c, N3, or N2b with supraclavicular lymph node metastases. *International journal of clinical oncology*, *20*(3), 455–462.

Jain, A., Kaczanowska, S., & Davila, E. (2014). IL-1 receptor-associated kinase signaling and its role in inflammation, cancer progression, and therapy resistance. *Frontiers in immunology*, *5*, 553.

Jain, J., Vinchurkar, S., Jhamtani, RC., Gupta, S., Attarwala, Z. (2021) Health Burden of Oral Cancer in South Asia Accountable to Consumption of Unregulated Flavored Smokeless Tobacco Products. *Arch Can Res,* 9 (S5: 003).

Jamal, Z., & Anjum, F. (2022). Oropharyngeal Squamous Cell Carcinoma. In *StatPearls [Internet]*. StatPearls Publishing.

Janssens, S., & Beyaert, R. (2003). Functional diversity and regulation of different interleukin-1 receptor-associated kinase (IRAK) family members. *Molecular cell*, *11*(2), 293-302.

Jethwa, A. R., & Khariwala, S. S. (2017). Tobacco-related carcinogenesis in head and neck cancer. *Cancer and Metastasis Reviews*, *36*, 411-423.

Jialal, I., Kaur, H., & Devaraj, S. (2014). Toll-like receptor status in obesity and metabolic syndrome: a translational perspective. *The Journal of Clinical Endocrinology & Metabolism*, *99*(1), 39-48.

Jin, H., Zhang, L., Wang, S., & Qian, L. (2019). BST2 promotes growth and induces gefitinib resistance in oral squamous cell carcinoma via regulating the EGFR pathway. *Archives of medical science: AMS*, *17*(6), 1772–1782.

Johnson, D. E., Burtness, B., Leemans, C. R., Lui, V. W. Y., Bauman, J. E., & Grandis, J. R. (2020). Head and neck squamous cell carcinoma. *Nature reviews. Disease primers*, *6*(1), 92.

Kalyankrishna, S., & Grandis, J. R. (2006). Epidermal growth factor receptor biology in head and neck cancer. *Journal of clinical oncology*, *24*(17), 2666-2672.

Kanno, Y., Chen, C. Y., Lee, H. L., Chiou, J. F., & Chen, Y. J. (2021). Molecular Mechanisms of Chemotherapy Resistance in Head and Neck Cancers. *Frontiers in oncology*, *11*, 640392.

Karabajakian, A., Gau, M., Reverdy, T., Neidhardt, E. M., & Fayette, J. (2018). Induction Chemotherapy in Head and Neck Squamous Cell Carcinoma: A Question of Belief. *Cancers*, *11*(1), 15.

Kawai, T., & Akira, S. (2006). TLR signaling. *Cell Death & Differentiation*, *13*(5), 816-825.

Kawai, T., & Akira, S. (2011). Toll-like receptors and their crosstalk with other innate receptors in infection and immunity. *Immunity*, *34*(5), 637-650.

Kawasaki, T., & Kawai, T. (2014). Toll-like receptor signaling pathways. *Frontiers in immunology*, *5*, 461.

Keshavarz, A., Pourbagheri-Sigaroodi, A., Zafari, P., Bagheri, N., Ghaffari, S. H., & Bashash, D. (2021). Toll-like receptors (TLRs) in cancer; with an extensive focus on TLR agonists and antagonists. *IUBMB life*, *73*(1), 10–25.

Khan, H., & Srivastava, R. (2023) IRAK-1 &-4 dual inhibitor mediated BST-2 suppression: A novel therapeutic approach towards head and neck squamous cell carcinoma. *IJBPAS*, *12*(6)

Khosla, S., Hershow, R. C., Freels, S., Jefferson, G. D., Davis, F. G., & Peterson, C. E. (2021). Head and neck squamous cell carcinomas among males of the three largest Asian diasporas in the US, 2004–2013. *Cancer Epidemiology*, *74*, 102011.

Kim, H. R., Lee, C. G., Choi, E. C., Kim, J. H., Koh, Y. W., & Cho, B. C. (2016). Induction docetaxel and S-1 followed by concomitant radiotherapy with low-dose daily cisplatin in locally advanced head and neck carcinoma. *Head & Neck*, *38*(S1), E1653-E1659.

Kobayashi, K., Hernandez, L. D., Galán, J. E., Janeway, C. A., Jr, Medzhitov, R., & Flavell, R. A. (2002). IRAK-M is a negative regulator of Toll-like receptor signaling. *Cell*, *110*(2), 191–202.

Kobayashi, K., Hisamatsu, K., Suzui, N., Hara, A., Tomita, H., & Miyazaki, T. (2018). A Review of HPV-Related Head and Neck Cancer. *Journal of clinical medicine*, *7*(9), 241.

Kuang, C. M., Fu, X., Hua, Y. J., Shuai, W. D., Ye, Z. H., Li, Y., Peng, Q. H., Li, Y. Z., Chen, S., Qian, C. N., Huang, W., & Liu, R. Y. (2017). BST2 confers cisplatin resistance via NF-κB signaling in nasopharyngeal cancer. *Cell death & disease*, *8*(6), e2874.

Kulkarni, M. R. (2013). Head and neck cancer burden in India. *Int J Head Neck Surg*, *4*(1), 29-35.

Kumar, H., Kawai, T., & Akira, S. (2011). Pathogen recognition by the innate immune system. *International reviews of immunology*, *30*(1), 16–34.

Kuznik, A., Bencina, M., Svajger, U., Jeras, M., Rozman, B., & Jerala, R. (2011). Mechanism of endosomal TLR inhibition by antimalarial drugs and imidazoquinolines. *Journal of immunology (Baltimore, Md.: 1950)*, *186*(8), 4794–4804.

Lazaridis, A., Gavriilaki, E., Douma, S., & Gkaliagkousi, E. (2021). Toll-like receptors in the pathogenesis of essential hypertension. A forthcoming immune-driven theory in full effect. *International Journal of Molecular Sciences*, *22*(7), 3451.

Lang, Y., & Dong, D. (2020). Cetuximab plus chemotherapy versus chemotherapy alone in recurrent or metastatic head and neck squamous cell carcinoma: a cost-effectiveness analysis. *Cancer Management and Research*, *12*, 11383.

Lee, M. S., & Kim, Y. J. (2007). Pattern-recognition receptor signaling initiated from extracellular, membrane, and cytoplasmic space. *Molecules and cells*, *23*(1), 1–10.

Leemans, C. R., Braakhuis, B. J., & Brakenhoff, R. H. (2011). The molecular biology of head and neck cancer. *Nature reviews cancer*, *11*(1), 9-22.

