

## **6. Bibliography**

1. Bolan, P.J., et al., *MR spectroscopy of breast cancer for assessing early treatment response: Results from the ACRIN 6657 MRS trial*. J Magn Reson Imaging, 2017. **46**(1): p. 290-302.
2. Riggio, A.I., K.E. Varley, and A.L. Welm, *The lingering mysteries of metastatic recurrence in breast cancer*. Br J Cancer, 2021. **124**(1): p. 13-26.
3. Siegel, R.L., et al., *Cancer statistics, 2022*. CA Cancer J Clin, 2022. **72**(1): p. 7-33.
4. Baysal, B.E., et al., *Mutations in SDHD, a mitochondrial complex II gene, in hereditary paraganglioma*. Science, 2000. **287**(5454): p. 848-51.
5. Janni, W., *Breast Cancer - a Lifestyle Disease?* Breast Care (Basel), 2018. **13**(2): p. 84-85.
6. Arnold, M., et al., *Current and future burden of breast cancer: Global statistics for 2020 and 2040*. Breast, 2022. **66**: p. 15-23.
7. Prat, A., et al., *Clinical implications of the intrinsic molecular subtypes of breast cancer*. Breast, 2015. **24 Suppl 2**: p. S26-35.
8. Ignatiadis, M. and C. Sotiriou, *Luminal breast cancer: from biology to treatment*. Nat Rev Clin Oncol, 2013. **10**(9): p. 494-506.
9. Dai, X., et al., *Breast cancer intrinsic subtype classification, clinical use and future trends*. Am J Cancer Res, 2015. **5**(10): p. 2929-43.
10. Brenton, J.D., et al., *Molecular classification and molecular forecasting of breast cancer: ready for clinical application?* J Clin Oncol, 2005. **23**(29): p. 7350-60.
11. Pons, L., et al., *Conventional and digital Ki67 evaluation and their correlation with molecular prognosis and morphological parameters in luminal breast cancer*. Sci Rep, 2022. **12**(1): p. 8176.
12. Sorlie, T., et al., *Repeated observation of breast tumor subtypes in independent gene expression data sets*. Proc Natl Acad Sci U S A, 2003. **100**(14): p. 8418-23.
13. Sorlie, T., *Molecular portraits of breast cancer: tumour subtypes as distinct disease entities*. Eur J Cancer, 2004. **40**(18): p. 2667-75.
14. Gatzka, M.L., et al., *An integrated genomics approach identifies drivers of proliferation in luminal-subtype human breast cancer*. Nat Genet, 2014. **46**(10): p. 1051-9.
15. Godoy-Ortiz, A., et al., *Deciphering HER2 Breast Cancer Disease: Biological and Clinical Implications*. Front Oncol, 2019. **9**: p. 1124.
16. Choi, S.B., et al., *Ki-67 and breast cancer prognosis: does it matter if Ki-67 level is examined using preoperative biopsy or postoperative specimen?* Breast Cancer Res Treat, 2022. **192**(2): p. 343-352.

17. Giordano, S.H., et al., *Systemic Therapy for Advanced Human Epidermal Growth Factor Receptor 2-Positive Breast Cancer: ASCO Guideline Update*. J Clin Oncol, 2022. **40**(23): p. 2612-2635.
18. von Minckwitz, G., et al., *Adjuvant Pertuzumab and Trastuzumab in Early HER2-Positive Breast Cancer*. N Engl J Med, 2017. **377**(2): p. 122-131.
19. Tripathy, D., et al., *De Novo Versus Recurrent HER2-Positive Metastatic Breast Cancer: Patient Characteristics, Treatment, and Survival from the SystHERs Registry*. Oncologist, 2020. **25**(2): p. e214-e222.
20. Dent, R., et al., *Triple-negative breast cancer: clinical features and patterns of recurrence*. Clin Cancer Res, 2007. **13**(15 Pt 1): p. 4429-34.
21. Yin, L., et al., *Triple-negative breast cancer molecular subtyping and treatment progress*. Breast Cancer Res, 2020. **22**(1): p. 61.
22. Tang, P. and G.M. Tse, *Immunohistochemical Surrogates for Molecular Classification of Breast Carcinoma: A 2015 Update*. Arch Pathol Lab Med, 2016. **140**(8): p. 806-14.
23. Li, J.J., J.Y. Tsang, and G.M. Tse, *Tumor Microenvironment in Breast Cancer-Updates on Therapeutic Implications and Pathologic Assessment*. Cancers (Basel), 2021. **13**(16).
24. Bozyk, A., et al., *Tumor Microenvironment-A Short Review of Cellular and Interaction Diversity*. Biology (Basel), 2022. **11**(6).
25. Denkert, C., et al., *Tumour-infiltrating lymphocytes and prognosis in different subtypes of breast cancer: a pooled analysis of 3771 patients treated with neoadjuvant therapy*. Lancet Oncol, 2018. **19**(1): p. 40-50.
26. Fu, G., et al., *The Postoperative Immunosuppressive Phenotypes of Peripheral T Helper Cells Are Associated with Poor Prognosis of Breast Cancer Patients*. Immunol Invest, 2017. **46**(7): p. 647-662.
27. Henriques, B., F. Mendes, and D. Martins, *Immunotherapy in Breast Cancer: When, How, and What Challenges?* Biomedicines, 2021. **9**(11).
28. Garaud, S., et al., *Tumor infiltrating B-cells signal functional humoral immune responses in breast cancer*. JCI Insight, 2019. **5**(18).
29. Burugu, S., K. Asleh-Aburaya, and T.O. Nielsen, *Immune infiltrates in the breast cancer microenvironment: detection, characterization and clinical implication*. Breast Cancer, 2017. **24**(1): p. 3-15.
30. Hussein, M.R. and H.I. Hassan, *Analysis of the mononuclear inflammatory cell infiltrate in the normal breast, benign proliferative breast disease, in situ and infiltrating ductal breast carcinomas: preliminary observations*. J Clin Pathol, 2006. **59**(9): p. 972-7.

31. Lumeng, C.N., J.L. Bodzin, and A.R. Saltiel, *Obesity induces a phenotypic switch in adipose tissue macrophage polarization*. *J Clin Invest*, 2007. **117**(1): p. 175-84.
32. Mancuso, P., *The role of adipokines in chronic inflammation*. *Immunotargets Ther*, 2016. **5**: p. 47-56.
33. Ouchi, N., et al., *Adipokines in inflammation and metabolic disease*. *Nat Rev Immunol*, 2011. **11**(2): p. 85-97.
34. Hu, D., et al., *Cancer-associated fibroblasts in breast cancer: Challenges and opportunities*. *Cancer Commun (Lond)*, 2022. **42**(5): p. 401-434.
35. Allaoui, R., et al., *Cancer-associated fibroblast-secreted CXCL16 attracts monocytes to promote stroma activation in triple-negative breast cancers*. *Nat Commun*, 2016. **7**: p. 13050.
36. Zhang, J., H. Jiang, and H. Zhang, *In situ administration of cytokine combinations induces tumor regression in mice*. *EBioMedicine*, 2018. **37**: p. 38-46.
37. Sparano, J.A., et al., *Inflammatory cytokines and distant recurrence in HER2-negative early breast cancer*. *NPJ Breast Cancer*, 2022. **8**(1): p. 16.
38. McAndrew, N.P., et al., *Effects of systemic inflammation on relapse in early breast cancer*. *NPJ Breast Cancer*, 2021. **7**(1): p. 7.
39. Hartman, Z.C., et al., *Growth of triple-negative breast cancer cells relies upon coordinate autocrine expression of the proinflammatory cytokines IL-6 and IL-8*. *Cancer Res*, 2013. **73**(11): p. 3470-80.
40. Yu, T.J., et al., *Bulk and single-cell transcriptome profiling reveal the metabolic heterogeneity in human breast cancers*. *Mol Ther*, 2021. **29**(7): p. 2350-2365.
41. Geng, Y., et al., *Phenotypic switch in blood: effects of pro-inflammatory cytokines on breast cancer cell aggregation and adhesion*. *PLoS One*, 2013. **8**(1): p. e54959.
42. Alraouji, N.N. and A. Aboussekhra, *Tocilizumab inhibits IL-8 and the proangiogenic potential of triple negative breast cancer cells*. *Mol Carcinog*, 2021. **60**(1): p. 51-59.
43. Kong, D., et al., *VEGF-C mediates tumor growth and metastasis through promoting EMT-epithelial breast cancer cell crosstalk*. *Oncogene*, 2021. **40**(5): p. 964-979.
44. Mehraj, U., et al., *Expression Pattern and Prognostic Significance of Chemokines in Breast cancer: An Integrated Bioinformatics Analysis*. *Clin Breast Cancer*, 2022. **22**(6): p. 567-578.
45. Rahman, M.M. and G. McFadden, *Modulation of tumor necrosis factor by microbial pathogens*. *PLoS Pathog*, 2006. **2**(2): p. e4.
46. Idriss, H.T. and J.H. Naismith, *TNF alpha and the TNF receptor superfamily: structure-function relationship(s)*. *Microsc Res Tech*, 2000. **50**(3): p. 184-95.

