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Chatterjee et al., Dysregulation of cell polarity proteins synergize with oncogenes or the microenvironment to induce invasive behavior in epithelial cells. *PLoS One*. 2012;7(4):e34343.

Insiketal et al., A New Model for the Presentation of Tumor-Associated Antigens and the Quest for an Anticancer Vaccine: A Solution to the Synthesis Challenge via RCM. *J Am Chem Soc*. 2009 October 14; 131(40): 14337–14344.

Choudhury et al., Molecular profiling of human mammary gland links breast cancer risk to a p27(+) cell population with progenitor characteristics. *Cell Stem Cell*. 2013 Jul 3;13(1):117-30.

Maruyama et al., Epigenetic regulation of cell type-specific expression patterns in the human mammary epithelium. *PLoS Genet*. 2011 Apr;7(4):e1001369.

Wu et al., Gene expression profiling of human breast tissue samples using SAGE-Seq. *Genome Res*. 2010 Dec;20(12):1730-9.

Irie et al., PTK6 regulates IGF-1-induced anchorage-independent survival. *PLoS One*. 2010 Jul 23;5(7):e11729.

Bric et al., Functional identification of tumor-suppressor genes through an in vivo RNA interference screen in a mouse lymphoma model. *Cancer Cell*. 2009 Oct 6;16(4):324-35.

Kutuk O, Letai A. Displacement of Bim by Bmf and Puma rather than increase in Bim level mediates paclitaxel-induced apoptosis in breast cancer cells. *Cell Death Differ*. 2010 Oct;17(10):1624-35.

Bailey et al., Estrogen receptor prevents p53-dependent apoptosis in breast cancer. *Proc Natl Acad Sci U S A*. 2012 Oct 30;109(44):18060-5.

Zheng et al., Prolyl hydroxylation by EglN2 destabilizes FOXO3a by blocking its interaction with the USP9x deubiquitinase. *Genes Dev*. 2014 Jul 1;28(13):1429-44.

Zhang et al., Control of Cyclin D1 and breast tumorigenesis by the EglN2 prolyl hydroxylase. (2009). *Cancer Cell*, Nov 3;16(5):413-24.

Zhou et al., In vivo discovery of immunotherapy targets in the tumour microenvironment. *Nature*. 2014 Feb 6;506(7486):52-7.

Kochupurakkal BS, Iglehart JD. Nourseothricin N-acetyl transferase: a positive selection marker for mammalian cells. *PLoS One*. 2013 Jul 4;8(7):e68509.

Li et al., The amplified cancer gene LAPTM4B promotes tumor growth and tolerance to stress through the induction of autophagy. *Autophagy*. 2012 Feb 1;8(2):273-4.

Walczak et al., Building biologics by chemical synthesis: practical preparation of di- and triantennary N-linked glycoconjugates. *J Am Chem Soc*. 2013 Mar 27;135(12):4700-3.

Brastianos et al., Exome sequencing identifies BRAF mutations in papillary craniopharyngiomas. *Nat Genet*. 2014 Feb;46(2):161-5.

Vora et al., CDK 4/6 inhibitors sensitize PIK3CA mutant breast cancer to PI3K inhibitors. *Cancer Cell*. 2014 Jul 14;26(1):136-49.

Anczuków et al., SRSF1-Regulated Alternative Splicing in Breast Cancer *Mol Cell*. 2015 Oct 1;60(1):105-17.

Javier et al., AKT signaling in ERBB2-amplified breast cancer. *Pharmacol Ther*. 2016 Feb;158:63-70. doi: 10.1016/j.pharmthera.2015.11.013. Epub 2015 Dec 2.

Pavlova and Thompson, The Emerging Hallmarks of Cancer Metabolism. *Cell Metab*. 2016 Jan 12;23(1):27-47. doi: 10.1016/j.cmet.2015.12.006.

