

BIBLIOGRAPHY

- [1] UniProt: the universal protein knowledgebase in 2023. *Nucleic Acids Research*, 51(D1):D523–D531, 2023.
- [2] Abbaszadegan, M. R., Taghehchian, N., Li, L., et al. Contribution of KCTD12 to esophageal squamous cell carcinoma. *BMC cancer*, 18(1):1–7, 2018.
- [3] AbdulMajeed, A. A., Dalley, A. J., and Farah, C. S. Loss of ELF3 immunoexpression is useful for detecting oral squamous cell carcinoma but not for distinguishing between grades of epithelial dysplasia. *Annals of Diagnostic Pathology*, 17(4):331–340, 2013.
- [4] Abe, Y., Ogasawara, S., Akiba, J., et al. Expression and role of regulator of G-protein signaling 5 in squamous cell carcinoma of the tongue. *Clinical and experimental dental research*, 5(2):160–169, 2019.
- [5] Abe, Y., Mukudai, Y., Kurihara, M., et al. Tumor protein D52 is upregulated in oral squamous carcinoma cells under hypoxia in a hypoxia-inducible-factor-independent manner and is involved in cell death resistance. *Cell & bioscience*, 11(1):1–13, 2021.
- [6] Acker, F., Stratmann, J., Aspacher, L., et al. KRAS Mutations in Squamous Cell Carcinomas of the Lung. *Frontiers in Oncology*, page 5245, 2021.
- [7] Adnane, J., Muro Cacho, C., Mathews, L., et al. Suppression of rho B expression in invasive carcinoma from head and neck cancer patients. *Clinical cancer research*, 8(7):2225–2232, 2002.
- [8] Ahmadi, M., Eftekhari Kenzerki, M., Akrami, S. M., et al. Overexpression of HPRT1 is associated with poor prognosis in head and neck squamous cell carcinoma. *FEBS Open bio*, 11(9):2525–2540, 2021.
- [9] Ahmed, H. A., Mahanta, P., Bhattacharyya, D. K., et al. Shifting-and-scaling correlation based biclustering algorithm. *IEEE/ACM transactions on computational biology and bioinformatics*, 11(6):1239–1252, 2014.
- [10] Ahn, J. H. and Chang, H. K. Expression of minichromosome maintenance protein 7 and Smad 4 in squamous cell carcinoma of the esophagus. *Korean J Pathol*, 44(4):346–53, 2010.
- [11] Ai, R., Sun, Y., Guo, Z., et al. NDRG1 overexpression promotes the progression of esophageal squamous cell carcinoma through modulating Wnt signaling pathway. *Cancer biology & therapy*, 17(9):943–954, 2016.
- [12] Ai, Y., Liu, S., Luo, H., et al. METTL3 Intensifies the Progress of Oral Squamous Cell Carcinoma via Modulating the m6A Amount of PRMT5 and PD-L1. *Journal of Immunology Research*, 2021, 2021.
- [13] Aitchison, J. and Silvey, S. D. Maximum-likelihood estimation procedures and associated tests of significance. *Journal of the Royal Statistical Society: Series B (Methodological)*, 22(1):154–171, 1960.
- [14] Al Rawi, N. H., Merza, M. S., Ghazi, A. M., et al. PIK3CB and K-ras in oral squamous Cell

- carcinoma. A possible cross-talk! *Journal of Orofacial Sciences*, 6(2):99, 2014.
- [15] Albert, R., Jeong, H., and Barabási, A.-L. Error and attack tolerance of complex networks. *nature*, 406(6794):378–382, 2000.
- [16] Alberts, B. *Molecular biology of the cell*. Garland science, 2017.
- [17] Alexa, A., Rahnenführer, J., and Lengauer, T. Improved scoring of functional groups from gene expression data by decorrelating GO graph structure. *Bioinformatics*, 22(13):1600–1607, 2006.
- [18] Algabri, Y. A., Li, L., and Liu, Z. P. scGENA: A single-cell gene coexpression network analysis framework for clustering cell types and revealing biological mechanisms. *Bioengineering*, 9(8):353, 2022.
- [19] Alizadeh, A. A., Eisen, M. B., Davis, R. E., et al. Distinct types of diffuse large B-cell lymphoma identified by gene expression profiling. *Nature*, 403(6769):503–511, 2000.
- [20] Almeida, A. D. S., Oliveira, D. T., Pereira, M. C., et al. Podoplanin and VEGF-C immunorexpression in oral squamous cell carcinomas: prognostic significance. *Anticancer research*, 33(9):3969–3976, 2013.
- [21] Alon, U., Barkai, N., Notterman, D. A., et al. Broad patterns of gene expression revealed by clustering analysis of tumor and normal colon tissues probed by oligonucleotide arrays. *Proceedings of the National Academy of Sciences*, 96(12):6745–6750, 1999.
- [22] Amar, D., Safer, H., and Shamir, R. Dissection of regulatory networks that are altered in disease via differential co-expression. *PLoS computational biology*, 9(3):e1002955, 2013.
- [23] Anders, S. and Huber, W. Differential expression analysis for sequence count data. *Nature Precedings*, pages 1–1, 2010.
- [24] Andisheh Tadbir, A., Goharian, A. S., Ranjbar, M. A., et al. Glypican-3 expression in patients with oral squamous cell carcinoma. *Journal of Dentistry*, 21(2):141, 2020.
- [25] Ando, T., Ishiguro, H., Kimura, M., et al. Decreased expression of NDRG1 is correlated with tumor progression and poor prognosis in patients with esophageal squamous cell carcinoma. *Diseases of the Esophagus*, 19(6):454–458, 2006.
- [26] Ando, T., Ishiguro, H., Kimura, M., et al. The overexpression of caveolin-1 and caveolin-2 correlates with a poor prognosis and tumor progression in esophageal squamous cell carcinoma. *Oncology reports*, 18(3):601–609, 2007.
- [27] Angiulli, F., Cesario, E., and Pizzuti, C. Random walk biclustering for microarray data. *Information Sciences*, 178(6):1479–1497, 2008.
- [28] Anthony, L. The Cambridge dictionary of statistics. *Reference Reviews*, 17(1):29–30, 2003.
- [29] Anupam, K., Tusharkant, C., Gupta, S. D., et al. Loss of disabled-2 expression is an early event in esophageal squamous tumorigenesis. *World journal of gastroenterology: WJG*, 12(37):6041, 2006.
- [30] Ashburner, M., Ball, C. A., Blake, J. A., et al. Gene ontology: tool for the unification of biology. *Nature genetics*, 25(1):25–29, 2000.
- [31] Ashtiani, M., Mirzaie, M., and Jafari, M. CINNA: an R/CRAN package to decipher Central Informative Nodes in Network Analysis. *Bioinformatics*, 35(8):1436–1437, 2019.
- [32] Attaran, N., Gu, X., Coates, P. J., et al. Downregulation of TAP1 in tumor-free tongue contralateral

- to squamous cell carcinoma of the oral tongue, an indicator of better survival. *International journal of molecular sciences*, 21(17):6220, 2020.
- [33] Aviel Ronen, S., Lau, S. K., Pintilie, M., et al. Glypican-3 is overexpressed in lung squamous cell carcinoma, but not in adenocarcinoma. *Modern Pathology*, 21(7):817–825, 2008.
- [34] Ayadi, W., Elloumi, M., and Hao, J. K. Pattern-driven neighborhood search for biclustering of microarray data. In *BMC bioinformatics*, volume 13, pages 1–11. Springer, 2012.
- [35] Azuaje, F. J. Selecting biologically informative genes in co-expression networks with a centrality score. *Biology direct*, 9(1):1–23, 2014.
- [36] Bai, G., Chu, J., Eli, M., et al. PAQR3 overexpression suppresses the aggressive phenotype of esophageal squamous cell carcinoma cells via inhibition of ERK signaling. *Biomedicine & Pharmacotherapy*, 94:813–819, 2017.
- [37] Bai, G., Yang, M., Zheng, C., et al. Suppressor PAQR3 associated with the clinical significance and prognosis in esophageal squamous cell carcinoma. *Oncology Letters*, 15(4):5703–5711, 2018.
- [38] Barabási, A.-L. and Albert, R. Emergence of scaling in random networks. *science*, 286(5439):509–512, 1999.
- [39] Bavelas, A. Communication patterns in task-oriented groups. *The journal of the acoustical society of America*, 22(6):725–730, 1950.
- [40] Bednarek, K., Kostrzevska Poczekaj, M., Szaumkessel, M., et al. Downregulation of CEACAM6 gene expression in laryngeal squamous cell carcinoma is an effect of DNA hypermethylation and correlates with disease progression. *American journal of cancer research*, 8(7):1249, 2018.
- [41] Ben Dor, A., Chor, B., Karp, R., et al. Discovering local structure in gene expression data: the order-preserving submatrix problem. In *Proceedings of the sixth annual international conference on Computational biology*, pages 49–57, 2002.
- [42] Bender, O., Gunduz, M., Cigdem, S., et al. Functional analysis of ESM 1 by si RNA knockdown in primary and metastatic head and neck cancer cells. *Journal of Oral Pathology & Medicine*, 47(1):40–47, 2018.
- [43] Benjamini, Y. and Hochberg, Y. Controlling the false discovery rate: a practical and powerful approach to multiple testing. *Journal of the Royal statistical society: series B (Methodological)*, 57(1):289–300, 1995.
- [44] Bergmann, S., Ihmels, J., and Barkai, N. Iterative signature algorithm for the analysis of large-scale gene expression data. *Physical review E*, 67(3):031902, 2003.
- [45] Bhagwat, A. S. and Vakoc, C. R. Targeting transcription factors in cancer. *Trends in cancer*, 1(1):53–65, 2015.
- [46] Bhol, C. S., Mishra, S. R., Patil, S., et al. PAX9 reactivation by inhibiting DNA methyltransferase triggers antitumor effect in oral squamous cell carcinoma. *Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease*, 1868(9):166428, 2022.
- [47] Bhuyan, M. H. Network anomaly detection: methods, systems and tools. *Ieee communications surveys & tutorials*, 16(1):303–336, 2013.
- [48] Bland, J. M. and Altman, D. G. Calculating correlation coefficients with repeated observations: Part 2—Correlation between subjects. *Bmj*, 310(6980):633, 1995.

- [49] Bland, J. M. and Altman, D. G. Multiple significance tests: the Bonferroni method. *Bmj*, 310(6973):170, 1995.
- [50] Blessmann, M., Al Dam, A., Hanken, H., et al. Amplification of the PPFIA1 gene region on 11q13 in oral squamous cell carcinomas (OSCC). *Journal of Cranio-Maxillofacial Surgery*, 41(8):845–849, 2013.
- [51] Bodnar, M., Szyberg, L., Kazmierczak, W., et al. Differentiated expression of membrane type metalloproteinases (MMP-14, MMP-15) and pro-MMP 2 in laryngeal squamous cell carcinoma. A novel mechanism. *Journal of oral pathology & medicine*, 42(3):267–274, 2013.
- [52] Bolidong, D., Domoto, T., Uehara, M., et al. Potential therapeutic effect of targeting glycogen synthase kinase 3 β in esophageal squamous cell carcinoma. *Scientific reports*, 10(1):1–13, 2020.
- [53] Bonacich, P. and Lloyd, P. Eigenvector-like measures of centrality for asymmetric relations. *Social networks*, 23(3):191–201, 2001.
- [54] Bora, M., Sarmah, N., Das, B., et al. A comparative study on regulation of HLA-G expression in bad obstetric history and in head and neck squamous cell carcinoma from Northeast India. *Human Immunology*, 2022.
- [55] Bray, N. L., Pimentel, H., Melsted, P., et al. Near-optimal probabilistic RNA-seq quantification. *Nature biotechnology*, 34(5):525–527, 2016.
- [56] Brieger, J., Pongsapich, W., Mann, S. A., et al. Demethylation treatment restores hic1 expression and impairs aggressiveness of head and neck squamous cell carcinoma. *Oral oncology*, 46(9):678–683, 2010.
- [57] Broët, P., Richardson, S., and Radvanyi, F. Bayesian hierarchical model for identifying changes in gene expression from microarray experiments. *Journal of Computational Biology*, 9(4):671–683, 2002.
- [58] Bryan, K., Cunningham, P., and Bolshakova, N. Application of simulated annealing to the bi-clustering of gene expression data. *IEEE transactions on information technology in biomedicine*, 10(3):519–525, 2006.
- [59] Byzia, E., Soloch, N., Bodnar, M., et al. Recurrent transcriptional loss of the PCDH17 tumor suppressor in laryngeal squamous cell carcinoma is partially mediated by aberrant promoter DNA methylation. *Molecular Carcinogenesis*, 57(7):878–885, 2018.
- [60] Cai, H., Wang, R., Tang, Z., et al. FSCN1 Promotes Esophageal Carcinoma Progression Through Downregulating PTK6 via its RNA-Binding Protein Effect. *Frontiers in Pharmacology*, 13:868296–868296, 2022.
- [61] Calmon, M. F., Rodrigues, R. V., Kaneto, C. M., et al. Epigenetic silencing of CRABP2 and MX1 in head and neck tumors. *Neoplasia*, 11(12):1329–IN9, 2009.
- [62] Campbell, C. M. P., Giuliano, A. R., Torres, B. N., et al. Salivary secretory leukocyte protease inhibitor (SLPI) and head and neck cancer: The Cancer Prevention Study II Nutrition Cohort. *Oral oncology*, 55:1–5, 2016.
- [63] Cao, L. J., Zhang, Y. J., Dong, S. Q., et al. ATAD2 interacts with C/EBP β to promote esophageal squamous cell carcinoma metastasis via TGF- β 1/Smad3 signaling. *Journal of Experimental & Clinical Cancer Research*, 40(1):1–16, 2021.

- [64] Cao, R., Tang, W., and Chen, S. Association between BTLA polymorphisms and susceptibility to esophageal squamous cell carcinoma in the Chinese population. *Journal of Clinical Laboratory Analysis*, 34(6):e23221, 2020.
- [65] Cao, X., Luan, K., Yang, J., et al. Targeting lncRNA PSMA3-AS1, a Prognostic Marker, Suppresses Malignant Progression of Oral Squamous Cell Carcinoma. *Disease Markers*, 2021, 2021.
- [66] Carlson, M. Genome wide annotation for humanR package version 3.5. 0, 2017.
- [67] Carrera, M., Bitu, C. C., de Oliveira, C. E., et al. HOXA10 controls proliferation, migration and invasion in oral squamous cell carcinoma. *International journal of clinical and experimental pathology*, 8(4):3613, 2015.
- [68] Chambers, J. M. *Software for data analysis: programming with R*, volume 2. Springer, 2008.
- [69] Chang, H. W., Yen, C. Y., Chen, C. H., et al. Evaluation of the mRNA expression levels of integrins $\alpha 3$, $\alpha 5$, $\beta 1$ and $\beta 6$ as tumor biomarkers of oral squamous cell carcinoma. *Oncology letters*, 16(4):4773–4781, 2018.
- [70] Chang, K. P., Wu, C. C., Fang, K. H., et al. Serum levels of chemokine (CXC motif) ligand 9 (CXCL9) are associated with tumor progression and treatment outcome in patients with oral cavity squamous cell carcinoma. *Oral oncology*, 49(8):802–807, 2013.
- [71] Chang, K. P., Yu, J. S., Chien, K. Y., et al. Identification of PRDX4 and P4HA2 as metastasis-associated proteins in oral cavity squamous cell carcinoma by comparative tissue proteomics of microdissected specimens using iTRAQ technology. *Journal of proteome research*, 10(11):4935–4947, 2011.
- [72] Chang, W. M., Chang, Y. C., Yang, Y. C., et al. AKR1C1 controls cisplatin-resistance in head and neck squamous cell carcinoma through cross-talk with the STAT1/3 signaling pathway. *Journal of Experimental & Clinical Cancer Research*, 38(1):1–14, 2019.
- [73] Chen, B., Liu, W., Liang, C., et al. TGM2 Has Potential to Be A Prognostic Factor for Lung Squamous Cell Carcinoma and an Indicator of Immune Infiltrates. 2020.
- [74] Chen, E. Y., Tan, C. M., Kou, Y., et al. Enrichr: interactive and collaborative HTML5 gene list enrichment analysis tool. *BMC bioinformatics*, 14(1):1–14, 2013.
- [75] Chen, J., Wang, Y., Zhang, W., et al. Membranous NOX5-derived ROS oxidizes and activates local Src to promote malignancy of tumor cells. *Signal transduction and targeted therapy*, 5(1):1–12, 2020.
- [76] Chen, J., Zhang, W., Wang, Y., et al. The diacylglycerol kinase α (DGK α)/Akt/NF- κ B feedforward loop promotes esophageal squamous cell carcinoma (ESCC) progression via FAK-dependent and FAK-independent manner. *Oncogene*, 38(14):2533–2550, 2019.
- [77] Chen, L. C., Yu, P. S., and Tseng, V. S. WF-MSB: a weighted fuzzy-based biclustering method for gene expression data. *International journal of data mining and bioinformatics*, 5(1):89–109, 2011.
- [78] Chen, M. F., Chen, P. T., Lu, M. S., et al. IL-6 expression predicts treatment response and outcome in squamous cell carcinoma of the esophagus. *Molecular cancer*, 12(1):1–12, 2013.
- [79] Chen, M. F., Lu, M. S., Lin, P. Y., et al. The role of DNA methyltransferase 3b in esophageal squamous cell carcinoma. *Cancer*, 118(16):4074–4089, 2012.
- [80] Chen, S. Characterizing oncogenic effects of NADPH oxidase 5 in head and neck squamous cell

- carcinomas. *HKU Theses Online (HKUTO)*, 2019.
- [81] Chen, T., Xu, B., Chen, H., et al. Transcription factor NFE2L3 promotes the proliferation of esophageal squamous cell carcinoma cells and causes radiotherapy resistance by regulating IL-6. *Computer Methods and Programs in Biomedicine*, 226:107102, 2022.
- [82] Chen, W. S., Luo, S. D., Chiu, T. J., et al. Ribophorin II overexpression is associated with poor response to induction chemotherapy with docetaxel, cisplatin, and fluorouracil in P16-negative locally advanced head and neck squamous cell carcinoma. *Journal of Clinical Medicine*, 10(18):4118, 2021.
- [83] Chen, W. C., Chen, M. F., and Lin, P. Y. Significance of DNMT3b in oral cancer. *PloS one*, 9(3):e89956, 2014.
- [84] Chen, X., Lu, B., Ma, Q., et al. EphA3 inhibits migration and invasion of esophageal cancer cells by activating the mesenchymal-epithelial transition process. *International journal of oncology*, 54(2):722–732, 2019.
- [85] Chen, X., Huang, L., Yang, T., et al. METTL3 Promotes Esophageal Squamous Cell Carcinoma Metastasis Through Enhancing GLS2 Expression. *Frontiers in oncology*, 11:1742, 2021.
- [86] Chen, X., Ying, Z., Lin, X., et al. Acylglycerol kinase augments JAK2/STAT3 signaling in esophageal squamous cells. *The Journal of clinical investigation*, 123(6):2576–2589, 2013.
- [87] Chen, X., Jiang, J., Wang, X., et al. Role and mechanism of Dvl3 in the esophageal squamous cell carcinoma. *Eur Rev Med Pharmacol Sci*, 22(22):7716–7725, 2018.
- [88] Chen, X., Li, Q., Wang, C., et al. Prognostic and diagnostic potential of isocitrate dehydrogenase 1 in esophageal squamous cell carcinoma. *Oncotarget*, 7(52):86148, 2016.
- [89] Chen, Y., Zhu, J., Lum, P. Y., et al. Variations in DNA elucidate molecular networks that cause disease. *Nature*, 452(7186):429–435, 2008.
- [90] Chen, Y., Zhang, Y., Tan, Y., et al. Clinical significance of SPARC in esophageal squamous cell carcinoma. *Biochemical and biophysical research communications*, 492(2):184–191, 2017.
- [91] Chen, Y. H., Lu, H. I., Lo, C. M., et al. NOX4 overexpression is a poor prognostic factor in patients undergoing curative esophagectomy for esophageal squamous cell carcinoma. *Surgery*, 167(3):620–627, 2020.
- [92] Chen, Y., Tian, T., Li, Z. Y., et al. FSCN1 is an effective marker of poor prognosis and a potential therapeutic target in human tongue squamous cell carcinoma. *Cell death & disease*, 10(5):1–11, 2019.
- [93] Chen, Z., Wang, Y., Wang, J., et al. Assessment of PPARGC1A, PPARGC1B, and PON1 Genetic Polymorphisms in Esophageal Squamous Cell Carcinoma Susceptibility in the Eastern Chinese Han Population: A Case–Control Study Involving 2351 Subjects. *DNA and Cell Biology*, 39(9):1521–1531, 2020.
- [94] Cheng, R., Zhu, S., Guo, S., et al. Downregulation of NONO induces apoptosis, suppressing growth and invasion in esophageal squamous cell carcinoma. *Oncology Reports*, 39(6):2575–2583, 2018.
- [95] Cheng, Y., Li, K., Diao, D., et al. Expression of KIAA0101 protein is associated with poor survival of esophageal cancer patients and resistance to cisplatin treatment in vitro. *Laboratory investigation*, 93(12):1276–1287, 2013.

- [96] Cheng, Y. and Church, G. M. Biclustering of expression data. In *Ismb*, volume 8, pages 93–103, 2000.
- [97] Chi, Z., Balani, J., Gopal, P., et al. Gata3 positivity is associated with poor prognosis in patients with oesophageal squamous cell carcinoma. *Journal of Clinical Pathology*, 2022.
- [98] Chiang, W., Cheng, T., Chang, C., et al. Carcinoembryonic antigen-related cell adhesion molecule 6 (CEACAM6) promotes EGF receptor signaling of oral squamous cell carcinoma metastasis via the complex N-glycosylation. *Oncogene*, 37(1):116–127, 2018.
- [99] Chien, H. T., Cheng, S. D., Chuang, W. Y., et al. Clinical implications of FADD gene amplification and protein overexpression in Taiwanese oral cavity squamous cell carcinomas. *PLoS One*, 11(10):e0164870, 2016.
- [100] Chiu, Y. C., Hsiao, T. H., Wang, L. J., et al. scdNet: a computational tool for single-cell differential network analysis. *BMC systems biology*, 12(8):59–66, 2018.
- [101] Choi, Y. and Kendzierski, C. Statistical methods for gene set co-expression analysis. *Bioinformatics*, 25(21):2780–2786, 2009.
- [102] Choy, B., LaLonde, A., Que, J., et al. MCM4 and MCM7, potential novel proliferation markers, significantly correlated with Ki-67, Bmi1, and cyclin E expression in esophageal adenocarcinoma, squamous cell carcinoma, and precancerous lesions. *Human pathology*, 57:126–135, 2016.
- [103] Chuang, C. Y., Chang, C. P., Lee, Y. J., et al. PRMT1 expression is elevated in head and neck cancer and inhibition of protein arginine methylation by adenosine dialdehyde or PRMT1 knockdown downregulates proliferation and migration of oral cancer cells. *Oncology reports*, 38(2):1115–1123, 2017.
- [104] Coelho, G. P., de França, F. O., and Von Zuben, F. J. Multi-objective biclustering: When non-dominated solutions are not enough. *Journal of Mathematical Modelling and Algorithms*, 8:175–202, 2009.
- [105] Consortium, G. O. The Gene Ontology (GO) database and informatics resource. *Nucleic acids research*, 32(suppl_1):D258–D261, 2004.
- [106] Coutinho-Camillo, C. M., Lourenço, S. V., Nonogaki, S., et al. Expression of PAR-4 and PHLDA1 is prognostic for overall and disease-free survival in oral squamous cell carcinomas. *Virchows Archiv*, 463(1):31–39, 2013.
- [107] Cover, T. M. *Elements of information theory*. John Wiley & Sons, 1999.
- [108] Creixell, P., Reimand, J., Haider, S., et al. Pathway and network analysis of cancer genomes. *Nature methods*, 12(7):615, 2015.
- [109] Crick, F. Central dogma of molecular biology. *Nature*, 227(5258):561–563, 1970.
- [110] Croft, D., O’kelly, G., Wu, G., et al. Reactome: a database of reactions, pathways and biological processes. *Nucleic acids research*, 39(suppl_1):D691–D697, 2010.
- [111] Csardi, G. and Csardi, M. G. Package ‘isa2’. 2017.
- [112] Cui, J., Zheng, L., Zhang, Y., et al. Bioinformatics analysis of DNMT1 expression and its role in head and neck squamous cell carcinoma prognosis. *Scientific reports*, 11(1):1–11, 2021.
- [113] Cui, T., Chen, Y., Yang, L., et al. The p53 target gene desmocollin 3 acts as a novel tumor suppressor through inhibiting EGFR/ERK pathway in human lung cancer. *Carcinogenesis*, 33(12):2326–

2333, 2012.

- [114] Cui, X. B., Zhang, S. M., Xu, Y. X., et al. PFN2, a novel marker of unfavorable prognosis, is a potential therapeutic target involved in esophageal squamous cell carcinoma. *Journal of translational medicine*, 14(1):1–16, 2016.
- [115] Cui, Z., Sun, S., Li, J., et al. UBE2L3 promotes squamous cell carcinoma progression in the oral cavity and hypopharynx via activating the NF- κ B signaling by increasing I κ B α degradation. *Cell biology international*, 46(5):806–818, 2022.
- [116] Dadras, S., Razmkhah, M., Khademi, B., et al. FXYD3 and TNF α mRNA expression in Laryngeal Squamous Cell Carcinoma and their correlation with clinicopathologic parameters. 2016.
- [117] Dai, T., Song, Y., Ma, H., et al. Studies on the expression of MMP-9 and significance of a macrophage assay in oral squamous cell carcinoma. *Chinese Journal of Clinical Oncology*, 4(5):333–337, 2007.
- [118] Dai, Y., Chen, W., Huang, J., et al. FCGR2A Could Function as a Prognostic Marker and Correlate with Immune Infiltration in Head and Neck Squamous Cell Carcinoma. *BioMed Research International*, 2021, 2021.
- [119] Dandara, C., Li, D. P., Walther, G., et al. Gene–environment interaction: the role of SULT1A1 and CYP3A5 polymorphisms as risk modifiers for squamous cell carcinoma of the oesophagus. *Carcinogenesis*, 27(4):791–797, 2006.
- [120] Das, S., Meher, P. K., Rai, A., et al. Statistical approaches for gene selection, hub gene identification and module interaction in gene co-expression network analysis: an application to aluminum stress in soybean (*Glycine max L.*). *PloS one*, 12(1):e0169605, 2017.
- [121] Dave, J. H., Vora, H. H., Ghosh, N. R., et al. Mediator of DNA damage checkpoint protein 1 (MDC1) as a prognostic marker for patients with oral squamous cell carcinoma. *Journal of Oral Pathology & Medicine*, 46(4):253–258, 2017.
- [122] Davidson, E. H. and Levine, M. S. Properties of developmental gene regulatory networks. *Proceedings of the National Academy of Sciences*, 105(51):20063–20066, 2008.
- [123] Dawei, H., Honggang, D., and Qian, W. AURKA contributes to the progression of oral squamous cell carcinoma (OSCC) through modulating epithelial-to-mesenchymal transition (EMT) and apoptosis via the regulation of ROS. *Biochemical and biophysical research communications*, 507(1-4):83–90, 2018.
- [124] Dawson, J. C., Timpson, P., Kalna, G., et al. MTSS1 regulates epidermal growth factor signaling in head and neck squamous carcinoma cells. *Oncogene*, 31(14):1781–1793, 2012.
- [125] de Lima, J. M., Morand, G. B., Macedo, C. C. S., et al. NDRG1 deficiency is associated with regional metastasis in oral cancer by inducing epithelial–mesenchymal transition. *Carcinogenesis*, 41(6):769–777, 2020.
- [126] De Meulenaere, A., Vermassen, T., Aspeslagh, S., et al. CD70 expression and its correlation with clinicopathological variables in squamous cell carcinoma of the head and neck. *Pathobiology*, 83(6):327–333, 2016.
- [127] de Vicente, J. C., Fernandez Valle, A., Vivanco Allende, B., et al. The prognostic role of claudins-1 and-4 in oral squamous cell carcinoma. *Anticancer research*, 35(5):2949–2959, 2015.