Li, D., & Wu, M. (2021). Pattern recognition receptors in health and diseases. *Signal transduction and targeted therapy*, *6*(1), 291.

Li, L., Zhao, G. D., Shi, Z., Qi, L. L., Zhou, L. Y., & Fu, Z. X. (2016). The Ras/Raf/MEK/ERK signaling pathway and its role in the occurrence and development of HCC. *Oncology letters*, *12*(5), 3045-3050.

Li, M., Zhou, Y., Feng, G., & Su, S. B. (2009). The critical role of Toll-like receptor signaling pathways in the induction and progression of autoimmune diseases. *Current molecular medicine*, *9*(3), 365-374.

Li, Q., Chen, Y., Zhang, D., Grossman, J., Li, L., Khurana, N., Jiang, H., Grierson, P.M., Herndon, J., DeNardo, D.G. and Challen, G.A. (2019). IRAK4 mediates colitis-induced tumorigenesis and chemoresistance in colorectal cancer. *JCI insight*, *4*(19).

Li, S., Li, J., Hu, T., Zhang, C., Lv, X., He, S., Yan, H., Tan, Y., Wen, M., Lei, M., & Zuo, J. (2017). Bcl-2 overexpression contributes to laryngeal carcinoma cell survival by forming a complex with Hsp90β. *Oncology reports*, *37*(2), 849–856.

Li, Z., Younger, K., Gartenhaus, R., Joseph, A. M., Hu, F., Baer, M. R., Brown, P., & Davila, E. (2015). Inhibition of IRAK1/4 sensitizes T cell acute lymphoblastic leukemia to chemotherapies. *The Journal of clinical investigation*, *125*(3), 1081–1097.

Lin, S. C., Lo, Y. C., & Wu, H. (2010). Helical assembly in the MyD88–IRAK4–IRAK2 complex in TLR/IL-1R signalling. *Nature*, *465*(7300), 885-890.

Litak, J., Grochowski, C., Litak, J., Osuchowska, I., Gosik, K., Radzikowska, E., Kamieniak, P., & Rolinski, J. (2020). TLR-4 Signaling vs. Immune Checkpoints, miRNAs

Molecules, Cancer Stem Cells, and Wingless-Signaling Interplay in Glioblastoma Multiforme-Future Perspectives. *International journal of molecular sciences*, *21*(9), 3114.

Liu, J. C., Lerou, P. H., & Lahav, G. (2014). Stem cells: balancing resistance and sensitivity to DNA damage. *Trends in cell biology*, *24*(5), 268–274.

Liu, J. H., Chen, C., Li, Z. Y., Zou, Z. M., Gao, D. C., Zhang, X., Kuang, X. W., Sun, Z. H., Zheng, W. J., Zhou, P., & Sun, S. R. (2020). The MyD88 inhibitor TJ-M2010-2 suppresses proliferation, migration and invasion of breast cancer cells by regulating MyD88/GSK-3β and MyD88/NF-κB signalling pathways. *Experimental cell research*, *394*(2), 112157.

Liu, L. K., Jiang, X. Y., Zhou, X. X., Wang, D. M., Song, X. L., & Jiang, H. B. (2010). Upregulation of vimentin and aberrant expression of E-cadherin/beta-catenin complex in oral squamous cell carcinomas: correlation with the clinicopathological features and patient outcome. *Modern pathology: an official journal of the United States and Canadian Academy of Pathology, Inc*, *23*(2), 213–224.

Liu, L., Liu, S., Deng, P., Liang, Y., Xiao, R., Tang, L. Q., Chen, J., Chen, Q. Y., Guan, P., Yan, S. M., Huang, X., Hong, J. H., Chen, J., Sun, Y., Teh, B. T., Yu, Q., Mai, H. Q., & Tan, J. (2021). Targeting the IRAK1-S100A9 Axis Overcomes Resistance to Paclitaxel in Nasopharyngeal Carcinoma. *Cancer research*, *81*(5), 1413–1425.

Liu, W. W., Zeng, Z. Y., Wu, Q. L., Hou, J. H., & Chen, Y. Y. (2005). Overexpression of MMP-2 in laryngeal squamous cell carcinoma: a potential indicator for poor prognosis. *Otolaryngology--head and neck surgery: official journal of American Academy of Otolaryngology-Head and Neck Surgery*, *132*(3), 395–400.

Livak, K. J., & Schmittgen, T. D. (2001). Analysis of relative gene expression data using real-time quantitative PCR and the 2− ΔΔCT method. *methods*, *25*(4), 402-408.

Loevner, L. A., Learned, K. O., Mohan, S., O'Malley Jr, B. W., Scanlon, M. H., Rassekh, C. H., & Weinstein, G. S. (2013). Transoral robotic surgery in head and neck cancer: what radiologists need to know about the cutting edge. *Radiographics*, *33*(6), 1759-1779.

Loiarro, M., Capolunghi, F., Fantò, N., Gallo, G., Campo, S., Arseni, B., Carsetti, R., Carminati, P., De Santis, R., Ruggiero, V., & Sette, C. (2007). Pivotal Advance: Inhibition of MyD88 dimerization and recruitment of IRAK1 and IRAK4 by a novel peptidomimetic compound. *Journal of leukocyte biology*, *82*(4), 801–810.

López-Verdín, S., Martínez-Fierro, M. L., Garza-Veloz, I., Zamora-Perez, A., Grajeda-Cruz, J., González-González, R., Molina-Frechero, N., Arocena-Sutz, M., & Bologna-Molina,

R. (2019). E-Cadherin gene expression in oral cancer: Clinical and prospective data. *Medicina oral, patologia oral y cirugia bucal*, *24*(4), e444–e451.

Lorch, J. H., Goloubeva, O., Haddad, R. I., Cullen, K., Sarlis, N., Tishler, R., Tan, M., Fasciano, J., Sammartino, D. E., Posner, M. R., & TAX 324 Study Group (2011). Induction chemotherapy with cisplatin and fluorouracil alone or in combination with docetaxel in locally advanced squamous-cell cancer of the head and neck: long-term results of the TAX 324 randomised phase 3 trial. *The Lancet. Oncology*, *12*(2), 153–159.

Lucas, K., & Maes, M. (2013). Role of the Toll Like receptor (TLR) radical cycle in chronic inflammation: possible treatments targeting the TLR4 pathway. *Molecular neurobiology*, *48*(1), 190-204.