47. Norman, M.U., et al., *TNF regulates leukocyte-endothelial cell interactions and microvascular dysfunction during immune complex-mediated inflammation*. Br J Pharmacol, 2005. **144**(2): p. 265-74.
48. Hallermalm, K., et al., *Tumor necrosis factor-alpha induces coordinated changes in major histocompatibility class I presentation pathway, resulting in increased stability of class I complexes at the cell surface*. Blood, 2001. **98**(4): p. 1108-15.
49. Jang, D.I., et al., *The Role of Tumor Necrosis Factor Alpha (TNF-alpha) in Autoimmune Disease and Current TNF-alpha Inhibitors in Therapeutics*. Int J Mol Sci, 2021. **22**(5).
50. van Loo, G. and M.J.M. Bertrand, *Death by TNF: a road to inflammation*. Nat Rev Immunol, 2023. **23**(5): p. 289-303.
51. Kalliolias, G.D. and L.B. Ivashkiv, *TNF biology, pathogenic mechanisms and emerging therapeutic strategies*. Nat Rev Rheumatol, 2016. **12**(1): p. 49-62.
52. Tan, W., et al., *TNF-alpha is a potential therapeutic target to overcome sorafenib resistance in hepatocellular carcinoma*. EBioMedicine, 2019. **40**: p. 446-456.
53. Takasago, T., et al., *Anti-tumor necrosis factor-alpha monoclonal antibody suppresses colorectal cancer growth in an orthotopic transplant mouse model*. PLoS One, 2023. **18**(3): p. e0283822.
54. Zhao, X., et al., *Inhibiting tumor necrosis factor-alpha diminishes desmoplasia and inflammation to overcome chemoresistance in pancreatic ductal adenocarcinoma*. Oncotarget, 2016. **7**(49): p. 81110-81122.
55. Tang, Y., et al., *Overview of the molecular mechanisms contributing to the formation of cancer-associated adipocytes (Review)*. Mol Med Rep, 2021. **24**(5).
56. Guerrero, J., et al., *Soluble factors derived from tumor mammary cell lines induce a stromal mammary adipose reversion in human and mice adipose cells. Possible role of TGF-beta1 and TNF-alpha*. Breast Cancer Res Treat, 2010. **119**(2): p. 497-508.
57. Arnol, D., et al., *Modeling Cell-Cell Interactions from Spatial Molecular Data with Spatial Variance Component Analysis*. Cell Rep, 2019. **29**(1): p. 202-211 e6.
58. Almet, A.A., et al., *The landscape of cell-cell communication through single-cell transcriptomics*. Curr Opin Syst Biol, 2021. **26**: p. 12-23.
59. Armingol, E., et al., *Deciphering cell-cell interactions and communication from gene expression*. Nat Rev Genet, 2021. **22**(2): p. 71-88.
60. Denk, D. and F.R. Greten, *Inflammation: the incubator of the tumor microenvironment*. Trends Cancer, 2022. **8**(11): p. 901-914.

61. Quail, D.F., et al., *Obesity alters the lung myeloid cell landscape to enhance breast cancer metastasis through IL5 and GM-CSF*. *Nat Cell Biol*, 2017. **19**(8): p. 974-987.
62. Yu, H., et al., *Targeting NF-kappaB pathway for the therapy of diseases: mechanism and clinical study*. *Signal Transduct Target Ther*, 2020. **5**(1): p. 209.
63. Taniguchi, K. and M. Karin, *NF-kappaB, inflammation, immunity and cancer: coming of age*. *Nat Rev Immunol*, 2018. **18**(5): p. 309-324.
64. Carrillo-Salinas, F.J., et al., *Heart Inflammation: Immune Cell Roles and Roads to the Heart*. *Am J Pathol*, 2019. **189**(8): p. 1482-1494.
65. Hanna, A. and N.G. Frangogiannis, *Inflammatory Cytokines and Chemokines as Therapeutic Targets in Heart Failure*. *Cardiovasc Drugs Ther*, 2020. **34**(6): p. 849-863.
66. Matsumori, A., *Anti-inflammatory therapy for heart failure*. *Curr Opin Pharmacol*, 2004. **4**(2): p. 171-6.
67. Li, W., et al., *NF-kappaB and its crosstalk with endoplasmic reticulum stress in atherosclerosis*. *Front Cardiovasc Med*, 2022. **9**: p. 988266.
68. Li, X., et al., *Activation of NF-kappaB-Inducing Kinase in Islet beta Cells Causes beta Cell Failure and Diabetes*. *Mol Ther*, 2020. **28**(11): p. 2430-2441.
69. Martinez-Reza, I., L. Diaz, and R. Garcia-Becerra, *Preclinical and clinical aspects of TNF-alpha and its receptors TNFR1 and TNFR2 in breast cancer*. *J Biomed Sci*, 2017. **24**(1): p. 90.
70. Cole, S.W., *Chronic inflammation and breast cancer recurrence*. *J Clin Oncol*, 2009. **27**(21): p. 3418-9.
71. Sazonovs, A., et al., *Large-scale sequencing identifies multiple genes and rare variants associated with Crohn's disease susceptibility*. *Nat Genet*, 2022. **54**(9): p. 1275-1283.
72. Koerner, L., et al., *NEMO- and RelA-dependent NF-kappaB signaling promotes small cell lung cancer*. *Cell Death Differ*, 2023. **30**(4): p. 938-951.
73. Weichert, W., et al., *High expression of RelA/p65 is associated with activation of nuclear factor-kappaB-dependent signaling in pancreatic cancer and marks a patient population with poor prognosis*. *Br J Cancer*, 2007. **97**(4): p. 523-30.
74. Yang, Q., et al., *RelA/MicroRNA-30a/NLRP3 signal axis is involved in rheumatoid arthritis via regulating NLRP3 inflammasome in macrophages*. *Cell Death Dis*, 2021. **12**(11): p. 1060.
75. Coussens, L.M., L. Zitvogel, and A.K. Palucka, *Neutralizing tumor-promoting chronic inflammation: a magic bullet?* *Science*, 2013. **339**(6117): p. 286-91.
76. Sarkar, D.K., et al., *Role of NF-kappaB as a Prognostic Marker in Breast Cancer : A Pilot Study in Indian Patients*. *Indian J Surg Oncol*, 2013. **4**(3): p. 242-7.