- [128] del Rio, G., Koschützki, D., and Coello, G. How to identify essential genes from molecular networks? *BMC systems biology*, 3(1):1–12, 2009.
- [129] Demokan, S., Chang, X., Chuang, A., et al. KIF1A and EDNRB are differentially methylated in primary HNSCC and salivary rinses. *International journal of cancer*, 127(10):2351–2359, 2010.
- [130] Demokan, S., Chuang, A. Y., Chang, X., et al. Identification of GNG7 as an epigenetically silenced gene in head and neck cancer by gene expression profiling, 2012.
- [131] Deng, P., Wang, J., Zhang, X., et al. AFF4 promotes tumorigenesis and tumor-initiation capacity of head and neck squamous cell carcinoma cells by regulating SOX2. *Carcinogenesis*, 39(7):937–947, 2018.
- [132] Deng, W. W., Mao, L., Yu, G. T., et al. LAG-3 confers poor prognosis and its blockade reshapes antitumor response in head and neck squamous cell carcinoma. *Oncoimmunology*, 5(11):e1239005, 2016.
- [133] Deville, S. S., Luft, S., Kaufmann, M., et al. Keap1 inhibition sensitizes head and neck squamous cell carcinoma cells to ionizing radiation via impaired non-homologous end joining and induced autophagy. *Cell death & disease*, 11(10):1–13, 2020.
- [134] Dey, K. K., Pal, I., Bharti, R., et al. Identification of RAB2A and PRDX1 as the potential biomarkers for oral squamous cell carcinoma using mass spectrometry-based comparative proteomic approach. *Tumor Biology*, 36(12):9829–9837, 2015.
- [135] Dharan, S. and Nair, A. S. Biclustering of gene expression data using reactive greedy randomized adaptive search procedure. *BMC bioinformatics*, 10:1–10, 2009.
- [136] Dharan, S. and Nair, A. S. Detection of Significant Biclusters in Gene Expression Data using Reactive Greedy Randomized Adaptive Search Algorithm. In *13th International Conference on Biomedical Engineering: ICBME 2008 3–6 December 2008 Singapore*, pages 631–634. Springer, 2009.
- [137] Dian Qi, L., Huang, C. C., Zhang, G., et al. FTO demethylates YAP mRNA promoting oral squamous cell carcinoma tumorigenesis. *Neoplasma*, 69(1), 2022.
- [138] Ding, L., Li, B., Zhao, Y., et al. Serum CCL2 and CCL3 as potential biomarkers for the diagnosis of oral squamous cell carcinoma. *Tumor Biology*, 35(10):10539–10546, 2014.
- [139] Ding, X., Sun, J., Wang, L., et al. Overexpression of SENP5 in oral squamous cell carcinoma and its association with differentiation. *Oncology reports*, 20(5):1041–1045, 2008.
- [140] Ding, Z., He, Y., Fu, Y., et al. CD38 multi-functionality in oral squamous cell carcinoma: prognostic implications, immune balance and immune checkpoint. *Frontiers in Oncology*, 11:2281, 2021.
- [141] Dong, Y., Lu, S., Wang, Z., et al. CCTs as new biomarkers for the prognosis of head and neck squamous cancer. *Open Medicine*, 15(1):672–688, 2020.
- [142] Dong, Z., Liang, X., Wu, X., et al. Promoter hypermethylation-mediated downregulation of tumor suppressor gene SEMA3B and lncRNA SEMA3B-AS1 correlates with progression and prognosis of esophageal squamous cell carcinoma. *Clinical & experimental metastasis*, 36(3):225–241, 2019.
- [143] Dos Santos, M., da Cunha Mercante, A. M., Nunes, F. D., et al. Prognostic significance of NDRG1 expression in oral and oropharyngeal squamous cell carcinoma. *Molecular biology re-*

- ports*, 39(12):10157–10165, 2012.
- [144] Du, F., Dong, D., Zhang, X., et al. MXD1 is a Potential Prognostic Biomarker and Correlated With Specific Molecular Change and Tumor Microenvironment Feature in Esophageal Squamous Cell Carcinoma. *Technology in cancer research & treatment*, 20:15330338211052142, 2021.
- [145] Du, J., Zhao, Y., Hu, D., et al. Silencing of integrin subunit $\alpha 3$ inhibits the proliferation, invasion, migration and autophagy of esophageal squamous cell carcinoma cells. *Oncology Letters*, 24(2):1–8, 2022.
- [146] Ebihara, Y., Miyamoto, M., Shichinohe, T., et al. Over-expression of E2F-1 in esophageal squamous cell carcinoma correlates with tumor progression. *Diseases of the Esophagus*, 17(2):150–154, 2004.
- [147] Economopoulou, P., Kladi Skandali, A., Strati, A., et al. Prognostic impact of indoleamine 2, 3-dioxygenase 1 (IDO1) mRNA expression on circulating tumour cells of patients with head and neck squamous cell carcinoma. *ESMO open*, 5(3):e000646, 2020.
- [148] Efron, B., Tibshirani, R., Storey, J. D., et al. Empirical Bayes analysis of a microarray experiment. *Journal of the American statistical association*, 96(456):1151–1160, 2001.
- [149] Faber, A., Barth, C., Hörmann, K., et al. CD44 as a stem cell marker in head and neck squamous cell carcinoma. *Oncology reports*, 26(2):321–326, 2011.
- [150] Faith, J. J., Driscoll, M. E., Fusaro, V. A., et al. Many Microbe Microarrays Database: uniformly normalized Affymetrix compendia with structured experimental metadata. *Nucleic acids research*, 36(suppl_1):D866–D870, 2007.
- [151] Fan, C., Hu, H., Shen, Y., et al. PRF1 is a prognostic marker and correlated with immune infiltration in head and neck squamous cell carcinoma. *Translational oncology*, 14(4):101042, 2021.
- [152] Fang, J., Ma, Y., Li, Y., et al. CCT4 knockdown enhances the sensitivity of cisplatin by inhibiting glycolysis in human esophageal squamous cell carcinomas. *Molecular Carcinogenesis*, 61(11):1043–1055, 2022.
- [153] Fang, W. K., Gu, W., Li, E. M., et al. Reduced membranous and ectopic cytoplasmic expression of DSC2 in esophageal squamous cell carcinoma: an independent prognostic factor. *Human pathology*, 41(10):1456–1465, 2010.
- [154] Fang, W. K., Liao, L. D., Li, L. Y., et al. Down-regulated desmocollin-2 promotes cell aggressiveness through redistributing adherens junctions and activating beta-catenin signalling in oesophageal squamous cell carcinoma. *The Journal of pathology*, 231(2):257–270, 2013.
- [155] Faoro, L., Singleton, P. A., Cervantes, G. M., et al. EphA2 mutation in lung squamous cell carcinoma promotes increased cell survival, cell invasion, focal adhesions, and mammalian target of rapamycin activation. *Journal of Biological Chemistry*, 285(24):18575–18585, 2010.
- [156] Feng, C., Jin, X., Han, Y., et al. Expression and prognostic analyses of ITGA3, ITGA5, and ITGA6 in head and neck squamous cell carcinoma. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 26:e926800–1, 2020.
- [157] Feng, C. J., Li, H. J., Li, J. N., et al. Expression of MCM7 and CDC6 in oral squamous cell carcinoma and precancerous lesions. *Anticancer research*, 28(6A):3763–3769, 2008.
- [158] Feng, C. J., Lu, X. W., Luo, D. Y., et al. Knockdown of CDC6 inhibits proliferation of tongue

- squamous cell carcinoma Tca8113 cells. *Technology in Cancer Research & Treatment*, 12(2):173–181, 2013.
- [159] Feng, J., Han, B., Yu, C., et al. Co-expression Network Identification and Clinical Prognostic Evaluation of Hub Genes in Head and Neck Squamous Cell Carcinoma. 2020.
- [160] Feng, W., Xiaoyan, X., Shenglei, L., et al. PTTG1 cooperated with GLI1 leads to epithelial-mesenchymal transition in esophageal squamous cell cancer. *Oncotarget*, 8(54):92388, 2017.
- [161] Feng, X., Luo, Q., Zhang, H., et al. The role of NLRP3 inflammasome in 5-fluorouracil resistance of oral squamous cell carcinoma. *Journal of Experimental & Clinical Cancer Research*, 36(1):1–14, 2017.
- [162] Feng, Y. F., Lei, Y. Y., Lu, J. B., et al. RIT1 suppresses esophageal squamous cell carcinoma growth and metastasis and predicts good prognosis. *Cell death & disease*, 9(11):1–13, 2018.
- [163] Fialka, F., Gruber, R. M., Hitt, R., et al. CPA6, FMO2, LGI1, SIAT1 and TNC are differentially expressed in early-and late-stage oral squamous cell carcinoma—a pilot study. *Oral oncology*, 44(10):941–948, 2008.
- [164] Fillies, T., Werkmeister, R., van Diest, P. J., et al. HIF1-alpha overexpression indicates a good prognosis in early stage squamous cell carcinomas of the oral floor. *BMC cancer*, 5(1):1–9, 2005.
- [165] Finak, G., McDavid, A., Yajima, M., et al. MAST: a flexible statistical framework for assessing transcriptional changes and characterizing heterogeneity in single-cell RNA sequencing data. *Genome biology*, 16(1):1–13, 2015.
- [166] Fisher, R. A. Statistical methods for research workers. In *Breakthroughs in statistics: Methodology and distribution*, pages 66–70. Springer, 1970.
- [167] Fisher, R. A. *Statistical methods for research workers*. Springer, 1992.
- [168] Fisher, R. A. et al. Statistical methods for research workers. *Statistical methods for research workers.*, (6th Ed), 1936.
- [169] Fix, E. and Hodges, J. L. Discriminatory analysis. Nonparametric discrimination: Consistency properties. *International Statistical Review/Revue Internationale de Statistique*, 57(3):238–247, 1989.
- [170] Freeman, L. C. A set of measures of centrality based on betweenness. *Sociometry*, 40(1):35–41, 1977.
- [171] Freeman, L. C. Centrality in social networks conceptual clarification. *Social networks*, 1(3):215–239, 1978.
- [172] Fu, Y., Tian, G., Zhang, Z., et al. SYT7 acts as an oncogene and a potential therapeutic target and was regulated by $\delta Np63\alpha$ in HNSCC. *Cancer cell international*, 21(1):1–14, 2021.
- [173] Fukamachi, M., Kasamatsu, A., Endo Sakamoto, Y., et al. Multiple coagulation factor deficiency protein 2 as a crucial component in metastasis of human oral cancer. *Experimental Cell Research*, 368(1):119–125, 2018.
- [174] Fukushima, A., Kusano, M., Redestig, H., et al. Metabolomic correlation-network modules in Arabidopsis based on a graph-clustering approach. *BMC systems biology*, 5(1):1–12, 2011.
- [175] Fukushima, R., Kasamatsu, A., Nakashima, D., et al. Overexpression of translocation associated membrane protein 2 leading to cancer-associated matrix metalloproteinase activation as a putative

- metastatic factor for human oral cancer. *Journal of Cancer*, 9(18):3326, 2018.
- [176] Galfre, S. G., Morandin, F., Pietrosanto, M., et al. COTAN: scRNA-seq data analysis based on gene co-expression. *NAR genomics and bioinformatics*, 3(3):lqab072, 2021.
- [177] Gan, C. P., Sam, K. K., Yee, P. S., et al. IFITM3 knockdown reduces the expression of CCND1 and CDK4 and suppresses the growth of oral squamous cell carcinoma cells. *Cellular Oncology*, 42(4):477–490, 2019.
- [178] Gao, F., Li, C., Zhao, X., et al. CKS2 modulates cell-cycle progression of tongue squamous cell carcinoma cells partly via modulating the cellular distribution of DUTPase. *Journal of Oral Pathology & Medicine*, 50(2):175–182, 2021.
- [179] Gao, H., Yan, Z., Sun, H., et al. FoXA2 promotes esophageal squamous cell carcinoma progression by ZEB2 activation. *World Journal of Surgical Oncology*, 19(1):1–10, 2021.
- [180] Gao, J., Zou, Z., Gao, J., et al. Increased expression of HMGB3: a novel independent prognostic marker of worse outcome in patients with esophageal squamous cell carcinoma. *International Journal of Clinical and Experimental Pathology*, 8(1):345, 2015.
- [181] Gao, L., Ji, Y., Wang, L., et al. Suppression of Esophageal Squamous Cell Carcinoma Development by Mechanosensitive Protein Piezo1 Downregulation. *ACS omega*, 6(15):10196–10206, 2021.
- [182] Gao, S., Li, S., Duan, X., et al. Inhibition of glycogen synthase kinase 3 beta (GSK3 β) suppresses the progression of esophageal squamous cell carcinoma by modifying STAT3 activity. *Molecular carcinogenesis*, 56(10):2301–2316, 2017.
- [183] Gao, S., Wang, Z., Liu, X., et al. The calcimedin annexin A3 displays tumor-promoting effect in esophageal squamous cell carcinoma by activating NF- κ B signaling. *Mammalian Genome*, 32(5):381–388, 2021.
- [184] Gaykalova, D. A., Zizkova, V., Guo, T., et al. Integrative computational analysis of transcriptional and epigenetic alterations implicates DTX1 as a putative tumor suppressor gene in HNSCC. *Oncotarget*, 8(9):15349, 2017.
- [185] Gaykalova, D. A., Zizkova, V., Tiscareno, I., et al. DTX1 is an epigenetically regulated tumor suppressor gene discovered by integrative analysis of epigenetic and transcriptional alterations in HNSCC. *Cancer Research*, 75(15_Supplement):815–815, 2015.
- [186] Gentleman, R. C., Carey, V. J., Bates, D. M., et al. Bioconductor: open software development for computational biology and bioinformatics. *Genome biology*, 5(10):1–16, 2004.
- [187] Gestraud, P., Brito, I., and Barillot, E. BicARE: Biclustering analysis and results exploration. URL <http://www.bioconductor.org/packages/release/bioc/vignettes/BicARE/inst/doc/BicARE.pdf>, 2014.
- [188] Ghobadi, N., Mehramiz, M., ShahidSales, S., et al. A genetic variant in CDKN2A/2B locus was associated with poor prognosis in patients with esophageal squamous cell carcinoma. *Journal of Cellular Physiology*, 234(4):5070–5076, 2019.
- [189] Gillis, J. and Pavlidis, P. “Guilt by association” is the exception rather than the rule in gene networks. *PLoS computational biology*, 8(3):e1002444, 2012.
- [190] Glaab, E., Baudot, A., Krasnogor, N., et al. EnrichNet: network-based gene set enrichment analysis. *Bioinformatics*, 28(18):i451–i457, 2012.

- [191] Goltz, D., Gevensleben, H., Dietrich, J., et al. PDCD1 (PD-1) promoter methylation predicts outcome in head and neck squamous cell carcinoma patients. *Oncotarget*, 8(25):41011, 2017.
- [192] Golub, G. H. and Reinsch, C. Singular value decomposition and least squares solutions. In *Handbook for Automatic Computation: Volume II: Linear Algebra*, pages 134–151. Springer, 1971.
- [193] Golub, T. R., Slonim, D. K., Tamayo, P., et al. Molecular classification of cancer: class discovery and class prediction by gene expression monitoring. *science*, 286(5439):531–537, 1999.
- [194] Gong, L., Mao, W., Chen, Q., et al. Analysis of SPARC and TUBB3 as predictors for prognosis in esophageal squamous cell carcinoma receiving nab-paclitaxel plus cisplatin neoadjuvant chemotherapy: a prospective study. *Cancer Chemotherapy and Pharmacology*, 83(4):639–647, 2019.
- [195] González-Moles, M. Á., Ayén, Á., González-Ruiz, I., et al. Prognostic and clinicopathological significance of FADD upregulation in head and neck squamous cell carcinoma: a systematic review and meta-analysis. *Cancers*, 12(9):2393, 2020.
- [196] Grandis, J. R., Melhem, M. F., Gooding, W. E., et al. Levels of TGF- α and EGFR protein in head and neck squamous cell carcinoma and patient survival. *JNCI: Journal of the National Cancer Institute*, 90(11):824–832, 1998.
- [197] Granelli, P., Cattaneo, M., Ferrero, S., et al. SEL1L and squamous cell carcinoma of the esophagus. *Clinical cancer research*, 10(17):5857–5861, 2004.
- [198] Greenhill, C. Matrix metalloproteinase 10 is associated with survival in patients with esophageal squamous cell carcinoma. *Nature Reviews Gastroenterology & Hepatology*, 9(2):63–63, 2012.
- [199] Gu, J. and Liu, J. S. Bayesian biclustering of gene expression data. *BMC genomics*, 9(1):1–10, 2008.
- [200] Guan, C., Liu, Z., Lu, C., et al. Nucleolar spindle-associated protein 1 promotes tumorigenesis and predicts poor prognosis in human esophageal squamous cell carcinoma. *Journal of Cellular Biochemistry*, 120(7):11726–11737, 2019.
- [201] Guan, X., Zhong, X., Men, W., et al. Analysis of EHMT1 expression and its correlations with clinical significance in esophageal squamous cell cancer. *Molecular and clinical oncology*, 2(1):76–80, 2014.
- [202] Guenin, S., Mouallif, M., Hubert, P., et al. Interleukin-32 expression is associated with a poorer prognosis in head and neck squamous cell carcinoma. *Molecular Carcinogenesis*, 53(8):667–673, 2014.
- [203] Gugger, M., White, R., Song, S., et al. GPR87 is an overexpressed G-protein coupled receptor in squamous cell carcinoma of the lung. *Disease markers*, 24(1):41–50, 2008.
- [204] Guo, B., Wang, L., Qin, X., et al. Jumonji domain-containing protein 6 functions as a marker of head and neck squamous cell carcinoma at advanced stage with no effect on prognosis. *Oncology letters*, 18(6):5843–5852, 2019.
- [205] Guo, J., Chang, C., Yang, L. Y., et al. Dysregulation of CXCL14 promotes malignant phenotypes of esophageal squamous carcinoma cells via regulating SRC and EGFR signaling. *Biochemical and Biophysical Research Communications*, 609:75–83, 2022.
- [206] Guo, M., Fan, X., Zhu, S., et al. Adirf expression reversely correlates with stage progression and

- involves keratinocyte differentiation in esophageal squamous cell carcinoma. 2022.
- [207] Guo, W., Wang, P., Li, N., et al. Prognostic value of PD-L1 in esophageal squamous cell carcinoma: a meta-analysis. *Oncotarget*, 9(17):13920, 2018.
- [208] Gusenleitner, D., Howe, E. A., Bentink, S., et al. iBBiG: iterative binary bi-clustering of gene sets. *Bioinformatics*, 28(19):2484–2492, 2012.
- [209] Han, F., Zhang, S., Zhang, L., et al. The overexpression and predictive significance of MMP-12 in esophageal squamous cell carcinoma. *Pathology-Research and Practice*, 213(12):1519–1522, 2017.
- [210] Han, G. H., Lu, K. J., Huang, J. X., et al. Association of serum annexin A1 with treatment response and prognosis in patients with esophageal squamous cell carcinoma. *Journal of Cancer Research and Therapeutics*, 14(10):667, 2018.
- [211] Han, G., Lu, K., Huang, J., et al. Effect of Annexin A1 gene on the proliferation and invasion of esophageal squamous cell carcinoma cells and its regulatory mechanisms. *International Journal of Molecular Medicine*, 39(2):357–363, 2017.
- [212] Han, N., Zhang, Y. Y., Zhang, Z. M., et al. High expression of PDGFA predicts poor prognosis of esophageal squamous cell carcinoma. *Medicine*, 100(20), 2021.
- [213] Han, P., Liu, Q., and Xiang, J. Monitoring methylation-driven genes as prognostic biomarkers in patients with lung squamous cell cancer. *Oncology letters*, 19(1):707–716, 2020.
- [214] Han, Y., Xia, K., and Su, T. Exploration of the Important Role of Microfibril-Associated Protein 4 Gene in Oral Squamous Cell Carcinoma. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 27:e931238–1, 2021.
- [215] Hano, K., Hatano, K., Saigo, C., et al. Combination of Clptm1L and TMEM207 Expression as a Robust Prognostic Marker in Oral Squamous Cell Carcinoma. *Frontiers in Oral Health*, 2:12, 2021.
- [216] Hao, M., Wang, H., Zhang, C., et al. Minichromosome maintenance protein 5 is an important pathogenic factor of oral squamous cell carcinoma. *Oncology Letters*, 20(4):1–1, 2020.
- [217] Hao, X. W., Zhu, S. T., He, Y. L., et al. Epigenetic inactivation of secreted frizzled-related protein 2 in esophageal squamous cell carcinoma. *World journal of gastroenterology: WJG*, 18(6):532, 2012.
- [218] Hao, Y., Xiao, Y., Liao, X., et al. FGF8 induces epithelial-mesenchymal transition and promotes metastasis in oral squamous cell carcinoma. *International journal of oral science*, 13(1):1–8, 2021.
- [219] Hao, Y., Hao, S., Andersen Nissen, E., et al. Integrated analysis of multimodal single-cell data. *Cell*, 184(13):3573–3587, 2021.
- [220] Hartigan, J. A. Direct clustering of a data matrix. *Journal of the american statistical association*, 67(337):123–129, 1972.
- [221] Hartmann, S., Szaumkessel, M., Salaverria, I., et al. Loss of protein expression and recurrent DNA hypermethylation of the GNG7 gene in squamous cell carcinoma of the head and neck. *Journal of applied genetics*, 53(2):167–174, 2012.
- [222] Haruki, S., Imoto, I., Kozaki, K. I., et al. Frequent silencing of protocadherin 17, a candidate tumour suppressor for esophageal squamous cell carcinoma. *Carcinogenesis*, 31(6):1027–1036,

- 2010.
- [223] Hasegawa, K., Fujii, S., Matsumoto, S., et al. YAP signaling induces PIEZO1 to promote oral squamous cell carcinoma cell proliferation. *The Journal of Pathology*, 253(1):80–93, 2021.
- [224] Haye, K., Babu, S., Oblein, L., et al. Keratin 17 Expression Predicts Poor Clinical Outcome in Patients With Advanced Esophageal Squamous Cell Carcinoma. *Applied Immunohistochemistry & Molecular Morphology*, 29(2):144–151, 2021.
- [225] He, F., Xiao, H., Cai, Y., et al. ATF5 and HIF1 α cooperatively activate HIF1 signaling pathway in esophageal cancer. *Cell Communication and Signaling*, 19(1):1–15, 2021.
- [226] He, G., Guan, X., Chen, X., et al. Expression and splice variant analysis of human TCF4 transcription factor in esophageal cancer. *Journal of Cancer*, 6(4):333, 2015.
- [227] He, H. L., Lee, Y. E., Chang, M. T., et al. AMACR overexpression acts as a negative prognostic factor in oral squamous cell carcinoma. *International Journal of Medical Sciences*, 15(6):638, 2018.
- [228] He, J. Z., Wu, Z. Y., Wang, S. H., et al. A decision tree–based combination of ezrin-interacting proteins to estimate the prognostic risk of patients with esophageal squamous cell carcinoma. *Human Pathology*, 66:115–125, 2017.
- [229] He, K. F., Zhang, L., Huang, C. F., et al. CD163+ tumor-associated macrophages correlated with poor prognosis and cancer stem cells in oral squamous cell carcinoma. *BioMed research international*, 2014, 2014.
- [230] He, X., Meng, F., Qin, L., et al. KLK11 suppresses cellular proliferation via inhibition of Wnt/ β -catenin signaling pathway in esophageal squamous cell carcinoma. *American Journal of Cancer Research*, 9(10):2264, 2019.
- [231] He, Y., Xu, W., Xiao, Y., et al. Overexpression of peroxiredoxin 6 (PRDX6) promotes the aggressive phenotypes of esophageal squamous cell carcinoma. *Journal of Cancer*, 9(21):3939, 2018.
- [232] He, Y., Hua, R., Li, B., et al. Loss of FBP1 promotes proliferation, migration, and invasion by regulating fatty acid metabolism in esophageal squamous cell carcinoma. *Aging (Albany NY)*, 13(4):4986, 2021.
- [233] He, Y., Wang, Y., Li, P., et al. Identification of GPX3 epigenetically silenced by CpG methylation in human esophageal squamous cell carcinoma. *Digestive diseases and sciences*, 56(3):681–688, 2011.
- [234] Hémon, A., Louandre, C., Lailier, C., et al. SLC7A11 as a biomarker and therapeutic target in HPV-positive head and neck Squamous Cell Carcinoma. *Biochemical and biophysical research communications*, 533(4):1083–1087, 2020.
- [235] Hgu133plus, C. M. db: Affymetrix Human Genome U133 Plus 2.0 Array Annotation Data (chip Hgu133plus2). 2016. R package version 3.2. 3.
- [236] Hirata, D., Yamabuki, T., Miki, D., et al. Involvement of epithelial cell transforming sequence-2 oncoantigen in lung and esophageal cancer progression. *Clinical Cancer Research*, 15(1):256–266, 2009.
- [237] Hochreiter, S., Bodenhofer, U., Heusel, M., et al. FABIA: factor analysis for bicluster acquisition. *Bioinformatics*, 26(12):1520–1527, 2010.