Ludwig, N., Szczepanski, M.J., Gluszko, A., Szafarowski, T., Azambuja, J.H., Dolg, L., Gellrich, N.C., Kampmann, A., Whiteside, T.L. and Zimmerer, R.M., (2019). CD44 (+) tumor cells promote early angiogenesis in head and neck squamous cell carcinoma. *Cancer Letters*, *467*, 85-95.

Lydiatt, W. M., Patel, S. G., O'Sullivan, B., Brandwein, M. S., Ridge, J. A., Migliacci, J. C., Loomis, A. M., & Shah, J. P. (2017). Head and Neck cancers-major changes in the American Joint Committee on cancer eighth edition cancer staging manual. *CA: a cancer journal for clinicians*, *67*(2), 122–137.

Ma, Y., Iyer, R. P., de Castro Brás, L. E., Toba, H., Yabluchanskiy, A., Deleon-Pennell, K. Y., Hall, M.E., Lange, R.A. and Lindsey, M.L., & Lindsey, M. L. (2015). Cross talk between inflammation and extracellular matrix following myocardial infarction. In *Inflammation in Heart Failure* (pp. 67-79). Academic Press.

Mahauad-Fernandez, W. D., & Okeoma, C. M. (2015). The role of BST-2/Tetherin in host protection and disease manifestation. *Immunity, inflammation and disease*, *4*(1), 4–23.

Mahauad-Fernandez, W. D., Naushad, W., Panzner, T. D., Bashir, A., Lal, G., & Okeoma, C. M. (2018). BST-2 promotes survival in circulation and pulmonary metastatic seeding of breast cancer cells. *Scientific reports*, *8*(1), 17608.

Mäkinen, L. K., Ahmed, A., Hagström, J., Lehtonen, S., Mäkitie, A. A., Salo, T., Haglund, C., & Atula, T. (2016). Toll-like receptors 2, 4, and 9 in primary, metastasized, and recurrent oral tongue squamous cell carcinomas. *Journal of oral pathology & medicine: official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology*, *45*(5), 338–345.

Mansoori, B., Mohammadi, A., Davudian, S., Shirjang, S., & Baradaran, B. (2017). The Different Mechanisms of Cancer Drug Resistance: A Brief Review. *Advanced pharmaceutical bulletin*, *7*(3), 339–348.

Maratheftis, C. I., Andreakos, E., Moutsopoulos, H. M., & Voulgarelis, M. (2007). Toll-like receptor-4 is up-regulated in hematopoietic progenitor cells and contributes to increased apoptosis in myelodysplastic syndromes. *Clinical cancer research: an official journal of the American Association for Cancer Research*, *13*(4), 1154–1160.

Marchitti, S. A., Brocker, C., Stagos, D., & Vasiliou, V. (2008). Non-P450 aldehyde oxidizing enzymes: the aldehyde dehydrogenase superfamily. *Expert opinion on drug metabolism & toxicology*, *4*(6), 697–720.

Martinez-Useros, J., & Garcia-Foncillas, J. (2015). The challenge of blocking a wider family members of EGFR against head and neck squamous cell carcinomas. *Oral oncology*, *51*(5), 423–430.

Marur, S., & Forastiere, A. A. (2016). Head and Neck Squamous Cell Carcinoma: Update on Epidemiology, Diagnosis, and Treatment. *Mayo Clinic proceedings*, *91*(3), 386–396.

McElroy, W. T. (2019). Interleukin-1 receptor-associated kinase 4 (IRAK4) inhibitors: an updated patent review (2016-2018). *Expert Opinion on Therapeutic Patents*, *29*(4), 243-259.

Mehendiratta, M., Solomon, M. C., Boaz, K., Guddattu, V., & Mohindra, A. (2014). Clinico-pathological correlation of E-cadherin expression at the invasive tumor front of Indian oral squamous cell carcinomas: An immunohistochemical study. *Journal of oral and maxillofacial pathology: JOMFP*, *18*(2), 217–222.

Mei, Z., Huang, J., Qiao, B., & Lam, A. K. (2020). Immune checkpoint pathways in immunotherapy for head and neck squamous cell carcinoma. *International journal of oral science*, *12*(1), 16.

Meng, D.F., Sun, R., Liu, G.Y., Peng, L.X., Zheng, L.S., Xie, P., Lin, S.T., Mei, Y., Qiang, Y.Y., Li, C.Z. and Xu, L. (2020). S100A14 suppresses metastasis of nasopharyngeal carcinoma by inhibition of NF-kB signaling through degradation of IRAK1. *Oncogene*, *39*(30), 5307-5322.

Meng, S., Li, Y., Zang, X., Jiang, Z., Ning, H., & Li, J. (2020). Effect of TLR2 on the proliferation of inflammation-related colorectal cancer and sporadic colorectal cancer. *Cancer cell international*, *20*, 1-13.

Merrell, M.A., Ilvesaro, J.M., Lehtonen, N., Sorsa, T., Gehrs, B., Rosenthal, E., Chen, D., Shackley, B., Harris, K.W. & Selander, K.S. (2006). Toll-like receptor 9 agonists

promote cellular invasion by increasing matrix metalloproteinase activity. *Molecular cancer research*, *4*(7), 437-447.

Meyer, H. J., Gundermann, P., & Surov, A. (2019). Associations between FDG-PET and Ki 67-index in head and neck cancer: A meta-analysis. *Medicine*, *98*(40), e17472.

Miller, D. L., Puricelli, M. D., & Stack, M. S. (2012). Virology and molecular pathogenesis of HPV (human papillomavirus)-associated oropharyngeal squamous cell carcinoma. *The Biochemical journal*, *443*(2), 339–353.

Mishra, D., Macha, M. A., Kaur, H., Zargar, M. A., & Chauhan, S. S. (2021). Recent Advances in Oral Cancer Research. *Management of Oral Cancers*, 27-39.

Mishra, S., Tiwari, V., Arora, A., Gupta, S., Anand, N., & Husain, N. (2020). Increased Expression of Oct4, Nanog and CD24 Predicts Poor Response to Chemo-Radiotherapy and Unfavourable Prognosis in Locally Advanced Oral Squamous Cell Carcinoma. *Asian Pacific journal of cancer prevention: APJCP*, *21*(9), 2539–2547.

Mizumoto, A., Ohashi, S., Hirohashi, K., Amanuma, Y., Matsuda, T., & Muto, M. (2017). Molecular mechanisms of acetaldehyde-mediated carcinogenesis in squamous epithelium. *International journal of molecular sciences*, *18*(9), 1943.