Toska and Baselga, Pharmacology in the Era of Targeted Therapies: The Case of PI3K Inhibitors. *Clin Cancer Res*. 2016 Mar 8. pii: clincanres.0038.2016. [Epub ahead of print]

Rossetti et al., Harnessing 3D models of mammary epithelial morphogenesis: An off the beaten path approach to identify candidate biomarkers of early stage breast cancer. *Cancer Lett*. 2016 Oct 1;380(2):375-83. doi: 10.1016/j.canlet.2016.07.003.

Rossetti et al., Mammary epithelial morphogenesis and early breast cancer. Evidence of involvement of basal components of the RNA Polymerase I transcription machinery. *Cell Cycle*. 2016 Sep 16;15(18):2515-26. doi: 10.1080/15384101.2016.1215385.

Rossetti et al., Tracing anti-cancer and cancer-promoting actions of all-trans retinoic acid in breast cancer to a RAR α epigenetic mechanism of mammary epithelial cell fate. *Oncotarget*. 2016 Dec 27;7(52):87064-87080. doi: 10.18632/oncotarget.13500.

Carmona et al., AKT signaling in ERBB2-amplified breast cancer. *Pharmacol Ther*. 2016 Feb;158:63-70. doi: 10.1016/j.pharmthera.2015.11.013. Epub 2015 Dec 2.

Page et al., Deep Sequencing of T-cell Receptor DNA as a Biomarker of Clonally Expanded TILs in Breast Cancer after Immunotherapy. *Cancer Immunol Res*. 2016 Oct;4(10):835-844. Epub 2016 Sep 1.

Pavlova and Thompson, The Emerging Hallmarks of Cancer Metabolism. *Cell Metab*. 2016 Jan 12;23(1):27-47. doi: 10.1016/j.cmet.2015.12.006.

Toska and Baselga, Pharmacology in the Era of Targeted Therapies: The Case of PI3K Inhibitors. *Clin Cancer Res*. 2016 May 1;22(9):2099-101. doi: 10.1158/1078-0432.CCR-16-0038. Epub 2016 Mar 8.

Ilic et al., PIK3CA mutant tumors depend on oxoglutarate dehydrogenase. *Proc Natl Acad Sci U S A*. 2017 Apr 25;114(17):E3434-E3443. doi: 10.1073/pnas.1617922114. Epub 2017 Apr 10.

Zhang J, Pavlova and Thompson, Cancer cell metabolism: the essential role of the nonessential amino acid, glutamine. *EMBO J*. 2017 May 15;36(10):1302-1315. doi: 10.15252/embj.201696151. Epub 2017 Apr 18.

Toska et al., PI3K pathway regulates ER-dependent transcription in breast cancer through the epigenetic regulator KMT2D. *Science*. 2017 Mar 24;355(6331):1324-1330. doi: 10.1126/science.aah6893.

Hofstatter et al., Increased epigenetic age in normal breast tissue from luminal breast cancer patients. *Clin Epigenetics*. 2018 Aug 29;10(1):112. doi: 10.1186/s13148-018-0534-8.

Kale, J, **Kutuk**, O et al., Phosphorylation switches Bax from promoting to inhibiting apoptosis thereby increasing drug resistance. *EMBO Rep*. 2018 Sep;19(9). pii: e45235. doi: 10.15252/embr.201745235. Epub 2018 Jul 9

Carlson, P, **Dasgupta** A et al., Targeting the perivascular niche sensitizes disseminated tumour cells to chemotherapy. *Nat Cell Biol*. 2019 Feb;21(2):238-250. doi: 10.1038/s41556-018-0267-0. Epub 2019 Jan 21

Li J, et al. An alternative splicing switch in FLNB promotes the mesenchymal cell state in human breast cancer. *Elife*. 2018 Jul 30;7. pii: e37184. doi: 10.7554/eLife.37184.

Zhang J, **Pavlova** NN, Thompson CB. Cancer cell metabolism: the essential role of the nonessential amino acid, glutamine. *EMBO J*. 2017 May 15;36(10):1302-1315. doi: 10.15252/embj.201696151. Epub 2017 Apr 18. Review.

Robinett RA, Guan N, Lux A, Biburger M, Nimmerjahn F, **Meyer AS**. Dissecting FcγR Regulation through a Multivalent Binding Model. *Cell Syst*. 2018 Jul 25;7(1):41-48.e5. doi: 10.1016/j.cels.2018.05.018. Epub 2018 Jun 27.