- [238] Hofman, P., Butori, C., Havet, K., et al. Prognostic significance of cortactin levels in head and neck squamous cell carcinoma: comparison with epidermal growth factor receptor status. *British journal of cancer*, 98(5):956–964, 2008.
- [239] Hong, F., Breitling, R., McEntee, C. W., et al. RankProd: a bioconductor package for detecting differentially expressed genes in meta-analysis. *Bioinformatics*, 22(22):2825–2827, 2006.
- [240] Horstmann, A. K. *The Role of ALDH1a2 in Head and Neck Squamous Cell Carcinoma*. PhD thesis, Weill Medical College of Cornell University, 2017.
- [241] Hou, Y., Xue, F., Fu, Y., et al. CLPTM1L Is a Novel Putative Oncogene Promoting Tumorigenesis in Oral Squamous Cell Carcinoma. *Cell transplantation*, 30:09636897211045970, 2021.
- [242] Hsieh, M. S., Yang, P. W., Wong, L. F., et al. The AXL receptor tyrosine kinase is associated with adverse prognosis and distant metastasis in esophageal squamous cell carcinoma. *Oncotarget*, 7(24):36956, 2016.
- [243] Hsu, N., Yeh, K., Chiang, I., et al. Cortactin overexpression in the esophageal squamous cell carcinoma and its involvement in the carcinogenesis. *Diseases of the Esophagus*, 21(5):402–408, 2008.
- [244] Hsu, P. K., Chen, H. Y., Yeh, Y. C., et al. TPX2 expression is associated with cell proliferation and patient outcome in esophageal squamous cell carcinoma. *Journal of gastroenterology*, 49(8):1231–1240, 2014.
- [245] Hu, J., Li, R., Miao, H., et al. Identification of key genes for esophageal squamous cell carcinoma via integrated bioinformatics analysis and experimental confirmation. *Journal of Thoracic Disease*, 12(6):3188, 2020.
- [246] Hu, J. M., Li, L., Chen, Y. Z., et al. HLA-DRB1 and HLA-DQB1 methylation changes promote the occurrence and progression of Kazakh ESCC. *Epigenetics*, 9(10):1366–1373, 2014.
- [247] Hu, J. M., Liu, K., Liu, J. H., et al. CD163 as a marker of M2 macrophage, contribute to predict aggressiveness and prognosis of Kazakh esophageal squamous cell carcinoma. *Oncotarget*, 8(13):21526, 2017.
- [248] Hu, J. and Gao, W. Long noncoding RNA PVT1 promotes tumour progression via the miR-128/ZEB1 axis and predicts poor prognosis in esophageal cancer. *Clinics and Research in Hepatology and Gastroenterology*, 45(4):101701, 2021.
- [249] Hu, N., Clifford, R. J., Yang, H. H., et al. Genome wide analysis of DNA copy number neutral loss of heterozygosity (CNNLOH) and its relation to gene expression in esophageal squamous cell carcinoma. *BMC genomics*, 11(1):1–11, 2010.
- [250] Hu, X., Xia, K., Xiong, H., et al. G3BP1 may serve as a potential biomarker of proliferation, apoptosis, and prognosis in oral squamous cell carcinoma. *Journal of Oral Pathology & Medicine*, 50(10):995–1004, 2021.
- [251] Hu, X., Lin, J., Jiang, M., et al. HIF-1 α promotes the metastasis of esophageal squamous cell carcinoma by targeting SP1. *Journal of Cancer*, 11(1):229, 2020.
- [252] Hu, Y. Y., Ma, C. C., and Ai, K. X. Knockdown of RAD51AP1 suppressed cell proliferation and invasion in esophageal squamous cell carcinoma. *Discover Oncology*, 13(1):1–13, 2022.
- [253] Huang, D. W., Sherman, B. T., and Lempicki, R. A. Bioinformatics enrichment tools: paths toward

- the comprehensive functional analysis of large gene lists. *Nucleic acids research*, 37(1):1–13, 2009.
- [254] Huang, F., Ma, G., Zhou, X., et al. Depletion of LAMP3 enhances PKA-mediated VASP phosphorylation to suppress invasion and metastasis in esophageal squamous cell carcinoma. *Cancer Letters*, 479:100–111, 2020.
- [255] Huang, J., Wang, X., Zhang, X., et al. CDK4 Amplification in Esophageal Squamous Cell Carcinoma Associated With Better Patient Outcome. *Frontiers in Genetics*, 12:375, 2021.
- [256] Huang, J., Gu, Z., Xu, Y., et al. CHI3L1 (Chitinase 3 Like 1) upregulation is associated with macrophage signatures in esophageal cancer. *Bioengineered*, 12(1):7882–7892, 2021.
- [257] Huang, L., Xie, T., Zhao, F., et al. DLX2 Is a Potential Immune-Related Prognostic Indicator Associated with Remodeling of Tumor Microenvironment in Lung Squamous Cell Carcinoma: An Integrated Bioinformatical Analysis. *Disease markers*, 2022, 2022.
- [258] Huang, X., Xiao, D. W., Xu, L. Y., et al. Prognostic significance of altered expression of SDC2 and CYR61 in esophageal squamous cell carcinoma. *Oncology reports*, 21(4):1123–1129, 2009.
- [259] Huang, X., Hong, C., Peng, Y., et al. The diagnostic value of serum IGFBP7 in patients with esophageal squamous cell carcinoma. *Journal of Cancer*, 10(12):2687, 2019.
- [260] Huang, Y., Ruan, R., Fang, Y., et al. GFI1 promotes the proliferation and migration of esophageal squamous cell carcinoma cells through the inhibition of SOCS1 expression. *International Journal of Molecular Medicine*, 48(4):1–11, 2021.
- [261] Huang, Z., Su, Q., Li, W., et al. Suppressed mitochondrial respiration via NOX5-mediated redox imbalance contributes to the antitumor activity of anlotinib in oral squamous cell carcinoma. *Journal of Genetics and Genomics*, 48(7):582–594, 2021.
- [262] Huang, Z. L., Lin, Z. R., Xiao, Y. R., et al. High expression of TACC3 in esophageal squamous cell carcinoma correlates with poor prognosis. *Oncotarget*, 6(9):6850, 2015.
- [263] Hung, P. S., Kao, S. Y., Shih, Y. H., et al. Insulin-like growth factor binding protein-5 (IGFBP-5) suppresses the tumorigenesis of head and neck squamous cell carcinoma. *The Journal of pathology*, 214(3):368–376, 2008.
- [264] Huynh Thu, V. A., Irrthum, A., Wehenkel, L., et al. Inferring regulatory networks from expression data using tree-based methods. *PloS one*, 5(9):e12776, 2010.
- [265] Hwang, J. A., Song, J. S., Yu, D. Y., et al. Peroxiredoxin 4 as an independent prognostic marker for survival in patients with early-stage lung squamous cell carcinoma. *International journal of clinical and experimental pathology*, 8(6):6627, 2015.
- [266] Imai, T., Oue, N., Yamamoto, Y., et al. Overexpression of KIFC1 and its association with spheroid formation in esophageal squamous cell carcinoma. *Pathology-Research and Practice*, 213(11):1388–1393, 2017.
- [267] Imani, R., Seyedmajidi, M., Ghasemi, N., et al. HLA-G expression is associated with an unfavorable prognosis of oral squamous cell carcinoma. *Asian Pacific Journal of Cancer Prevention: APJCP*, 19(9):2527, 2018.
- [268] Irrthum, A., Wehenkel, L., Geurts, P., et al. Inferring regulatory networks from expression data using tree-based methods. *PloS one*, 5(9):e12776, 2010.
- [269] Ishiguro, H., Kimura, M., Takahashi, H., et al. GADD45A expression is correlated with patient

- prognosis in esophageal cancer. *Oncology Letters*, 11(1):277–282, 2016.
- [270] Ishiguro, H., Wakasugi, T., Terashita, Y., et al. Decreased expression of CDH1 or CTNNB1 affects poor prognosis of patients with esophageal cancer. *World Journal of Surgical Oncology*, 14(1):1–8, 2016.
- [271] Ishiguro, H., Wakasugi, T., Terashita, Y., et al. Nuclear expression of TCF4/TCF7L2 is correlated with poor prognosis in patients with esophageal squamous cell carcinoma. *Cellular & Molecular Biology Letters*, 21(1):1–8, 2016.
- [272] Ito, T., Shimada, Y., Kan, T., et al. Pttgl is a prognostic factor and a potential therapeutic target in esophageal squamous cell carcinoma. In *GASTROENTEROLOGY*, volume 132, pages A133–A133. WB SAUNDERS CO-ELSEVIER INC 1600 JOHN F KENNEDY BOULEVARD, STE 1800 . . . , 2007.
- [273] Iwabu, J., Yamashita, S., Takeshima, H., et al. FGF5 methylation is a sensitivity marker of esophageal squamous cell carcinoma to definitive chemoradiotherapy. *Scientific reports*, 9(1):1–10, 2019.
- [274] Iwamoto, K., Nakashiro, K. I., Tanaka, H., et al. Ribonucleotide reductase M2 is a promising molecular target for the treatment of oral squamous cell carcinoma. *International journal of oncology*, 46(5):1971–1977, 2015.
- [275] Iwasawa, S., Yamano, Y., Takiguchi, Y., et al. Upregulation of thioredoxin reductase 1 in human oral squamous cell carcinoma. *Oncology reports*, 25(3):637–644, 2011.
- [276] Iyoda, M., Kasamatsu, A., Ishigami, T., et al. Epithelial cell transforming sequence 2 in human oral cancer. *PloS one*, 5(11):e14082, 2010.
- [277] Jackson, M. Representing and measuring networks. *Social and economic networks*, pages 37–43, 2008.
- [278] Jacob, F. and Monod, J. Genetic regulatory mechanisms in the synthesis of proteins. *Journal of molecular biology*, 3(3):318–356, 1961.
- [279] Jain, A. P., Patel, K., Pinto, S., et al. MAP2K1 is a potential therapeutic target in erlotinib resistant head and neck squamous cell carcinoma. *Scientific reports*, 9(1):1–12, 2019.
- [280] Jaiswal, S. G., Jaiswal, G. R., et al. Butyrylcholinesterase: An economical marker of disease activity in oral squamous cell carcinoma before and after therapy. *Journal of Cancer Research and Therapeutics*, 16(8):39, 2020.
- [281] Ji, C., Liu, H., Xiang, M., et al. Deregulation of decorin and FHL1 are associated with esophageal squamous cell carcinoma progression and poor prognosis. *International journal of clinical and experimental medicine*, 8(11):20965, 2015.
- [282] Jia, Y., Xiao, Z., Jiang, W., et al. Overexpression of IFITM 3 predicts poor prognosis in stage IIA esophageal squamous cell carcinoma after I vor L ewis esophagectomy. *Thoracic cancer*, 8(6):592–599, 2017.
- [283] Jia, Y., Wang, N., Wang, J., et al. Down-regulation of stromal caveolin-1 expression in esophageal squamous cell carcinoma: a potent predictor of lymph node metastases, early tumor recurrence, and poor prognosis. *Annals of Surgical Oncology*, 21(1):329–336, 2014.
- [284] Jiang, W., Yao, F., He, J., et al. Downregulation of VGLL4 in the progression of esophageal

- squamous cell carcinoma. *Tumor Biology*, 36(2):1289–1297, 2015.
- [285] Jiang, Y., Shang, L., Shi, Z., et al. Microtubule-associated protein 4 is an important regulator of cell invasion/migration and a potential therapeutic target in esophageal squamous cell carcinoma. *Oncogene*, 35(37):4846–4856, 2016.
- [286] Jiao, R., Zheng, X., Sun, Y., et al. IDO1 expression increased after neoadjuvant therapy predicts poor pathologic response and prognosis in esophageal squamous cell carcinoma. *Frontiers in Oncology*, 10:1099, 2020.
- [287] Jin, J., Li, Z., Liu, J., et al. Knockdown of zinc transporter ZIP5 (SLC39A5) expression significantly inhibits human esophageal cancer progression. *Oncology reports*, 34(3):1431–1439, 2015.
- [288] Jin, X., Huang, T., Ma, C., et al. Protein tyrosine kinase 7-knockdown inhibits oral squamous cell carcinoma cell viability, proliferation, migration and invasion via downregulating dishevelled segment polarity protein 3 expression. *Experimental and Therapeutic Medicine*, 22(6):1–9, 2021.
- [289] Jin, Z. *The Functional Role of ACOT7 in Head and Neck Squamous Cell Carcinoma*. PhD thesis, UCLA, 2021.
- [290] Jin, Z., Zhao, X., Cui, L., et al. UBE2C promotes the progression of head and neck squamous cell carcinoma. *Biochemical and biophysical research communications*, 523(2):389–397, 2020.
- [291] Johnson, S. C. Hierarchical clustering schemes. *Psychometrika*, 32(3):241–254, 1967.
- [292] Jolliffe, I. T. Springer series in statistics. *Principal component analysis*, 29:912, 2002.
- [293] Jumai, K., Zhang, T., Qiao, B., et al. Highly Expressing Promotes Proliferation and Migration of Esophageal Squamous Cell Carcinoma. *Journal of Immunology Research*, 2022.
- [294] Jung, A. C., Ray, A. M., Ramolu, L., et al. Caveolin-1-negative head and neck squamous cell carcinoma primary tumors display increased epithelial to mesenchymal transition and prometastatic properties. *Oncotarget*, 6(39):41884, 2015.
- [295] Jung, S., Sielker, S., Purcz, N., et al. Analysis of angiogenic markers in oral squamous cell carcinoma-gene and protein expression. *Head & face medicine*, 11(1):1–8, 2015.
- [296] Kaiser, S. and Leisch, F. biclust-A Toolbox for Bicluster Analysis in R. *Proceedings of Computational Statistics*, 2008.
- [297] Kanehisa, M. and Goto, S. KEGG: kyoto encyclopedia of genes and genomes. *Nucleic acids research*, 28(1):27–30, 2000.
- [298] Kang, B. H., Shu, C. W., Chao, J. K., et al. HSPD1 repressed E-cadherin expression to promote cell invasion and migration for poor prognosis in oral squamous cell carcinoma. *Scientific reports*, 9(1):8932, 2019.
- [299] Kang, Z., Zhu, J., Sun, N., et al. COL11A1 promotes esophageal squamous cell carcinoma proliferation and metastasis and is inversely regulated by miR-335-5p. *Annals of translational medicine*, 9(20), 2021.
- [300] Kao, K. J., Chang, K. M., Hsu, H. C., et al. Correlation of microarray-based breast cancer molecular subtypes and clinical outcomes: implications for treatment optimization. *BMC cancer*, 11(1):1–15, 2011.
- [301] Kato, K., Hida, Y., Miyamoto, M., et al. Overexpression of caveolin-1 in esophageal squamous cell carcinoma correlates with lymph node metastasis and pathologic stage. *Cancer*, 94(4):929–933,

2002.

- [302] Katz, L. A new status index derived from sociometric analysis. *Psychometrika*, 18(1):39–43, 1953.
- [303] Kayser, G., Csanadi, A., Kakanou, S., et al. Downregulation of MTSS1 expression is an independent prognosticator in squamous cell carcinoma of the lung. *British journal of cancer*, 112(5):866–873, 2015.
- [304] Keller, M. P., Choi, Y., Wang, P., et al. A gene expression network model of type 2 diabetes links cell cycle regulation in islets with diabetes susceptibility. *Genome research*, 18(5):706–716, 2008.
- [305] Kimura, Y., Watanabe, M., Ohga, T., et al. Vascular endothelial growth factor C expression correlates with lymphatic involvement and poor prognosis in patients with esophageal squamous cell carcinoma. *Oncology reports*, 10(6):1747–1751, 2003.
- [306] Kimura, Y., Kasamatsu, A., Nakashima, D., et al. ARNT2 regulates tumoral growth in oral squamous cell carcinoma. *Journal of Cancer*, 7(6):702, 2016.
- [307] Kindt, N., Lechien, J. R., Nonclercq, D., et al. Involvement of CD74 in head and neck squamous cell carcinomas. *Journal of cancer research and clinical oncology*, 140(6):937–947, 2014.
- [308] Kirkpatrick, S., Gelatt Jr, C. D., and Vecchi, M. P. Optimization by simulated annealing. *science*, 220(4598):671–680, 1983.
- [309] Kisilevich, S., Mansmann, F., Nanni, M., et al. Data mining and knowledge discovery handbook. 2010.
- [310] Kita, Y., Nishizono, Y., Okumura, H., et al. Clinical and biological impact of cyclin-dependent kinase subunit 2 in esophageal squamous cell carcinoma. *Oncology reports*, 31(5):1986–1992, 2014.
- [311] Kluger, Y., Basri, R., Chang, J. T., et al. Spectral biclustering of microarray data: coclustering genes and conditions. *Genome research*, 13(4):703–716, 2003.
- [312] Knitz, M. W., Darragh, L. B., Bickett, T. E., et al. Loss of cancer cell STAT1 improves response to radiation therapy and promotes T cell activation in head and neck squamous cell carcinoma. *Cancer Immunology, Immunotherapy*, 71(5):1049–1061, 2022.
- [313] Ko, C. P., Yang, L. C., Chen, C. J., et al. Expression of myeloid zinc finger 1 and the correlation to clinical aspects of oral squamous cell carcinoma. *Tumor Biology*, 36(9):7099–7105, 2015.
- [314] Ko, H. H., Cheng, S. L., Lee, J. J., et al. Expression of AKR1B10 as an independent marker for poor prognosis in human oral squamous cell carcinoma. *Head & Neck*, 39(7):1327–1332, 2017.
- [315] Koh, Y., Kim, T., Jeon, Y. K., et al. Class III β -tubulin, but not ERCC1, is a strong predictive and prognostic marker in locally advanced head and neck squamous cell carcinoma. *Annals of oncology*, 20(8):1414–1419, 2009.
- [316] Komatsu, S., Ichikawa, D., Hirajima, S., et al. Clinical impact of predicting CCND1 amplification using plasma DNA in superficial esophageal squamous cell carcinoma. *Digestive Diseases and Sciences*, 59(6):1152–1159, 2014.
- [317] Kondo, T., Ozawa, S., Ikoma, T., et al. Expression of the chemokine CXCL14 and cetuximab-dependent tumour suppression in head and neck squamous cell carcinoma. *Oncogenesis*, 5(7):e240–e240, 2016.
- [318] Kong, L., Yu, Y., Guan, H., et al. TGIF1 plays a carcinogenic role in esophageal squamous cell

- carcinoma through the Wnt/ β -catenin and Akt/mTOR signaling pathways. *International journal of molecular medicine*, 47(5):1–10, 2021.
- [319] Kordi Tamandani, D. M., Sabers, E., Jamali, S., et al. ERK and RAF1 genes: analysis of methylation and expression profiles in patients with oral squamous cell carcinoma. *British Journal of Biomedical Science*, 71(3):100–103, 2014.
- [320] Ku, B. M., Yi, S. Y., Koh, J., et al. The CDK4/6 inhibitor LY2835219 has potent activity in combination with mTOR inhibitor in head and neck squamous cell carcinoma. *Oncotarget*, 7(12):14803, 2016.
- [321] Kuhn, D. J., Smith, D. M., Pross, S., et al. Overexpression of interleukin-2 receptor α in a human squamous cell carcinoma of the head and neck cell line is associated with increased proliferation, drug resistance, and transforming ability. *Journal of cellular biochemistry*, 89(4):824–836, 2003.
- [322] Kumar, R., Samal, S. K., Routray, S., et al. Identification of oral cancer related candidate genes by integrating protein-protein interactions, gene ontology, pathway analysis and immunohistochemistry. *Scientific Reports*, 7(1):1–18, 2017.
- [323] Kurimoto, K., Hayashi, M., Guerrero Preston, R., et al. PAX5 gene as a novel methylation marker that predicts both clinical outcome and cisplatin sensitivity in esophageal squamous cell carcinoma. *Epigenetics*, 12(10):865–874, 2017.
- [324] Kwon, J., Lee, T. S., Lee, H. W., et al. Integrin alpha 6: a novel therapeutic target in esophageal squamous cell carcinoma. *International journal of oncology*, 43(5):1523–1530, 2013.
- [325] Kwong, R. A., Scarlett, C. J., Kalish, L. H., et al. LMO4 expression in squamous cell carcinoma of the anterior tongue. *Histopathology*, 58(3):477–480, 2011.
- [326] Laljee, R. P., Muddaiah, S., Salagundi, B., et al. Interferon stimulated gene-ISG15 is a potential diagnostic biomarker in oral squamous cell carcinomas. *Asian Pacific Journal of Cancer Prevention*, 14(2):1147–1150, 2013.
- [327] Langfelder, P. and Horvath, S. WGCNA: an R package for weighted correlation network analysis. *BMC bioinformatics*, 9(1):1–13, 2008.
- [328] Langfelder, P. and Horvath, S. Fast R functions for robust correlations and hierarchical clustering. *Journal of statistical software*, 46(11), 2012.
- [329] Langfelder, P., Luo, R., Oldham, M. C., et al. Is my network module preserved and reproducible? *PLoS computational biology*, 7(1):e1001057, 2011.
- [330] Langfelder, P., Mischel, P. S., and Horvath, S. When is hub gene selection better than standard meta-analysis? *PloS one*, 8(4):e61505, 2013.
- [331] Lau, M. C. C., Ng, K. Y., Wong, T. L., et al. FSTL1 Promotes Metastasis and Chemoresistance in Esophageal Squamous Cell Carcinoma through NF κ B–BMP Signaling Cross-talk FSTL1-Mediated NF κ B and BMP Pathway Deregulation in ESCC. *Cancer research*, 77(21):5886–5899, 2017.
- [332] Law, C. W., Chen, Y., Shi, W., et al. Voom: Precision weights unlock linear model analysis tools for RNA-seq read counts. *Genome biology*, 15(2):1–17, 2014.
- [333] Lazzeroni, L. and Owen, A. Plaid models for gene expression data. *Statistica sinica*, pages 61–86, 2002.

- [334] Lee, C. R., Lee, S. H., Rigas, N. K., et al. Elevated expression of JMJD6 is associated with oral carcinogenesis and maintains cancer stemness properties. *Carcinogenesis*, 37(2):119–128, 2016.
- [335] Lee, C. E., Vincent Chong, V. K., Ramanathan, A., et al. Collagen triple helix repeat containing-1 (CTHRC1) expression in oral squamous cell carcinoma (OSCC): prognostic value and clinicopathological implications. *International journal of medical sciences*, 12(12):937, 2015.
- [336] Lee, C. H., Chang, J. S. M., Syu, S. H., et al. IL-1 β promotes malignant transformation and tumor aggressiveness in oral cancer. *Journal of cellular physiology*, 230(4):875–884, 2015.
- [337] Lee, D., Wada, K., Taniguchi, Y., et al. Expression of fatty acid binding protein 4 is involved in the cell growth of oral squamous cell carcinoma. *Oncology reports*, 31(3):1116–1120, 2014.
- [338] Lee, E. J., Lee, B. B., Han, J., et al. CpG island hypermethylation of E-cadherin (CDH1) and integrin α 4 is associated with recurrence of early stage esophageal squamous cell carcinoma. *International journal of cancer*, 123(9):2073–2079, 2008.
- [339] Lee, J. R., Roh, J. L., Lee, S. M., et al. Overexpression of glutathione peroxidase 1 predicts poor prognosis in oral squamous cell carcinoma. *Journal of cancer research and clinical oncology*, 143(11):2257–2265, 2017.
- [340] Lee, K. W., Kim, J. H., Han, S., et al. Twist1 is an independent prognostic factor of esophageal squamous cell carcinoma and associated with its epithelial–mesenchymal transition. *Annals of surgical oncology*, 19(1):326–335, 2012.
- [341] Lee, T. C., Pidugu, V. K., Wu, M. M., et al. IFIT1 and IFIT3 modulate the drug response via enhancing EGFR signaling and in human oral squamous cell carcinoma cells. In *Proceedings for Annual Meeting of The Japanese Pharmacological Society WCP2018 (The 18th World Congress of Basic and Clinical Pharmacology)*, pages PO4–6. Japanese Pharmacological Society, 2018.
- [342] Lei, Z., Tian, D., Zhang, C., et al. Clinicopathological and prognostic significance of GPX2 protein expression in esophageal squamous cell carcinoma. *BMC cancer*, 16(1):1–8, 2016.
- [343] Lek, S. M., Li, K., Tan, Q. X., et al. Pairing a prognostic target with potential therapeutic strategy for head and neck cancer. *Oral Oncology*, 111:105035, 2020.
- [344] Leusink, F. K., Koudounarakis, E., Frank, M. H., et al. Cathepsin K associates with lymph node metastasis and poor prognosis in oral squamous cell carcinoma. *Bmc Cancer*, 18(1):1–9, 2018.
- [345] Li, C., Yue, X., Li, Y., et al. Long non-coding RNA PVT1 promotes tumor progression by regulating the Wnt pathway in human esophageal squamous cell carcinoma. *Chinese medical journal*, 135(15):1861–1863, 2022.
- [346] Li, C., Zhu, M., Zhu, J., et al. SOX12 contributes to the activation of the JAK2/STAT3 pathway and malignant transformation of esophageal squamous cell carcinoma. *Oncology reports*, 45(1):129–138, 2021.
- [347] Li, G. S., Hou, W., Chen, G., et al. Clinical significance of integrin subunit Beta 4 in head and neck squamous cell carcinoma. *Cancer Biotherapy & Radiopharmaceuticals*, 2020.
- [348] Li, G., Ma, Q., Tang, H., et al. QUBIC: a qualitative biclustering algorithm for analyses of gene expression data. *Nucleic acids research*, 37(15):e101–e101, 2009.
- [349] Li, H. G., Li, J. S., Chen, W. L., et al. Prognostic significance of erythropoietin and erythropoietin receptor in tongue squamous cell carcinoma. *British Journal of Oral and Maxillofacial Surgery*,

47(6):470–475, 2009.

