

Bibliography

1. Peer-reviewed journal articles

1. Tessarollo NG, Guimarães IDS, Dos Santos DZ, Henriques TB, Lyra-Junior PCM, Carlos de Souza J, Pimenta TM, Martins BDS, Butzene SMS, Padilha JMS, Maciel LLF, Almeida JCA, Silva IV, Rangel LBA. Phosphodiesterase 7: a potential novel therapeutic target in ovarian cancer. *Front Pharmacol.* 2025 Jun 4;16:1566330. doi:10.3389/fphar.2025.1566330.
2. Huang H, Hu C, Na J, Hart SN, Gnanaolivu RD, Abozaid M, Rao T, Tecleab YA, CARRIERS Consortium, Pesaran T, Lyra PCM, Karam R, Yadav S, Nathanson KL, Domchek SM, de la Hoya M, Robson M, Mehine M, Bandlamudi C, Mandelker D, Monteiro ANA, Iversen ES, Boddicker N, Chen W, Richardson ME, Couch FJ. Functional evaluation and clinical classification of BRCA2 variants. *Nature.* 2025 Jan. doi:10.1038/s41586-024-08388-8.
3. Nepomuceno TC#, Lyra P#, Zhu J, Yi F, Martin RH, Lupu D, Peterson L, Peres LC, Berry A, Iversen ES, Couch FJ, Mo Q, Monteiro AN. Assessment of BRCA1 and BRCA2 germline variant data from patients with breast cancer in a real-world data registry. *JCO Clin Cancer Inform.* 2024 May. doi:10.1200/CCI.23.00251.
4. Hu C, Huang H, Na J, Lumby C, Abozaid M, Holdren MA, Rao TJ, Karam R, Pesaran T, Weyandt JD, Csuy CM, Seelaus CA, Young CC, Fulk K, Heidari Z, Morais Lyra PC Jr, Couch RE, Persons B, Polley EC, Gnanaolivu RD, Boddicker NJ, Monteiro ANA, Yadav S, Domchek SM, Richardson ME, Couch FJ. Functional analysis and clinical classification of 462 germline BRCA2 missense variants affecting the DNA binding domain. *Am J Hum Genet.* 2024 Mar. doi:10.1016/j.ajhg.2024.02.002.
5. Huang H, Hu C, Na J, Hart SN, Gnanaolivu RD, Abozaid M, Rao T, Tecleab YA, Pesaran T, Lyra PCM, Karam R, Yadav S, Domchek SM, de la Hoya M, Robson M, Mehine M, Bandlamudi C, Mandelker D, Monteiro ANA, Boddicker N, Chen W, Richardson ME, Couch FJ. Saturation genome editing-based functional evaluation and clinical classification of BRCA2 single nucleotide variants. *bioRxiv* [Preprint]. 2023 Dec. doi:10.1101/2023.12.14.571597.
6. Zipinotti Dos Santos D, de Souza JC, Pimenta TM, Martins BS, Ribeiro Junior RS, Butzene SMS, Tessarollo NG, Lyra-Jr PC, et al. The impact of lipid metabolism on breast cancer: a review about its role in tumorigenesis and immune escape. *Cell Commun Signal.* 2023 Jun. doi:10.1186/s12964-023-01178-1.
7. Fasching PA, Liu D, Scully S, Ingle JN, Lyra-Jr PC, Rack B, Hein A, Ekici AB, Reis A, Schneeweiss A, Tesch H, Fehm TN, Heinrich G, Beckmann MW, Ruebner M, Huebner H, Lambrechts D, Madden E, Shen J, Room J, Doheny K, Jenkins GD, Carlson EE, Li L, Fridley BL, et al. Identification of two genetic loci associated with leukopenia after chemotherapy in breast cancer patients. *Clin Cancer Res.* 2022 Aug. doi:10.1158/1078-0432.CCR-20-4774.
8. Mendoza-Fandiño G, Lyra-Jr PC, Nepomuceno TC, Harro CM, Woods NT, Li X, Rangel LB, Carvalho MA, Couch FJ, Monteiro ANA. Two distinct mechanisms underlie estrogen-receptor-negative breast cancer susceptibility at the 2p23.2 locus. *Eur J Hum Genet.* 2021 Nov. doi:10.1038/s41431-021-01005-6.