77. Orlova, Z., et al., *IKKepsilon regulates the breast cancer stem cell phenotype*. Biochim Biophys Acta Mol Cell Res, 2019. **1866**(4): p. 598-611.
78. Li, C.W., et al., *Epithelial-mesenchymal transition induced by TNF-alpha requires NF-kappaB-mediated transcriptional upregulation of Twist1*. Cancer Res, 2012. **72**(5): p. 1290-300.
79. Goldberg, J.E. and K.L. Schwertfeger, *Proinflammatory cytokines in breast cancer: mechanisms of action and potential targets for therapeutics*. Curr Drug Targets, 2010. **11**(9): p. 1133-46.
80. Pires, B.R., et al., *NF-kappaB Is Involved in the Regulation of EMT Genes in Breast Cancer Cells*. PLoS One, 2017. **12**(1): p. e0169622.
81. Ukaji, T., et al., *Inhibition of MMP-2-mediated cellular invasion by NF-kappaB inhibitor DHMEQ in 3D culture of breast carcinoma MDA-MB-231 cells: A model for early phase of metastasis*. Biochem Biophys Res Commun, 2017. **485**(1): p. 76-81.
82. Chen, J., et al., *Narasin inhibits tumor metastasis and growth of ERalpha-positive breast cancer cells by inactivation of the TGF-beta/SMAD3 and IL-6/STAT3 signaling pathways*. Mol Med Rep, 2020. **22**(6): p. 5113-5124.
83. Choi, H.S., et al., *Disruption of the NF-kappaB/IL-8 Signaling Axis by Sulconazole Inhibits Human Breast Cancer Stem Cell Formation*. Cells, 2019. **8**(9).
84. Ding, L., et al., *The Roles of Cyclin-Dependent Kinases in Cell-Cycle Progression and Therapeutic Strategies in Human Breast Cancer*. Int J Mol Sci, 2020. **21**(6).
85. Deka, K. and Y. Li, *Transcriptional Regulation during Aberrant Activation of NF-kappaB Signalling in Cancer*. Cells, 2023. **12**(5).
86. Vazquez-Santillan, K., et al., *NF-kappaBeta-inducing kinase regulates stem cell phenotype in breast cancer*. Sci Rep, 2016. **6**: p. 37340.
87. Egusquiaguirre, S.P., et al., *The STAT3 Target Gene TNFRSF1A Modulates the NF-kappaB Pathway in Breast Cancer Cells*. Neoplasia, 2018. **20**(5): p. 489-498.
88. Al-Mutairi, M.S. and H.O. Habashy, *Nuclear Factor-kappaB Clinical Significance in Breast Cancer: An Immunohistochemical Study*. Med Princ Pract, 2023. **32**(1): p. 33-39.
89. Hermawan, A., et al., *Integrative Bioinformatics Study of Tangeretin Potential Targets for Preventing Metastatic Breast Cancer*. Evid Based Complement Alternat Med, 2021. **2021**: p. 2234554.
90. Kanzaki, H., et al., *Disabling the Nuclear Translocalization of RelA/NF-kappaB by a Small Molecule Inhibits Triple-Negative Breast Cancer Growth*. Breast Cancer (Dove Med Press), 2021. **13**: p. 419-430.
91. Kim, G.C., et al., *Upregulation of Ets1 expression by NFATc2 and NFKB1/RELA promotes breast cancer cell invasiveness*. Oncogenesis, 2018. **7**(11): p. 91.

92. Costa, T.D.F., et al., *PAK4 suppresses RELB to prevent senescence-like growth arrest in breast cancer*. Nat Commun, 2019. **10**(1): p. 3589.
93. Kim, S.L., H.S. Choi, and D.S. Lee, *BRD4/nuclear PD-L1/RelB circuit is involved in the stemness of breast cancer cells*. Cell Commun Signal, 2023. **21**(1): p. 315.
94. Wang, M., et al., *RelB sustains endocrine resistant malignancy: an insight of noncanonical NF-kappaB pathway into breast Cancer progression*. Cell Commun Signal, 2020. **18**(1): p. 128.
95. Romieu-Mourez, R., et al., *Mouse mammary tumor virus c-rel transgenic mice develop mammary tumors*. Mol Cell Biol, 2003. **23**(16): p. 5738-54.
96. Cogswell, P.C., et al., *Selective activation of NF-kappa B subunits in human breast cancer: potential roles for NF-kappa B2/p52 and for Bcl-3*. Oncogene, 2000. **19**(9): p. 1123-31.
97. Belguise, K. and G.E. Sonenshein, *PKCtheta promotes c-Rel-driven mammary tumorigenesis in mice and humans by repressing estrogen receptor alpha synthesis*. J Clin Invest, 2007. **117**(12): p. 4009-21.
98. Yeo, S.K., et al., *Opposing roles of Nfkb2 gene products p100 and p52 in the regulation of breast cancer stem cells*. Breast Cancer Res Treat, 2017. **162**(3): p. 465-477.
99. Dejardin, E., et al., *Highly-expressed p100/p52 (NFKB2) sequesters other NF-kappa B-related proteins in the cytoplasm of human breast cancer cells*. Oncogene, 1995. **11**(9): p. 1835-41.
100. Brindley, D.N., F.T. Lin, and G.J. Tigyi, *Role of the autotaxin-lysophosphatidate axis in cancer resistance to chemotherapy and radiotherapy*. Biochim Biophys Acta, 2013. **1831**(1): p. 74-85.
101. Gendaszewska-Darmach, E., *Lysophosphatidic acids, cyclic phosphatidic acids and autotaxin as promising targets in therapies of cancer and other diseases*. Acta Biochim Pol, 2008. **55**(2): p. 227-40.
102. Matas-Rico, E., et al., *Autotaxin impedes anti-tumor immunity by suppressing chemotaxis and tumor infiltration of CD8(+) T cells*. Cell Rep, 2021. **37**(7): p. 110013.
103. Seo, E.J., et al., *Autotaxin Regulates Maintenance of Ovarian Cancer Stem Cells through Lysophosphatidic Acid-Mediated Autocrine Mechanism*. Stem Cells, 2016. **34**(3): p. 551-64.
104. Auciello, F.R., et al., *A Stromal Lysolipid-Autotaxin Signaling Axis Promotes Pancreatic Tumor Progression*. Cancer Discov, 2019. **9**(5): p. 617-627.
105. Benesch, M.G., et al., *Autotaxin is an inflammatory mediator and therapeutic target in thyroid cancer*. Endocr Relat Cancer, 2015. **22**(4): p. 593-607.
106. Lopane, C., et al., *Implications of the lysophosphatidic acid signaling axis in liver cancer*. Biochim Biophys Acta Rev Cancer, 2017. **1868**(1): p. 277-282.
107. Wu, J.M., et al., *Autotaxin expression and its connection with the TNF-alpha-NF-kappaB axis in human hepatocellular carcinoma*. Mol Cancer, 2010. **9**: p. 71.

108. Erstad, D.J., et al., *The autotaxin-lysophosphatidic acid pathway emerges as a therapeutic target to prevent liver cancer*. Mol Cell Oncol, 2017. **4**(3): p. e1311827.
109. Kazama, S., et al., *Immunohistochemical detection of autotaxin (ATX)/lysophospholipase D (lysoPLD) in submucosal invasive colorectal cancer*. J Gastrointest Cancer, 2011. **42**(4): p. 204-11.
110. Benesch, M.G.K., X. Tang, and D.N. Brindley, *Autotaxin and Breast Cancer: Towards Overcoming Treatment Barriers and Sequelae*. Cancers (Basel), 2020. **12**(2).
111. Benesch, M.G., et al., *Regulation of autotaxin expression and secretion by lysophosphatidate and sphingosine 1-phosphate*. J Lipid Res, 2015. **56**(6): p. 1134-44.
112. Benesch, M.G.K., et al., *Coming of Age for Autotaxin and Lysophosphatidate Signaling: Clinical Applications for Preventing, Detecting and Targeting Tumor-Promoting Inflammation*. Cancers (Basel), 2018. **10**(3).
113. Benesch, M.G., et al., *Inhibition of autotaxin delays breast tumor growth and lung metastasis in mice*. FASEB J, 2014. **28**(6): p. 2655-66.
114. Hauck, T., et al., *Influence of the autotaxin-lysophosphatidic acid axis on cellular function and cytokine expression in different breast cancer cell lines*. Sci Rep, 2022. **12**(1): p. 5565.
115. Park, S.J., K.P. Lee, and D.S. Im, *Action and Signaling of Lysophosphatidylethanolamine in MDA-MB-231 Breast Cancer Cells*. Biomol Ther (Seoul), 2014. **22**(2): p. 129-35.
116. Shao, Y., et al., *Serum ATX as a novel biomarker for breast cancer*. Medicine (Baltimore), 2019. **98**(13): p. e14973.
117. Tang, X., et al., *Inhibition of Autotaxin with GLPG1690 Increases the Efficacy of Radiotherapy and Chemotherapy in a Mouse Model of Breast Cancer*. Mol Cancer Ther, 2020. **19**(1): p. 63-74.
118. Shim, S.J., et al., *The expressions of autotaxin-lysophosphatidate signaling-related proteins in metastatic breast cancer*. Int J Clin Exp Pathol, 2019. **12**(8): p. 2920-2930.
119. Meng, G., et al., *Implications for breast cancer treatment from increased autotaxin production in adipose tissue after radiotherapy*. FASEB J, 2017. **31**(9): p. 4064-4077.
120. Cha, Y.J. and J.S. Koo, *Expression of Autotaxin(-)Lysophosphatidate Signaling-Related Proteins in Breast Cancer with Adipose Stroma*. Int J Mol Sci, 2019. **20**(9).
121. Hardie, D.G., *100 years of the Warburg effect: a historical perspective*. Endocr Relat Cancer, 2022. **29**(12): p. T1-T13.
122. Apostolova, P. and E.L. Pearce, *Lactic acid and lactate: revisiting the physiological roles in the tumor microenvironment*. Trends Immunol, 2022. **43**(12): p. 969-977.