- [350] Li, H., Wang, S., Li, X., et al. CDCA7 promotes TGF- β -induced epithelial-mesenchymal transition via transcriptionally regulating Smad4/Smad7 in ESCC. *Cancer Science*, 2022.
- [351] Li, H., Weng, Y., Wang, S., et al. CDCA7 facilitates tumor progression by directly regulating CCNA2 expression in esophageal squamous cell carcinoma. *Frontiers in oncology*, page 4206, 2021.
- [352] Li, J., Ko, J. M. Y., Dai, W., et al. Depletion of DNA Polymerase Theta Inhibits Tumor Growth and Promotes Genome Instability through the cGAS-STING-ISG Pathway in Esophageal Squamous Cell Carcinoma. *Cancers*, 13(13):3204, 2021.
- [353] Li, J., Ye, M., and Zhou, C. Expression profile and prognostic values of HOXA family members in laryngeal squamous cell cancer. *Frontiers in Oncology*, 10:368, 2020.
- [354] Li, J., Yang, D., Zhang, C., et al. ESM1 Is a Promising Therapeutic Target and Prognostic Indicator for Esophageal Carcinogenesis/Esophageal Squamous Cell Carcinoma. *BioMed Research International*, 2022, 2022.
- [355] Li, K. Y., Zhang, J., Jiang, L. C., et al. Knockdown of USP39 by lentivirus-mediated RNA interference suppresses the growth of oral squamous cell carcinoma. *Cancer Biomarkers*, 16(1):137–144, 2016.
- [356] Li, L., Wang, J., Gao, L., et al. Expression of paxillin in laryngeal squamous cell carcinoma and its prognostic value. *International journal of clinical and experimental pathology*, 8(8):9232, 2015.
- [357] Li, L., Ma, G., Jing, C., et al. Guanylate-binding protein 1 (GBP1) promotes lymph node metastasis in human esophageal squamous cell carcinoma. *Discovery Medicine*, 20(112):369–378, 2015.
- [358] Li, M., Yang, X., Zhang, J., et al. Effects of EHD2 interference on migration of esophageal squamous cell carcinoma. *Medical oncology*, 30(1):1–7, 2013.
- [359] Li, M., Li, C., Lu, P., et al. Expression and function analysis of CRABP2 and FABP5, and their ratio in esophageal squamous cell carcinoma. *Open Medicine*, 16(1):1444–1458, 2021.
- [360] Li, P., Liu, X., Dong, Z. M., et al. Epigenetic silencing of HIC1 promotes epithelial-mesenchymal transition and drives progression in esophageal squamous cell carcinoma. *Oncotarget*, 6(35):38151, 2015.
- [361] Li, P., Lv, H., Wu, Y., et al. E2F transcription factor 1 is involved in the phenotypic modulation of esophageal squamous cell carcinoma cells via microRNA-375. *Bioengineered*, 12(2):10047–10062, 2021.
- [362] Li, P. D., Hu, J. L., Ma, C., et al. Upregulation of the long non-coding RNA PVT1 promotes esophageal squamous cell carcinoma progression by acting as a molecular sponge of miR-203 and LASP1. *Oncotarget*, 8(21):34164, 2017.
- [363] Li, Q., Yang, L., Han, K., et al. Ets2 knockdown inhibits tumorigenesis in esophageal squamous cell carcinoma in vivo and in vitro. *Oncotarget*, 7(38):61458, 2016.
- [364] Li, R., Pang, X. F., Huang, Z. G., et al. Overexpression of UBE2C in esophageal squamous cell carcinoma tissues and molecular analysis. *BMC cancer*, 21(1):1–16, 2021.
- [365] Li, S., Xi, Y., Zhang, H., et al. A pivotal role for Pim-1 kinase in esophageal squamous cell carcinoma involving cell apoptosis induced by reducing Akt phosphorylation. *Oncology reports*,

- 24(4):997–1004, 2010.
- [366] Li, W., Hou, G., Zhou, D., et al. The roles of AKR1C1 and AKR1C2 in ethyl-3, 4-dihydroxybenzoate induced esophageal squamous cell carcinoma cell death. *Oncotarget*, 7(16):21542, 2016.
- [367] Li, W. V. and Li, Y. sclink: Inferring sparse gene co-expression networks from single-cell expression data. *Genomics, proteomics & bioinformatics*, 19(3):475–492, 2021.
- [368] Li, X., Aierken, A., and Shen, L. IPO5 promotes malignant progression of esophageal cancer through activating MMP7. *Eur Rev Med Pharmacol Sci*, 24(8):4246–4254, 2020.
- [369] Li, X. and Ren, H. Long noncoding RNA PVT1 promotes tumor cell proliferation, invasion, migration and inhibits apoptosis in oral squamous cell carcinoma by regulating miR-150-5p/GLUT-1. *Oncology reports*, 44(4):1524–1538, 2020.
- [370] Li, X., Zhu, F., Liu, Z., et al. High expression of Rab31 confers a poor prognosis and enhances cell proliferation and invasion in oral squamous cell carcinoma. *Oncology Reports*, 45(3):1182–1192, 2021.
- [371] Li, X., Lu, J. Y., Zhao, L. Q., et al. Overexpression of ETS2 in human esophageal squamous cell carcinoma. *World Journal of Gastroenterology*, 9(2):205, 2003.
- [372] Li, X., Zheng, S., Liu, Q., et al. Under-expression of annexin A2 is associated with Kazakh's esophageal squamous cell carcinoma. *Molecular Carcinogenesis*, 54(9):779–788, 2015.
- [373] Li, X., Zhang, J., Wu, Y., et al. IGFBP7 remodels the tumor microenvironment of esophageal squamous cell carcinoma by activating the TGF β 1/SMAD signaling pathway. *Oncology Letters*, 24(2):1–7, 2022.
- [374] Li, Y. Downregulation of POTEg predicts poor prognosis in esophageal squamous cell carcinoma. *Cancer Research*, 78(13_Supplement):4472–4472, 2018.
- [375] Li, Y., Chen, L. L., Nie, C. J., et al. Downregulation of RBMS3 is associated with poor prognosis in esophageal squamous cell carcinoma. *Cancer research*, 71(19):6106–6115, 2011.
- [376] Li, Y., Wang, X., Shi, L., et al. Predictions for high COL1A1 and COL10A1 expression resulting in a poor prognosis in esophageal squamous cell carcinoma by bioinformatics analyses. *Translational cancer research*, 9(1):85, 2020.
- [377] Li, Y., Zhang, Q., Peng, B., et al. Identification of glutathione S-transferase omega 1 (GSTO1) protein as a novel tumor-associated antigen and its autoantibody in human esophageal squamous cell carcinoma. *Tumor Biology*, 35(11):10871–10877, 2014.
- [378] Li, Y., Ma, J., Guo, Q., et al. Overexpression of MMP-2 and MMP-9 in esophageal squamous cell carcinoma. *Diseases of the Esophagus*, 22(8):664–667, 2009.
- [379] Li, Y., Wu, T., Jiao, Z., et al. BASP1 is up-regulated in tongue squamous cell carcinoma and associated with a poor prognosis. *Asian Journal of Surgery*, 2021.
- [380] Li, Y., Wu, T., Gong, S., et al. Analysis of the Prognosis and Therapeutic Value of the CXC Chemokine Family in Head and Neck Squamous Cell Carcinoma. *Frontiers in oncology*, page 2657, 2021.
- [381] Li, Y. J., Huang, T. H., Hsiao, M., et al. Suppression of fructose-bisphosphate aldolase C expression as a predictor of advanced oral squamous cell carcinoma. *Head & neck*, 38(S1):E1075–E1085,

2016.

- [382] Li, Y., Xu, Z., Li, J., et al. Interleukin-18 expression in oral squamous cell carcinoma: its role in tumor cell migration and invasion, and growth of tumor cell xenografts. *FEBS open bio*, 8(12):1953–1963, 2018.
- [383] Li, Z., Chen, Y., Yan, F., et al. The expression of BUB1 in laryngeal squamous cell carcinoma and its clinical significance. *Lin Chuang er bi yan hou tou Jing wai ke za zhi= Journal of Clinical Otorhinolaryngology, Head, and Neck Surgery*, 27(21):1184–1187, 2013.
- [384] Li, Z., Shimada, Y., Uchida, S., et al. TGF- α as well as VEGF, PD-ECGF and bFGF contribute to angiogenesis of esophageal squamous cell carcinoma. *International journal of oncology*, 17(3):453–513, 2000.
- [385] Lian, Q., Ma, D. M., Chen, M. G., et al. Silencing Rab14 represses the proliferation and migration of oral squamous cell carcinoma, and enhances cisplatin sensitivity. *American journal of translational research*, 9(9):4195, 2017.
- [386] Liang, J. S., Liu, S. Q., Yan, C. Z., et al. Role of FSCN1 in the tumor microenvironment of lung squamous cell carcinoma. *Immunobiology*, 227(3):152206, 2022.
- [387] Liang, J. and Sun, Z. Overexpression of membranial SLC3A2 regulates the proliferation of oral squamous cancer cells and affects the prognosis of oral cancer patients. *Journal of Oral Pathology & Medicine*, 50(4):371–377, 2021.
- [388] Liang, J., Zhang, Z., Liang, L., et al. HIF-1 α regulated tongue squamous cell carcinoma cell growth via regulating VEGF expression in a xenograft model. *Annals of translational medicine*, 2(9), 2014.
- [389] Liang, Y. N., Liu, Y., Meng, Q. W., et al. RBMS3 is a tumor suppressor gene that acts as a favorable prognostic marker in lung squamous cell carcinoma. *Medical oncology*, 32(2):1–9, 2015.
- [390] Liang, Y., Lei, Y., Du, M., et al. The increased expression and aberrant methylation of SHC1 in non-small cell lung cancer: Integrative analysis of clinical and bioinformatics databases. *Journal of Cellular and Molecular Medicine*, 25(14):7039–7051, 2021.
- [391] Liao, P. H., Wang, Y. Y., Wang, W. C., et al. Overexpression of sprout2 in human oral squamous cell carcinogenesis. *Archives of Oral Biology*, 87:131–142, 2018.
- [392] Liao, X., Chen, Y., Liu, D., et al. High expression of LAMP3 is a novel biomarker of poor prognosis in patients with esophageal squamous cell carcinoma. *International journal of molecular sciences*, 16(8):17655–17667, 2015.
- [393] Liao, Y., Wang, F., Zhang, Y., et al. Silencing SHMT2 Inhibits the Progression of Oral Squamous Cell Carcinoma Through Cell Cycle Regulation. 2020.
- [394] Liao, Y., Wang, F., Zhang, Y., et al. Silencing SHMT2 inhibits the progression of tongue squamous cell carcinoma through cell cycle regulation. *Cancer cell international*, 21(1):1–19, 2021.
- [395] Liao, Y., Chiang, K., Shieh, J., et al. Epidermal growth factor-induced ANGPTL4 enhances anoikis resistance and tumour metastasis in head and neck squamous cell carcinoma. *Oncogene*, 36(16):2228–2242, 2017.
- [396] Liao, Y., Xue, Y., Zhang, L., et al. Higher heat shock factor 1 expression in tumor stroma predicts poor prognosis in esophageal squamous cell carcinoma patients. *Journal of translational medicine*,

- 13(1):1–13, 2015.
- [397] Lieberman, R., Pan, J., Zhang, Q., et al. Rad52 deficiency decreases development of lung squamous cell carcinomas by enhancing immuno-surveillance. *Oncotarget*, 8(21):34032, 2017.
- [398] Lien, M. Y., Tsai, H. C., Chang, A. C., et al. Chemokine CCL4 induces vascular endothelial growth factor C expression and lymphangiogenesis by miR-195-3p in oral squamous cell carcinoma. *Frontiers in immunology*, 9:412, 2018.
- [399] Lin, C. H., Li, H. Y., Liu, Y. P., et al. High-CLDN4 ESCC cells harbor stem-like properties and indicate for poor concurrent chemoradiation therapy response in esophageal squamous cell carcinoma. *Therapeutic advances in medical oncology*, 11:1758835919875324, 2019.
- [400] Lin, C. Z., Liu, Z. Q., Zhou, W. K., et al. Effect of the regulator of G-protein signaling 2 on the proliferation and invasion of oral squamous cell carcinoma cells and its molecular mechanism. *Hua xi kou Qiang yi xue za zhi= Huaxi Kouqiang Yixue Zazhi= West China Journal of Stomatology*, 39(3):320–327, 2021.
- [401] Lin, C. L., Chiang, W. F., Tung, C. L., et al. Sprouty2 protein is downregulated in human squamous cell carcinoma of the head and neck and suppresses cell proliferation in vitro. *Molecular Medicine Reports*, 11(1):547–554, 2015.
- [402] Lin, D., Lin, B., Bhanot, H., et al. RUVBL1 is an amplified epigenetic factor promoting proliferation and inhibiting differentiation program in head and neck squamous cancers. *Oral Oncology*, 111:104930, 2020.
- [403] Lin, F., Gao, L., Su, Z., et al. Knockdown of KPNA2 inhibits autophagy in oral squamous cell carcinoma cell lines by blocking p53 nuclear translocation. *Oncology reports*, 40(1):179–194, 2018.
- [404] Lin, F. C., Lee, Y. C., Goan, Y. G., et al. Pin1 positively affects tumorigenesis of esophageal squamous cell carcinoma and correlates with poor survival of patients. *Journal of biomedical science*, 21(1):1–8, 2014.
- [405] Lin, Y., Zhang, Y., Chen, Y., et al. Promoter methylation and clinical significance of GPX3 in esophageal squamous cell carcinoma. *Pathology-Research and Practice*, 215(11):152676, 2019.
- [406] Lin, Y. T., Chuang, H. C., Chen, C. H., et al. Clinical significance of erythropoietin receptor expression in oral squamous cell carcinoma. *BMC cancer*, 12(1):1–7, 2012.
- [407] Linde, J., Schulze, S., Henkel, S. G., et al. Data-and knowledge-based modeling of gene regulatory networks: an update. *EXCLI journal*, 14:346, 2015.
- [408] Ling, Z., Zhao, Q., Zhou, S., et al. MSH2 promoter hypermethylation in circulating tumor DNA is a valuable predictor of disease-free survival for patients with esophageal squamous cell carcinoma. *European Journal of Surgical Oncology (EJSO)*, 38(4):326–332, 2012.
- [409] Lioni, M., Brafford, P., Andl, C., et al. Dysregulation of claudin-7 leads to loss of E-cadherin expression and the increased invasion of esophageal squamous cell carcinoma cells. *The American journal of pathology*, 170(2):709–721, 2007.
- [410] Liu, B. H., Yu, H., Tu, K., et al. DCGL: an R package for identifying differentially coexpressed genes and links from gene expression microarray data. *Bioinformatics*, 26(20):2637–2638, 2010.
- [411] Liu, B., Jia, Y., Cao, Y., et al. Overexpression of phosphoserine aminotransferase 1 (PSAT1)

- predicts poor prognosis and associates with tumor progression in human esophageal squamous cell carcinoma. *Cellular physiology and biochemistry*, 39(1):395–406, 2016.
- [412] Liu, C. T., Zhu, S. T., Li, P., et al. SULF1 inhibits proliferation and invasion of esophageal squamous cell carcinoma cells by decreasing heparin-binding growth factor signaling. *Digestive diseases and sciences*, 58(5):1256–1263, 2013.
- [413] Liu, F., White, J. A., Antonescu, C., et al. GCOD-GeneChip oncology database. *BMC bioinformatics*, 12:1–10, 2011.
- [414] Liu, G., Ren, X., Gao, C., et al. Acylglycerol kinase promotes the proliferation and cell cycle progression of oral squamous cell carcinoma. *Molecular Medicine Reports*, 12(2):2225–2230, 2015.
- [415] Liu, H., Qin, Y. R., Bi, J., et al. Overexpression of matrix metalloproteinase 10 is associated with poor survival in patients with early stage of esophageal squamous cell carcinoma. *Diseases of the Esophagus*, 25(7):656–663, 2012.
- [416] Liu, H. C., Zhang, Y., Wang, X. L., et al. Upregulation of the TPX2 gene is associated with enhanced tumor malignance of esophageal squamous cell carcinoma. *Biomedicine & pharmacotherapy*, 67(8):751–755, 2013.
- [417] Liu, H. T., Wang, N., Wang, X., et al. Overexpression of Pim-1 is associated with poor prognosis in patients with esophageal squamous cell carcinoma. *Journal of surgical oncology*, 102(6):683–688, 2010.
- [418] Liu, H., Zhang, H., Fan, H., et al. TAB2 Promotes the Biological Functions of Head and Neck Squamous Cell Carcinoma Cells via EMT and PI3K Pathway. *Disease Markers*, 2022, 2022.
- [419] Liu, J. H., Jiang, M., Guan, J. L., et al. LncRNA KCNQ1OT1 enhances the radioresistance of lung squamous cell carcinoma by targeting the miR-491-5p/TPX2-RNF2 axis. 2022.
- [420] Liu, J., Zheng, X., Deng, H., et al. Expression of CCR6 in esophageal squamous cell carcinoma and its effects on epithelial-to-mesenchymal transition. *Oncotarget*, 8(70):115244, 2017.
- [421] Liu, J., Li, F., Ping, Y., et al. Local production of the chemokines CCL5 and CXCL10 attracts CD8+ T lymphocytes into esophageal squamous cell carcinoma. *Oncotarget*, 6(28):24978, 2015.
- [422] Liu, J., Shao, J., Zhang, C., et al. Immuno-oncological role of 20S proteasome alpha-subunit 3 in aggravating the progression of esophageal squamous cell carcinoma. *European journal of immunology*, 52(2):338–351, 2022.
- [423] Liu, J., Ban, H., Liu, Y., et al. The expression and significance of AKR1B10 in laryngeal squamous cell carcinoma. *Scientific reports*, 11(1):1–12, 2021.
- [424] Liu, J., Min, L., Zhu, S., et al. Cyclin-dependent kinase inhibitor 3 promoted cell proliferation by driving cell cycle from G1 to S phase in esophageal squamous cell carcinoma. *Journal of Cancer*, 10(8):1915, 2019.
- [425] Liu, J., Li, Z., Hu, X., et al. Biclustering of microarray data with MOSPO based on crowding distance. In *BMC bioinformatics*, volume 10, pages 1–10. BioMed Central, 2009.
- [426] Liu, P. F., Chen, C. F., Shu, C. W., et al. UBE2C is a potential biomarker for tumorigenesis and prognosis in tongue squamous cell carcinoma. *Diagnostics*, 10(9):674, 2020.
- [427] Liu, P. F., Shu, C. W., Lee, C. H., et al. Clinical significance and the role of guanylate-binding

- protein 5 in Oral squamous cell carcinoma. *Cancers*, 13(16):4043, 2021.
- [428] Liu, P., Zhang, R., Han, L., et al. Vasohibin 2 promotes lymphangiogenesis of lung squamous cell carcinoma through snail-dependent vascular endothelial growth factor-D (VEGF-D) signaling pathway. *Annals of Translational Medicine*, 10(2), 2022.
- [429] Liu, Q., Zhou, Y. X., Wang, H., et al. The silencing of SFRP2 expression in ESCC is due to methylation of the gene promoter. *Technology in Cancer Research & Treatment*, 18:1533033819877977, 2019.
- [430] Liu, S., Wang, Y., Han, Y., et al. EREG-driven oncogenesis of Head and Neck Squamous Cell Carcinoma exhibits higher sensitivity to Erlotinib therapy. *Theranostics*, 10(23):10589, 2020.
- [431] Liu, X. and Wang, L. Computing the maximum similarity bi-clusters of gene expression data. *Bioinformatics*, 23(1):50–56, 2007.
- [432] Liu, X., Qing, S., Che, K., et al. Androgen receptor promotes oral squamous cell carcinoma cell migration by increasing EGFR phosphorylation. *OncoTargets and therapy*, 12:4245, 2019.
- [433] Liu, Y., Li, R., Yin, K., et al. The crucial role of SEMA3F in suppressing the progression of oral squamous cell carcinoma. *Cellular & Molecular Biology Letters*, 22(1):1–11, 2017.
- [434] Liu, Y. Q., Chu, L. Y., Yang, T., et al. Serum DSG2 as a potential biomarker for diagnosis of esophageal squamous cell carcinoma and esophagogastric junction adenocarcinoma. *Bioscience Reports*, 42(5):BSR20212612, 2022.
- [435] Liu, Y., Tan, Y. R., Sun, W. W., et al. Identification of SCARA5 as a potential biomarker for oral squamous cell carcinoma using MALDI–TOF–MS analysis. *PROTEOMICS–Clinical Applications*, 12(5):1700180, 2018.
- [436] Liu, Y., Zhang, M., He, T., et al. Epigenetic silencing of IGF2BP1 promotes esophageal cancer growth by activating PI3K-AKT signaling. *Clinical Epigenetics*, 12(1):1–12, 2020.
- [437] Liu, Y., Zhang, X., Qiu, Y., et al. Clinical significance of EphA2 expression in squamous-cell carcinoma of the head and neck. *Journal of cancer research and clinical oncology*, 137(5):761–769, 2011.
- [438] Liu, Y. C., Ho, H. C., Lee, M. R., et al. Cortactin is a prognostic marker for oral squamous cell carcinoma and its overexpression is involved in oral carcinogenesis. *Environmental toxicology*, 32(3):799–812, 2017.
- [439] Liu, Z. C., Cao, K., Xiao, Z. H., et al. VRK1 promotes cisplatin resistance by up-regulating c-MYC via c-Jun activation and serves as a therapeutic target in esophageal squamous cell carcinoma. *Oncotarget*, 8(39):65642, 2017.
- [440] Liu, Z., Gu, S., Lu, T., et al. IFI6 depletion inhibits esophageal squamous cell carcinoma progression through reactive oxygen species accumulation via mitochondrial dysfunction and endoplasmic reticulum stress. *Journal of Experimental & Clinical Cancer Research*, 39(1):1–28, 2020.
- [441] Liu, Z., Wang, L., Wang, L. E., et al. Polymorphisms of the DNMT3B gene and risk of squamous cell carcinoma of the head and neck: a case–control study. *Cancer letters*, 268(1):158–165, 2008.
- [442] Liu, Z., Yu, S., Ye, S., et al. Keratin 17 activates AKT signalling and induces epithelial-mesenchymal transition in oesophageal squamous cell carcinoma. *Journal of proteomics*, 211:103557, 2020.

- [443] Livak, K. J. and Schmittgen, T. D. Analysis of relative gene expression data using real-time quantitative PCR and the $2^{-\Delta\Delta CT}$ method. *methods*, 25(4):402–408, 2001.
- [444] Lloyd, S. Least squares quantization in PCM. *IEEE transactions on information theory*, 28(2):129–137, 1982.
- [445] Lodish, H. F., Berk, A., Kaiser, C., et al. *Molecular cell biology*. WH Freeman New York, 2021.
- [446] Loomans, H. A., Arnold, S. A., Hebron, K., et al. Loss of ACVRIB leads to increased squamous cell carcinoma aggressiveness through alterations in cell-cell and cell-matrix adhesion proteins. *American journal of cancer research*, 7(12):2422, 2017.
- [447] Loomans, H. A., Arnold, S. A., Quast, L. L., et al. Esophageal squamous cell carcinoma invasion is inhibited by Activin A in ACVRIB-positive cells. *BMC cancer*, 16(1):1–15, 2016.
- [448] Lourenco, G. J., Nogueira, G. A. S., Oliveira, C. B. M., et al. MLH1, MSH2, MSH3 and EXO1 polymorphisms and head and neck squamous cell carcinoma risk and prognosis., 2015.
- [449] Love, M., Anders, S., and Huber, W. Differential analysis of count data—the DESeq2 package. *Genome Biol*, 15(550):10–1186, 2014.
- [450] Love, M. I., Huber, W., and Anders, S. Moderated estimation of fold change and dispersion for RNA-seq data with DESeq2. *Genome biology*, 15(12):1–21, 2014.
- [451] Lowry, D. B., Logan, T. L., Santuari, L., et al. Expression quantitative trait locus mapping across water availability environments reveals contrasting associations with genomic features in Arabidopsis. *The Plant Cell*, 25(9):3266–3279, 2013.
- [452] Lu, F., Chen, W., Jiang, T., et al. Expression profile, clinical significance and biological functions of IGF2BP2 in esophageal squamous cell carcinoma. *Experimental and Therapeutic Medicine*, 23(4):1–11, 2022.
- [453] Lu, S., Li, N., Peng, Z., et al. Fc fragment of immunoglobulin G receptor IIa (FCGR2A) as a new potential prognostic biomarker of esophageal squamous cell carcinoma. *Chinese medical journal*, 135(04):482–484, 2022.
- [454] Lu, T., Li, Y., Pan, M., et al. TBC1D14 inhibits autophagy to suppress lymph node metastasis in head and neck squamous cell carcinoma by downregulating macrophage erythroblast attracter. *International Journal of Biological Sciences*, 18(5):1795, 2022.
- [455] Lu, T., Zheng, Y., Gong, X., et al. High Expression of Hyaluronan-Mediated Motility Receptor Predicts Adverse Outcomes: A Potential Therapeutic Target for Head and Neck Squamous Cell Carcinoma. *Frontiers in oncology*, 11:499, 2021.
- [456] Lucarini, G., Zizzi, A., Re, M., et al. Prognostic implication of CEACAM1 expression in squamous cell carcinoma of the larynx: pilot study. *Head & Neck*, 41(6):1615–1621, 2019.
- [457] Luo, G., Qi, Y., Lei, Z., et al. A potential biomarker of esophageal squamous cell carcinoma WTAP promotes the proliferation and migration of ESCC. *Pathology-Research and Practice*, 238:154114, 2022.
- [458] Luo, L. L., Zhao, L., Wang, Y. X., et al. Insulin-like growth factor binding protein-3 is a new predictor of radiosensitivity on esophageal squamous cell carcinoma. *Scientific reports*, 5(1):1–12, 2015.
- [459] Luo, L. L., Zhao, L., Xi, M., et al. Association of insulin-like growth factor-binding protein-3 with

- radiotherapy response and prognosis of esophageal squamous cell carcinoma. *Chinese journal of cancer*, 34(3):1–8, 2015.
- [460] Luo, M. L., Shen, X. M., Zhang, Y., et al. Amplification and overexpression of CTTN (EMS1) contribute to the metastasis of esophageal squamous cell carcinoma by promoting cell migration and anoikis resistance. *Cancer research*, 66(24):11690–11699, 2006.
- [461] Luo, Q., Zhan, X., Kuang, Y., et al. Wtap promotes oesophageal squamous cell carcinoma development by decreasing cpsf4 expression in an m6a-dependent manner. *Medical Oncology*, 39(12):231, 2022.
- [462] Luo, Q., Li, X., Gan, G., et al. PPT1 Reduction Contributes to Erianin-Induced Growth Inhibition in Oral Squamous Carcinoma Cells. *Frontiers in Cell and Developmental Biology*, 9, 2021.
- [463] Lyu, Q., Jin, L., Yang, X., et al. LncRNA MINCR activates Wnt/ β -catenin signals to promote cell proliferation and migration in oral squamous cell carcinoma. *Pathology-Research and Practice*, 215(5):924–930, 2019.
- [464] Ma, A. G., Yu, L. M., Zhao, H., et al. PSMD4 regulates the malignancy of esophageal cancer cells by suppressing endoplasmic reticulum stress. *The Kaohsiung Journal of Medical Sciences*, 35(10):591–597, 2019.
- [465] Ma, C., Zhang, C., Zhong, L., et al. Decreased expression of profilin 2 in oral squamous cell carcinoma and its clinicopathological implications. *Oncology reports*, 26(4):813–823, 2011.
- [466] Ma, G., Jing, C., Huang, F., et al. Integrin α 6 promotes esophageal cancer metastasis and is targeted by miR-92b. *Oncotarget*, 8(4):6681, 2017.
- [467] Ma, H. L., Jin, S. F., Ju, W. T., et al. Stathmin is overexpressed and regulated by mutant p53 in oral squamous cell carcinoma. *Journal of Experimental & Clinical Cancer Research*, 36(1):1–14, 2017.
- [468] Ma, H., Li, L., Jia, L., et al. POM121 is identified as a novel prognostic marker of oral squamous cell carcinoma. *Journal of Cancer*, 10(19):4473, 2019.
- [469] Ma, J., Yu, X., Guo, L., et al. DUSP6, a tumor suppressor, is involved in differentiation and apoptosis in esophageal squamous cell carcinoma. *Oncology letters*, 6(6):1624–1630, 2013.
- [470] Ma, J., Tang, X., Sun, W. W., et al. Mutant GDF15 presents a poor prognostic outcome for patients with oral squamous cell carcinoma. *Oncotarget*, 7(2):2113, 2016.
- [471] Ma, J., Wang, J., Fan, W., et al. Upregulated TIMP-1 correlates with poor prognosis of laryngeal squamous cell carcinoma. *International journal of clinical and experimental pathology*, 7(1):246, 2014.
- [472] Ma, J., Chen, S., Su, M., et al. High FN1 expression is associated with poor survival in esophageal squamous cell carcinoma. *Medicine*, 102(14), 2023.
- [473] Ma, L., Wang, Q., Gong, Z., et al. Long noncoding RNA GIHCG enhanced tongue squamous cell carcinoma progression through regulating miR-429. *Journal of cellular biochemistry*, 119(11):9064–9071, 2018.
- [474] Ma, R. L., Shen, L. Y., and Chen, K. N. Coexpression of ANXA2, SOD2 and HOXA13 predicts poor prognosis of esophageal squamous cell carcinoma. *Oncology Reports*, 31(5):2157–2164, 2014.