Mohajertehran, F., Ayatollahi, H., Khazaeni, K., Shakeri, M. T., & Mohtasham, N. (2018). Overexpression of High-Mobility Motor Box 1 in the Blood and Tissues of Patients with Head and Neck Squamous Cell Carcinoma. *Iranian journal of otorhinolaryngology*, *30*(100), 261–271.

Mohamed, F. E. A., Hammad, S., Luong, T. V., Dewidar, B., Al-Jehani, R., Davies, N., Dooley, S., & Jalan, R. (2020). Expression of TLR-2 in hepatocellular carcinoma is associated with tumour proliferation, angiogenesis and Caspase-3 expression. *Pathology, research and practice*, *216*(8), 152980.

Mokhtari, Y., Pourbagheri-Sigaroodi, A., Zafari, P., Bagheri, N., Ghaffari, S. H., & Bashash, D. (2021). Toll-like receptors (TLRs): An old family of immune receptors with a new face in cancer pathogenesis. *Journal of cellular and molecular medicine*, *25*(2), 639–651.

Mollinedo, F., & Gajate, C. (2003). Microtubules, microtubule-interfering agents and apoptosis. *Apoptosis: an international journal on programmed cell death*, *8*(5), 413–450.

Muroi, M., & Tanamoto, K. (2012). IRAK-1-mediated negative regulation of Toll-like receptor signaling through proteasome-dependent downregulation of TRAF6. *Biochimica et biophysica acta*, *1823*(2), 255–263.

Murthy, V., Calcuttawala, A., Chadha, K., d'Cruz, A., Krishnamurthy, A., Mallick, I., Nair, S., Teni, T., Pawar, S., Talapatra, K., Patil, A., Bhatt, A., Chatterjee, S., Swain, M., Narayanan, P., Ghadyalpatil, N., Singhal, M., Kuriakose, M., Prabhash, K., Agarwal, J., Parikh, P. (2017). Human papillomavirus in head and neck cancer in India: Current status and consensus recommendations. *South Asian journal of cancer*, *6*(3), 93–98.

Mushtaq, M., Kovalevska, L., Darekar, S., Abramsson, A., Zetterberg, H., Kashuba, V., Klein, G., Arsenian-Henriksson, M., & Kashuba, E. (2020). Cell stemness is maintained upon concurrent expression of RB and the mitochondrial ribosomal protein S18-2. *Proceedings of the National Academy of Sciences of the United States of America*, *117*(27), 15673–15683.

Nagata, M., Nakayama, H., Tanaka, T., Yoshida, R., Yoshitake, Y., Fukuma, D., Kawahara, K., Nakagawa, Y., Ota, K., Hiraki, A., & Shinohara, M. (2011). Overexpression of cIAP2 contributes to 5-FU resistance and a poor prognosis in oral squamous cell carcinoma. *British journal of cancer*, *105*(9), 1322–1330.

Nair, D., Mair, M., Singh, A., & D'Cruz, A. (2018). Prevalence and Impact of Human Papillomavirus on Head and Neck Cancers: Review of Indian Studies. *Indian journal of surgical oncology*, *9*(4), 568–575.

Najafzadeh, B., Asadzadeh, Z., Motafakker Azad, R., Mokhtarzadeh, A., Baghbanzadeh, A., Alemohammad, H., Abdoli Shadbad, M., Vasefifar, P., Najafi, S., & Baradaran, B. (2021). The oncogenic potential of NANOG: An important cancer induction mediator. *Journal of cellular physiology*, *236*(4), 2443–2458.

Nandi, S., Mandal, A., & Chhebbi, M. (2021). The prevalence and clinicopathological correlation of human papillomavirus in head and neck squamous cell carcinoma in India: A systematic review article. *Cancer treatment and research communications*, *26*, 100301.

Neil, S. J., Zang, T., & Bieniasz, P. D. (2008). Tetherin inhibits retrovirus release and is antagonized by HIV-1 Vpu. *Nature*, *451*(7177), 425-430.

Ngo, V. N., Young, R. M., Schmitz, R., Jhavar, S., Xiao, W., Lim, K. H., Kohlhammer, H., Xu, W., Yang, Y., Zhao, H., Shaffer, A. L., Romesser, P., Wright, G., Powell, J., Rosenwald, A., Muller-Hermelink, H. K., Ott, G., Gascoyne, R. D., Connors, J. M., Rimsza, L. M., Campo. E., Jaffe. E., Delabie. J., Smeland. E., Fisher. R., Braziel. R., Tubbs. R., Cook. J., Weisenburger. D., Chan. W., Staudt, L. M. (2011). Oncogenically active MYD88 mutations in human lymphoma. *Nature*, *470*(7332), 115–119.

Nguyen, A., Bhavsar, S., Riley, E., Caponetti, G., & Agrawal, D. (2016). Clinical Value of High Mobility Group Box 1 and the Receptor for Advanced Glycation End-products in Head and Neck Cancer: A Systematic Review. *International archives of otorhinolaryngology*, *20*(4), 382–389.

Nijkamp, M. M., Span, P. N., Hoogsteen, I. J., van der Kogel, A. J., Kaanders, J. H., & Bussink, J. (2011). Expression of E-cadherin and vimentin correlates with metastasis formation in head and neck squamous cell carcinoma patients. *Radiotherapy and Oncology*, *99*(3), 344-348.

Nojiri, K., Sugimoto, K., Shiraki, K., Tameda, M., Inagaki, Y., Kusagawa, S., Ogura, S., Tanaka, J., Yoneda, M., Yamamoto, N., Okano, H., Takei, Y., Ito, M., Kasai, C., Inoue, H., & Takase, K. (2013). The expression and function of Toll-like receptors 3 and 9 in human colon carcinoma. *Oncology reports*, *29*(5), 1737–1743.

Nouri, Y., Weinkove, R., & Perret, R. (2021). T-cell intrinsic Toll-like receptor signaling: implications for cancer immunotherapy and CAR T-cells. *Journal for immunotherapy of cancer*, *9*(11), e003065.

Pandey, A., Singh, A., Singh, S., Kumar, A., Das, A., Shahi, H., & Singh, A. (2020). Oral smokeless tobacco consumption pattern among rural Indian cancer patients: a prospective survey. *South Asian Journal of Cancer*, *9*(01), 17-19.

Patra, M. C., & Choi, S. (2016). Recent progress in the molecular recognition and therapeutic importance of interleukin-1 receptor-associated kinase 4. *Molecules*, *21*(11), 1529.