123. Rolver, M.G. and S.F. Pedersen, *Putting Warburg to work: how imaging of tumour acidosis could help predict metastatic potential in breast cancer*. Br J Cancer, 2021. **124**(1): p. 1-2.
124. Zhang, L., et al., *Glycolysis-related gene expression profiling serves as a novel prognosis risk predictor for human hepatocellular carcinoma*. Sci Rep, 2021. **11**(1): p. 18875.
125. San-Millan, I., et al., *Role of Lactate in the Regulation of Transcriptional Activity of Breast Cancer-Related Genes and Epithelial-to-Mesenchymal Transition Proteins: A Compassion of MCF7 and MDA-MB-231 Cancer Cell Lines*. bioRxiv, 2023.
126. Zhang, H.S., et al., *NRF2 facilitates breast cancer cell growth via HIF1a-mediated metabolic reprogramming*. Int J Biochem Cell Biol, 2018. **95**: p. 85-92.
127. Zhang, D., et al., *Downregulation of hexokinase 2 improves radiosensitivity of breast cancer*. Transl Cancer Res, 2019. **8**(1): p. 290-297.
128. Martinez-Reyes, I. and N.S. Chandel, *Cancer metabolism: looking forward*. Nat Rev Cancer, 2021. **21**(10): p. 669-680.
129. Liberti, M.V. and J.W. Locasale, *The Warburg Effect: How Does it Benefit Cancer Cells?* Trends Biochem Sci, 2016. **41**(3): p. 211-218.
130. Wang, Z., et al., *Machine learning-based glycolysis-associated molecular classification reveals differences in prognosis, TME, and immunotherapy for colorectal cancer patients*. Front Immunol, 2023. **14**: p. 1181985.
131. Park, S., et al., *ERRalpha-Regulated Lactate Metabolism Contributes to Resistance to Targeted Therapies in Breast Cancer*. Cell Rep, 2016. **15**(2): p. 323-35.
132. Wei, Y., et al., *Prognostic Significance of Serum Lactic Acid, Lactate Dehydrogenase, and Albumin Levels in Patients with Metastatic Colorectal Cancer*. Biomed Res Int, 2018. **2018**: p. 1804086.
133. Xian, Z.Y., et al., *Inhibition of LDHA suppresses tumor progression in prostate cancer*. Tumour Biol, 2015. **36**(10): p. 8093-100.
134. Zhao, J., et al., *LDHA promotes tumor metastasis by facilitating epithelial-mesenchymal transition in renal cell carcinoma*. Mol Med Rep, 2017. **16**(6): p. 8335-8344.
135. Ricketts, C., et al., *Germline SDHB mutations and familial renal cell carcinoma*. J Natl Cancer Inst, 2008. **100**(17): p. 1260-2.
136. Elchuri, S., et al., *CuZnSOD deficiency leads to persistent and widespread oxidative damage and hepatocarcinogenesis later in life*. Oncogene, 2005. **24**(3): p. 367-80.
137. Van Remmen, H., et al., *Life-long reduction in MnSOD activity results in increased DNA damage and higher incidence of cancer but does not accelerate aging*. Physiol Genomics, 2003. **16**(1): p. 29-37.

138. Pachnis, P., et al., *In vivo isotope tracing reveals a requirement for the electron transport chain in glucose and glutamine metabolism by tumors*. *Sci Adv*, 2022. **8**(35): p. eabn9550.
139. Lane, A.N. and T.W. Fan, *Regulation of mammalian nucleotide metabolism and biosynthesis*. *Nucleic Acids Res*, 2015. **43**(4): p. 2466-85.
140. Ying, H., et al., *Oncogenic Kras maintains pancreatic tumors through regulation of anabolic glucose metabolism*. *Cell*, 2012. **149**(3): p. 656-70.
141. Lv, Y., et al., *Nucleotide de novo synthesis increases breast cancer stemness and metastasis via cGMP-PKG-MAPK signaling pathway*. *PLoS Biol*, 2020. **18**(11): p. e3000872.
142. Ali, E.S., et al., *The mTORC1-SLC4A7 axis stimulates bicarbonate import to enhance de novo nucleotide synthesis*. *Mol Cell*, 2022. **82**(17): p. 3284-3298 e7.
143. Bouyahya, A., et al., *Targeting mTOR as a Cancer Therapy: Recent Advances in Natural Bioactive Compounds and Immunotherapy*. *Cancers (Basel)*, 2022. **14**(22).
144. Mao, X., et al., *Crosstalk between cancer-associated fibroblasts and immune cells in the tumor microenvironment: new findings and future perspectives*. *Mol Cancer*, 2021. **20**(1): p. 131.
145. Oshi, M., et al., *Adipogenesis in triple-negative breast cancer is associated with unfavorable tumor immune microenvironment and with worse survival*. *Sci Rep*, 2021. **11**(1): p. 12541.
146. Zhou, C., et al., *Cancer-associated adipocytes promote the invasion and metastasis in breast cancer through LIF/CXCLs positive feedback loop*. *Int J Biol Sci*, 2022. **18**(4): p. 1363-1380.
147. Masoud, V. and G. Pages, *Targeted therapies in breast cancer: New challenges to fight against resistance*. *World J Clin Oncol*, 2017. **8**(2): p. 120-134.
148. Oh, D.Y. and Y.J. Bang, *HER2-targeted therapies - a role beyond breast cancer*. *Nat Rev Clin Oncol*, 2020. **17**(1): p. 33-48.
149. Bianchini, G., et al., *Triple-negative breast cancer: challenges and opportunities of a heterogeneous disease*. *Nat Rev Clin Oncol*, 2016. **13**(11): p. 674-690.
150. Yang, R., et al., *Therapeutic progress and challenges for triple negative breast cancer: targeted therapy and immunotherapy*. *Mol Biomed*, 2022. **3**(1): p. 8.
151. Marra, A., et al., *Practical classification of triple-negative breast cancer: intratumoral heterogeneity, mechanisms of drug resistance, and novel therapies*. *NPJ Breast Cancer*, 2020. **6**: p. 54.
152. Nedeljkovic, M. and A. Damjanovic, *Mechanisms of Chemotherapy Resistance in Triple-Negative Breast Cancer-How We Can Rise to the Challenge*. *Cells*, 2019. **8**(9).
153. Long, J.P., X.N. Li, and F. Zhang, *Targeting metabolism in breast cancer: How far we can go?* *World J Clin Oncol*, 2016. **7**(1): p. 122-30.