Albregues J, et al., Neutrophil extracellular traps produced during inflammation awaken dormant cancer cells in mice. *Science*. 2018 Sep 28;361(6409). pii: eaao4227. doi: 10.1126/science.aao4227.

Karaayvaz M, Cristea S, Gillespie SM, Patel AP, Mylvaganam R, Luo CC, Specht MC, Bernstein BE, Michor F, Ellisen LW. Unravelling subclonal heterogeneity and aggressive disease states in TNBC through single-cell RNA-seq. *Nat Commun*. 2018 09 04; 9(1):3588.

Waks, AG, **Stover**, DG et al., The Immune Microenvironment in Hormone Receptor-Positive Breast Cancer Before and After Preoperative Chemotherapy *Clin Cancer Res*. 2019 Aug 1;25(15):4644-4655. doi: 10.1158/1078-0432.CCR-19-0173. Epub 2019 May 6.

Spring, L et al., Phase 1b clinical trial of ado-trastuzumab emtansine and ribociclib for HER2-positive metastatic breast cancer *NPJ Breast Cancer*. 2021; 7: 103. Published online 2021 Aug 4. doi: 10.1038/s41523-021-00311-y

Siang-Boon Koh et al., and **Spring, L**. Systematic tissue collection during clinical breast biopsy is feasible, safe and enables high-content translational analyses *NPJ Precis Oncol*. 2021 Sep 21;5(1):85. doi: 10.1038/s41698-021-00224-w.

Spring LM, Nakajima E, Hutchinson J, Viscosi E, Blouin G, Weekes C, Rugo H, Moy B, Bardia A. Sacituzumab Govitecan for Metastatic Triple-Negative Breast Cancer: Clinical Overview and Management of Potential Toxicities. *Oncologist*. 2021 Oct;26(10):827-834. doi: 10.1002/onco.13878. Epub 2021 Jul 10.

Daniels VW, Zoeller JJ, van Gastel N, McQueeney KE, Parvin S, Potter DS, Fell GG, Ferreira VG, Yilma B, Gupta R, Spetz J, Bhola PD, Endress JE, Harris IS, Carrilho E, Sarosiek KA, Scadden DT, Brugge JS, Letai A. Metabolic perturbations sensitize triple-negative breast cancers to apoptosis induced by BH3 mimetics. *Sci Signal*. 2021 Jun 8;14(686):eabc7405. doi: 10.1126/scisignal.abc7405.

Remsik J, Wilcox JA, Babady NE, McMillen TA, Vachha BA, Halpern NA, Dhawan V, Rosenblum M, Iacobuzio-Donahue CA, Avila EK, Santomasso B, Boire A. Inflammatory Leptomeningeal Cytokines Mediate COVID-19 Neurologic Symptoms in Patients. *Cancer Cell*. 2021 Feb 8;39(2):276-283.e3. doi: 10.1016/j.ccell.2021.01.007. Epub 2021 Jan 16. PMID: 33508216

Remsik J, Saadeh F, Tong X, Li MJ, Snyder J, Bale T, Wu J, Derderian C, Guber D, Chi Y, Murali R, Boire A. J Characterization, isolation, and in vitro culture of leptomeningeal fibroblasts. *Neuroimmunol.* 2021 Dec 15;361:577727. doi: 10.1016/j.jneuroim.2021.577727. Epub 2021 Sep 29. PMID: 34688068

Mehta AK, Cheney EM, Hartl CA, Pantelidou C, Oliwa M, Castrillon JA, Lin JR, Hurst KE, de Oliveira Taveira M, Johnson NT, Oldham WM, Kalocsay M, Berberich MJ, Boswell SA, Kothari A, Johnson S, Dillon DA, Lipschitz M, Rodig S, Santagata S, Garber JE, Tung N, Yélamos J, Thaxton JE, Mittendorf EA, Sorger PK, Shapiro GI, **Guerriero JL**. Targeting immunosuppressive macrophages overcomes PARP inhibitor resistance in BRCA1-associated triple-negative breast cancer. *Nat Cancer.* 2021 Jan;2(1):66-82. doi: 10.1038/s43018-020-00148-7. Epub 2020 Dec 14. PMID: 33738458