Phi, L. T. H., Sari, I. N., Yang, Y. G., Lee, S. H., Jun, N., Kim, K. S., Lee, Y. K., & Kwon, H. Y. (2018). Cancer Stem Cells (CSCs) in Drug Resistance and their Therapeutic Implications in Cancer Treatment. *Stem cells international*, *2018*, 5416923.

Piccinini, A. M., & Midwood, K. S. (2010). DAMPening inflammation by modulating TLR signalling. *Mediators of inflammation*, *2010*, 672395.

Poulose, J. V., & Kainickal, C. T. (2022). Immune checkpoint inhibitors in head and neck squamous cell carcinoma: A systematic review of phase-3 clinical trials. *World journal of clinical oncology*, *13*(5), 388–411.

Prieto-Vila, M., Takahashi, R. U., Usuba, W., Kohama, I., & Ochiya, T. (2017). Drug resistance driven by cancer stem cells and their niche. *International journal of molecular sciences*, *18*(12), 2574.

Qian, X., Wagner, S., Ma, C., Coordes, A., Gekeler, J., Klussmann, J. P., Hummel, M., Kaufmann, A. M., & Albers, A. E. (2014). Prognostic significance of ALDH1A1-positive cancer stem cells in patients with locally advanced, metastasized head and neck

squamous cell carcinoma. *Journal of cancer research and clinical oncology*, *140*(7), 1151–1158.

Qin, Y., Zheng, X., Gao, W., Wang, B., & Wu, Y. (2021). Tumor microenvironment and immune-related therapies of head and neck squamous cell carcinoma. *Molecular Therapy-Oncolytics*, *20*, 342-351.

Qiu, G., Li, Y., Liu, Z., Wang, M., Ge, J., & Bai, X. (2014). Clinical value of serum HMGB1 in diagnosis and prognosis of laryngeal squamous cell carcinoma. *Medical oncology (Northwood, London, England)*, *31*(12), 316.

Ren, T., Wen, Z. K., Liu, Z. M., Liang, Y. J., Guo, Z. L., & Xu, L. (2007). Functional expression of TLR9 is associated to the metastatic potential of human lung cancer cell. *Cancer biology & therapy*, *6*(11), 1704-1709.

Rhyasen, G. W., & Starczynowski, D. T. (2015). IRAK signalling in cancer. *British journal of cancer*, *112*(2), 232–237.

Rhyasen, G. W., Bolanos, L., & Starczynowski, D. T. (2013). Differential IRAK signaling in hematologic malignancies. *Experimental hematology*, *41*(12), 1005–1007.

Ribbat-Idel, J., Perner, S., Kuppler, P., Klapper, L., Krupar, R., Watermann, C., Paulsen, F.O., Offermann, A., Bruchhage, K.L., Wollenberg, B. & Idel, C. (2021). Immunologic "cold" squamous cell carcinomas of the head and neck are associated with an unfavorable prognosis. *Frontiers in Medicine*, *8*, 20.

Rosenthal, E. L., & Matrisian, L. M. (2006). Matrix metalloproteases in head and neck cancer. *Head & Neck: Journal for the Sciences and Specialties of the Head and Neck*, *28*(7), 639-648.

Rubinstein, M., & Armstrong, W. B. (2011). Transoral laser microsurgery for laryngeal cancer: a primer and review of laser dosimetry. *Lasers in medical science*, *26*, 113-124.

Ruokolainen, H., Pääkkö, P., & Turpeenniemi-Hujanen, T. (2006). Tissue and circulating immunoreactive protein for MMP-2 and TIMP-2 in head and neck squamous cell carcinoma--tissue immunoreactivity predicts aggressive clinical course. *Modern pathology: an official journal of the United States and Canadian Academy of Pathology, Inc*, *19*(2), 208–217.

Sabatini, M. E., & Chiocca, S. (2020). Human papillomavirus as a driver of head and neck cancers. *British journal of cancer*, *122*(3), 306-314.

Satelli, A., & Li, S. (2011). Vimentin in cancer and its potential as a molecular target for cancer therapy. *Cellular and molecular life sciences: CMLS*, *68*(18), 3033–3046.

Sato, Y., Goto, Y., Narita, N., & Hoon, D. S. (2009). Cancer cells expressing toll-like receptors and the tumor microenvironment. *Cancer microenvironment*, *2*(1), 205-214.

Schaefer, L. (2014). Complexity of danger: the diverse nature of damage-associated molecular patterns. *Journal of Biological Chemistry*, *289*(51), 35237-35245.

Schmaußer, B., Andrulis, M., Endrich, S., Müller-Hermelink, H. K., & Eck, M. (2005). Toll-like receptors TLR4, TLR5 and TLR9 on gastric carcinoma cells: an implication for interaction with Helicobacter pylori. *International Journal of Medical Microbiology*, *295*(3), 179-185.

Sekiguchi, F., & Kawabata, A. (2020). Role of HMGB1 in Chemotherapy-Induced Peripheral Neuropathy. *International journal of molecular sciences*, *22*(1), 367.

Senbanjo, L. T., & Chellaiah, M. A. (2017). CD44: A Multifunctional Cell Surface Adhesion Receptor Is a Regulator of Progression and Metastasis of Cancer Cells. *Frontiers in cell and developmental biology*, *5*, 18.

Sher, D. J., Schwartz, D. L., Nedzi, L., Khan, S., Hughes, R., Fidler, M. J., & Koshy, M. (2016). Comparative effectiveness of induction chemotherapy for oropharyngeal squamous cell carcinoma: a population-based analysis. *Oral Oncology*, *54*, 58-67.

Siddiqi, K., Shah, S., Abbas, S. M., Vidyasagaran, A., Jawad, M., Dogar, O., & Sheikh, A. (2015). Global burden of disease due to smokeless tobacco consumption in adults: analysis of data from 113 countries. *BMC medicine*, *13*, 194.

Siddiqui, M. R., Singh, R., Bhatnagar, A., Kumar, J., & Chaudhary, M. (2017). Determination of residual solvents in docetaxel by headspace gas chromatography. *Arabian Journal of chemistry*, *10*, S2479-S2484.

Singer, J. W., Fleischman, A., Al-Fayoumi, S., Mascarenhas, J. O., Yu, Q., & Agarwal, A. (2018). Inhibition of interleukin-1 receptor-associated kinase 1 (IRAK1) as a therapeutic strategy. *Oncotarget*, *9*(70), 33416.

Singh, A., Singhavi, H., Sathe, P., Gnanamoorthy, A., & Chaturvedi, P. (2020). Addictions causing head-and-neck cancers. *Indian Journal of Medical and Paediatric Oncology*, *41*(04), 510-518.