9. Lyra-Jr PC, Nepomuceno TC, de Souza MLM, Machado GF, Veloso MF, Henriques TB, dos Santos DZ, Ribeiro IG, Ribeiro-Jr RSR, Rangel LBA, Richardson M, Iversen ES, Goldgar D, Couch FJ, Carvalho MA, Monteiro ANA. Integration of functional assay data results provides strong evidence for classification of hundreds of BRCA1 variants of uncertain significance. *Genet Med.* 2021 Oct. doi:10.1038/s41436-020-00991-0.
 10. Henriques TB, dos Santos DZ, Guimaraes IS, Tessarollo NG, Lyra-Jr PC, Mesquita P, Pádua D, Amaral AL, Cavadas B, Pereira L, Silva IV, Almeida RMSG, Rangel LBA. Inhibition of CXCR2 plays a pivotal role in re-sensitizing ovarian cancer to cisplatin treatment. *Aging.* 2021 May. doi:10.18632/aging.203074.
 11. Lyra-Jr PC, Rangel LBA, Monteiro ANA. Functional landscape of common variants associated with susceptibility to epithelial ovarian cancer. *Curr Epidemiol Rep.* 2020 Jan. doi:10.1007/s40471-020-00227-4.
 12. Gusev A, Lawrenson K, Lin X, Lyra-Jr PC, Kar S, Vavra KC, Segato F, Fonseca MAS, Lee JM, Pejovic T, Liu G, Ovarian Cancer Association Consortium, Karlan BY, Freedman ML, Noushmehr H, Monteiro ANA, Pharoah PDP, Pasaniuc B, Gayther SA. A transcriptome-wide association study of high-grade serous epithelial ovarian cancer identifies new susceptibility genes and splice variants. *Nat Genet.* 2019 May. doi:10.1038/s41588-019-0395-x.
 13. Buckley MA, Woods NT, Tyrer JP, Mendoza-Fandiño G, Lawrenson K, Hazelett DJ, Najafabadi HS, Gjyshi A, Carvalho RS, Lyra-Jr PC, Coetzee SG, Shen HC, Yang AW, Earp MA, Yoder SJ, Risch H, Chenevix-Trench G, Ramus SJ, Phelan CM, Coetzee GA, Noushmehr H, Hughes TR, Sellers TA, Goode EL, Pharoah PDP, Gayther SA, Monteiro ANA. Functional analysis and fine mapping of the 9p22.2 ovarian cancer susceptibility locus. *Cancer Res.* 2019 Feb. doi:10.1158/0008-5472.CAN-17-3864.
 14. Phelan CM, Kuchenbaecker KB, Tyrer JP, Kar SP, Lawrenson K, Winham SJ, Dennis J, Pirie A, Riggan MJ, Chornokur G, Earp MA, Lyra-Jr PC, et al. Identification of 12 new susceptibility loci for different histotypes of epithelial ovarian cancer. *Nat Genet.* 2017 May. doi:10.1038/ng.3826.
-

2. Book chapters

1. Guimaraes IS, Dos Santos DZ, Lyra-Junior PCM, Silva IV, Rangel LBA. The therapeutic potential of metformin in breast and ovarian cancer. In: [Book chapter]. Nova Publishers; 2019.
2. Lyra-Junior PCM, Tessarollo N, Guimaraes I, Henriques TB, Dos Santos DZ, Souza MLM, Marques VH, De Oliveira LFRL, Vaz K, Silva IV, Rangel LBA, Branco AT. GWAS in breast cancer. 1st ed. Intech; 2017. p. 99–118.
3. Guimaraes IS, Tessarollo NG, Lyra-Junior PCM, dos Santos DZ, Zampier RC, de Oliveira LFRL, Siqueira KV, Silva IV, Rangel LBA. Targeting the PI3K/AKT/mTOR pathway in cancer cells. 1st ed. InTech; 2015.
4. Ladislau T, Klesia D, Renata S, Guimaraes IS, Sarah CM, Paulo C, Iuri BA, Leticia L, Alice. Target cancer therapy. 2nd ed. InTech; 2013. v.1, p.37–63.