- [475] Ma, S. and Zhao, X. KPNA2 is a promising biomarker candidate for esophageal squamous cell carcinoma and correlates with cell proliferation. *Oncology reports*, 32(4):1631–1637, 2014.
- [476] Ma, Y., He, S., Gao, A., et al. Methylation silencing of TGF- β receptor type II is involved in malignant transformation of esophageal squamous cell carcinoma. *Clinical Epigenetics*, 12(1):1–12, 2020.
- [477] Ma, Y. and Wang, H. Clinical significance of Annexin A2 expression in oral squamous cell carcinoma and its influence on cell proliferation, migration and invasion. *Scientific reports*, 11(1):1–10, 2021.
- [478] Ma, Z., Chen, C., Tang, P., et al. BNIP3 induces apoptosis and protective autophagy under hypoxia in esophageal squamous cell carcinoma cell lines: BNIP3 regulates cell death. *Diseases of the Esophagus*, 30(9), 2017.
- [479] Ma, Z., Zhang, H., Lian, M., et al. SLC7A11, a component of cysteine/glutamate transporter, is a novel biomarker for the diagnosis and prognosis in laryngeal squamous cell carcinoma. *Oncology Reports*, 38(5):3019–3029, 2017.
- [480] Ma, Z., Dong, Z., Yu, D., et al. IL-32 promotes the radiosensitivity of esophageal squamous cell carcinoma cell through STAT3 pathway. *BioMed Research International*, 2021, 2021.
- [481] Madeira, S. C. and Oliveira, A. L. Biclustering algorithms for biological data analysis: a survey. *IEEE/ACM transactions on computational biology and bioinformatics*, 1(1):24–45, 2004.
- [482] Magnes, T., Melchardt, T., Hufnagl, C., et al. The influence of FCGR2A and FCGR3A polymorphisms on the survival of patients with recurrent or metastatic squamous cell head and neck cancer treated with cetuximab. *The Pharmacogenomics Journal*, 18(3):474–479, 2018.
- [483] Maji, S., Samal, S. K., Pattanaik, L., et al. Mcl-1 is an important therapeutic target for oral squamous cell carcinomas. *Oncotarget*, 6(18):16623, 2015.
- [484] Malik, M. A., Sharma, K. L., Zargar, S. A., et al. Association of matrix metalloproteinase-7 (-181A> G) polymorphism with risk of esophageal squamous cell carcinoma in Kashmir Valley. *Saudi Journal of Gastroenterology: Official Journal of the Saudi Gastroenterology Association*, 17(5):301, 2011.
- [485] Mao, J. T., Lu, Q., Jing, P. Y., et al. Comprehensive Analysis of Prognostic Value and Immune Infiltration of MMP12 in Esophageal Squamous Cell Carcinoma. *Journal of Oncology*, 2022, 2022.
- [486] Maqsood, A., Ali, A., Zaffar, Z., et al. Expression of CD34 and α -SMA markers in oral squamous cell carcinoma differentiation. a histological and histo-chemical study. *International Journal of Environmental Research and Public Health*, 18(1):192, 2021.
- [487] Margolin, A. A., Nemenman, I., Basso, K., et al. ARACNE: an algorithm for the reconstruction of gene regulatory networks in a mammalian cellular context. In *BMC bioinformatics*, pages 1–15. Springer, 2006.
- [488] Martin, C. E., Nguyen, A., Kang, M. K., et al. DYRK1A is required for maintenance of cancer stemness, contributing to tumorigenic potential in oral/oropharyngeal squamous cell carcinoma. *Experimental Cell Research*, 405(1):112656, 2021.
- [489] Martin, F. J., Amode, M. R., Aneja, A., et al. Ensembl 2023. *Nucleic acids research*, 51(D1):D933–

D941, 2023.

- [490] Matsuda, T., Takeuchi, H., Matsuda, S., et al. The role of EpCAM expression in esophageal squamous cell carcinoma. *Cancer Research*, 73(8_Supplement):3992–3992, 2013.
- [491] Matsuda, T., Takeuchi, H., Matsuda, S., et al. EpCAM, a potential therapeutic target for esophageal squamous cell carcinoma. *Annals of surgical oncology*, 21(3):356–364, 2014.
- [492] Matsuo, F. S., Andrade, M. F., Loyola, A. M., et al. Pathologic significance of AKT, mTOR, and GSK3 β proteins in oral squamous cell carcinoma-affected patients. *Virchows Archiv*, 472(6):983–997, 2018.
- [493] Matsuura, N., Tanaka, K., Yamasaki, M., et al. NOTCH3 limits the epithelial–mesenchymal transition and predicts a favorable clinical outcome in esophageal cancer. *Cancer medicine*, 10(12):3986–3996, 2021.
- [494] Maza, E., Frasse, P., Senin, P., et al. Comparison of normalization methods for differential gene expression analysis in RNA-Seq experiments: a matter of relative size of studied transcriptomes. *Communicative & integrative biology*, 6(6):e25849, 2013.
- [495] Meng, L., He, X., Hong, Q., et al. CCR4, CCR8, and P2RY14 as Prognostic Factors in Head and Neck Squamous Cell Carcinoma Are Involved in the Remodeling of the Tumor Microenvironment. *Frontiers in oncology*, 11:618187, 2021.
- [496] Miao, S., Zhou, S. Y., Han, C. S., et al. Clinicopathological significance of matrix metalloproteinase-7 protein expression in esophageal cancer: a meta-analysis. *Drug design, development and therapy*, 9:3729, 2015.
- [497] Minakawa, Y., Kasamatsu, A., Koike, H., et al. Kinesin family member 4A: a potential predictor for progression of human oral cancer. *PloS one*, 8(12):e85951, 2013.
- [498] Ming, X. Y., Zhang, X., Cao, T. T., et al. RHCG suppresses tumorigenicity and metastasis in esophageal squamous cell carcinoma via inhibiting NF- κ B signaling and MMP1 expression. *Theranostics*, 8(1):185, 2018.
- [499] Minn, A. J., Gupta, G. P., Padua, D., et al. Lung metastasis genes couple breast tumor size and metastatic spread. *Proceedings of the National Academy of Sciences*, 104(16):6740–6745, 2007.
- [500] Mir, C., Garcia Mayea, Y., Garcia, L., et al. SDCBP modulates stemness and chemoresistance in head and neck squamous cell carcinoma through Src activation. *Cancers*, 13(19):4952, 2021.
- [501] Mishra, R., Nagini, S., and Rana, A. Expression and inactivation of glycogen synthase kinase 3 alpha/beta and their association with the expression of cyclin D1 and p53 in oral squamous cell carcinoma progression. *Molecular cancer*, 14(1):1–16, 2015.
- [502] Miyake, K., Baba, Y., Ishimoto, T., et al. Isocitrate dehydrogenase gene mutations and 2-hydroxyglutarate accumulation in esophageal squamous cell carcinoma. *Medical Oncology*, 36(1):1–9, 2019.
- [503] Miyashita, H., Mori, S., Motegi, K., et al. Pin1 is overexpressed in oral squamous cell carcinoma and its levels correlate with cyclin D1 overexpression. *Oncology reports*, 10(2):455–461, 2003.
- [504] Miyazaki, T., Kato, H., Fukuchi, M., et al. EphA2 overexpression correlates with poor prognosis in esophageal squamous cell carcinoma. *International journal of cancer*, 103(5):657–663, 2003.
- [505] Moghbeli, M., Abbaszadegan, M. R., Farshchian, M., et al. Association of PYGO2 and EGFR in

- esophageal squamous cell carcinoma. *Medical oncology*, 30(2):1–9, 2013.
- [506] Mohanty, S., Mohapatra, P., Shriwas, O., et al. CRISPR-based kinome-screening revealed MINK1 as a druggable player to rewire 5FU-resistance in OSCC through AKT/MDM2/p53 axis. *Oncogene*, 41(45):4929–4940, 2022.
- [507] Mohanty, S., Mohapatra, P., Shriwas, O., et al. MINK1 modulates 5FU resistance in OSCC through AKT/MDM2 mediated regulation of p53. *bioRxiv*, pages 2021–08, 2021.
- [508] Monica, V., Ceppi, P., Righi, L., et al. Desmocollin-3: a new marker of squamous differentiation in undifferentiated large-cell carcinoma of the lung. *Modern Pathology*, 22(5):709–717, 2009.
- [509] Morabito, S., Miyoshi, E., Michael, N., et al. Single-nucleus chromatin accessibility and transcriptomic characterization of alzheimer’s disease. *Nature genetics*, 53(8):1143–1155, 2021.
- [510] Morabito, S., Reese, F., Rahimzadeh, N., et al. High dimensional co-expression networks enable discovery of transcriptomic drivers in complex biological systems. *bioRxiv*, 2022.
- [511] Moriya, Y., Uzawa, N., Morita, T., et al. The high-temperature requirement factor A3 (HtrA3) is associated with acquisition of the invasive phenotype in oral squamous cell carcinoma cells. *Oral Oncology*, 51(1):84–89, 2015.
- [512] Mortazavi, A., Williams, B. A., McCue, K., et al. Mapping and quantifying mammalian transcriptomes by RNA-Seq. *Nature methods*, 5(7):621–628, 2008.
- [513] Mukhopadhyay, A., Maulik, U., and Bandyopadhyay, S. A novel coherence measure for discovering scaling biclusters from gene expression data. *Journal of bioinformatics and computational biology*, 7(05):853–868, 2009.
- [514] Murali, T. and Kasif, S. Extracting conserved gene expression motifs from gene expression data. In *Biocomputing 2003*, pages 77–88. World Scientific, 2002.
- [515] Na, J., Zhou, W., Yin, M., et al. GNA13 promotes the proliferation and migration of lung squamous cell carcinoma cells through regulating the PI3K/AKT signaling pathway. *Tissue and Cell*, 76:101795, 2022.
- [516] Nagai, Y., Watanabe, M., Ishikawa, S., et al. Clinical significance of Wnt-induced secreted protein-1 (WISP-1/CCN4) in esophageal squamous cell carcinoma. *Anticancer research*, 31(3):991–997, 2011.
- [517] Nagata, M., Noman, A. A., Suzuki, K., et al. ITGA3 and ITGB4 expression biomarkers estimate the risks of locoregional and hematogenous dissemination of oral squamous cell carcinoma. *BMC cancer*, 13(1):1–9, 2013.
- [518] Nelder, J. A. and Wedderburn, R. W. Generalized linear models. *Journal of the Royal Statistical Society: Series A (General)*, 135(3):370–384, 1972.
- [519] Newman, M. E. The mathematics of networks. *The new palgrave encyclopedia of economics*, 2(2008):1–12, 2008.
- [520] Ni, H., Ni, T., Feng, J., et al. Spondin-2 is a novel diagnostic biomarker for laryngeal squamous cell carcinoma. *Pathology-Research and Practice*, 215(2):286–291, 2019.
- [521] Ni, P. Z., He, J. Z., Wu, Z. Y., et al. Overexpression of Stathmin 1 correlates with poor prognosis and promotes cell migration and proliferation in oesophageal squamous cell carcinoma. *Oncology reports*, 38(6):3608–3618, 2017.

- [522] Nigro, C. L., Vivenza, D., Denaro, N., et al. DUSP2 methylation is a candidate biomarker of outcome in head and neck cancer. *Annals of translational medicine*, 6(13), 2018.
- [523] Ninomiya, Y., Ozawa, S., Oguma, J., et al. Expression of vasohibin-1 and-2 predicts poor prognosis among patients with squamous cell carcinoma of the esophagus. *Oncology Letters*, 16(4):5265–5274, 2018.
- [524] Niu, J., Huang, Y. J., Wang, L. E., et al. Genetic polymorphisms in the PTPN13 gene and risk of squamous cell carcinoma of head and neck. *Carcinogenesis*, 30(12):2053–2058, 2009.
- [525] Nowinska, K., Ciesielska, U., Piotrowska, A., et al. MCM5 expression is associated with the grade of malignancy and Ki-67 antigen in LSCC. *Anticancer research*, 39(5):2325–2335, 2019.
- [526] Obara, S., Yamamoto, G., Hayashi, S., et al. Expression of Keratin 75 (K6hf) in Oral Squamous Cell Carcinoma. *Dental medicine research*, 31(1):28–34, 2011.
- [527] Ochi, F., Shiozaki, A., Ichikawa, D., et al. Carbonic anhydrase XII as an independent prognostic factor in advanced esophageal squamous cell carcinoma. *Journal of Cancer*, 6(10):922, 2015.
- [528] Oguma, J., Ozawa, S., Sakakibara, T., et al. Prognostic impact of LY6K and CDCA1 expression for patients with esophageal squamous cell carcinoma. *Annals of gastroenterological surgery*, 5(2):194–203, 2021.
- [529] Oh, E. Y., Christensen, S. M., Ghanta, S., et al. Extensive rewiring of epithelial-stromal co-expression networks in breast cancer. *Genome biology*, 16(1):1–22, 2015.
- [530] Ohmura, G., Tsujikawa, T., Yaguchi, T., et al. Aberrant myosin 1b expression promotes cell migration and lymph node metastasis of HNSCC. *Molecular Cancer Research*, 13(4):721–731, 2015.
- [531] Okamoto, A., Higo, M., Shiiba, M., et al. Down-regulation of nucleolar and spindle-associated protein 1 (NUSAP1) expression suppresses tumor and cell proliferation and enhances anti-tumor effect of paclitaxel in oral squamous cell carcinoma. *PLoS One*, 10(11):e0142252, 2015.
- [532] Okamoto, M., Koma, Y. I., Kodama, T., et al. Growth differentiation factor 15 promotes progression of esophageal squamous cell carcinoma via TGF- β type II receptor activation. *Pathobiology*, 87(2):100–113, 2020.
- [533] Oliver, S. Guilt-by-association goes global. *Nature*, 403(6770):601–602, 2000.
- [534] Onidani, K., Miura, N., Sugiura, Y., et al. Possible Therapeutic Strategy Involving the Purine Synthesis Pathway Regulated by ITK in Tongue Squamous Cell Carcinoma. *Cancers*, 13(13):3333, 2021.
- [535] Ou, D. and Wu, Y. The prognostic and clinical significance of IFI44L aberrant downregulation in patients with oral squamous cell carcinoma. *BMC cancer*, 21(1):1–11, 2021.
- [536] Oya, K., Kondo, Y., Fukuda, Y., et al. TUBB3 immunostaining improves the diagnostic accuracy of oral liquid-based cytology in squamous cell carcinoma. *Cytopathology*, 33(3):374–379, 2022.
- [537] Palumbo Jr, A., Da Costa, N. M., De Martino, M., et al. UBE2C is overexpressed in ESCC tissues and its abrogation attenuates the malignant phenotype of ESCC cell lines. *Oncotarget*, 7(40):65876, 2016.
- [538] Palumbo Jr, A., Da Costa, N. M., Esposito, F., et al. HMGA2 overexpression plays a critical role in the progression of esophageal squamous carcinoma. *Oncotarget*, 7(18):25872, 2016.
- [539] Pan, H., Gu, L., Liu, B., et al. Tropomyosin-1 acts as a potential tumor suppressor in human oral

- squamous cell carcinoma. *PLoS One*, 12(2):e0168900, 2017.
- [540] Parikh, A., Shin, J., Faquin, W., et al. Malignant cell-specific CXCL14 promotes tumor lymphocyte infiltration in oral cavity squamous cell carcinoma. *Journal for immunotherapy of cancer*, 8(2), 2020.
- [541] Patowary, P., Bhattacharyya, D. K., and Barah, P. Identifying critical genes in esophageal squamous cell carcinoma using an ensemble approach. *Informatics in Medicine Unlocked*, 18:100277, 2020.
- [542] Patsis, C., Yiotakis, I., and Scorilas, A. Diagnostic and prognostic significance of human kallikrein 11 (KLK11) mRNA expression levels in patients with laryngeal cancer. *Clinical biochemistry*, 45(9):623–630, 2012.
- [543] Pattani, K. M., Soudry, E., Glazer, C. A., et al. MAGEB2 is activated by promoter demethylation in head and neck squamous cell carcinoma. 2012.
- [544] Pawar, H., Kashyap, M. K., Sahasrabudhe, N. A., et al. Quantitative tissue proteomics of esophageal squamous cell carcinoma for novel biomarker discovery. *Cancer biology & therapy*, 12(6):510–522, 2011.
- [545] Pearson, K. VII. Note on regression and inheritance in the case of two parents. *proceedings of the royal society of London*, 58(347-352):240–242, 1895.
- [546] Pearson, K. LIII. On lines and planes of closest fit to systems of points in space. *The London, Edinburgh, and Dublin philosophical magazine and journal of science*, 2(11):559–572, 1901.
- [547] Peisker, A., Raschke, G. F., Fahmy, M. D., et al. Salivary MMP-9 in the detection of oral squamous cell carcinoma. *Medicina Oral, Patologia Oral y Cirugia Bucal*, 22(3):e270, 2017.
- [548] Peng, K., Chen, X., Lin, A., et al. PolyC-RNA-binding protein 1 (PCBP1) enhances tropomyosin 3 (TPM3) mRNA stability to promote the progression of esophageal squamous cell carcinoma. *Bioengineered*, 13(4):8581–8592, 2022.
- [549] Peng, S., Wang, J., Chen, Y., et al. High expression of ECT2 and E2F1 is associated with worse clinical manifestations and prognosis in patients with oral squamous cell carcinoma. *European Journal of Inflammation*, 20:1721727X221136794, 2022.
- [550] Pereira, C. S., Oliveira, M. V. M. d., Barros, L. O., et al. Low expression of MSH2 DNA repair protein is associated with poor prognosis in head and neck squamous cell carcinoma. *Journal of Applied Oral Science*, 21:416–421, 2013.
- [551] Pico, A. R., Kelder, T., Van Iersel, M. P., et al. WikiPathways: pathway editing for the people. *PLoS biology*, 6(7):e184, 2008.
- [552] Pidugu, V. K., Wu, M. M., Yen, A. H., et al. IFIT1 and IFIT3 promote oral squamous cell carcinoma metastasis and contribute to the anti-tumor effect of gefitinib via enhancing p-EGFR recycling. *Oncogene*, 38(17):3232–3247, 2019.
- [553] Pontes, B., Giráldez, R., and Aguilar Ruiz, J. S. Biclustering on expression data: A review. *Journal of biomedical informatics*, 57:163–180, 2015.
- [554] Pontes Balanza, B. Evolutionary biclustering of gene expression data shifting and scaling pattern-based evaluation. 2013.
- [555] Pramanik, R., Das, P., Sharma, A., et al. NOTCH3 expression predicts poor survival in advanced esophageal squamous cell cancers. *Annals of Oncology*, 30:ix51, 2019.

- [556] Prelić, A., Bleuler, S., Zimmermann, P., et al. A systematic comparison and evaluation of biclustering methods for gene expression data. *Bioinformatics*, 22(9):1122–1129, 2006.
- [557] Principe, S., Mejia Guerrero, S., Ignatchenko, V., et al. Proteomic analysis of cancer-associated fibroblasts reveals a paracrine role for MFAP5 in human oral tongue squamous cell carcinoma. *Journal of proteome research*, 17(6):2045–2059, 2018.
- [558] Qian, W., Huang, P., Liang, X., et al. High expression of carcinoembryonic antigen-associated cell adhesion molecule 1 is associated with microangiogenesis in esophageal squamous cell carcinoma. *Translational Cancer Research*, 9(8):4762, 2020.
- [559] Qian, Y., Liang, X., Kong, P., et al. Elevated DHODH expression promotes cell proliferation via stabilizing β -catenin in esophageal squamous cell carcinoma. *Cell Death & Disease*, 11(10):862, 2020.
- [560] Qin, K., Zheng, Z., He, Y., et al. High expression of neutrophil cytosolic factor 2 (NCF2) is associated with aggressive features and poor prognosis of esophageal squamous cell carcinoma. *International Journal of Clinical and Experimental Pathology*, 13(12):3033, 2020.
- [561] Qin, S., Yi, M., Jiao, D., et al. Distinct roles of VEGFA and ANGPT2 in lung adenocarcinoma and squamous cell carcinoma. *Journal of Cancer*, 11(1):153, 2020.
- [562] Qiu, L. L., Zhang, X. G., Chen, G., et al. Clinical significance of the interleukin 24 mRNA level in head and neck squamous cell carcinoma and its subgroups: an in silico investigation. *Journal of oncology*, 2020, 2020.
- [563] Qiu, Y. T., Wang, W. J., Zhang, B., et al. MCM7 amplification and overexpression promote cell proliferation, colony formation and migration in esophageal squamous cell carcinoma by activating the AKT1/mTOR signaling pathway. *Oncology reports*, 37(6):3590–3596, 2017.
- [564] Qu, J., Zhao, Q., Yang, L., et al. Identification and characterization of prognosis-related genes in the tumor microenvironment of esophageal squamous cell carcinoma. *International Immunopharmacology*, 96:107616, 2021.
- [565] Qu, Y., He, Y., Yang, Y., et al. ALDH3A1 acts as a prognostic biomarker and inhibits the epithelial mesenchymal transition of oral squamous cell carcinoma through IL-6/STAT3 signaling pathway. *Journal of Cancer*, 11(9):2621, 2020.
- [566] Radhakrishnan, A., Nanjappa, V., Raja, R., et al. A dual specificity kinase, DYRK1A, as a potential therapeutic target for head and neck squamous cell carcinoma. *Scientific reports*, 6(1):1–13, 2016.
- [567] Rahmatallah, Y., Emmert Streib, F., and Glazko, G. Gene Sets Net Correlations Analysis (GSNCA): a multivariate differential coexpression test for gene sets. *Bioinformatics*, 30(3):360–368, 2014.
- [568] Ram, A. J., Smiline Girija, A., Jayaseelan, V. P., et al. Overexpression of BASP1 Indicates a Poor Prognosis in Head and Neck Squamous Cell Carcinoma. *Asian Pacific Journal of Cancer Prevention: APJCP*, 21(11):3435, 2020.
- [569] Randhawa, V. and Acharya, V. Integrated network analysis and logistic regression modeling identify stage-specific genes in Oral Squamous Cell Carcinoma. *BMC medical genomics*, 8(1):1–20, 2015.
- [570] Rao, X., Huang, D., Sui, X., et al. Overexpression of WRAP53 is associated with development and

- progression of esophageal squamous cell carcinoma. *PLoS One*, 9(3):e91670, 2014.
- [571] Rapone, B. and Ferrara, E. Vascular Endothelial Growth Factor Expression in the Pathological Angiogenesis in Oral Squamous Cell Carcinoma. In *Oral Diseases*. IntechOpen, 2020.
- [572] Rasamny, J. J., Allak, A., Krook, K. A., et al. Cyclin D1 and FADD as biomarkers in head and neck squamous cell carcinoma. *Otolaryngology–Head and Neck Surgery*, 146(6):923–931, 2012.
- [573] Rather, M. I., Nagashri, M. N., Swamy, S. S., et al. Oncogenic microRNA-155 down-regulates tumor suppressor CDC73 and promotes oral squamous cell carcinoma cell proliferation: implications for cancer therapeutics. *Journal of Biological Chemistry*, 288(1):608–618, 2013.
- [574] Ravasz, E., Somera, A. L., Mongru, D. A., et al. Hierarchical organization of modularity in metabolic networks. *science*, 297(5586):1551–1555, 2002.
- [575] Ren, P., Zhang, J., Xiu, L., et al. Clinical significance of phospholipase A2 group IIA (PLA2G2A) expression in primary resected esophageal squamous cell carcinoma. *Eur Rev Med Pharmacol Sci*, 17(6):752–757, 2013.
- [576] Ren, W., Lian, P., Cheng, L., et al. FHL1 inhibits the growth of tongue squamous cell carcinoma cells via G1/S cell cycle arrest. *Molecular Medicine Reports*, 12(3):3958–3964, 2015.
- [577] Ren, Y., Cao, B., Law, S., et al. Hepatocyte growth factor promotes cancer cell migration and angiogenic factors expression: a prognostic marker of human esophageal squamous cell carcinomas. *Clinical Cancer Research*, 11(17):6190–6197, 2005.
- [578] Rentoft, M., Coates, P. J., Loljung, L., et al. Expression of CXCL10 is associated with response to radiotherapy and overall survival in squamous cell carcinoma of the tongue. *Tumor Biology*, 35(5):4191–4198, 2014.
- [579] Rettig, E. M., Bishop, J. A., Agrawal, N., et al. HEY1 is expressed independent of NOTCH1 and is associated with poor prognosis in head and neck squamous cell carcinoma. *Oral Oncology*, 82:168–175, 2018.
- [580] Rezvani, G., Andisheh Tadbir, A., Ashraf, M. J., et al. Evaluation of minichromosome maintenance-3 (MCM3) in oral squamous cell carcinoma. *Journal of Dentistry*, 16(2):87, 2015.
- [581] Riedel, F., Adam, S., Feick, P., et al. Expression of IL-18 in patients with head and neck squamous cell carcinoma. *International journal of molecular medicine*, 13(2):267–272, 2004.
- [582] Rivera, R. S., Gunduz, M., Nagatsuka, H., et al. Involvement of EphA2 in head and neck squamous cell carcinoma: mRNA expression, loss of heterozygosity and immunohistochemical studies. *Oncology reports*, 19(5):1079–1084, 2008.
- [583] Robbins, H. The empirical Bayes approach to statistical decision problems. *The Annals of Mathematical Statistics*, 35(1):1–20, 1964.
- [584] Robinson, M. D., McCarthy, D. J., and Smyth, G. K. edgeR: A Bioconductor package for differential expression analysis of digital gene expression data. *Bioinformatics*, 26(1):139–140, 2010.
- [585] Rodini, C. O., Xavier, F. C. A., Paiva, K. B. S., et al. Homeobox gene expression profile indicates HOXA5 as a candidate prognostic marker in oral squamous cell carcinoma. *International journal of oncology*, 40(4):1180–1188, 2012.
- [586] Rodrigues, M. F. S. D., Miguita, L., De Andrade, N. P., et al. GLI3 knockdown decreases stemness, cell proliferation and invasion in oral squamous cell carcinoma. *International Journal of Oncology*,

- 53(6):2458–2472, 2018.
- [587] Rodrigues, M. F., de Oliveira Rodini, C., de Aquino Xavier, F. C., et al. PROX1 gene is differentially expressed in oral cancer and reduces cellular proliferation. *Medicine*, 93(28), 2014.
- [588] Rong, L., Wang, L., Shuai, Y., et al. CXCL14 regulates cell proliferation, invasion, migration and epithelial-mesenchymal transition of oral squamous cell carcinoma. *Biotechnology & Biotechnological Equipment*, 33(1):1335–1342, 2019.
- [589] Roshan, V. D., Sinto, M., Vargees, B. T., et al. Loss of CDKN2A and CDKN2B expression is associated with disease recurrence in oral cancer. *Journal of Oral and Maxillofacial Pathology: JOMFP*, 23(1):82, 2019.
- [590] Routray, S. Caveolin-1 in oral squamous cell carcinoma microenvironment: an overview. *Tumor Biology*, 35(10):9487–9495, 2014.
- [591] Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. BicGenesis: A Method to Identify ESCC Biomarkers Using the Biclustering Approach. In *Proceedings of International Conference on Big Data, Machine Learning and Applications*, pages 1–14. Springer, 2021.
- [592] Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. CBDCEM: An effective centrality based differential co-expression method for critical gene finding. *Gene Reports*, 29:101688, 2022.
- [593] Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. Identification of Potential Biomarkers Using Integrative Approach: A Case Study of ESCC. *SN Computer Science*, 4(2):1–31, 2023.
- [594] Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. Identification of Potential Biomarkers using Integrative Approach: An application of ESCC. In *Pattern Recognition and Machine Intelligence: 9th International Conference, PReMI 2021, Kolkata, India, December 15-18, 2021, Proceedings*. Springer, 2024.
- [595] Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. scDiffCoAM: A Complete Framework to Identify Potential Biomarkers using scRNA-Seq Data Analysis. *Journal of Biosciences*, 2024.
- [596] Sakai, M., Sohda, M., Miyazaki, T., et al. Significance of karyopherin- $\alpha 2$ (KPNA2) expression in esophageal squamous cell carcinoma. *Anticancer research*, 30(3):851–856, 2010.
- [597] Sakamoto, N., Oue, N., Noguchi, T., et al. Serial analysis of gene expression of esophageal squamous cell carcinoma: ADAMTS16 is upregulated in esophageal squamous cell carcinoma. *Cancer science*, 101(4):1038–1044, 2010.
- [598] Sakata, J., Hirose, A., Yoshida, R., et al. HMGA2 contributes to distant metastasis and poor prognosis by promoting angiogenesis in oral squamous cell carcinoma. *International journal of molecular sciences*, 20(10):2473, 2019.
- [599] Sakata, J., Hirose, A., Yoshida, R., et al. Enhanced expression of IGFBP-3 reduces radiosensitivity and is associated with poor prognosis in oral squamous cell carcinoma. *Cancers*, 12(2):494, 2020.
- [600] Salehi, N., Karimi Jafari, M. H., Totonchi, M., et al. Integration and gene co-expression network analysis of scRNA-seq transcriptomes reveal heterogeneity and key functional genes in human spermatogenesis. *Scientific reports*, 11(1):1–13, 2021.
- [601] Sannigrahi, M. K., Srinivas, C. S., Deokate, N., et al. The strong propensity of Cadherin-23 for aggregation inhibits cell migration. *Molecular oncology*, 13(5):1092–1109, 2019.