Smith, M. A., Choudhary, G. S., Pellagatti, A., Choi, K., Bolanos, L. C., Bhagat, T. D., Gordon-Mitchell, S., Von Ahrens, D., Pradhan, K., Steeples, V., Kim, S., Steidl, U., Walter, M., Fraser, I. D. C., Kulkarni, A., Salomonis, N., Komurov, K., Boultwood, J., Verma, A., & Starczynowski, D. T. (2019). U2AF1 mutations induce oncogenic IRAK4 isoforms and activate innate immune pathways in myeloid malignancies. *Nature cell biology*, *21*(5), 640–650.

Sobecki, M., Mrouj, K., Colinge, J., Gerbe, F., Jay, P., Krasinska, L., Dulic, V., & Fisher, D. (2017). Cell-Cycle Regulation Accounts for Variability in Ki-67 Expression Levels. *Cancer research*, *77*(10), 2722–2734.

Srivastava, R., Geng, D., Liu, Y., Zheng, L., Li, Z., Joseph, M.A., McKenna, C., Bansal, N., Ochoa, A. and Davila, E. (2012). Augmentation of Therapeutic Responses in Melanoma by Inhibition of IRAK-1,-4IRAK-4 Signaling and Melanoma Progression. *Cancer research*, *72*(23), 6209-6216.

Stransky, N., Egloff, A. M., Tward, A. D., Kostic, A. D., Cibulskis, K., Sivachenko, A., Kryukov, G. V., Lawrence, M. S., Sougnez, C., McKenna, A., Shefler, E., Ramos, A. H., Stojanov, P., Carter, S. L., Voet, D., Cortés, M. L., Auclair, D., Berger, M. F., Saksena, G., Guiducci, C., Onofrio, R., Parkin, M., Romkes, M., Weissfeld, J., Seethala, R., Wang, L., Rangel-Escareno, C., Fernandez-Lopez, JC., Hidalgo-Miranda, A., Melendez-Zaigla, J., Winckler, W., Ardlie, K., Gabriel, S., Meyerson, M., Lander, E., Getz, G., Golub, T.,Garraway, L., Grandis, J. R. (2011). The mutational landscape of head and neck squamous cell carcinoma. *Science (New York, N.Y.)*, *333*(6046), 1157–1160.

Sun, H., Hu, W., Yan, Y., Zhang, Z., Chen, Y., Yao, X., Teng, L., Wang, X., Chai, D., Zheng, J., & Wang, G. (2021). Using PAMPs and DAMPs as adjuvants in cancer vaccines. *Human vaccines & immunotherapeutics*, *17*(12), 5546–5557.

Sun, L., Liu, W., & Zhang, L. J. (2019). The Role of Toll-Like Receptors in Skin Host Defense, Psoriasis, and Atopic Dermatitis. *Journal of immunology research*, *2019*, 1824624.

Sun, Z., Sun, X., Chen, Z., Du, J., & Wu, Y. (2022). Head and neck squamous cell carcinoma: risk factors, molecular alterations, immunology and peptide vaccines. *International Journal of Peptide Research and Therapeutics*, *28*, 1-18.

Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., Soerjomataram, I., Jemal, A., & Bray, F. (2021). Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA: a cancer journal for clinicians*, *71*(3), 209-249.

Szczepanski, M. J., Czystowska, M., Szajnik, M., Harasymczuk, M., Boyiadzis, M., Kruk-Zagajewska, A, Szyfter, W., Zeromski, J. and Whiteside, T.L. (2009). Triggering of Toll-like receptor 4 expressed on human head and neck squamous cell carcinoma promotes tumor development and protects the tumor from immune attack. *Cancer research*, *69*(7), 3105-3113.

Takeda, K., & Akira, S. (2004, February). TLR signaling pathways. In *Seminars in immunology* (Vol. 16, No. 1, pp. 3-9). Academic Press.

Tai, Y. T., Horton, H. M., Kong, S. Y., Pong, E., Chen, H., Cemerski, S., Bernett, M. J., Nguyen, D. H., Karki, S., Chu, S. Y., Lazar, G. A., Munshi, N. C., Desjarlais, J. R., Anderson, K. C., & Muchhal, U. S. (2012). Potent in vitro and in vivo activity of an Fc-engineered humanized anti-HM1.24 antibody against multiple myeloma via augmented effector function. *Blood*, *119*(9), 2074–2082.

Tanaka, J., Sugimoto, K., Shiraki, K., Tameda, M., Kusagawa, S., Nojiri, K., Beppu, T., Yoneda, K., Yamamoto, N., Uchida, K., Kojima, T., & Takei, Y. (2010). Functional cell surface expression of toll-like receptor 9 promotes cell proliferation and survival in human hepatocellular carcinomas. *International journal of oncology*, *37*(4), 805–814.

Teoh, M., Clark, C. H., Wood, K., Whitaker, S., & Nisbet, A. (2011). Volumetric modulated arc therapy: a review of current literature and clinical use in practice. *The British journal of radiology*, *84*(1007), 967–996.

Theodoraki, M. N., Yerneni, S. S., Brunner, C., Theodorakis, J., Hoffmann, T. K., & Whiteside, T. L. (2018). Plasma-derived exosomes reverse epithelial-to-mesenchymal transition after photodynamic therapy of patients with head and neck cancer. *Oncoscience*, *5*(3-4), 75.

Tomita, H., Tanaka, K., Tanaka, T., & Hara, A. (2016). Aldehyde dehydrogenase 1A1 in stem cells and cancer. *Oncotarget*, *7*(10), 11018.

Treon, S. P., Xu, L., Yang, G., Zhou, Y., Liu, X., Cao, Y., Sheehy, P., Manning, R. J., Patterson, C. J., Tripsas, C., Arcaini, L., Pinkus, G. S., Rodig, S. J., Sohani, A. R., Harris, N. L., Laramie, J. M., Skifter, D. A., Lincoln, S. E., & Hunter, Z. R. (2012). MYD88 L265P somatic mutation in Waldenström's macroglobulinemia. *The New England journal of medicine*, *367*(9), 826–833.

Tsai, Y. P., Yang, M. H., Huang, C. H., Chang, S. Y., Chen, P. M., Liu, C. J., Teng, S. C., & Wu, K. J. (2009). Interaction between HSP60 and beta-catenin promotes metastasis. *Carcinogenesis*, *30*(6), 1049–1057.