5. Santos Guimaraes ID, Dalmaschio R, Herlinger AL, Pirola K, Ladislau T, Valado IC, Lyra-Junior PCM, Fernandes Teixeira S, Modesto G, dos Santos DZ, Rangel K, Azevedo Rangel LB. Conventional cancer treatment. 1st ed. InTech; 2013. v.1, p.3–35.
 6. Madeira K, Guimaraes I, Daltoe R, Herlinger A, Ladislau T, Valadao I, Lyra-Junior PCM, Teixeira S, Silva IV, Rangel LBA. Triple-negative breast cancer: clinicopathological characteristics, challenges, and therapy. 1st ed. Nova Science Publishers, Inc.; 2012. v.1, p.89–113.
-

3. Edited book

1. Rangel LBA, Kirubamani H, Silva IV, Lyra-Junior PCM, editors. *Hormone Therapy and Replacement in Cancer and Aging-related Diseases*. IntechOpen; 2020.
-

4. Oral presentations at scientific meetings

1. Lyra P. The Galaxy-ML2 tool suite: using Galaxy to promote best practice in machine learning for biomedical data science. Robert Gillies Machine Learning Conference, Moffitt Cancer Center; Oct 2025.
 2. Lyra P. The Galaxy-ML2 tool suite: using Galaxy to promote best practice in machine learning for biomedical data science. Galaxy Bioconductor Community Conference (GBCC), Cold Spring Harbor; Jun 2025.
 3. Lyra P. Optimizing cancer analyses with best-practices machine learning: a web application. Moffitt Symposium (featured poster), Moffitt Cancer Center; May 2025.
-

5. Poster presentations and published abstracts

1. Lyra P, Qiu J, Sargent L, Gu Q, Goecks J. Optimizing cancer analyses with best-practices machine learning: a web application. Moffitt Research Symposium (featured poster), Moffitt Cancer Center; May 2025.
2. Lyra PCM Jr, Dalcolmo L, Parsons M, Brito S, Nepomuceno TC, Nguyen NP, Richardson ME, de Oliveira G, da Silva J, Caleca L, Hu C, Rossing M, Hazra A, Martins A, Caputo S, Millot G, Ngeow YJY, Carvalho MA, Cline M, Radice P, Carlsen R, Mesman R, Zampiga V, Joseph V, Sharan S, Vreeswijk M, Spurdle A, Couch FJ, Monteiro AN. Large-scale integration of functional assay data for the resolution of germline BRCA1 and BRCA2 variants of uncertain significance. BRCA Symposium, International Symposium on Hereditary Breast and Ovarian Cancer; May 2025.
3. Lyra P Jr, Dalcolmo L, Parsons M, Nathan V, Nepomuceno T, de Oliveira G, da Silva J, Caleca L, Taneja T, Hu C, Richardson M, Rossing M, Hazra A, Martins A, Caputo S, Millot G, Ngeow YJY, Carvalho MA, Cline M, Radice P, Carlsen R, Mesman R, Zampiga V, Joseph V, Sharan S, Spurdle A, Couch F, Vreeswijk M, Monteiro AN.