- [602] Santos, C. R., Rodríguez-Pinilla, M., Vega, F. M., et al. VRK1 signaling pathway in the context of the proliferation phenotype in head and neck squamous cell carcinoma. *Molecular cancer research*, 4(3):177–185, 2006.
- [603] Santos, M. d., Mercante, A. M. d. C., Louro, I. D., et al. HIF1-alpha expression predicts survival of patients with squamous cell carcinoma of the oral cavity. 2012.
- [604] Santos, S. d. S., Galatro, T. F. d. A., Watanabe, R. A., et al. CoGA: an R package to identify differentially co-expressed gene sets by analyzing the graph spectra. *PLoS One*, 10(8):e0135831, 2015.
- [605] Sarmah, N., Baruah, M. N., and Baruah, S. Immune modulation in HLA-G expressing head and neck squamous cell carcinoma in relation to human papilloma virus positivity: a study from North-east India. *Frontiers in oncology*, 9:58, 2019.
- [606] Sasahira, T., Ueda, N., Yamamoto, K., et al. Prox1 and FOXC2 act as regulators of lymphangiogenesis and angiogenesis in oral squamous cell carcinoma. *PLoS One*, 9(3):e92534, 2014.
- [607] Sasaki, K., Natsugoe, S., Ishigami, S., et al. Expression of CXCL12 and its receptor CXCR4 in esophageal squamous cell carcinoma. *Oncology reports*, 21(1):65–71, 2009.
- [608] Satija, R., Farrell, J. A., Gennert, D., et al. Spatial reconstruction of single-cell gene expression data. *Nature biotechnology*, 33(5):495–502, 2015.
- [609] Sato, Y., Motoyama, S., Nanjo, H., et al. CXCL10 expression status is prognostic in patients with advanced thoracic esophageal squamous cell carcinoma. *Annals of surgical oncology*, 23(3):936–942, 2016.
- [610] Schena, M., Shalon, D., Davis, R. W., et al. Quantitative monitoring of gene expression patterns with a complementary DNA microarray. *Science*, 270(5235):467–470, 1995.
- [611] Seidensaal, K., Nollert, A., Feige, A. H., et al. Impaired aldehyde dehydrogenase 1 subfamily member 2A-dependent retinoic acid signaling is related with a mesenchymal-like phenotype and an unfavorable prognosis of head and neck squamous cell carcinoma. *Molecular cancer*, 14(1):1–13, 2015.
- [612] Sekikawa, S., Onda, T., Miura, N., et al. Underexpression of α -1-microglobulin/bikunin precursor predicts a poor prognosis in oral squamous cell carcinoma. *International Journal of Oncology*, 53(6):2605–2614, 2018.
- [613] Sekino, N., Kano, M., Kobayashi, S., et al. Metformin-Induced Heat Shock Protein Family A Member 6 Is a Promising Biomarker of Esophageal Squamous Cell Carcinoma. *Oncology*, 100(5):267–277, 2022.
- [614] Sekula, M., Gaskins, J., and Datta, S. Single-Cell Differential Network Analysis with Sparse Bayesian Factor Models. *Frontiers in Genetics*, 12:2805, 2022.
- [615] Semenick, D. Tests and measurements: The T-test. *Strength & Conditioning Journal*, 12(1):36–37, 1990.
- [616] Seven, D., Dogan, S., Kiliç, E., et al. Downregulation of Rab25 activates Akt1 in head and neck squamous cell carcinoma. *Oncology Letters*, 10(3):1927–1931, 2015.
- [617] Shah, I., Bhat, G., Mehta, P., et al. Genotypes of CYP1A1, SULT1A1 and SULT1A2 and risk of squamous cell carcinoma of esophagus: outcome of a case–control study from Kashmir, India.

Diseases of the esophagus, 29(8):937–943, 2016.

- [618] Shang, X., Liu, G., Zhang, Y., et al. Downregulation of BIRC5 inhibits the migration and invasion of esophageal cancer cells by interacting with the PI3K/Akt signaling pathway. *Oncology letters*, 16(3):3373–3379, 2018.
- [619] Shao, N., Han, Y., Song, L., et al. Clinical significance of hypoxia-inducible factor 1 α , and its correlation with p53 and vascular endothelial growth factor expression in resectable esophageal squamous cell carcinoma. *Journal of Cancer Research and Therapeutics*, 16(2):269, 2020.
- [620] Shao, Y., Qu, Y., Dang, S., et al. MiR-145 inhibits oral squamous cell carcinoma (OSCC) cell growth by targeting c-Myc and CDK6. *Cancer cell international*, 13(1):1–9, 2013.
- [621] Sharma, P., Bhattacharyya, D. K., and Kalita, J. K. Centrality analysis in PPI networks. In *2016 International Conference on Accessibility to Digital World (ICADW)*, pages 135–140. IEEE, 2016.
- [622] Shen, F. F., Pan, Y., Li, J. Z., et al. High expression of HLA-DQA1 predicts poor outcome in patients with esophageal squamous cell carcinoma in Northern China. *Medicine*, 98(8), 2019.
- [623] Shen, T. Y., Mei, L. L., Qiu, Y. T., et al. Identification of candidate target genes of genomic aberrations in esophageal squamous cell carcinoma. *Oncology Letters*, 12(4):2956–2961, 2016.
- [624] Shen, Y., Li, X., Wang, D., et al. COL3A1: Potential prognostic predictor for head and neck cancer based on immune-microenvironment alternative splicing. *Cancer Medicine*, 2022.
- [625] Shen, Z., Cao, B., Lin, L., et al. The clinical signification of claudin-11 promoter hypermethylation for laryngeal squamous cell carcinoma. *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*, 23:3635, 2017.
- [626] Shen, Z., Chen, X., Li, Q., et al. Elevated methylation of CMTM3 promoter in the male laryngeal squamous cell carcinoma patients. *Clinical biochemistry*, 49(16-17):1278–1282, 2016.
- [627] Shen, Z., Hu, Y., Zhou, C., et al. ESRRG promoter hypermethylation as a diagnostic and prognostic biomarker in laryngeal squamous cell carcinoma. *Journal of Clinical Laboratory Analysis*, 33(6):e22899, 2019.
- [628] Sherman, B. T., Lempicki, R. A., et al. Systematic and integrative analysis of large gene lists using DAVID bioinformatics resources. *Nature protocols*, 4(1):44–57, 2009.
- [629] Sheyhidin, I., Nabi, G., Hasim, A., et al. Overexpression of TLR3, TLR4, TLR7 and TLR9 in esophageal squamous cell carcinoma. *World journal of gastroenterology: WJG*, 17(32):3745, 2011.
- [630] Shi, F., Xiao, S., Zhao, Y., et al. High cd38 expression in tumor-infiltrating immune cells is a favorite prognosis factor in esophageal squamous cell carcinoma with perigastric lymph node metastasis. 2020.
- [631] Shi, H., Li, N., Li, S., et al. Expression of NDRG2 in esophageal squamous cell carcinoma. *Cancer science*, 101(5):1292–1299, 2010.
- [632] Shiba, D., Terayama, M., Yamada, K., et al. Clinicopathological significance of cystatin A expression in progression of esophageal squamous cell carcinoma. *Medicine*, 97(15), 2018.
- [633] Shibata, K., Nakayama, T., Hirakawa, H., et al. Clinicopathological significance of angiopoietin-like protein 4 expression in oesophageal squamous cell carcinoma. *Journal of Clinical Pathology*, 63(12):1054–1058, 2010.
- [634] Shinozuka, K., Uzawa, K., Fushimi, K., et al. Downregulation of carcinoembryonic antigen-related

- cell adhesion molecule 1 in oral squamous cell carcinoma: correlation with tumor progression and poor prognosis. *Oncology*, 76(6):387–397, 2009.
- [635] Shu, W., Lin, Y., Yan, Y., et al. IGF2BP2 Promotes the Proliferation, Invasion and Migration of Esophageal Carcinoma Cells via Activation of the PI3K/AKT/EMT Signaling Pathway. 2021.
- [636] Simonik, E. A., Cai, Y., Kimmelschue, K. N., et al. LIM-only protein 4 (LMO4) and LIM domain binding protein 1 (LDB1) promote growth and metastasis of human head and neck cancer (LMO4 and LDB1 in head and neck cancer). *PLoS One*, 11(10):e0164804, 2016.
- [637] Smyth, G. K. Linear models and empirical bayes methods for assessing differential expression in microarray experiments. *Statistical applications in genetics and molecular biology*, 3(1), 2004.
- [638] Smyth, G. K. Limma: linear models for microarray data. In *Bioinformatics and computational biology solutions using R and Bioconductor*, pages 397–420. 2005.
- [639] Soares Lima, S. C., Gonzaga, I. M., Camuzi, D., et al. IL6 and BCL3 expression are potential biomarkers in esophageal squamous cell carcinoma. *Frontiers in Oncology*, page 3102, 2021.
- [640] Song, G., Liu, K., Yang, X., et al. SATB1 plays an oncogenic role in esophageal cancer by up-regulation of FN1 and PDGFRB. *Oncotarget*, 8(11):17771, 2017.
- [641] Song, J., Liu, Y., Guan, X., et al. A Novel Ferroptosis-Related Biomarker Signature to Predict Overall Survival of Esophageal Squamous Cell Carcinoma. *Frontiers in Molecular Biosciences*, 8:607, 2021.
- [642] Song, J. J., Zhao, S. J., Fang, J., et al. Foxp3 overexpression in tumor cells predicts poor survival in oral squamous cell carcinoma. *BMC cancer*, 16(1):1–7, 2016.
- [643] Spearman, C. The proof and measurement of association between two things. 1961.
- [644] Stephens, M. False discovery rates: a new deal. *Biostatistics*, 18(2):275–294, 2017.
- [645] Storey, J. D. and Tibshirani, R. Statistical significance for genomewide studies. *Proceedings of the National Academy of Sciences*, 100(16):9440–9445, 2003.
- [646] Struckmeier, A. K., Radermacher, A., Fehrenz, M., et al. IDO1 is highly expressed in macrophages of patients in advanced tumour stages of oral squamous cell carcinoma. *Journal of Cancer Research and Clinical Oncology*, pages 1–13, 2022.
- [647] Stuart, J. M., Segal, E., Koller, D., et al. A gene-coexpression network for global discovery of conserved genetic modules. *science*, 302(5643):249–255, 2003.
- [648] Su, H., Hu, N., Yang, H. H., et al. Global Gene Expression Profiling and Validation in Esophageal Squamous Cell Carcinoma and Its Association with Clinical Phenotypes Global Gene Expression of Esophageal Squamous Cell Carcinoma Global Gene Expression of Esophageal Squamous Cell Carcinoma. *Clinical Cancer Research*, 17(9):2955–2966, 2011.
- [649] Su, Y., Zeng, Z., Rong, D., et al. PSMC2, ORC5 and KRTDAP are specific biomarkers for HPV-negative head and neck squamous cell carcinoma. *Oncology letters*, 21(4):1–1, 2021.
- [650] Subramanian, A., Kuehn, H., Gould, J., et al. GSEA-P: a desktop application for Gene Set Enrichment Analysis. *Bioinformatics*, 23(23):3251–3253, 2007.
- [651] Subramanian, A., Tamayo, P., Mootha, V. K., et al. Gene set enrichment analysis: a knowledge-based approach for interpreting genome-wide expression profiles. *Proceedings of the National Academy of Sciences*, 102(43):15545–15550, 2005.

- [652] Sullivan, D. What is Google PageRank? A guide for searchers & webmasters. *Search engine land*, 2007.
- [653] Sun, B., Wei, Q., Liu, C., et al. ECT2 promotes proliferation and metastasis of esophageal squamous cell carcinoma via the RhoA-ERK signaling pathway. *European Review for Medical and Pharmacological Sciences*, 24(15):7991–8000, 2020.
- [654] Sun, J., Xie, T., Jamal, M., et al. CLEC3B as a potential diagnostic and prognostic biomarker in lung cancer and association with the immune microenvironment. *Cancer cell international*, 20(1):1–15, 2020.
- [655] Sun, M. C., Fang, K., Li, Z. X., et al. ETV5 overexpression promotes progression of esophageal squamous cell carcinoma by upregulating SKA1 and TRPV2. *International journal of medical sciences*, 19(6):1072, 2022.
- [656] Sun, S., Cui, Z., Yan, T., et al. CCN5 inhibits proliferation and promotes apoptosis of oral squamous cell carcinoma cells. *Cell Biology International*, 44(4):998–1008, 2020.
- [657] Sun, X., Chen, P., Chen, X., et al. KIF4A enhanced cell proliferation and migration via Hippo signaling and predicted a poor prognosis in esophageal squamous cell carcinoma. *Thoracic Cancer*, 12(4):512–524, 2021.
- [658] Sun, Y., Qian, Y., Chen, C., et al. Extracellular vesicle IL-32 promotes the M2 macrophage polarization and metastasis of esophageal squamous cell carcinoma via FAK/STAT3 pathway. *Journal of Experimental & Clinical Cancer Research*, 41(1):1–22, 2022.
- [659] Sung, C. O., Han, S. Y., and Kim, S. H. Low expression of claudin-4 is associated with poor prognosis in esophageal squamous cell carcinoma. *Annals of surgical oncology*, 18(1):273–281, 2011.
- [660] Syed, N., Barbhuiya, M. A., Pinto, S. M., et al. Phosphotyrosine profiling identifies ephrin receptor A2 as a potential therapeutic target in esophageal squamous cell carcinoma. *Proteomics*, 15(2-3):374–382, 2015.
- [661] Takada, N., Yano, Y., Matsuda, T., et al. Expression of immunoreactive human hepatocyte growth factor in human esophageal squamous cell carcinomas. *Cancer letters*, 97(2):145–148, 1995.
- [662] Takenawa, T., Harada, K., Ferdous, T., et al. Silencing of Tropomyosin 1 suppresses the proliferation, invasion and metastasis of oral squamous cell carcinoma in vitro. *Journal of Oral and Maxillofacial Surgery, Medicine, and Pathology*, 35(3):282–287, 2023.
- [663] Taleb, S., Abbaszadegan, M. R., Moghbeli, M., et al. HES1 as an independent prognostic marker in esophageal squamous cell carcinoma. *Journal of gastrointestinal cancer*, 45(4):466–471, 2014.
- [664] Tam, K., Schoppy, D. W., Shin, J. H., et al. Assessing the impact of targeting CEACAM1 in head and neck squamous cell carcinoma. *Otolaryngology–Head and Neck Surgery*, 159(1):76–84, 2018.
- [665] Tamura, T., Ichikawa, T., Nakahata, S., et al. Loss of NDRG2 Expression Confers Oral Squamous Cell Carcinoma with Enhanced Metastatic Potential Function of NDRG2 in OSCC Development and Metastasis. *Cancer research*, 77(9):2363–2374, 2017.
- [666] Tan, B., Wang, J., Song, Q., et al. Prognostic value of PAX9 in patients with esophageal squamous cell carcinoma and its prediction value to radiation sensitivity. *Molecular medicine reports*, 16(1):806–816, 2017.

- [667] Tan, K. D., Zhu, Y., Tan, H. K., et al. Amplification and overexpression of PPFIA1, a putative 11q13 invasion suppressor gene, in head and neck squamous cell carcinoma. *Genes, Chromosomes and Cancer*, 47(4):353–362, 2008.
- [668] Tan, Y. H. C., Srivastava, S., Won, B. M., et al. EPHA2 mutations with oncogenic characteristics in squamous cell lung cancer and malignant pleural mesothelioma. *Oncogenesis*, 8(9):1–11, 2019.
- [669] Tanaka, J., Irié, T., Yamamoto, G., et al. ANGPTL 4 regulates the metastatic potential of oral squamous cell carcinoma. *Journal of oral pathology & medicine*, 44(2):126–133, 2015.
- [670] Tanaka, T., Ishiguro, H., Kuwabara, Y., et al. Vascular endothelial growth factor C (VEGF-C) in esophageal cancer correlates with lymph node metastasis and poor patient prognosis. *Journal of Experimental & Clinical Cancer Research*, 29(1):1–7, 2010.
- [671] Tanay, A., Sharan, R., and Shamir, R. Discovering statistically significant biclusters in gene expression data. *Bioinformatics*, 18(suppl_1):S136–S144, 2002.
- [672] Tang, F., Barbacioru, C., Wang, Y., et al. mRNA-Seq whole-transcriptome analysis of a single cell. *Nature methods*, 6(5):377–382, 2009.
- [673] Tang, H., Wu, Y., Liu, M., et al. SEMA3B improves the survival of patients with esophageal squamous cell carcinoma by upregulating p53 and p21. *Oncology Reports*, 36(2):900–908, 2016.
- [674] Tang, P., Jia, R., Gong, L., et al. High expression of PPFIA1 in human esophageal squamous cell carcinoma correlates with tumor progression and poor prognosis. 2022.
- [675] Tang, X., Tang, Q., Yang, X., et al. FN1 promotes prognosis and radioresistance in head and neck squamous cell carcinoma: from radioresistant HNSCC cell line to integrated bioinformatics methods. *Frontiers in Genetics*, 13, 2022.
- [676] Tarazona, S., García, F., Ferrer, A., et al. NOIseq: a RNA-seq differential expression method robust for sequencing depth biases. *EMBnet. journal*, 17(B):18–19, 2011.
- [677] Tavazoie, S., Hughes, J. D., Campbell, M. J., et al. Systematic determination of genetic network architecture. *Nature genetics*, 22(3):281–285, 1999.
- [678] Teng, L. and Chan, L. Discovering biclusters by iteratively sorting with weighted correlation coefficient in gene expression data. *Journal of Signal Processing Systems*, 50:267–280, 2008.
- [679] Tesson, B. M., Breitling, R., and Jansen, R. C. DiffCoEx: a simple and sensitive method to find differentially coexpressed gene modules. *BMC bioinformatics*, 11(1):1–9, 2010.
- [680] The Cancer Genome Atlas Network. Comprehensive molecular portraits of human breast tumours. *Nature*, 490(7418):61–70, 2012.
- [681] Thomas, P. D., Ebert, D., Muruganujan, A., et al. PANTHER: Making genome-scale phylogenetics accessible to all. *Protein Science*, 31(1):8–22, 2022.
- [682] Thomas, P. D., Kejariwal, A., Campbell, M. J., et al. PANTHER: a browsable database of gene products organized by biological function, using curated protein family and subfamily classification. *Nucleic acids research*, 31(1):334–341, 2003.
- [683] Tian, J., Lu, Z., Niu, S., et al. Aberrant MCM10 SUMOylation induces genomic instability mediated by a genetic variant associated with survival of esophageal squamous cell carcinoma. *Clinical and Translational Medicine*, 11(6):e485, 2021.
- [684] Todorovic, V., Koetsier, J. L., and Green, K. J. Plakophilin 3 (Pkp3) increases oral squamous

- carcinoma cell-cell adhesion while inhibiting cell motility and proliferation. *Cancer Research*, 72(8_Supplement):4221–4221, 2012.
- [685] Tomasovic Loncaric, C., Fucic, A., Andabak, A., et al. Androgen receptor as a biomarker of oral squamous cell carcinoma progression risk. *Anticancer research*, 39(8):4285–4289, 2019.
- [686] Tong, M., Chan, K. W., Bao, J. Y., et al. Rab25 Is a Tumor Suppressor Gene with Antiangiogenic and Anti-Invasive Activities in Esophageal Squamous Cell Carcinoma Rab25 in Esophageal Cancer. *Cancer research*, 72(22):6024–6035, 2012.
- [687] Toyozumi, T., Hoshino, I., Takahashi, M., et al. Fra-1 regulates the expression of HMGA1, which is associated with a poor prognosis in human esophageal squamous cell carcinoma. *Annals of Surgical Oncology*, 24(11):3446–3455, 2017.
- [688] Tripathi, S. C., Matta, A., Kaur, J., et al. Overexpression of prothymosin alpha predicts poor disease outcome in head and neck cancer. *PLoS One*, 6(5):e19213, 2011.
- [689] Troiano, G., Caponio, V. C. A., Adipietro, I., et al. Prognostic significance of CD68+ and CD163+ tumor associated macrophages in head and neck squamous cell carcinoma: A systematic review and meta-analysis. *Oral oncology*, 93:66–75, 2019.
- [690] Troiano, G., Guida, A., Aquino, G., et al. Integrative histologic and bioinformatics analysis of BIRC5/Survivin expression in oral squamous cell carcinoma. *International journal of molecular sciences*, 19(9):2664, 2018.
- [691] Tsai, S. T., Wang, P. J., Liou, N. J., et al. ICAM1 is a potential cancer stem cell marker of esophageal squamous cell carcinoma. *PloS one*, 10(11):e0142834, 2015.
- [692] Tseng, M. Y., Liu, S. Y., Chen, H. R., et al. Serine protease inhibitor (SERPIN) B1 promotes oral cancer cell motility and is over-expressed in invasive oral squamous cell carcinoma. *Oral oncology*, 45(9):771–776, 2009.
- [693] Tseng, Y. C., Shu, C. W., Chang, H. M., et al. Assessment of early growth response 1 in tumor suppression of esophageal squamous cell carcinoma. *Journal of Clinical Medicine*, 11(19):5792, 2022.
- [694] Tsukao, Y., Yamasaki, M., Miyazaki, Y., et al. Overexpression of heat-shock factor 1 is associated with a poor prognosis in esophageal squamous cell carcinoma. *Oncology letters*, 13(3):1819–1825, 2017.
- [695] Tsuruda, Y., Kogo, R., Ito, S., et al. SATB1 is a novel prognostic factor in esophageal cancer patients and promotes migration and invasion of esophageal cancer cells. *Cancer Research*, 78(13_Supplement):1552–1552, 2018.
- [696] Tukey, J. W. Comparing individual means in the analysis of variance. *Biometrics*, pages 99–114, 1949.
- [697] Tusher, V. G., Tibshirani, R., and Chu, G. Significance analysis of microarrays applied to the ionizing radiation response. *Proceedings of the National Academy of Sciences*, 98(9):5116–5121, 2001.
- [698] Uchi, Y., Takeuchi, H., Matsuda, S., et al. CXCL12 expression promotes esophageal squamous cell carcinoma proliferation and worsens the prognosis. *BMC cancer*, 16(1):1–11, 2016.
- [699] Ueda, S., Hashimoto, K., Miyabe, S., et al. Salivary NUS1 and RCN1 levels as biomarkers for oral

- squamous cell carcinoma diagnosis. *in vivo*, 34(5):2353–2361, 2020.
- [700] Ueki, S., Fujishima, F., Kumagai, T., et al. GR, Sgk1, and NDRG1 in esophageal squamous cell carcinoma: their correlation with therapeutic outcome of neoadjuvant chemotherapy. *BMC cancer*, 20(1):1–12, 2020.
- [701] Umeda, S., Kanda, M., Koike, M., et al. Copine 5 expression predicts prognosis following curative resection of esophageal squamous cell carcinoma. *Oncology Reports*, 40(6):3772–3780, 2018.
- [702] Urakawa, N., Utsunomiya, S., Nishio, M., et al. GDF15 derived from both tumor-associated macrophages and esophageal squamous cell carcinomas contributes to tumor progression via Akt and Erk pathways. *Laboratory investigation*, 95(5):491–503, 2015.
- [703] Usami, Y., Chiba, H., Nakayama, F., et al. Reduced expression of claudin-7 correlates with invasion and metastasis in squamous cell carcinoma of the esophagus. *Human pathology*, 37(5):569–577, 2006.
- [704] Usman, M., Ilyas, A., Hashim, Z., et al. Identification of GIMAP7 and Rab13 as putative biomarkers for oral squamous cell carcinoma through comparative proteomic approach. *Pathology & Oncology Research*, 26(3):1817–1822, 2020.
- [705] Valente, T. W. and Foreman, R. K. Integration and radiality: Measuring the extent of an individual's connectedness and reachability in a network. *Social networks*, 20(1):89–105, 1998.
- [706] Vallejo-Díaz, J., Olazabal-Morán, M., Cariaga-Martínez, A. E., et al. Targeted depletion of PIK3R2 induces regression of lung squamous cell carcinoma. *Oncotarget*, 7(51):85063, 2016.
- [707] Valverde, L. d. F., de Freitas, R. D., Pereira, T. d. A., et al. MCM3: a novel proliferation marker in oral squamous cell carcinoma. *Applied Immunohistochemistry & Molecular Morphology*, 26(2):120–125, 2018.
- [708] van Caloen, G. and Machiels, J. P. Potential role of cyclin-dependent kinase 4/6 inhibitors in the treatment of squamous cell carcinoma of the head and neck. *Current opinion in oncology*, 31(3):122–130, 2019.
- [709] Van Limbergen, E. J., Zabrocki, P., Porcu, M., et al. FLT1 kinase is a mediator of radioresistance and survival in head and neck squamous cell carcinoma. *Acta oncologica*, 53(5):637–645, 2014.
- [710] Van't Veer, L. J., Dai, H., Van De Vijver, M. J., et al. Gene expression profiling predicts clinical outcome of breast cancer. *nature*, 415(6871):530–536, 2002.
- [711] Velmurugan, B. K., Yeh, K. T., Lee, C. H., et al. Acidic leucine-rich nuclear phosphoprotein-32A (ANP32A) association with lymph node metastasis predicts poor survival in oral squamous cell carcinoma patients. *Oncotarget*, 7(10):10879, 2016.
- [712] Viswanath, M. *Ontology-based automatic text summarization*. PhD thesis, University of Georgia, 2009.
- [713] Voineagu, I., Wang, X., Johnston, P., et al. Transcriptomic analysis of autistic brain reveals convergent molecular pathology. *Nature*, 474(7351):380–384, 2011.
- [714] von Mässenhausen, A., Sanders, C., Thewes, B., et al. MERTK as a novel therapeutic target in head and neck cancer. *Oncotarget*, 7(22):32678, 2016.
- [715] Wada, S., Noguchi, T., Takeno, S., et al. PIK3CA and TFRC located in 3q are new prognostic factors in esophageal squamous cell carcinoma. *Annals of surgical oncology*, 13(7):961–966, 2006.