154. Lv, L., et al., *Relationship between metabolic reprogramming and drug resistance in breast cancer*. *Front Oncol*, 2022. **12**: p. 942064.
155. Budczies, J., et al., *Glutamate enrichment as new diagnostic opportunity in breast cancer*. *Int J Cancer*, 2015. **136**(7): p. 1619-28.
156. Joshi, S., et al., *Exosomal Metabolic Signatures Are Associated with Differential Response to Neoadjuvant Chemotherapy in Patients with Breast Cancer*. *Int J Mol Sci*, 2022. **23**(10).
157. Tayyari, F., et al., *Metabolic profiles of triple-negative and luminal A breast cancer subtypes in African-American identify key metabolic differences*. *Oncotarget*, 2018. **9**(14): p. 11677-11690.
158. Xiao, Y., et al., *Comprehensive metabolomics expands precision medicine for triple-negative breast cancer*. *Cell Res*, 2022. **32**(5): p. 477-490.
159. Liu, Y.M., et al., *Combined Single-Cell and Spatial Transcriptomics Reveal the Metabolic Evolvement of Breast Cancer during Early Dissemination*. *Adv Sci (Weinh)*, 2023. **10**(6): p. e2205395.
160. Bai, M. and C. Sun, *Determination of Breast Metabolic Phenotypes and Their Associations With Immunotherapy and Drug-Targeted Therapy: Analysis of Single-Cell and Bulk Sequences*. *Front Cell Dev Biol*, 2022. **10**: p. 829029.
161. Roshanzamir, F., et al., *Metastatic triple negative breast cancer adapts its metabolism to destination tissues while retaining key metabolic signatures*. *Proc Natl Acad Sci U S A*, 2022. **119**(35): p. e2205456119.
162. Tielens, A.G. and J.J. Van Hellemond, *The electron transport chain in anaerobically functioning eukaryotes*. *Biochim Biophys Acta*, 1998. **1365**(1-2): p. 71-8.
163. Yang, Q., et al., *Targeting the complex I and III of mitochondrial electron transport chain as a potentially viable option in liver cancer management*. *Cell Death Discov*, 2021. **7**(1): p. 293.
164. Gaude, E. and C. Frezza, *Tissue-specific and convergent metabolic transformation of cancer correlates with metastatic potential and patient survival*. *Nat Commun*, 2016. **7**: p. 13041.
165. Kim, S.H. and S.V. Singh, *The FoxQ1 transcription factor is a novel regulator of electron transport chain complex I subunits in human breast cancer cells*. *Mol Carcinog*, 2022. **61**(3): p. 372-381.
166. Li, L.D., et al., *Down-Regulation of NDUFB9 Promotes Breast Cancer Cell Proliferation, Metastasis by Mediating Mitochondrial Metabolism*. *PLoS One*, 2015. **10**(12): p. e0144441.
167. Rosland, G.V., et al., *Epithelial to mesenchymal transition (EMT) is associated with attenuation of succinate dehydrogenase (SDH) in breast cancer through reduced expression of SDHC*. *Cancer Metab*, 2019. **7**: p. 6.

168. Perillo, B., et al., *ROS in cancer therapy: the bright side of the moon*. Exp Mol Med, 2020. **52**(2): p. 192-203.
169. Sabharwal, S.S. and P.T. Schumacker, *Mitochondrial ROS in cancer: initiators, amplifiers or an Achilles' heel?* Nat Rev Cancer, 2014. **14**(11): p. 709-21.
170. Oshi, M., et al., *Abundance of reactive oxygen species (ROS) is associated with tumor aggressiveness, immune response, and worse survival in breast cancer*. Breast Cancer Res Treat, 2022. **194**(2): p. 231-241.
171. Fox, D.B., et al., *NRF2 activation promotes the recurrence of dormant tumour cells through regulation of redox and nucleotide metabolism*. Nat Metab, 2020. **2**(4): p. 318-334.
172. Keerthiga, R., D.S. Pei, and A. Fu, *Mitochondrial dysfunction, UPR(mt) signaling, and targeted therapy in metastasis tumor*. Cell Biosci, 2021. **11**(1): p. 186.
173. Wang, S.F., L.M. Tseng, and H.C. Lee, *Role of mitochondrial alterations in human cancer progression and cancer immunity*. J Biomed Sci, 2023. **30**(1): p. 61.
174. Kenny, T.C., et al., *Mitohormesis Primes Tumor Invasion and Metastasis*. Cell Rep, 2019. **27**(8): p. 2292-2303 e6.
175. Kumar, R., et al., *A mitochondrial unfolded protein response inhibitor suppresses prostate cancer growth in mice via HSP60*. J Clin Invest, 2022. **132**(13).
176. Chen, H., et al., *SIRT3-mediated mitochondrial unfolded protein response weakens breast cancer sensitivity to cisplatin*. Genes Genomics, 2021. **43**(12): p. 1433-1444.
177. Srinivasan, S., et al., *Mitochondrial dysfunction and mitochondrial dynamics-The cancer connection*. Biochim Biophys Acta Bioenerg, 2017. **1858**(8): p. 602-614.
178. Vaughan, R.A., et al., *Tumor necrosis factor alpha induces Warburg-like metabolism and is reversed by anti-inflammatory curcumin in breast epithelial cells*. Int J Cancer, 2013. **133**(10): p. 2504-10.
179. Baryla, M., et al., *Oncometabolites-A Link between Cancer Cells and Tumor Microenvironment*. Biology (Basel), 2022. **11**(2).
180. Gomez, V., et al., *Breast cancer-associated macrophages promote tumorigenesis by suppressing succinate dehydrogenase in tumor cells*. Sci Signal, 2020. **13**(652).
181. Gray, L.R., S.C. Tompkins, and E.B. Taylor, *Regulation of pyruvate metabolism and human disease*. Cell Mol Life Sci, 2014. **71**(14): p. 2577-604.
182. Xu, H., et al., *Glycolytic potential enhanced by blockade of pyruvate influx into mitochondria sensitizes prostate cancer to detection and radiotherapy*. Cancer Biol Med, 2022. **19**(9): p. 1315-33.

183. Garcia-Bermudez, J., et al., *Aspartate is a limiting metabolite for cancer cell proliferation under hypoxia and in tumours*. *Nat Cell Biol*, 2018. **20**(7): p. 775-781.
184. Zhou, H., et al., *The Roles of TNF Signaling Pathways in Metabolism of Bone Tumors*. *Front Pharmacol*, 2022. **13**: p. 907629.
185. Singh, K., et al., *NLRX1 regulates TNF-alpha-induced mitochondria-lysosomal crosstalk to maintain the invasive and metastatic potential of breast cancer cells*. *Biochim Biophys Acta Mol Basis Dis*, 2019. **1865**(6): p. 1460-1476.
186. Devanaboyina, M., et al., *NF-kappaB Signaling in Tumor Pathways Focusing on Breast and Ovarian Cancer*. *Oncol Rev*, 2022. **16**: p. 10568.
187. Zhang, Z., et al., *Expression of nuclear factor-kappaB and its clinical significance in nonsmall-cell lung cancer*. *Ann Thorac Surg*, 2006. **82**(1): p. 243-8.
188. Wang, X., et al., *alpha-Ketoglutarate-Activated NF-kappaB Signaling Promotes Compensatory Glucose Uptake and Brain Tumor Development*. *Mol Cell*, 2019. **76**(1): p. 148-162 e7.
189. Ma, C., et al., *Knockdown of Pyruvate Kinase M Inhibits Cell Growth and Migration by Reducing NF-kB Activity in Triple-Negative Breast Cancer Cells*. *Mol Cells*, 2019. **42**(9): p. 628-636.
190. Esparza-Lopez, J., et al., *Metformin reverses mesenchymal phenotype of primary breast cancer cells through STAT3/NF-kappaB pathways*. *BMC Cancer*, 2019. **19**(1): p. 728.
191. Altea-Manzano, P., et al., *A palmitate-rich metastatic niche enables metastasis growth via p65 acetylation resulting in pro-metastatic NF-kappaB signaling*. *Nat Cancer*, 2023. **4**(3): p. 344-364.
192. Capece, D., et al., *Enhanced triacylglycerol catabolism by carboxylesterase 1 promotes aggressive colorectal carcinoma*. *J Clin Invest*, 2021. **131**(11).
193. Shteinfer-Kuzmine, A., et al., *Mitochondria and nucleus cross-talk: Signaling in metabolism, apoptosis, and differentiation, and function in cancer*. *IUBMB Life*, 2021. **73**(3): p. 492-510.
194. Mauro, C., et al., *NF-kappaB controls energy homeostasis and metabolic adaptation by upregulating mitochondrial respiration*. *Nat Cell Biol*, 2011. **13**(10): p. 1272-9.
195. Harding, O., et al., *Damaged mitochondria recruit the effector NEMO to activate NF-kappaB signaling*. *Mol Cell*, 2023. **83**(17): p. 3188-3204 e7.
196. Londhe, P., et al., *Classical NF-kappaB Metabolically Reprograms Sarcoma Cells Through Regulation of Hexokinase 2*. *Front Oncol*, 2018. **8**: p. 104.
197. Zheng, Z., et al., *Metformin activates AMPK/SIRT1/NF-kappaB pathway and induces mitochondrial dysfunction to drive caspase3/GSDME-mediated cancer cell pyroptosis*. *Cell Cycle*, 2020. **19**(10): p. 1089-1104.