- Integration of functional data to classify BRCA1/2 missense variants: an ENIGMA project. Moffitt Scientific Symposium, Moffitt Cancer Center; May 2024.
4. Lyra P, Dalcolmo L, Parsons M, Nepomuceno T, Brito S, Nguyen NPN, de Oliveira G, da Silva JP, Caleca L, Taneja T, Hu C, Richardson M, Rossing M, Hazra A, Martins A, Caputo S, Millot GA, Ngeow YJY, Carvalho MA, Cline M, Radice P, Carlsen R, Mesman R, Zampiga V, Villani R, Josef V, Sharan S, Michailidou K, Spurdle AB, Couch F, Vreeswijk MPG, Monteiro AN. Abstract 7325: Integration of functional data to classify BRCA1/2 missense variants: an ENIGMA project. *Cancer Res.* AACR Annual Meeting; Mar 2024. doi:10.1158/1538-7445.AM2024-7325.
 5. Huang H, Hu C, Na J, Abozaid M, Munankarmy A, Rao T, Dunn Lumby CA, Lyra PCM, Couch RE, Persons BR, Polley EC, Karam R, Pesaran T, Yadav S, Monteiro ANA, Boddicker NJ, Domchek SM, Richardson ME, Couch FJ. Abstract PR09: Functional and clinical characterization of hypomorphic missense variants in the BRCA2 cancer predisposition gene. *Cancer Res.* AACR Annual Meeting; Feb 2024. doi:10.1158/1538-7445.ADVBC23-PR09.
 6. Lyra P Jr, Dalcolmo L, Parsons M, Nathan V, Nepomuceno T, de Oliveira G, da Silva J, Caleca L, Taneja T, Hu C, Richardson M, Rossing M, Hazra A, Martins A, Caputo S, Millot G, Ngeow YJY, Carvalho MA, Cline M, Radice P, Carlsen R, Mesman R, Zampiga V, Joseph V, Sharan S, Spurdle A, Couch F, Vreeswijk M, Monteiro AN. Integration of functional data to classify BRCA2 missense variants: an ENIGMA project. Moffitt Scientific Symposium, Moffitt Cancer Center; May 2023.
 7. Henriques T, dos Santos D, Guimaraes I, Tessarollo N, Lyra P, Mesquisa P, Padua D, Amaral AL, Pereira L, Cavadas B, Silva I, Almeida R, Rangel L. Role of CXCR2 in the acquisition of pan-resistant phenotype in high-grade serous ovarian cancer cells. *Cancer Res.* AACR Annual Meeting; Jul 2019. doi:10.1158/1535-7163.TARG-19-A133.
 8. Zipinotti dos Santos D, dos Santos Guimarães I, Gusmão Tessarollo NG, Barbosa Henriques T, Lyra Junior PC, de Souza MLL, Gomes MC, Silva IV, Rangel LBA. Enhancement of cisplatin activity against triple-negative breast cancer cells by atorvastatin. *Cancer Res.* AACR Annual Meeting; Jul 2019. doi:10.1158/1538-7445.AM2019-5276.
 9. Ladislau T, Silva D, Madeira K, Daltoe R, Paes MF, Herlinger A, Lyra-Junior PCM, Silva IV, Rangel LBA. The role of mTOR in the cisplatin-resistant phenotype in ovarian cancer lineage. In: *Proceedings of the 103rd Annual Meeting of the American Association for Cancer Research*. Chicago (IL); 2012. v.1.
 10. Herlinger A, Valadao I, Daltoe R, Madeira K, Allochio JF, Rezende LCD, Cerri MF, Teixeira S, Lyra-Junior PCM. Effect of novel rationally designed naphtoquinone-derived drugs on lung cancer cell lines. 10th International Congress on Cell Biology and 16th Congress of the Brazilian Society for Cell Biology, Rio de Janeiro, Brazil; 2012. Poster abstracts. v.1, p.95–95.
 11. Cerri MF, Guimaraes I, Rezende LCD, Paes MF, Silva D, Lyra-Junior PCM, Tommasi BO, Silva IV, Rangel LBA. Evaluation of relative expression of SLC34A2/NaPi-IIb in NSCLC cell lines treated with estrogen and PKC and PKA pathway modulators. XXVI Reunião Anual da FeSBE, Rio de Janeiro, Brazil; 2011. *Anais da XXVI Reunião Anual da FeSBE*. v.1.
 12. Cerri MF, Rezende LCD, Lyra-Junior PCM, Paes MF, Silva D, Sirtoli GM, Tommasi BO, Silva IV, Rangel LBA. Avaliação da expressão do gene SLC34A2/NaPi-IIb em

- linhagens de carcinoma de pulmão do tipo NSCLC em resposta ao tratamento com 17-beta-estradiol. 56º Congresso Brasileiro de Genética, Guarujá, Brazil; 2010. v.56, p.31–31.
13. Cerri MF, Rezende LCD, Paes MF, Lyra-Junior PCM, Silva D, Sirtoli GM, Tommasi BO, Silva IV, Rangel LBA. Avaliação da expressão relativa de SLC34A2/NaPi-IIb em linhagens celulares de NSCLC sob tratamento com moduladores das vias de PKC e PKA. 56º Congresso Brasileiro de Genética, Guarujá, Brazil; 2010. v.56, p.32–32.
14. Cerri MF, Rezende LCD, Paes MF, Silva D, Goncalves NTLP, Lyra-Junior PCM, Tommasi BO, Silva IV, Rangel LBA. Avaliação da expressão do gene SLC34A2/NaPi-IIb em linhagens de carcinoma de pulmão do tipo NSCLC em resposta ao tratamento com 17-beta-estradiol. IV Congresso de Ciências da Saúde, Vitória, Brazil; 2010. v.4, p.125–126.