- [716] Wald, A. Tests of statistical hypotheses concerning several parameters when the number of observations is large. *Transactions of the American Mathematical society*, 54(3):426–482, 1943.
- [717] Wan, Y. and Wu, X. Expression and clinical significance of DAPK1 and CD147 in esophageal squamous cell carcinoma. *Zhonghua Zhong liu za zhi [Chinese Journal of Oncology]*, 34(1):44–48, 2012.
- [718] Wang, F., Xia, J., Wang, N., et al. miR-145 inhibits proliferation and invasion of esophageal squamous cell carcinoma in part by targeting c-Myc. *Onkologie*, 36(12):754–758, 2013.
- [719] Wang, F., Zhang, C., Cheng, H., et al. TGF- β -induced PLEK2 promotes metastasis and chemoresistance in oesophageal squamous cell carcinoma by regulating LCN2. *Cell death & disease*, 12(10):1–12, 2021.
- [720] Wang, H., Wu, Q., Liu, Z., et al. Downregulation of FAP suppresses cell proliferation and metastasis through PTEN/PI3K/AKT and Ras-ERK signaling in oral squamous cell carcinoma. *Cell death & disease*, 5(4):e1155–e1155, 2014.
- [721] Wang, H., Luo, Q., Feng, X., et al. NLRP3 promotes tumor growth and metastasis in human oral squamous cell carcinoma. *BMC cancer*, 18(1):1–10, 2018.
- [722] Wang, H., Qiu, X., Lin, S., et al. Knockdown of IFI27 inhibits cell proliferation and invasion in oral squamous cell carcinoma. *World journal of surgical oncology*, 16(1):1–7, 2018.
- [723] Wang, H., Wang, F., Ouyang, W., et al. BCAT1 overexpression regulates proliferation and c-Myc/GLUT1 signaling in head and neck squamous cell carcinoma. *Oncology Reports*, 45(5):1–11, 2021.
- [724] Wang, H., Liu, H. L., Yang, W. H., et al. Expression of ubiquitin C-terminal hydrolase L1 (UCHL1) and its prognostic significance in esophageal squamous cell carcinoma. *Int J Clin Exp Med*, 9(2):3795–3799, 2016.
- [725] Wang, J. H., Zhang, L., Huang, S. T., et al. Expression and prognostic significance of MYL9 in esophageal squamous cell carcinoma. *PloS one*, 12(4):e0175280, 2017.
- [726] Wang, J., Sun, Z., Wang, J., et al. Expression and prognostic potential of PLEK2 in head and neck squamous cell carcinoma based on bioinformatics analysis. *Cancer medicine*, 10(18):6515–6533, 2021.
- [727] Wang, J., Xi, L., Hunt, J. L., et al. Expression pattern of chemokine receptor 6 (CCR6) and CCR7 in squamous cell carcinoma of the head and neck identifies a novel metastatic phenotype. *Cancer research*, 64(5):1861–1866, 2004.
- [728] Wang, L., Zhang, M., Zhu, Y., et al. CCR4 expression is associated with poor prognosis in patients with early stage (pN0) oral tongue cancer. *Journal of Oral and Maxillofacial Surgery*, 77(2):426–432, 2019.
- [729] Wang, L., Li, M., Zhan, Y., et al. Down-regulation of POTE1 predicts poor prognosis in esophageal squamous cell carcinoma patients. *Molecular Carcinogenesis*, 57(7):886–895, 2018.
- [730] Wang, L., Liu, G., Bolor Erdene, E., et al. Identification of KIF4A as a prognostic biomarker for esophageal squamous cell carcinoma. *Aging (Albany NY)*, 13(21):24050, 2021.
- [731] Wang, M., Xie, T., Wu, Y., et al. Identification of RFC5 as a novel potential prognostic biomarker in lung cancer through bioinformatics analysis. *Oncology Letters*, 16(4):4201–4210, 2018.

- [732] Wang, Q., Liao, C., Tan, Z., et al. FUT6 inhibits the proliferation, migration, invasion, and EGF-induced EMT of head and neck squamous cell carcinoma (HNSCC) by regulating EGFR/ERK/STAT signaling pathway. *Cancer Gene Therapy*, 30(1):182–191, 2023.
- [733] Wang, R., Guo, Y., Ma, H., et al. Tumor necrosis factor superfamily member 13 is a novel biomarker for diagnosis and prognosis and promotes cancer cell proliferation in laryngeal squamous cell carcinoma. *Tumor Biology*, 37(2):2635–2645, 2016.
- [734] Wang, R., Gao, Y., and Zhang, H. ACTN1 interacts with ITGA5 to promote cell proliferation, invasion and epithelial-mesenchymal transformation in head and neck squamous cell carcinoma. *Iranian Journal of Basic Medical Sciences*, 26(2), 2023.
- [735] Wang, S., Sun, M., Gu, C., et al. Expression of CD163, interleukin-10, and interferon-gamma in oral squamous cell carcinoma: mutual relationships and prognostic implications. *European journal of oral sciences*, 122(3):202–209, 2014.
- [736] Wang, S., Wang, X. L., Wu, Z. Z., et al. Overexpression of RRM2 is related to poor prognosis in oral squamous cell carcinoma. *Oral Diseases*, 27(2):204–214, 2021.
- [737] Wang, S. H., Chen, Y. L., Hsiao, J. R., et al. Insulin-like growth factor binding protein 3 promotes radiosensitivity of oral squamous cell carcinoma cells via positive feedback on NF- κ B/IL-6/ROS signaling. *Journal of Experimental & Clinical Cancer Research*, 40(1):1–18, 2021.
- [738] Wang, W., Liao, K., Guo, H. C., et al. Integrated transcriptomics explored the cancer-promoting genes CDKN3 in esophageal squamous cell cancer. *Journal of Cardiothoracic Surgery*, 16(1):1–7, 2021.
- [739] Wang, W. L., Chang, W. L., Yang, H. B., et al. Low disabled-2 expression promotes tumor progression and determines poor survival and high recurrence of esophageal squamous cell carcinoma. *Oncotarget*, 7(44):71169, 2016.
- [740] Wang, X., Xu, H., Zhou, Z., et al. IGF2BP2 maybe a novel prognostic biomarker in oral squamous cell carcinoma. *Bioscience reports*, 42(2):BSR20212119, 2022.
- [741] Wang, X. L., Wang, S., Wu, Z. Z., et al. Overexpression of ATAD2 indicates poor prognosis in oral squamous cell carcinoma. *International journal of medical sciences*, 17(11):1598, 2020.
- [742] Wang, X., He, J., Zhao, X., et al. Syndecan-1 suppresses epithelial-mesenchymal transition and migration in human oral cancer cells. *Oncology reports*, 39(4):1835–1842, 2018.
- [743] Wang, X., Liu, Y., Leng, X., et al. UBE2T contributes to the prognosis of esophageal squamous cell carcinoma. *Pathology and Oncology Research*, 27, 2021.
- [744] Wang, X., Cheng, G., Zhang, T., et al. CHST15 promotes the proliferation of TE-1 cells via multiple pathways in esophageal cancer. *Oncology Reports*, 43(1):75–86, 2020.
- [745] Wang, X., Li, X., Zhang, X., et al. Glucose-6-phosphate dehydrogenase expression is correlated with poor clinical prognosis in esophageal squamous cell carcinoma. *European Journal of Surgical Oncology (EJSO)*, 41(10):1293–1299, 2015.
- [746] Wang, X., Liu, H., Zhang, X., et al. G6PD downregulation triggered growth inhibition and induced apoptosis by regulating STAT3 signaling pathway in esophageal squamous cell carcinoma. *Tumor Biology*, 37(1):781–789, 2016.
- [747] Wang, X. L., Liu, K., Liu, J. H., et al. High infiltration of CD68-tumor associated macrophages,

- predict poor prognosis in Kazakh esophageal cancer patients. *International Journal of Clinical and Experimental Pathology*, 10(10):10282, 2017.
- [748] Wang, Y., Ren, X., Li, W., et al. SPDEF suppresses head and neck squamous cell carcinoma progression by transcriptionally activating NR4A1. *International Journal of Oral Science*, 13(1):33, 2021.
- [749] Wang, Y., Lu, Z., Hu, Z., et al. The up-regulation of TANK-binding kinase 1 in head and neck squamous cell carcinoma. *Differentiation*, 1(14):46–7, 2017.
- [750] Wang, Y., Zhang, Y., Herman, J. G., et al. Epigenetic silencing of TMEM176A promotes esophageal squamous cell cancer development. *Oncotarget*, 8(41):70035, 2017.
- [751] Wang, Y., Jing, Y., Ding, L., et al. Epiregulin reprograms cancer-associated fibroblasts and facilitates oral squamous cell carcinoma invasion via JAK2-STAT3 pathway. *Journal of Experimental & Clinical Cancer Research*, 38(1):1–13, 2019.
- [752] Wang, Y. R. and Huang, H. Review on statistical methods for gene network reconstruction using expression data. *Journal of theoretical biology*, 362:53–61, 2014.
- [753] Wang, Z., Gerstein, M., and Snyder, M. RNA-Seq: a revolutionary tool for transcriptomics. *Nature reviews genetics*, 10(1):57–63, 2009.
- [754] Wang, Z., Xiong, H., Zuo, Y., et al. PSMC2 knockdown inhibits the progression of oral squamous cell carcinoma by promoting apoptosis via PI3K/Akt pathway. *Cell Cycle*, pages 1–12, 2021.
- [755] Wang, Z., Xiong, H., Zuo, Y., et al. PSMC2 knockdown inhibits the progression of oral squamous cell carcinoma by promoting apoptosis via PI3K/Akt pathway. *Cell Cycle*, 21(5):477–488, 2022.
- [756] Ward Jr, J. H. Hierarchical grouping to optimize an objective function. *Journal of the American statistical association*, 58(301):236–244, 1963.
- [757] Watanabe, M., Ohnishi, Y., Wato, M., et al. SOX4 expression is closely associated with differentiation and lymph node metastasis in oral squamous cell carcinoma. *Medical molecular morphology*, 47(3):150–155, 2014.
- [758] Watson, J. D. and Crick, F. H. Molecular structure of nucleic acids: a structure for deoxyribose nucleic acid. *Nature*, 171(4356):737–738, 1953.
- [759] Watson, M. CoXpress: differential co-expression in gene expression data. *BMC bioinformatics*, 7(1):1–12, 2006.
- [760] Wei, T., Bi, G., Bian, Y., et al. The Significance of Secreted Phosphoprotein 1 in Multiple Human Cancers. *Frontiers in molecular biosciences*, 7:251, 2020.
- [761] Welch, B. L. The generalization of ‘STUDENT’S’ problem when several different population variances are involved. *Biometrika*, 34(1-2):28–35, 1947.
- [762] Wen, J., Nikitakis, N. G., Chaisuparat, R., et al. Secretory leukocyte protease inhibitor (SLPI) expression and tumor invasion in oral squamous cell carcinoma. *The American journal of pathology*, 178(6):2866–2878, 2011.
- [763] Weng, J., Fan, H., Liu, H., et al. YTHDC1 Promotes Stemness Maintenance and Malignant Progression in Head and Neck Squamous Cell Carcinoma. *Stem Cells International*, 2022, 2022.
- [764] Williams, V. S., Jones, L. V., and Tukey, J. W. Controlling error in multiple comparisons, with examples from state-to-state differences in educational achievement. *Journal of educational and*

- behavioral statistics*, 24(1):42–69, 1999.
- [765] Wolfe, C. J., Kohane, I. S., and Butte, A. J. Systematic survey reveals general applicability of "guilt-by-association" within gene coexpression networks. *BMC bioinformatics*, 6(1):1–10, 2005.
- [766] Wolfram Research. RadialityCentrality. Wolfram Language Function, [https://reference.wolfram.com/language/ref/RadialityCentrality.html\(updated2015\)](https://reference.wolfram.com/language/ref/RadialityCentrality.html(updated2015)), 2012. Last Access 31-05-2021.
- [767] Wong, V. C. L., Chen, H., Ko, J. M. Y., et al. Tumor suppressor dual-specificity phosphatase 6 (DUSP6) impairs cell invasion and epithelial-mesenchymal transition (EMT)-associated phenotype. *International journal of cancer*, 130(1):83–95, 2012.
- [768] Woźniak, M., Nahajowski, M., Hnitecka, S., et al. Expression of syndecan-1 in oral cavity squamous cell carcinoma. *Journal of Histotechnology*, 44(1):46–51, 2021.
- [769] Wu, C. C., Xiao, Y., Li, H., et al. Overexpression of FAM3C is associated with poor prognosis in oral squamous cell carcinoma. *Pathology-Research and Practice*, 215(4):772–778, 2019.
- [770] Wu, J., Yang, L., Shan, Y., et al. AURKA promotes cell migration and invasion of head and neck squamous cell carcinoma through regulation of the AURKA/Akt/FAK signaling pathway. *Oncology letters*, 11(3):1889–1894, 2016.
- [771] Wu, Q., Zhuang, K., and Li, H. PAQR3 plays a suppressive role in laryngeal squamous cell carcinoma. *Tumor Biology*, 37:561–565, 2016.
- [772] Wu, Q. Q., Zhao, M., Huang, G. Z., et al. Fibroblast activation protein (FAP) overexpression induces epithelial–mesenchymal transition (EMT) in oral squamous cell carcinoma by down-regulating dipeptidyl peptidase 9 (DPP9). *OncoTargets and therapy*, 13:2599, 2020.
- [773] Wu, Q., Zhang, H., Yang, D., et al. The m6A-induced lncRNA CASC8 promotes proliferation and chemoresistance via upregulation of hnRNPL in esophageal squamous cell carcinoma. *International journal of biological sciences*, 18(13):4824–4836, 2022.
- [774] Wu, Q., Zheng, Z., Zhang, J., et al. Chordin-Like 1 Regulates Epithelial-to-Mesenchymal Transition and Metastasis via the MAPK Signaling Pathway in Oral Squamous Cell Carcinoma. *Frontiers in oncology*, 12:862751–862751, 2022.
- [775] Wu, T., Jiao, Z., Li, Y., et al. HPRT1 Promotes Chemoresistance in Oral Squamous Cell Carcinoma via Activating MMP1/PI3K/Akt Signaling Pathway. *Cancers*, 14(4):855, 2022.
- [776] Wu, T., Xiao, Z., Li, Y., et al. CDH3 is associated with poor prognosis by promoting the malignancy and chemoresistance in oral squamous cell carcinoma. *Asian Journal of Surgery*, 45(12):2651–2658, 2022.
- [777] Wu, Y. C., Shen, Y. C., Chang, J. W. C., et al. Autocrine CCL5 promotes tumor progression in esophageal squamous cell carcinoma in vitro. *Cytokine*, 110:94–103, 2018.
- [778] Wu, Y. B., Lu, D., He, Z. F., et al. PIM1 polymorphism and PIM1 expression as predisposing factors of esophageal squamous cell carcinoma in the Asian population. *OncoTargets and therapy*, 9:2919, 2016.
- [779] Xi, S., Dyer, K. F., Kimak, M., et al. Decreased STAT1 expression by promoter methylation in squamous cell carcinogenesis. *Journal of the National Cancer Institute*, 98(3):181–189, 2006.
- [780] Xia, C., Chen, X., Li, J., et al. SLC39A4 as a novel prognosis marker promotes tumor progression

- in esophageal squamous cell carcinoma. *Oncotargets and therapy*, 13:3999, 2020.
- [781] Xiao, F., Dai, Y., Hu, Y., et al. Expression profile analysis identifies IER3 to predict overall survival and promote lymph node metastasis in tongue cancer. *Cancer cell international*, 19(1):1–12, 2019.
- [782] Xiao, X., Jiang, L., Hu, H., et al. Silencing of UAP1L1 inhibits proliferation and induces apoptosis in esophageal squamous cell carcinoma. *Molecular Carcinogenesis*, 60(3):179–187, 2021.
- [783] Xie, F., Ye, L., Chen, J., et al. The impact of Metastasis Suppressor-1, MTSS1, on oesophageal squamous cell carcinoma and its clinical significance. *Journal of Translational Medicine*, 9(1):1–10, 2011.
- [784] Xie, G. F., Zhao, L. D., Chen, Q., et al. High ACTN1 is associated with poor prognosis, and ACTN1 silencing suppresses cell proliferation and metastasis in oral squamous cell carcinoma. *Drug Design, Development and Therapy*, 14:1717, 2020.
- [785] Xie, J. J., Xie, Y. M., Chen, B., et al. ATF3 functions as a novel tumor suppressor with prognostic significance in esophageal squamous cell carcinoma. *Oncotarget*, 5(18):8569, 2014.
- [786] Xie, Z., Li, T., Huang, B., et al. Semaphorin 3F serves as a tumor suppressor in esophageal squamous cell carcinoma and is associated with lymph node metastasis in disease progression. *Technology in Cancer Research & Treatment*, 19:1533033820928117, 2020.
- [787] Xing, S., Zheng, X., Zeng, T., et al. Chitinase 3-like 1 secreted by peritumoral macrophages in esophageal squamous cell carcinoma is a favorable prognostic factor for survival. *World journal of gastroenterology*, 23(43):7693, 2017.
- [788] Xu, F., Gu, J., Wang, L., et al. Up-regulation of EIF3e is associated with the progression of esophageal squamous cell carcinoma and poor prognosis in patients. *Journal of Cancer*, 9(7):1135, 2018.
- [789] Xu, H., Chen, X., and Huang, Z. Identification of ESM1 overexpressed in head and neck squamous cell carcinoma. *Cancer Cell International*, 19(1):1–11, 2019.
- [790] Xu, P., Hu, K., Zhang, P., et al. Hypoxia-mediated YTHDF2 overexpression promotes lung squamous cell carcinoma progression by activation of the mTOR/AKT axis. *Cancer cell international*, 22(1):1–13, 2022.
- [791] Xu, Q., Chang, H., Tian, X., et al. Hypoxia-induced MFAP5 promotes tumor migration and invasion via AKT pathway in head and neck squamous cell carcinoma. *Journal of Cancer*, 11(6):1596, 2020.
- [792] Xu, T. T., Zeng, X. W., Wang, X. H., et al. Cystatin-B Negatively Regulates the Malignant Characteristics of Oral Squamous Cell Carcinoma Possibly Via the Epithelium Proliferation/Differentiation Program. *Frontiers in oncology*, 11:707066, 2021.
- [793] Xu, W., Chen, B., Ke, D., et al. TRIM29 mediates lung squamous cell carcinoma cell metastasis by regulating autophagic degradation of e-cadherin. *Aging (Albany NY)*, 12(13):13488, 2020.
- [794] Xu, X. L., Liu, H., Zhang, Y., et al. SPP1 and FN1 are significant gene biomarkers of tongue squamous cell carcinoma. *Oncology Letters*, 22(4):1–14, 2021.
- [795] Xu, Y., Wang, N., Liu, R., et al. Epigenetic Study of Esophageal Carcinoma Based on Methylation, Gene Integration and Weighted Correlation Network Analysis. *Oncotargets and therapy*, 14:3133, 2021.

- [796] Xu, Z., Wang, S., Wu, M., et al. TGF β 1 and HGF protein secretion by esophageal squamous epithelial cells and stromal fibroblasts in oesophageal carcinogenesis. *Oncology Letters*, 6(2):401–406, 2013.
- [797] Xue, H., Lu, J., Yuan, R., et al. Knockdown of CLIC4 enhances ATP-induced HN4 cell apoptosis through mitochondrial and endoplasmic reticulum pathways. *Cell & bioscience*, 6(1):1–9, 2016.
- [798] Xue, J., Chen, H., Diao, L., et al. Expression of caveolin-1 in tongue squamous cell carcinoma by quantum dots. *European Journal of Histochemistry: EJH*, 54(2), 2010.
- [799] Yamamoto, M., Ozawa, S., Ninomiya, Y., et al. Plasma vasohibin-1 and vasohibin-2 are useful biomarkers in patients with esophageal squamous cell carcinoma. *Esophagus*, 17(3):289–297, 2020.
- [800] Yamatoji, M., Kasamatsu, A., Yamano, Y., et al. State of homeobox A10 expression as a putative prognostic marker for oral squamous cell carcinoma. *Oncology reports*, 23(1):61–67, 2010.
- [801] Yan, Y., Zhou, K., Wang, L., et al. Clinical significance of serum cathepsin B and cystatin C levels and their ratio in the prognosis of patients with esophageal cancer. *OncoTargets and therapy*, 10:1947, 2017.
- [802] Yang, C., Ma, J., Zhu, D., et al. GDF15 is a potential predictive biomarker for TPF induction chemotherapy and promotes tumorigenesis and progression in oral squamous cell carcinoma. *Annals of oncology*, 25(6):1215–1222, 2014.
- [803] Yang, F., Zeng, Z., Li, J., et al. TIM-3 and CEACAM1 are prognostic factors in head and neck squamous cell carcinoma. *Frontiers in Molecular Biosciences*, 8:619765, 2021.
- [804] Yang, F., Shi, J., Zhang, L., et al. Role of fibulin-1 gene promoter methylation in the carcinogenesis and development of tongue squamous cell carcinoma. *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, 133(4):432–440, 2022.
- [805] Yang, J., Huang, Q., Guo, Y., et al. DIAPH1 promotes laryngeal squamous cell carcinoma progression through cell cycle regulation. *Frontiers in Oncology*, 11:716876, 2021.
- [806] Yang, J., Zhou, L., Zhang, Y., et al. DIAPH1 is upregulated and inhibits cell apoptosis through ATR/p53/caspase-3 signaling pathway in laryngeal squamous cell carcinoma. *Disease Markers*, 2019, 2019.
- [807] Yang, J., Yu, H., Liu, B. H., et al. DCGL v2. 0: an R package for unveiling differential regulation from differential co-expression. *PloS one*, 8(11):e79729, 2013.
- [808] Yang, J., Wang, H., Wang, W., et al. Enhanced biclustering on expression data. In *Third IEEE Symposium on Bioinformatics and Bioengineering, 2003. Proceedings.*, pages 321–327. IEEE, 2003.
- [809] Yang, J., Wang, H., Wang, W., et al. An improved biclustering method for analyzing gene expression profiles. *International Journal on Artificial Intelligence Tools*, 14(05):771–789, 2005.
- [810] Yang, L. L., Zhang, M. J., Wu, L., et al. LAIR-1 overexpression and correlation with advanced pathological grade and immune suppressive status in oral squamous cell carcinoma. *Head & Neck*, 41(4):1080–1086, 2019.
- [811] Yang, M., Ma, B., and Liu, X. MCTS1 promotes laryngeal squamous cell carcinoma cell growth via enhancing LARP7 stability. *Clinical and Experimental Pharmacology and Physiology*, 49(6):652–660, 2022.