198. Li, T., et al., *c-Rel Is a Myeloid Checkpoint for Cancer Immunotherapy*. Nat Cancer, 2020. **1**(5): p. 507-517.
199. Burmester, G.R., et al., *Adalimumab: long-term safety in 23 458 patients from global clinical trials in rheumatoid arthritis, juvenile idiopathic arthritis, ankylosing spondylitis, psoriatic arthritis, psoriasis and Crohn's disease*. Ann Rheum Dis, 2013. **72**(4): p. 517-24.
200. Pan, Z., et al., *Identification of gene signatures associated with ulcerative colitis and the association with immune infiltrates in colon cancer*. Front Immunol, 2023. **14**: p. 1086898.
201. Goel, N. and S. Stephens, *Certolizumab pegol*. MAbs, 2010. **2**(2): p. 137-47.
202. Zhao, S., E. Mysler, and R.J. Moots, *Etanercept for the treatment of rheumatoid arthritis*. Immunotherapy, 2018. **10**(6): p. 433-445.
203. Egberts, J.H., et al., *Anti-tumor necrosis factor therapy inhibits pancreatic tumor growth and metastasis*. Cancer Res, 2008. **68**(5): p. 1443-50.
204. Kato, H., et al., *Anti-tumor necrosis factor therapy inhibits lung metastasis in an osteosarcoma cell line*. Oncology, 2015. **88**(3): p. 139-46.
205. Kobelt, D., et al., *Pro-inflammatory TNF-alpha and IFN-gamma Promote Tumor Growth and Metastasis via Induction of MACC1*. Front Immunol, 2020. **11**: p. 980.
206. Liu, Y., et al., *Anti-TNF-alpha monoclonal antibody reverses psoriasis through dual inhibition of inflammation and angiogenesis*. Int Immunopharmacol, 2015. **28**(1): p. 731-43.
207. Brown, E.R., et al., *A clinical study assessing the tolerability and biological effects of infliximab, a TNF-alpha inhibitor, in patients with advanced cancer*. Ann Oncol, 2008. **19**(7): p. 1340-1346.
208. Paik, P.K., et al., *Phase I trial of the TNF-alpha inhibitor certolizumab plus chemotherapy in stage IV lung adenocarcinomas*. Nat Commun, 2022. **13**(1): p. 6095.
209. Shirmohammadi, E., et al., *The efficacy of etanercept as anti-breast cancer treatment is attenuated by residing macrophages*. BMC Cancer, 2020. **20**(1): p. 836.
210. Hamaguchi, T., et al., *TNF inhibitor suppresses bone metastasis in a breast cancer cell line*. Biochem Biophys Res Commun, 2011. **407**(3): p. 525-30.
211. Stine, Z.E., et al., *Targeting cancer metabolism in the era of precision oncology*. Nat Rev Drug Discov, 2022. **21**(2): p. 141-162.
212. Trajkovic-Arsic, M. and E. Subramani, *Is metabolism the magic bullet for targeted cancer therapy?* BMC Cancer, 2023. **23**(1): p. 484.
213. Faubert, B., A. Solmonson, and R.J. DeBerardinis, *Metabolic reprogramming and cancer progression*. Science, 2020. **368**(6487).
214. Sullivan, M.R., et al., *Quantification of microenvironmental metabolites in murine cancers reveals determinants of tumor nutrient availability*. Elife, 2019. **8**.

215. Balma, M., et al., *Non-conventional and Investigational PET Radiotracers for Breast Cancer: A Systematic Review*. Front Med (Lausanne), 2022. **9**: p. 881551.
216. Vogsen, M., et al., *2-<sup>18</sup>F]FDG-PET/CT is a better predictor of survival than conventional CT: a prospective study of response monitoring in metastatic breast cancer*. Sci Rep, 2023. **13**(1): p. 5552.
217. Sharma, N.S., et al., *Targeting tumor-intrinsic hexosamine biosynthesis sensitizes pancreatic cancer to anti-PD1 therapy*. J Clin Invest, 2020. **130**(1): p. 451-465.
218. Leone, R.D., et al., *Glutamine blockade induces divergent metabolic programs to overcome tumor immune evasion*. Science, 2019. **366**(6468): p. 1013-1021.
219. Owen, M.R., E. Doran, and A.P. Halestrap, *Evidence that metformin exerts its anti-diabetic effects through inhibition of complex 1 of the mitochondrial respiratory chain*. Biochem J, 2000. **348 Pt 3**(Pt 3): p. 607-14.
220. Wheaton, W.W., et al., *Metformin inhibits mitochondrial complex I of cancer cells to reduce tumorigenesis*. Elife, 2014. **3**: p. e02242.
221. Lord, S.R., et al., *Integrated Pharmacodynamic Analysis Identifies Two Metabolic Adaption Pathways to Metformin in Breast Cancer*. Cell Metab, 2018. **28**(5): p. 679-688 e4.
222. Veiga, S.R., et al., *Phenformin-Induced Mitochondrial Dysfunction Sensitizes Hepatocellular Carcinoma for Dual Inhibition of mTOR*. Clin Cancer Res, 2018. **24**(15): p. 3767-3780.
223. Rajeshkumar, N.V., et al., *Treatment of Pancreatic Cancer Patient-Derived Xenograft Panel with Metabolic Inhibitors Reveals Efficacy of Phenformin*. Clin Cancer Res, 2017. **23**(18): p. 5639-5647.
224. Fiorillo, M., et al., *Repurposing atovaquone: targeting mitochondrial complex III and OXPHOS to eradicate cancer stem cells*. Oncotarget, 2016. **7**(23): p. 34084-99.
225. Rohlenova, K., et al., *Selective Disruption of Respiratory Supercomplexes as a New Strategy to Suppress Her2(high) Breast Cancer*. Antioxid Redox Signal, 2017. **26**(2): p. 84-103.
226. Munoz, L.E., et al., *Metformin reduces PD-L1 on tumor cells and enhances the anti-tumor immune response generated by vaccine immunotherapy*. J Immunother Cancer, 2021. **9**(11).
227. Fu, Q., et al., *Anti-Tumor Necrosis Factor Receptor 2 Antibody Combined With Anti-PD-L1 Therapy Exerts Robust Antitumor Effects in Breast Cancer*. Front Cell Dev Biol, 2021. **9**: p. 720472.
228. Vasan, K., M. Werner, and N.S. Chandel, *Mitochondrial Metabolism as a Target for Cancer Therapy*. Cell Metab, 2020. **32**(3): p. 341-352.