Gray GK, Li CM, **Rosenbluth JM**, Selfors LM, Girnius N, Lin JR, Schackmann RCJ, Goh WL, Moore K, Shapiro HK, Mei S, D'Andrea K, Nathanson KL, Sorger PK, Santagata S, Regev A, Garber JE, Dillon DA, Brugge JS. A human breast atlas integrating single-cell proteomics and transcriptomics. *Dev Cell.* 2022 Jun 6;57(11):1400-1420.e7. doi: 10.1016/j.devcel.2022.05.003. Epub 2022 May 25. PMID: 35617956

Micalizzi DS, Che D, Nicholson BT, Edd JF, Desai N, Lang ER, Toner M, Maheswaran S, Ting DT, Haber DA. Targeting breast and pancreatic cancer metastasis using a dual-cadherin antibody. *Proc Natl Acad Sci U S A.* 2022 Oct 25;119(43):e2209563119. doi: 10.1073/pnas.2209563119. Epub 2022 Oct 18. PMID: 36256815

Brett JO, Dubash TD, Johnson GN, Niemierko A, Mariotti V, Kim LSL, Xi J, Pandey A, Dunne S, Nasrazadani A, Lloyd MR, Kambadakone A, Spring LM, **Micalizzi DS**, Onozato ML, Che D, Nayar U, Brufsky A, Kalinsky K, Ma CX, O'Shaughnessy J, Han HS, Iafrate AJ, Ryan LY, Juric D, Moy B, Ellisen LW, Maheswaran S, Wagle N, Haber DA, Bardia A, Wander SA. A Gene Panel Associated With Abemaciclib Utility in ESR1-Mutated Breast Cancer After Prior Cyclin-Dependent Kinase 4/6-Inhibitor Progression. *JCO Precis Oncol.* 2023 May;7:e2200532. doi: 10.1200/PO.22.00532. PMID: 37141550

Abelman RO, **Wu B**, Spring LM, Ellisen LW, Bardia A. Mechanisms of Resistance to Antibody-Drug Conjugates. *Cancers (Basel).* 2023 Feb 17;15(4):1278. doi: 10.3390/cancers15041278.

Lipsyc-Sharf M, Partridge AH. Fertility and Sexual Health in Young Women with Early-Stage Breast Cancer. *Surg Oncol Clin N Am.* 2023 Oct;32(4):747-759. doi: 10.1016/j.soc.2023.05.012. Epub 2023 Jun 15. PMID: 37714641

Barufaldi B, da Nobrega YNG, Carvalhal G, Teixeira JPV, Silva Filho TM, do Rego TG, Malheiros Y, Acciavatti RJ, Maidment ADA. Multiclass Segmentation of Breast Tissue and Suspicious Findings: A Simulation-Based Study for the Development of Self-Steering Tomosynthesis. *Tomography.* 2023 Jun 10;9(3):1120-1132. doi: 10.3390/tomography9030092. PMID: 37368544

Barufaldi B, Gomes J, Rego TGD, Malheiros Y, Filho TMS, Borges LR, Acciavatti RJ, Surti S, Maidment ADA. Impact of Tomosynthesis Acquisition on 3D Segmentations of Breast Outline and Adipose/Dense Tissue with AI: A Simulation-Based Study. *Tomography.* 2023 Jul 3;9(4):1303-1314. doi: 10.3390/tomography9040103. PMID: 37489471

Acciavatti RJ, Choi CJ, Vent TL, **Barufaldi B**, Cohen EA, Wileyto EP, Maidment ADA. Non-Isocentric Geometry for Next-Generation Tomosynthesis With Super-Resolution. *IEEE Trans Med Imaging.* 2024 Jan;43(1):377-391. doi: 10.1109/TMI.2023.3307004. Epub 2024 Jan 2. PMID: 37603482