- [812] Yang, N., Tian, J., Wang, X., et al. A functional variant in TNXB promoter associates with the risk of esophageal squamous-cell carcinoma. *Molecular Carcinogenesis*, 59(4):439–446, 2020.
- [813] Yang, P. W., Chang, Y. H., Wong, L. F., et al. The genetic effect and molecular function of the SOCS5 in the prognosis of esophageal squamous cell carcinoma. *Journal of Cancer*, 12(8):2216, 2021.
- [814] Yang, Q. C., Wu, C. C., Cao, L. Y., et al. Increased expression of LAMTOR5 predicts poor prognosis and is associated with lymph node metastasis of head and neck squamous cell carcinoma. *International journal of medical sciences*, 16(6):783, 2019.
- [815] Yang, Q., Wang, R., Xiao, W., et al. Cellular retinoic acid binding protein 2 is strikingly downregulated in human esophageal squamous cell carcinoma and functions as a tumor suppressor. *PLoS One*, 11(2):e0148381, 2016.
- [816] Yang, S., Jia, R., and Bian, Z. SRSF5 functions as a novel oncogenic splicing factor and is up-regulated by oncogene SRSF3 in oral squamous cell carcinoma. *Biochimica et Biophysica Acta (BBA)-Molecular Cell Research*, 1865(9):1161–1172, 2018.
- [817] Yang, W., Zhao, X., Han, Y., et al. Identification of hub genes and therapeutic drugs in esophageal squamous cell carcinoma based on integrated bioinformatics strategy. *Cancer cell international*, 19(1):1–15, 2019.
- [818] Yang, W. E., Ho, C. C., Yang, S. F., et al. Cathepsin B expression and the correlation with clinical aspects of oral squamous cell carcinoma. *PLoS One*, 11(3):e0152165, 2016.
- [819] Yang, X., Han, B., He, Z., et al. RNA-Binding Proteins CLK1 and POP7 as Biomarkers for Diagnosis and Prognosis of Esophageal Squamous Cell Carcinoma. *Frontiers in Cell and Developmental Biology*, page 2379, 2021.
- [820] Yang, Y. F., Chang, Y. C., Tsai, K. W., et al. UBE2C triggers HIF-1 α -glycolytic flux in head and neck squamous cell carcinoma. *Journal of Cellular and Molecular Medicine*, 26(13):3716–3725, 2022.
- [821] Yang, Z. M., Liao, B., Yang, S. S., et al. Predictive Role of NEK6 in Prognosis and Immune Infiltration in Head and Neck Squamous Cell Carcinoma. *Frontiers in Endocrinology*, 13, 2022.
- [822] Yang, Z., Yan, G., Zheng, L., et al. YKT6, as a potential predictor of prognosis and immunotherapy response for oral squamous cell carcinoma, is related to cell invasion, metastasis, and CD8+ T cell infiltration. *Oncoimmunology*, 10(1):1938890, 2021.
- [823] Ye, L., Guan, S., Zhang, C., et al. Circulating autoantibody to FOXP3 may be a potential biomarker for esophageal squamous cell carcinoma. *Tumor Biology*, 34(3):1873–1877, 2013.
- [824] Yeh, C. M., Lee, Y. J., Ko, P. Y., et al. High Expression of KLF10 Is Associated with Favorable Survival in Patients with Oral Squamous Cell Carcinoma. *Medicina*, 57(1):17, 2020.
- [825] Yen, C. C., Tsao, Y. P., Chen, P. C. H., et al. PML protein as a prognostic molecular marker for patients with esophageal squamous cell carcinomas receiving primary surgery. *Journal of Surgical Oncology*, 103(8):761–767, 2011.
- [826] Yi, J., Pan, B. z., Xiong, L., et al. Clinical significance of angiotensin-like protein 4 expression in tissue and serum of esophageal squamous cell carcinoma patients. *Medical Oncology*, 30(3):1–7, 2013.

- [827] Yie, S. M., Yang, H., Ye, S. R., et al. Expression of HLA-G is associated with prognosis in esophageal squamous cell carcinoma. *American journal of clinical pathology*, 128(6):1002–1009, 2007.
- [828] Yip, K. Y., Cheung, D. W., and Ng, M. K. Harp: A practical projected clustering algorithm. *IEEE Transactions on knowledge and data engineering*, 16(11):1387–1397, 2004.
- [829] Yokobori, T., Bao, P., Fukuchi, M., et al. Nuclear PROX1 is associated with hypoxia-inducible factor 1 α expression and cancer progression in esophageal squamous cell carcinoma. *Annals of surgical oncology*, 22(3):1566–1573, 2015.
- [830] Yoon, T. M., Kim, S., Cho, W. S., et al. SOX4 expression is associated with treatment failure and chemoradioresistance in oral squamous cell carcinoma. *BMC cancer*, 15(1):1–10, 2015.
- [831] Yoshimoto, S., Morita, H., Matsuda, M., et al. NFAT5 promotes oral squamous cell carcinoma progression in a hyperosmotic environment. *Laboratory Investigation*, 101(1):38–50, 2021.
- [832] You, B. H., Yoon, J. H., Kang, H., et al. HERES, a lncRNA that regulates canonical and noncanonical Wnt signaling pathways via interaction with EZH2. *Proceedings of the National Academy of Sciences*, 116(49):24620–24629, 2019.
- [833] Yu, C., Wang, Y., Li, G., et al. LncRNA PVT1 promotes malignant progression in squamous cell carcinoma of the head and neck. *Journal of Cancer*, 9(19):3593, 2018.
- [834] Yu, F., Wu, W., Liang, M., et al. Prognostic significance of Rab27A and Rab27B Expression in esophageal squamous cell cancer. *Cancer Management and Research*, 12:6353, 2020.
- [835] Yu, H., Yao, J., Du, M., et al. CDKN3 promotes cell proliferation, invasion and migration by activating the AKT signaling pathway in esophageal squamous cell carcinoma. *Oncology Letters*, 19(1):542–548, 2020.
- [836] Yu, S. Y., Wang, Y. P., Chang, J. Y. F., et al. Increased expression of MCM 5 is significantly associated with aggressive progression and poor prognosis of oral squamous cell carcinoma. *Journal of Oral Pathology & Medicine*, 43(5):344–349, 2014.
- [837] Yu, S., Yin, J. J., Miao, J. X., et al. Activation of NLRP3 inflammasome promotes the proliferation and migration of esophageal squamous cell carcinoma. *Oncology Reports*, 43(4):1113–1124, 2020.
- [838] Yu, X., Li, W., Xia, Z., et al. Targeting MCL-1 sensitizes human esophageal squamous cell carcinoma cells to cisplatin-induced apoptosis. *BMC cancer*, 17(1):1–13, 2017.
- [839] Yu, Y., Ding, S., Liang, Y., et al. Expression of ercc1, tyms, tubb3, rrm1 and top2a in patients with esophageal squamous cell carcinoma: A hierarchical clustering analysis. *Experimental and therapeutic medicine*, 7(6):1578–1582, 2014.
- [840] Yuan, H., Zhou, W., Yang, Y., et al. ISG15 promotes esophageal squamous cell carcinoma tumorigenesis via c-MET/Fyn/ β -catenin signaling pathway. *Experimental Cell Research*, 367(1):47–55, 2018.
- [841] Yuan, L., Tian, X., Zhang, Y., et al. LINC00319 promotes cancer stem cell-like properties in laryngeal squamous cell carcinoma via E2F1-mediated upregulation of HMGB3. *Experimental & Molecular Medicine*, 53(8):1218–1228, 2021.
- [842] Yuan, P., Rao, W., Lin, Z., et al. Genomic analyses reveal SCN7A is associated with the prognosis of esophageal squamous cell carcinoma. *Esophagus*, pages 1–13, 2022.

- [843] Yuan, S., Lin, L. s., Gan, R. H., et al. Elevated matrix metalloproteinase 7 expression promotes the proliferation, motility and metastasis of tongue squamous cell carcinoma. *BMC cancer*, 20(1):1–12, 2020.
- [844] Yuan, X., Yi, M., Dong, B., et al. Prognostic significance of KRT19 in lung squamous cancer. *Journal of Cancer*, 12(4):1240, 2021.
- [845] Yuan, Y., Xie, X., Jiang, Y., et al. LRP6 is identified as a potential prognostic marker for oral squamous cell carcinoma via MALDI-IMS. *Cell death & disease*, 8(9):e3035–e3035, 2017.
- [846] Yue, D., Fan, Q., Chen, X., et al. Epigenetic inactivation of SPINT2 is associated with tumor suppressive function in esophageal squamous cell carcinoma. *Experimental cell research*, 322(1):149–158, 2014.
- [847] Yun, M., Choi, A. J., Lee, Y. C., et al. Carbonyl reductase 1 is a new target to improve the effect of radiotherapy on head and neck squamous cell carcinoma. *Journal of Experimental & Clinical Cancer Research*, 37(1):1–12, 2018.
- [848] Yun, T. and Yi, G. S. Biclustering for the comprehensive search of correlated gene expression patterns using clustered seed expansion. *BMC genomics*, 14(1):1–15, 2013.
- [849] Zeng, H., Zhao, X., and Tang, C. Downregulation of SELENBP1 enhances oral squamous cell carcinoma chemoresistance through KEAP1–NRF2 signaling. *Cancer Chemotherapy and Pharmacology*, 88(2):223–233, 2021.
- [850] Zeng, R., Duan, L., Kong, Y., et al. Clinicopathological and prognostic role of MMP-9 in esophageal squamous cell carcinoma: a meta-analysis. *Chinese Journal of Cancer Research*, 25(6):637, 2013.
- [851] Zhai, Y. C., Dong, B., Wei, W. Q., et al. Overexpression of Phospholipase A 2 Group IIA in Esophageal Squamous Cell Carcinoma and Association with Cyclooxygenase-2 Expression. *Asian Pacific Journal of Cancer Prevention*, 15(21):9417–9421, 2014.
- [852] Zhang, B., Zhang, Z., Li, L., et al. TSPAN15 interacts with BTRC to promote oesophageal squamous cell carcinoma metastasis via activating NF- κ B signaling. *Nature communications*, 9(1):1–12, 2018.
- [853] Zhang, B. and Horvath, S. A general framework for weighted gene co-expression network analysis. *Statistical applications in genetics and molecular biology*, 4(1), 2005.
- [854] Zhang, B., Zhang, Z., Zhang, X., et al. Serological antibodies against LY6K as a diagnostic biomarker in esophageal squamous cell carcinoma. *Biomarkers*, 17(4):372–378, 2012.
- [855] Zhang, C., Cai, Q., and Ke, J. Poor Prognosis of Oral Squamous Cell Carcinoma Correlates With ITGA6. *international dental journal*, 73(2):178–185, 2023.
- [856] Zhang, D., Fu, Y., Tian, G., et al. UCHL1 promotes proliferation and metastasis in head and neck squamous cell carcinoma and could be a potential therapeutic target. *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, 133(6):684–697, 2022.
- [857] Zhang, E., Liu, S., Xu, Z., et al. Pituitary tumor-transforming gene 1 (PTTG1) is overexpressed in oral squamous cell carcinoma (OSCC) and promotes migration, invasion and epithelial–mesenchymal transition (EMT) in SCC15 cells. *Tumor Biology*, 35(9):8801–8811, 2014.
- [858] Zhang, G., Kong, X., Wang, M., et al. AXL is a marker for epithelial-mesenchymal transition in

- esophageal squamous cell carcinoma. *Oncology Letters*, 15(2):1900–1906, 2018.
- [859] Zhang, H., Nan, X., Li, X., et al. CMTM5 exhibits tumor suppressor activity through promoter methylation in oral squamous cell carcinoma. *Biochemical and Biophysical Research Communications*, 447(2):304–310, 2014.
- [860] Zhang, H., Zhang, J., Nan, X., et al. CMTM3 inhibits cell growth and migration and predicts favorable survival in oral squamous cell carcinoma. *Tumor Biology*, 36:7849–7858, 2015.
- [861] Zhang, H., Jia, R., Yang, Y., et al. High Expression of PPFIA1 Is Associated With Tumor Progression and a Poor Prognosis in Esophageal Squamous Cell Carcinoma. 2021.
- [862] Zhang, H., Luo, H., Hu, Z., et al. Targeting WISP1 to sensitize esophageal squamous cell carcinoma to irradiation. *Oncotarget*, 6(8):6218, 2015.
- [863] Zhang, H., Liu, X., Chen, L., et al. Differential expression of peroxiredoxin 3 in laryngeal squamous cell carcinoma. *Oncotarget*, 8(2):3471, 2017.
- [864] Zhang, H., Liu, J., Fu, X., et al. Identification of key genes and pathways in tongue squamous cell carcinoma using bioinformatics analysis. *Medical science monitor: international medical journal of experimental and clinical research*, 23:5924, 2017.
- [865] Zhang, H., Zhao, J. H., and Suo, Z. M. Knockdown of HOXA5 inhibits the tumorigenesis in esophageal squamous cell cancer. *Biomedicine & Pharmacotherapy*, 86:149–154, 2017.
- [866] Zhang, J. Y., Zhu, W. W., Wang, M. Y., et al. Cancer-associated fibroblasts promote oral squamous cell carcinoma progression through LOX-mediated matrix stiffness. *Journal of translational medicine*, 19(1):1–16, 2021.
- [867] Zhang, J., Wu, J., Chen, Y., et al. Dlx5 promotes cancer progression through regulation of CCND1 in oral squamous cell carcinoma (OSCC). *Biochemistry and Cell Biology*, 99(4):424–434, 2021.
- [868] Zhang, J., Huang, F., Gong, T., et al. SERPINE2 promotes esophageal squamous cell carcinoma metastasis by activating BMP4. *Cancer Letters*, 469:390–398, 2020.
- [869] Zhang, M. J., Gao, W., Liu, S., et al. CD38 triggers inflammasome-mediated pyroptotic cell death in head and neck squamous cell carcinoma. *American journal of cancer research*, 10(9):2895, 2020.
- [870] Zhang, M. J., Chen, D. S., Li, H., et al. Clinical significance of USP7 and EZH2 in predicting prognosis of laryngeal squamous cell carcinoma and their possible functional mechanism. *International journal of clinical and experimental pathology*, 12(6):2184, 2019.
- [871] Zhang, Q., Xu, H., You, Y., et al. High Gpx1 expression predicts poor survival in laryngeal squamous cell carcinoma. *Auris Nasus Larynx*, 45(1):13–19, 2018.
- [872] Zhang, Q., He, Y., Nie, M., et al. Roles of miR-138 and ISG15 in oral squamous cell carcinoma. *Experimental and therapeutic medicine*, 14(3):2329–2334, 2017.
- [873] Zhang, S., Gong, T., Nan, Y., et al. MAFB promotes the malignant phenotypes by IGFBP6 in esophageal squamous cell carcinomas. *Experimental Cell Research*, page 113158, 2022.
- [874] Zhang, S., Yang, X., Shi, H., et al. Overexpression of leucine aminopeptidase 3 contributes to malignant development of human esophageal squamous cell carcinoma. *Journal of molecular histology*, 45(3):283–292, 2014.
- [875] Zhang, W., Li, J., Wu, Y., et al. TEAD4 overexpression promotes epithelial-mesenchymal transition

- and associates with aggressiveness and adverse prognosis in head neck squamous cell carcinoma. *Cancer cell international*, 18(1):1–14, 2018.
- [876] Zhang, X., Lin, A., Zhang, J. G., et al. Alteration of HLA-F and HLA I antigen expression in the tumor is associated with survival in patients with esophageal squamous cell carcinoma. *International journal of cancer*, 132(1):82–89, 2013.
- [877] Zhang, X., Peng, L., Luo, Y., et al. Dissecting esophageal squamous-cell carcinoma ecosystem by single-cell transcriptomic analysis. *Nature communications*, 12(1):1–17, 2021.
- [878] Zhang, X. F., Pan, K., Weng, D. S., et al. Cytotoxic T lymphocyte antigen-4 expression in esophageal carcinoma: implications for prognosis. *Oncotarget*, 7(18):26670, 2016.
- [879] Zhang, X., Dong, Y., Zhao, M., et al. ITGB2-mediated metabolic switch in CAFs promotes OSCC proliferation by oxidation of NADH in mitochondrial oxidative phosphorylation system. *Theranostics*, 10(26):12044, 2020.
- [880] Zhang, X., Hu, F., Liu, L., et al. Effect of silencing of mediator of DNA damage checkpoint protein 1 on the growth of oral squamous cell carcinoma in vitro and in vivo. *European journal of oral sciences*, 127(6):494–499, 2019.
- [881] Zhang, X., Huang, Z., Hu, Y., et al. Knockdown of Myosin 6 inhibits proliferation of oral squamous cell carcinoma cells. *Journal of Oral Pathology & Medicine*, 45(10):740–745, 2016.
- [882] Zhang, X., Chen, Y., Li, Z., et al. TGFBR3 is an independent unfavourable prognostic marker in oesophageal squamous cell cancer and is positively correlated with Ki-67. *International Journal of Experimental Pathology*, 101(6):223–229, 2020.
- [883] Zhang, Y., Chen, K., Li, L., et al. CCR4 is a prognostic biomarker and correlated with immune infiltrates in head and neck squamous cell carcinoma. *Annals of Translational Medicine*, 9(18), 2021.
- [884] Zhang, Y., Molavi, O., Su, M., et al. The clinical and biological significance of STAT1 in esophageal squamous cell carcinoma. *BMC cancer*, 14(1):1–14, 2014.
- [885] Zhang, Y., Chen, L., Wu, X., et al. The RNA N6-methyladenosine demethylase FTO promotes head and neck squamous cell carcinoma proliferation and migration by increasing CTNBN1. *International Journal of General Medicine*, pages 8785–8795, 2021.
- [886] Zhang, Y., Liu, Y. D., Luo, Y. L., et al. Prognostic value of lymphocyte activation gene-3 (LAG-3) expression in esophageal squamous cell carcinoma. *Journal of Cancer*, 9(22):4287, 2018.
- [887] Zhang, Y., Xie, J., Yang, J., et al. QUBIC: a bioconductor package for qualitative biclustering analysis of gene co-expression data. *Bioinformatics*, 33(3):450–452, 2017.
- [888] Zhang, Z. F., Huang, T. J., Zhang, X. K., et al. AKR1C2 acts as a targetable oncogene in esophageal squamous cell carcinoma via activating PI3K/AKT signaling pathway. *Journal of cellular and molecular medicine*, 24(17):9999–10012, 2020.
- [889] Zhao, C., Wei, C., Chen, X., et al. MRGBP: A New Factor for Diagnosis and Prediction of Head and Neck Squamous Cell Carcinoma. *BioMed Research International*, 2022, 2022.
- [890] Zhao, F., Ge, F., Xie, M., et al. FTO mediated ERBB2 demethylation promotes tumor progression in esophageal squamous cell carcinoma cells. *Clinical & Experimental Metastasis*, 39(4):623–639, 2022.

- [891] Zhao, G. Y., Lin, Z. W., Lu, C. L., et al. USP7 overexpression predicts a poor prognosis in lung squamous cell carcinoma and large cell carcinoma. *Tumor Biology*, 36(3):1721–1729, 2015.
- [892] Zhao, L., Li, Q. Q., Zhang, R., et al. The overexpression of IGFBP-3 is involved in the chemosensitivity of esophageal squamous cell carcinoma cells to nimotuzumab combined with cisplatin. *Tumor Biology*, 33(4):1115–1123, 2012.
- [893] Zhao, L. and Zaki, M. J. MicroCluster: efficient deterministic biclustering of microarray data. *IEEE intelligent systems*, 20(6):40–49, 2005.
- [894] Zhao, L., Liang, J., Zhong, W., et al. Expression and prognostic analysis of BGN in head and neck squamous cell carcinoma. *Gene*, 827:146461, 2022.
- [895] Zhao, R., Wang, S., Liu, J., et al. KLK11 acts as a tumor-inhibitor in laryngeal squamous cell carcinoma through the inactivation of Akt/Wnt/ β -catenin signaling. *Journal of Bioenergetics and Biomembranes*, 53:85–96, 2021.
- [896] Zhao, S. L., Zhu, S. T., Hao, X., et al. Effects of DNA methyltransferase 1 inhibition on esophageal squamous cell carcinoma. *Diseases of the Esophagus*, 24(8):601–610, 2011.
- [897] Zhao, X., Chen, H., Qiu, Y., et al. FAM64A promotes HNSCC tumorigenesis by mediating transcriptional autoregulation of FOXM1. *International journal of oral science*, 14(1):1–12, 2022.
- [898] Zhao, X., Zhang, W., and Ji, W. MYO5A inhibition by miR-145 acts as a predictive marker of occult neck lymph node metastasis in human laryngeal squamous cell carcinoma. *OncoTargets and therapy*, pages 3619–3635, 2018.
- [899] Zhao, Y., Geng, H., Liu, G., et al. The Deubiquitinase USP39 Promotes ESCC Tumorigenesis Through Pre-mRNA Splicing of the mTORC2 Component Rictor. *Frontiers in Oncology*, 11:1906, 2021.
- [900] Zhao, Y., Lu, Q., Li, C., et al. PRMT1 regulates the tumour-initiating properties of esophageal squamous cell carcinoma through histone H4 arginine methylation coupled with transcriptional activation. *Cell death & disease*, 10(5):1–17, 2019.
- [901] Zhao, Y., Xie, X., Tian, L., et al. MARCKSL1 interacted with F-actin to promote esophageal squamous cell carcinoma mobility by modulating the formation of invadopodia. *Cancer Medicine*, 2022.
- [902] Zhao, Z. F., Li, J. X., Ye, R., et al. Interleukin-6 as a potential molecular target in esophageal squamous cell carcinoma. *Oncology letters*, 11(2):925–932, 2016.
- [903] Zheng, X., Yang, L., Wang, Y., et al. Epigenetically inhibiting CYP3A5 modulates the migration and invasion of esophageal squamous cell carcinoma via ZEB2. 2022.
- [904] Zheng, X., Zhao, Y., Wang, X., et al. Decreased expression of CIAPIN1 is correlated with poor prognosis in patients with esophageal squamous cell carcinoma. *Digestive diseases and sciences*, 55(12):3408–3414, 2010.
- [905] Zheng, Y., Li, Y., Xie, J., et al. IGHG1 functions as an oncogene in tongue squamous cell carcinoma via JAK1/STAT5 signaling. *European Review for Medical and Pharmacological Sciences*, 24(12):6716–6725, 2020.
- [906] Zhong, X., Chen, X., Guan, X., et al. Overexpression of G9a and MCM7 in oesophageal squamous cell carcinoma is associated with poor prognosis. *Histopathology*, 66(2):192–200, 2015.

- [907] Zhou, C., Shen, Y., Wei, Z., et al. ITGA5 is an independent prognostic biomarker and potential therapeutic target for laryngeal squamous cell carcinoma. *Journal of Clinical Laboratory Analysis*, 36(2):e24228, 2022.
- [908] Zhou, J., Yang, Y., Zhang, H., et al. Overexpressed COL3A1 has prognostic value in human esophageal squamous cell carcinoma and promotes the aggressiveness of esophageal squamous cell carcinoma by activating the NF- κ B pathway. *Biochemical and Biophysical Research Communications*, 2022.
- [909] Zhou, J. H., Zhang, B., Kernstine, K. H., et al. Autoantibodies against MMP-7 as a novel diagnostic biomarker in esophageal squamous cell carcinoma. *World Journal of Gastroenterology: WJG*, 17(10):1373, 2011.
- [910] Zhou, J., Zhang, J., Zhang, W., et al. Ribophorin II promotes the epithelial–mesenchymal transition and aerobic glycolysis of laryngeal squamous cell carcinoma via regulating reactive oxygen species-mediated Phosphatidylinositol-3-Kinase/Protein Kinase B activation. *Bioengineered*, 13(3):5141–5151, 2022.
- [911] Zhou, L., Li, H., Cai, H., et al. Upregulation of IGF2BP2 Promotes Oral Squamous Cell Carcinoma Progression That Is Related to Cell Proliferation, Metastasis and Tumor-Infiltrating Immune Cells. *Frontiers in oncology*, 12, 2022.
- [912] Zhou, W. H., Du, W. D., Li, Y. F., et al. The overexpression of fibronectin 1 promotes cancer progression and associated with M2 macrophages polarization in head and neck squamous cell carcinoma patients. *International Journal of General Medicine*, pages 5027–5042, 2022.
- [913] Zhou, W., Yue, H., Li, C., et al. Protein arginine methyltransferase 1 promoted the growth and migration of cancer cells in esophageal squamous cell carcinoma. *Tumor Biology*, 37(2):2613–2619, 2016.
- [914] Zhou, Y., Liu, X., Li, J., et al. GINS2 is Overexpressed in Esophageal Squamous Cell Cancer and Indicates Poor Survival Outcome. *International Journal of Radiation Oncology, Biology, Physics*, 99(2):E207–E208, 2017.
- [915] Zhou, Y., Wang, L., Ban, X., et al. DHRS2 inhibits cell growth and motility in esophageal squamous cell carcinoma. *Oncogene*, 37(8):1086–1094, 2018.
- [916] Zhu, L., Shen, Y., and Sun, W. Paraoxonase 3 promotes cell proliferation and metastasis by PI3K/Akt in oral squamous cell carcinoma. *Biomedicine & Pharmacotherapy*, 85:712–717, 2017.
- [917] Zhu, L., Qin, G., Ye, L., et al. Epithelial cell transforming sequence 2 expression is associated with the progression of laryngeal squamous cell carcinoma. *Oncology Letters*, 17(6):5699–5704, 2019.
- [918] Zhu, M. H., Ji, S. L., Zhang, C. Y., et al. DNA microarray reveals ZNF195 and SBF1 are potential biomarkers for gemcitabine sensitivity in head and neck squamous cell carcinoma cell lines. *International journal of clinical and experimental pathology*, 7(4):1514, 2014.
- [919] Zhu, X., Wang, J., Li, L., et al. GPX3 suppresses tumor migration and invasion via the FAK/AKT pathway in esophageal squamous cell carcinoma. *American journal of translational research*, 10(6):1908, 2018.
- [920] Zhu, Y., Qi, X., Yu, C., et al. Identification of prothymosin alpha (PTMA) as a biomarker for esophageal squamous cell carcinoma (ESCC) by label-free quantitative proteomics and Quantita-

- tive Dot Blot (QDB). *Clinical Proteomics*, 16(1):1–20, 2019.
- [921] Zhu, Y. H., Yang, F., Zhang, S. S., et al. High expression of biglycan is associated with poor prognosis in patients with esophageal squamous cell carcinoma. *International journal of clinical and experimental pathology*, 6(11):2497, 2013.
- [922] Zhu, Y. H., Zhang, B., Li, M., et al. Prognostic significance of FAM3C in esophageal squamous cell carcinoma. *Diagnostic pathology*, 10(1):1–7, 2015.
- [923] Zhu, Y., Lam, A. K., Shum, D. K., et al. Significance of serglycin and its binding partners in autocrine promotion of metastasis in esophageal cancer. *Theranostics*, 11(6):2722, 2021.
- [924] Zhu, Z. L., Yan, B. Y., Zhang, Y., et al. Overexpression of FX3P-3 is involved in the tumorigenesis and development of esophageal squamous cell carcinoma. *Disease markers*, 35(3):195–202, 2013.
- [925] Zou, H., Wen, B., Li, R. L., et al. Lysyl oxidase-like 2 promotes esophageal squamous cell carcinoma cell migration independent of catalytic activity. *The International Journal of Biochemistry & Cell Biology*, 125:105795, 2020.
- [926] Zuo, J., Zhao, M., Liu, B., et al. TNF- α -mediated upregulation of SOD-2 contributes to cell proliferation and cisplatin resistance in esophageal squamous cell carcinoma. *Oncology reports*, 42(4):1497–1506, 2019.

List of Publications

Journals

1. Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. CBDCEM: An effective centrality based differential co-expression method for critical gene finding. *Gene Reports*, 29:101688, 2022
2. Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. Identification of Potential Biomarkers Using Integrative Approach: A Case Study of ESCC. *SN Computer Science*, 4(2):1–31, 2023

Conferences/ Workshops

1. Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. BicGenesis: A Method to Identify ESCC Biomarkers Using the Biclustering Approach. In *Proceedings of International Conference on Big Data, Machine Learning and Applications*, pages 1–14. Springer, 2021
2. Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. Identification of Potential Biomarkers using Integrative Approach: An application of ESCC. In *Pattern Recognition and Machine Intelligence: 9th International Conference, PReMI 2021, Kolkata, India, December 15-18, 2021, Proceedings*. Springer, 2024

Under Review

1. Saikia, M., Bhattacharyya, D. K., and Kalita, J. K. scDiffCoAM: A Complete Framework to Identify Potential Biomarkers using scRNA-Seq Data Analysis. *Journal of Biosciences*, 2024