229. Gong, C., et al., *Regulating the immunosuppressive tumor microenvironment to enhance breast cancer immunotherapy using pH-responsive hybrid membrane-coated nanoparticles*. J Nanobiotechnology, 2021. **19**(1): p. 58.
230. Greene, J., A. Segaran, and S. Lord, *Targeting OXPHOS and the electron transport chain in cancer; Molecular and therapeutic implications*. Semin Cancer Biol, 2022. **86**(Pt 2): p. 851-859.
231. Bezawork-Geleta, A., et al., *Mitochondrial Complex II: At the Crossroads*. Trends Biochem Sci, 2017. **42**(4): p. 312-325.
232. de Lonlay, P., et al., *A mutant mitochondrial respiratory chain assembly protein causes complex III deficiency in patients with tubulopathy, encephalopathy and liver failure*. Nat Genet, 2001. **29**(1): p. 57-60.
233. Mick, D.U., et al., *Coa3 and Cox14 are essential for negative feedback regulation of COX1 translation in mitochondria*. J Cell Biol, 2010. **191**(1): p. 141-54.
234. Capece, D., et al., *NF-kappaB: blending metabolism, immunity, and inflammation*. Trends Immunol, 2022. **43**(9): p. 757-775.
235. Pelicano, H., et al., *Mitochondrial dysfunction in some triple-negative breast cancer cell lines: role of mTOR pathway and therapeutic potential*. Breast Cancer Res, 2014. **16**(5): p. 434.
236. Theodossiou, T.A., et al., *Simultaneous defeat of MCF7 and MDA-MB-231 resistances by a hypericin PDT-tamoxifen hybrid therapy*. NPJ Breast Cancer, 2019. **5**: p. 13.
237. Suhane, S., D. Berel, and V.K. Ramanujan, *Biomarker signatures of mitochondrial NDUFS3 in invasive breast carcinoma*. Biochem Biophys Res Commun, 2011. **412**(4): p. 590-5.
238. Putignani, L., et al., *Alteration of expression levels of the oxidative phosphorylation system (OXPHOS) in breast cancer cell mitochondria*. Breast Cancer Res Treat, 2008. **110**(3): p. 439-52.
239. Wang, L., et al., *A novel agent exerts antitumor activity in breast cancer cells by targeting mitochondrial complex II*. Oncotarget, 2016. **7**(22): p. 32054-64.
240. Zhang, Z., T. Fang, and Y. Lv, *A novel lactate metabolism-related signature predicts prognosis and tumor immune microenvironment of breast cancer*. Front Genet, 2022. **13**: p. 934830.
241. Ali, M., R.N.K. Bamezai, and R.P. Singh, *Invasive Breast Cancer: miR-24-2 Targets Genes Associated with Survival and Sensitizes MDA-MB-231 Cells to Berberine*. OMICS, 2023. **27**(9): p. 409-420.
242. de Oliveira, R.C., S.P. Dos Reis, and G.C. Cavalcante, *Mutations in Structural Genes of the Mitochondrial Complex IV May Influence Breast Cancer*. Genes (Basel), 2023. **14**(7).

243. LeBleu, V.S., et al., *PGC-1alpha mediates mitochondrial biogenesis and oxidative phosphorylation in cancer cells to promote metastasis*. *Nat Cell Biol*, 2014. **16**(10): p. 992-1003, 1-15.
244. Viale, A., D. Corti, and G.F. Draetta, *Tumors and mitochondrial respiration: a neglected connection*. *Cancer Res*, 2015. **75**(18): p. 3685-6.
245. Xia, L., et al., *The cancer metabolic reprogramming and immune response*. *Mol Cancer*, 2021. **20**(1): p. 28.
246. Boroughs, L.K. and R.J. DeBerardinis, *Metabolic pathways promoting cancer cell survival and growth*. *Nat Cell Biol*, 2015. **17**(4): p. 351-9.
247. Santidrian, A.F., et al., *Mitochondrial complex I activity and NAD<sup>+</sup>/NADH balance regulate breast cancer progression*. *J Clin Invest*, 2013. **123**(3): p. 1068-81.
248. Guha, M., et al., *Aggressive triple negative breast cancers have unique molecular signature on the basis of mitochondrial genetic and functional defects*. *Biochim Biophys Acta Mol Basis Dis*, 2018. **1864**(4 Pt A): p. 1060-1071.
249. Putignani, L., et al., *Preliminary evidences on mitochondrial injury and impaired oxidative metabolism in breast cancer*. *Mitochondrion*, 2012. **12**(3): p. 363-9.
250. Selak, M.A., et al., *Succinate links TCA cycle dysfunction to oncogenesis by inhibiting HIF-alpha prolyl hydroxylase*. *Cancer Cell*, 2005. **7**(1): p. 77-85.
251. Weinberg, S.E., et al., *Mitochondrial complex III is essential for suppressive function of regulatory T cells*. *Nature*, 2019. **565**(7740): p. 495-499.
252. Murphy, M.P. and E.T. Chouchani, *Why succinate? Physiological regulation by a mitochondrial coenzyme Q sentinel*. *Nat Chem Biol*, 2022. **18**(5): p. 461-469.
253. Christen, S., et al., *Breast Cancer-Derived Lung Metastases Show Increased Pyruvate Carboxylase-Dependent Anaplerosis*. *Cell Rep*, 2016. **17**(3): p. 837-848.
254. Sullivan, L.B., et al., *Supporting Aspartate Biosynthesis Is an Essential Function of Respiration in Proliferating Cells*. *Cell*, 2015. **162**(3): p. 552-63.
255. Zhou, J., et al., *NO and TNF-alpha released from activated macrophages stabilize HIF-1alpha in resting tubular LLC-PK1 cells*. *Am J Physiol Cell Physiol*, 2003. **284**(2): p. C439-46.
256. Fendt, S.M., et al., *Reductive glutamine metabolism is a function of the alpha-ketoglutarate to citrate ratio in cells*. *Nat Commun*, 2013. **4**: p. 2236.
257. Owens, K.M., et al., *Impaired OXPHOS complex III in breast cancer*. *PLoS One*, 2011. **6**(8): p. e23846.

258. Grashei, M., et al., *Conversion of Hyperpolarized [1-(13)C]Pyruvate in Breast Cancer Cells Depends on Their Malignancy, Metabolic Program and Nutrient Microenvironment*. *Cancers (Basel)*, 2022. **14**(7).
259. Padilla, J. and J. Lee, *A Novel Therapeutic Target, BACH1, Regulates Cancer Metabolism*. *Cells*, 2021. **10**(3).
260. Jha, P., X. Wang, and J. Auwerx, *Analysis of Mitochondrial Respiratory Chain Supercomplexes Using Blue Native Polyacrylamide Gel Electrophoresis (BN-PAGE)*. *Curr Protoc Mouse Biol*, 2016. **6**(1): p. 1-14.
261. Shinde, A., et al., *TNF-alpha differentially modulates subunit levels of respiratory electron transport complexes of ER/PR +ve/-ve breast cancer cells to regulate mitochondrial complex activity and tumorigenic potential*. *Cancer Metab*, 2021. **9**(1): p. 19.
262. Varkaris, A., et al., *Circulating inflammation signature predicts overall survival and relapse-free survival in metastatic colorectal cancer*. *Br J Cancer*, 2019. **120**(3): p. 340-345.
263. Morein, D., et al., *Continuous Inflammatory Stimulation Leads via Metabolic Plasticity to a Prometastatic Phenotype in Triple-Negative Breast Cancer Cells*. *Cells*, 2021. **10**(6).
264. Zhao, M., et al., *NF-kappaB subunits direct kinetically distinct transcriptional cascades in antigen receptor-activated B cells*. *Nat Immunol*, 2023. **24**(9): p. 1552-1564.
265. Jeong, Y.J., H.K. Oh, and H.R. Choi, *Methylation of the RELA Gene is Associated with Expression of NF-kappaB1 in Response to TNF-alpha in Breast Cancer*. *Molecules*, 2019. **24**(15).
266. Ren, C., et al., *Ubiquitination of NF-kappaB p65 by FBXW2 suppresses breast cancer stemness, tumorigenesis, and paclitaxel resistance*. *Cell Death Differ*, 2022. **29**(2): p. 381-392.
267. Li, M., et al., *miR-7 Reduces Breast Cancer Stem Cell Metastasis via Inhibiting RELA to Decrease ESAM Expression*. *Mol Ther Oncolytics*, 2020. **18**: p. 70-82.
268. Luo, J.L., et al., *Inhibition of NF-kappaB in cancer cells converts inflammation- induced tumor growth mediated by TNFalpha to TRAIL-mediated tumor regression*. *Cancer Cell*, 2004. **6**(3): p. 297-305.
269. Piao, H.L., et al., *alpha-catenin acts as a tumour suppressor in E-cadherin-negative basal-like breast cancer by inhibiting NF-kappaB signalling*. *Nat Cell Biol*, 2014. **16**(3): p. 245-54.
270. Invernizzi, F., et al., *A homozygous mutation in LYRM7/MZM1L associated with early onset encephalopathy, lactic acidosis, and severe reduction of mitochondrial complex III activity*. *Hum Mutat*, 2013. **34**(12): p. 1619-22.
271. Dallabona, C., et al., *LYRM7 mutations cause a multifocal cavitating leukoencephalopathy with distinct MRI appearance*. *Brain*, 2016. **139**(Pt 3): p. 782-94.