Tunggal, J. A., Helfrich, I., Schmitz, A., Schwarz, H., Günzel, D., Fromm, M., Kemler, R., Krieg, T., & Niessen, C. M. (2005). E-cadherin is essential for in vivo epidermal barrier function by regulating tight junctions. *The EMBO journal*, *24*(6), 1146–1156.

Turpeenniemi-Hujanen, T. (2005). Gelatinases (MMP-2 and-9) and their natural inhibitors as prognostic indicators in solid cancers. *Biochimie*, *87*(3-4), 287-297.

Urban-Wojciuk, Z., Khan, M. M., Oyler, B. L., Fåhraeus, R., Marek-Trzonkowska, N., Nita-Lazar, A., Hupp, T. R., & Goodlett, D. R. (2019). The Role of TLRs in Anti-cancer Immunity and Tumor Rejection. *Frontiers in immunology*, *10*, 2388.

Urruticoechea, A., Smith, I. E., & Dowsett, M. (2005). Proliferation marker Ki-67 in early breast cancer. *Journal of clinical oncology*, *23*(28), 7212-7220.

Van Damme, N., Goff, D., Katsura, C., Jorgenson, R. L., Mitchell, R., Johnson, M. C., Stephens, E. B., & Guatelli, J. (2008). The interferon-induced protein BST-2 restricts HIV-1 release and is downregulated from the cell surface by the viral Vpu protein. *Cell host & microbe*, *3*(4), 245–252.

van Duijvenvoorde, M., Derks, S., Bahce, I., Leemans, C. R., van de Ven, R., & Fransen, M. F. (2022). Comparison of the tumor microenvironments of squamous cell carcinoma at different anatomical locations within the upper aerodigestive tract in relation to response to ICI therapy. *Clinical & translational immunology*, *11*(1), e1363.

Veigas, F., Mahmoud, Y. D., Merlo, J., Rinflerch, A., Rabinovich, G. A., & Girotti, M. R. (2021). Immune checkpoints pathways in head and neck squamous cell carcinoma. *Cancers*, *13*(5), 1018.

Vermorken, J. B., Remenar, E., van Herpen, C., Gorlia, T., Mesia, R., Degardin, M., Stewart, J. S., Jelic, S., Betka, J., Preiss, J. H., van den Weyngaert, D., Awada, A., Cupissol, D., Kienzer, H. R., Rey, A., Desaunois, I., Bernier, J., Lefebvre, J. L., & EORTC 24971/TAX 323 Study Group (2007). Cisplatin, fluorouracil, and docetaxel in unresectable head and neck cancer. *The New England journal of medicine*, *357*(17), 1695–1704.

Vijay K. (2018). Toll-like receptors in immunity and inflammatory diseases: Past, present, and future. *International immunopharmacology*, *59*, 391–412.

Wainwright, D. A., Balyasnikova, I. V., Han, Y., & Lesniak, M. S. (2011). The expression of BST2 in human and experimental mouse brain tumors. *Experimental and molecular pathology*, *91*(1), 440–446.

Wang, F., Zhang, P., Yang, L., Yu, X., Ye, X., Yang, J., Qian, C., Zhang, X., Cui, Y. H., & Bian, X. W. (2015). Activation of toll-like receptor 2 promotes invasion by upregulating MMPs in glioma stem cells. *American journal of translational research*, *7*(3), 607–615.

Wang, G. X., Kurra, V., Gainor, J. F., Sullivan, R. J., Flaherty, K. T., Lee, S. I., & Fintelmann, F. J. (2017). Immune Checkpoint Inhibitor Cancer Therapy: Spectrum of Imaging Findings. *Radiographics: a review publication of the Radiological Society of North America, Inc*, *37*(7), 2132–2144.

Wang, W., Nishioka, Y., Ozaki, S., Jalili, A., Abe, S., Kakiuchi, S., Kishuku, M., Minakuchi, K., Matsumoto, T., & Sone, S. (2009). HM1.24 (CD317) is a novel target against lung cancer for immunotherapy using anti-HM1.24 antibody. *Cancer immunology, immunotherapy: CII*, *58*(6), 967–976.

Wang, X., Zhang, H., & Chen, X. (2019). Drug resistance and combating drug resistance in cancer. *Cancer drug resistance (Alhambra, Calif.)*, *2*(2), 141–160.

Warren, C. F. A., Wong-Brown, M. W., & Bowden, N. A. (2019). BCL-2 family isoforms in apoptosis and cancer. *Cell death & disease*, *10*(3), 177.

Wee, Z. N., Yatim, S. M., Kohlbauer, V. K., Feng, M., Goh, J. Y., Bao, Y., Lee, P. L., Zhang, S., Wang, P. P., Lim, E., Tam, W. L., Cai, Y., Ditzel, H. J., Hoon, D. S., Tan, E. Y., & Yu, Q. (2015). IRAK1 is a therapeutic target that drives breast cancer metastasis and resistance to paclitaxel. *Nature communications*, *6*, 8746.

Wei, Y., Li, Y., Chen, Y., Liu, P., Huang, S., Zhang, Y., Sun, Y., Wu, Z., Hu, M., Wu, Q., Wu, H., Liu, F., She, T., & Ning, Z. (2022). ALDH1: A potential therapeutic target for cancer stem cells in solid tumors. *Frontiers in oncology*, *12*, 1026278.

Werner, J. A., Dunne, A. A., Folz, B. J., & Lippert, B. M. (2002). Transoral laser microsurgery in carcinomas of the oral cavity, pharynx, and larynx. *Cancer control: journal of the Moffitt Cancer Center*, *9*(5), 379–386.

West, A.C., Tang, K., Tye, H., Yu, L., Deng, N., Najdovska, M., Lin, S.J., Balic, J.J., Okochi-Takada, E., McGuirk, P. & Keogh, B., (2017). Identification of a TLR2-regulated gene signature associated with tumor cell growth in gastric cancer. *Oncogene*, *36*(36), 5134-5144.

Wild, C. A., Bergmann, C., Fritz, G., Schuler, P., Hoffmann, T. K., Lotfi, R., Westendorf, A., Brandau, S., & Lang, S. (2012). HMGB1 conveys immunosuppressive characteristics on regulatory and conventional T cells. *International immunology*, *24*(8), 485–494.

Woodman, N., Pinder, S. E., Tajadura, V., Le Bourhis, X., Gillett, C., Delannoy, P., Burchell, J. M., & Julien, S. (2016). Two E-selectin ligands, BST-2 and LGALS3BP, predict metastasis and poor survival of ER-negative breast cancer. *International journal of oncology*, *49*(1), 265–275.