272. Wit, N., et al., *A histone deacetylase 3 and mitochondrial complex I axis regulates toxic formaldehyde production*. *Sci Adv*, 2023. **9**(20): p. eadg2235.
273. Prajapati, P., et al., *TRIM32 regulates mitochondrial mediated ROS levels and sensitizes the oxidative stress induced cell death*. *Cell Signal*, 2020. **76**: p. 109777.
274. Eftekhari, R., et al., *Study of the tumor microenvironment during breast cancer progression*. *Cancer Cell Int*, 2017. **17**: p. 123.
275. Jiang, X. and D.J. Shapiro, *The immune system and inflammation in breast cancer*. *Mol Cell Endocrinol*, 2014. **382**(1): p. 673-682.
276. Cruceriu, D., et al., *The dual role of tumor necrosis factor-alpha (TNF-alpha) in breast cancer: molecular insights and therapeutic approaches*. *Cell Oncol (Dordr)*, 2020. **43**(1): p. 1-18.
277. Laha, D., et al., *The Role of Tumor Necrosis Factor in Manipulating the Immunological Response of Tumor Microenvironment*. *Front Immunol*, 2021. **12**: p. 656908.
278. Mercogliano, M.F., et al., *Tumor Necrosis Factor alpha Blockade: An Opportunity to Tackle Breast Cancer*. *Front Oncol*, 2020. **10**: p. 584.
279. Tripsianis, G., et al., *Coexpression of IL-6 and TNF-alpha: prognostic significance on breast cancer outcome*. *Neoplasma*, 2014. **61**(2): p. 205-12.
280. Liang, Q., et al., *Effect of Ki-67 Expression Levels and Histological Grade on Breast Cancer Early Relapse in Patients with Different Immunohistochemical-based Subtypes*. *Sci Rep*, 2020. **10**(1): p. 7648.
281. Winter, M., et al., *Vimentin Promotes the Aggressiveness of Triple Negative Breast Cancer Cells Surviving Chemotherapeutic Treatment*. *Cells*, 2021. **10**(6).
282. Zhao, H., et al., *Inflammation and tumor progression: signaling pathways and targeted intervention*. *Signal Transduct Target Ther*, 2021. **6**(1): p. 263.
283. Raza, S., et al., *Multifaceted role of chemokines in solid tumors: From biology to therapy*. *Semin Cancer Biol*, 2022. **86**(Pt 3): p. 1105-1121.
284. Chatterjee, S., et al., *Paracrine Crosstalk between Fibroblasts and ER(+) Breast Cancer Cells Creates an IL1beta-Enriched Niche that Promotes Tumor Growth*. *iScience*, 2019. **19**: p. 388-401.
285. Ricciardi, M., et al., *Epithelial-to-mesenchymal transition (EMT) induced by inflammatory priming elicits mesenchymal stromal cell-like immune-modulatory properties in cancer cells*. *Br J Cancer*, 2015. **112**(6): p. 1067-75.
286. Li, H.H., et al., *Tumour Necrosis Factor-alpha Gene Polymorphism Is Associated with Metastasis in Patients with Triple Negative Breast Cancer*. *Sci Rep*, 2015. **5**: p. 10244.

287. Kim, M.H., et al., *Identification for antitumor effects of tramadol in a xenograft mouse model using orthotopic breast cancer cells*. Sci Rep, 2021. **11**(1): p. 22113.
288. Pileczki, V., et al., *TNF-alpha gene knockout in triple negative breast cancer cell line induces apoptosis*. Int J Mol Sci, 2012. **14**(1): p. 411-20.
289. Little, A.C., et al., *IL-4/IL-13 Stimulated Macrophages Enhance Breast Cancer Invasion Via Rho-GTPase Regulation of Synergistic VEGF/CCL-18 Signaling*. Front Oncol, 2019. **9**: p. 456.
290. Dutta, P., et al., *MCP-1 is overexpressed in triple-negative breast cancers and drives cancer invasiveness and metastasis*. Breast Cancer Res Treat, 2018. **170**(3): p. 477-486.
291. Zhuang, X., et al., *Interferon-gamma inhibits aldehyde dehydrogenasebright cancer stem cells in the 4T1 mouse model of breast cancer*. Chin Med J (Engl), 2021. **135**(2): p. 194-204.
292. Heckel, M.C., et al., *Human breast tumor cells express IL-10 and IL-12p40 transcripts and proteins, but do not produce IL-12p70*. Cell Immunol, 2011. **266**(2): p. 143-53.
293. Stender, J.D., et al., *Structural and Molecular Mechanisms of Cytokine-Mediated Endocrine Resistance in Human Breast Cancer Cells*. Mol Cell, 2017. **65**(6): p. 1122-1135 e5.
294. Aggarwal, B.B., *Nuclear factor-kappaB: the enemy within*. Cancer Cell, 2004. **6**(3): p. 203-8.
295. Ben-Neriah, Y. and M. Karin, *Inflammation meets cancer, with NF-kappaB as the matchmaker*. Nat Immunol, 2011. **12**(8): p. 715-23.
296. Courtois, G. and T.D. Gilmore, *Mutations in the NF-kappaB signaling pathway: implications for human disease*. Oncogene, 2006. **25**(51): p. 6831-43.
297. Grivennikov, S. and M. Karin, *Autocrine IL-6 signaling: a key event in tumorigenesis?* Cancer Cell, 2008. **13**(1): p. 7-9.
298. Hodge, D.R., E.M. Hurt, and W.L. Farrar, *The role of IL-6 and STAT3 in inflammation and cancer*. Eur J Cancer, 2005. **41**(16): p. 2502-12.
299. Yang, H., et al., *Engineered bispecific antibodies targeting the interleukin-6 and -8 receptors potently inhibit cancer cell migration and tumor metastasis*. Mol Ther, 2022. **30**(11): p. 3430-3449.
300. Hemmings, D.G. and D.N. Brindley, *Signalling by lysophosphatidate and its health implications*. Essays Biochem, 2020. **64**(3): p. 547-563.
301. David, M., et al., *Cancer cell expression of autotaxin controls bone metastasis formation in mouse through lysophosphatidic acid-dependent activation of osteoclasts*. PLoS One, 2010. **5**(3): p. e9741.
302. Deken, M.A., et al., *Characterization and translational development of IOA-289, a novel autotaxin inhibitor for the treatment of solid tumors*. Immunooncol Technol, 2023. **18**: p. 100384.

## Chapter 6

303. Meng, G., et al., *Dexamethasone decreases the autotaxin-lysophosphatidate-inflammatory axis in adipose tissue: implications for the metabolic syndrome and breast cancer*. *FASEB J*, 2019. **33**(2): p. 1899-1910.
304. Meng, G., et al., *Repeated Fractions of X-Radiation to the Breast Fat Pads of Mice Augment Activation of the Autotaxin-Lysophosphatidate-Inflammatory Cycle*. *Cancers (Basel)*, 2019. **11**(11).