Xie, W., Wang, Y., Huang, Y., Yang, H., Wang, J., & Hu, Z. (2009). Toll-like receptor 2 mediates invasion via activating NF-κB in MDA-MB-231 breast cancer cells. *Biochemical and biophysical research communications*, *379*(4), 1027-1032.

Yadav, A., Kumar, B., Datta, J., Teknos, T. N., & Kumar, P. (2011). IL-6 promotes head and neck tumor metastasis by inducing epithelial-mesenchymal transition via the JAK-

STAT3-SNAIL signaling pathway. *Molecular cancer research: MCR*, *9*(12), 1658–1667.

Yamamoto, M., Sato, S., Hemmi, H., Hoshino, K., Kaisho, T., Sanjo, H., Takeuchi, O., Sugiyama, M., Okabe, M., Takeda, K., & Akira, S. (2003). Role of adaptor TRIF in the MyD88-independent toll-like receptor signaling pathway. *Science (New York, N.Y.)*, *301*(5633), 640–643.

Yamashita, N., Tokunaga, E., Iimori, M., Inoue, Y., Tanaka, K., Kitao, H., Saeki, H., Oki, E., & Maehara, Y. (2018). Epithelial Paradox: Clinical Significance of Coexpression of E-cadherin and Vimentin With Regard to Invasion and Metastasis of Breast Cancer. *Clinical breast cancer*, *18*(5), e1003–e1009.

Yang, G., Zhou, Y., Liu, X., Xu, L., Cao, Y., Manning, R. J., Patterson, C. J., Buhrlage, S. J., Gray, N., Tai, Y. T., Anderson, K. C., Hunter, Z. R., & Treon, S. P. (2013). A mutation in MYD88 (L265P) supports the survival of lymphoplasmacytic cells by activation of Bruton tyrosine kinase in Waldenström macroglobulinemia. *Blood*, *122*(7), 1222–1232.

Yang, J., Li, M., & Zheng, Q. C. (2015). Emerging role of Toll-like receptor 4 in hepatocellular carcinoma. *Journal of hepatocellular carcinoma*, *2*, 11–17.

Yang, L. L., Wu, L., Yu, G. T., Zhang, W. F., Liu, B., & Sun, Z. J. (2018). CD317 Signature in Head and Neck Cancer Indicates Poor Prognosis. *Journal of dental research*, *97*(7), 787–794.

Ye, Z. H., Gao, L., Wen, D. Y., He, Y., Pang, Y. Y., & Chen, G. (2017). Diagnostic and prognostic roles of IRAK1 in hepatocellular carcinoma tissues: an analysis of immunohistochemistry and RNA-sequencing data from the cancer genome atlas. *OncoTargets and therapy*, *10*, 1711.

Yeh S. A. (2010). Radiotherapy for head and neck cancer. *Seminars in plastic surgery*, *24*(2), 127–136.

Yete, S., D'Souza, W., & Saranath, D. (2018). High-Risk Human Papillomavirus in Oral Cancer: Clinical Implications. *Oncology*, *94*(3), 133–141.

Yeung, K. T., & Yang, J. (2017). Epithelial–mesenchymal transition in tumor metastasis. *Molecular oncology*, *11*(1), 28-39.

Yi, E. H., Yoo, H., Noh, K. H., Han, S., Lee, H., Lee, J. K., Won, C., Kim, B. H., Kim, M. H., Cho, C. H., & Ye, S. K. (2013). BST-2 is a potential activator of invasion and migration in tamoxifen-resistant breast cancer cells. *Biochemical and biophysical research communications*, *435*(4), 685–690.

Yip, K. W., & Reed, J. C. (2008). Bcl-2 family proteins and cancer. *Oncogene*, *27*(50), 6398-6406.

Yu, G. T., Bu, L. L., Zhao, Y. Y., Mao, L., Deng, W. W., Wu, T. F., Zhang, W. F., & Sun, Z. J. (2016). CTLA4 blockade reduces immature myeloid cells in head and neck squamous cell carcinoma. *Oncoimmunology*, *5*(6), e1151594.

Yu, L., Wang, L., & Chen, S. (2010). Endogenous toll-like receptor ligands and their biological significance. *Journal of cellular and molecular medicine*, *14*(11), 2592–2603.

Zhang, A., Wang, X., Fan, C., & Mao, X. (2021). The Role of Ki67 in Evaluating Neoadjuvant Endocrine Therapy of Hormone Receptor-Positive Breast Cancer. *Frontiers in endocrinology*, *12*, 687244.

Zhang, D., Li, L., Jiang, H., Knolhoff, B. L., Lockhart, A. C., Wang-Gillam, A., DeNardo, D. G., Ruzinova, M. B., & Lim, K. H. (2017). Constitutive IRAK4 Activation Underlies Poor Prognosis and Chemoresistance in Pancreatic Ductal Adenocarcinoma. *Clinical cancer research: an official journal of the American Association for Cancer Research*, *23*(7), 1748–1759.

Zhang, K., Jiao, K., Xing, Z., Zhang, L., Yang, J., Xie, X., & Yang, L. (2014). Bcl-xL overexpression and its association with the progress of tongue carcinoma. *International journal of clinical and experimental pathology*, *7*(11), 7360–7377.

Zhang, W., Sui, Y., Ni, J., & Yang, T. (2016). Insights into the Nanog gene: A propeller for stemness in primitive stem cells. *International journal of biological sciences*, *12*(11), 1372.

Zhao, W., Li, Y., & Zhang, X. (2017). Stemness-Related Markers in Cancer. *Cancer translational medicine*, *3*(3), 87–95

Zhong, L. P., Zhang, C. P., Ren, G. X., Guo, W., William, W. N., Jr, Sun, J., Zhu, H. G., Tu, W. Y., Li, J., Cai, Y. L., Wang, L. Z., Fan, X. D., Wang, Z. H., Hu, Y. J., Ji, T., Yang, W. J., Ye, W. M., Li, J., He, Y., Wang, Y. A., Xu, Li., Wang, B., Merrill, K., Lee, J., Myers, J., Zhang, Z. Y. (2013). Randomized phase III trial of induction chemotherapy with docetaxel, cisplatin, and fluorouracil followed by surgery versus up-front surgery in locally advanced resectable oral squamous cell carcinoma. *Journal of clinical oncology: official journal of the American Society of Clinical Oncology*, *31*(6), 744–751.

Zhou, C., & Sun, B. (2014). The prognostic role of the cancer stem cell marker aldehyde dehydrogenase 1 in head and neck squamous cell carcinomas: a meta-analysis. *Oral oncology*, *50*(12), 1144–1148.