

CURRICULUM VITAE

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Positions:

- **Momentum Fellow**, MTA TTK Lendület Cancer Biomarker Research Group, Budapest, since 2014.
- **OTKA postdoctoral fellowship**, Research Laboratory for Pediatrics and Nephrology of the Hungarian Academy of Sciences, Budapest 2011-2013.
- **HAESF Senior Leaders Fellowship**, Children's Hospital Informatics Program, Harvard Medical School, Boston, Massachusetts, USA, 2008
- **Research fellowship**, Joint Research Laboratory of the Hungarian Academy of Sciences and the Semmelweis University, Budapest, 2007-2014.
- **Research fellowship**, Szentágothai János Knowledge Center, Semmelweis University, Consultant: Prof.Dr. Tulassay Tivadar, 2005-2006

Education:

- **Master of Health Management, Semmelweis University, Faculty of Health and Public Services**, 2009-2011, MSc theses: "New diagnostic tool for predicting oncological treatment efficiency ", Number of diploma: M-2/2011, Dated: 17.11.2011.
- **Semmelweis University, School of Ph.D. Studies**, Budapest, 2000-2005, PhD theses: "The significance of Vitamin-D receptor gene polymorphisms in chronic diseases", Number of diploma: 802/2005. Consultant: Dr Andras Szabó, Graduation: „Summa cum laude”.
- **Semmelweis University of Medicine (SOTE), Faculty of General Medicine**, Budapest, 1993-2000, Medical Licence No: A/59537, Number of diploma: 121/2000.
- **Ruprecht-Karls University of Heidelberg**, Germany, Faculty of General Medicine, WS-SS: 1998-1999

Publications:

1. *Pongor L, Harami-Papp H, Méhes E, Czirók A, Győrffy B. Cell dispersal influences tumor heterogeneity and introduces a bias in NGS data interpretation, **Sci Rep**, [accepted paper in press]
2. *Menyhárt O, Budczies J, Munkácsy G, Esteva FJ, Szabó A, Miquel TP, Győrffy B. DUSP4 is associated with increased resistance against anti-HER2 therapy in breast cancer, **Oncotarget**, [accepted paper in press]
3. Chung S, Nagaraju GP, Nagalingam A, Muniraj N, Kuppusamy P, Walker A, Woo J, Győrffy B, Gabrielson E, Saxena NK, Sharma D. Adiponectin induces cytotoxic autophagy in breast cancer cells through LKB1 mediated activation of AMPK-ATG1 axis, **Autophagy**, [accepted paper in press]
4. Sengupta S, Nagalingam A, Muniraj N, Bonner MY, Mistriotis P, Afthinos A, Kuppusamy P, Lanoue D, Cho S, Korangath P, Shriver M, Begum A, Merino VF, Huang CY, Arbiser JL, Matsui W, Győrffy B, Konstantopoulos K, Sukumar S, Marignani PA, Saxena NK, Sharma D. Activation of tumor suppressor LKB1 by honokiol abrogates cancer stem-like phenotype in breast cancer via inhibition of oncogenic Stat3. **Oncogene**. 2017 Jun 5. doi: 10.1038/onc.2017.164. [Epub ahead of print]
5. Ligeti B, Menyhárt O, Petrič I, Győrffy B, Pongor S. Propagation on Molecular Interaction Networks: Prediction of Effective Drug Combinations and Biomarkers in Cancer Treatment. **Curr Pharm Des**. 2017;23(1):5-28. doi: 10.2174/1381612822666161021162727. PMID: 27774896 [Epub ahead of print]
6. Horányi D, Babay LÉ, Rigó J Jr, Győrffy B, Nagy GR. Effect of extended oral contraception use on the prevalence of fetal trisomy 21 in women aged at least 35 years. **Int J Gynaecol Obstet**. 2017 Jun 13. doi: 10.1002/ijgo.12238. [Epub ahead of print] PubMed PMID: 28608970.
7. Ács B, Madaras L, Kovács KA, Micsik T, Tökés AM, Győrffy B, Kulka J, Szász AM. Reproducibility and Prognostic Potential of Ki-67 Proliferation Index when Comparing Digital-Image Analysis with Standard Semi-Quantitative Evaluation in Breast Cancer. **Pathol Oncol Res**. 2017 Apr 11. doi: 10.1007/s12253-017-0220-8. [Epub ahead of print]
8. Ru GQ, Han Y, Wang W, Chen Y, Wang H, Xu WJ, Ma J, Ye M, Chen X, He XL, Győrffy B, Zhao ZS, Huang D. CEACAM6 is a prognostic biomarker and potential therapeutic target for gastric carcinoma. **Oncotarget**. [Epub ahead of print]
9. Xu H, Han Y, Lou J, Zhang H, Zhao Y, Győrffy B, Li R. PDGFRA, HSD17B4 and HMGB2 are potential therapeutic targets in polycystic ovarian syndrome and breast cancer. **Oncotarget**. 2017 May 13. doi: 10.18632/oncotarget.17846. [Epub ahead of print]
10. *Nagy Á, Pongor LS, Szabó A, Santarpia M, Győrffy B. KRAS driven expression signature has prognostic power superior to mutation status in non-small cell lung cancer. **Int J Cancer**. 2017 Feb 15;140(4):930-937. doi: 10.1002/ijc.30509.
11. Safonov A, Jiang T, Bianchini G, Győrffy B, Karn T4, Hatzis C, Pusztai L. Immune Gene Expression Is Associated with Genomic Aberrations in Breast Cancer. **Cancer Res**. 2017 Jun 15;77(12):3317-3324. doi: 10.1158/0008-5472.CAN-16-3478.
12. Martínez-Canales S, Cifuentes F, López De Rodas Gregorio M, Serrano-Oviedo L,

- Galán-Moya EM, Amir E, Pandiella A, Györffy B, Ocaña A. Transcriptomic immunologic signature associated with favorable clinical outcome in basal-like breast tumors. **PLoS One**. 2017 May 4;12(5):e0175128. doi: 10.1371/journal.pone.0175128.
13. Ács B, Kulka J, Kovács KA, Teleki I, Tökés AM, Meczker Á, Györffy B, Madaras L, Krenács T, Szász AM. Comparison of five Ki67 antibodies regarding reproducibility and capacity to predict prognosis in breast cancer: Does the antibody matter? **Hum Pathol**. 2017 Feb 8. pii: S0046-8177(17)30032-1. doi: 10.1016/j.humpath.2017.01.011.
 14. Iwamoto T, Katagiri T, Niikura N, Miyoshi Y, Kochi M, Nogami T, Shien T, Motoki T, Taira N, Omori M, Tokuda Y, Fujiwara T, Doihara H, Györffy B, Matsuoka J. Immunohistochemical Ki67 after short-term hormone therapy identifies low-risk breast cancers as reliably as genomic markers. **Oncotarget**. 2017 Apr 18;8(16):26122-26128. doi: 10.18632/oncotarget.15385.
 15. Sávolt Á, Péley G, Polgár C, Udvarhelyi N, Rubovszky G, Kovács E, Györffy B, Kásler M, Mátrai Z. Eight-year follow up result of the OTOASOR trial: The Optimal Treatment Of the Axilla - Surgery Or Radiotherapy after positive sentinel lymph node biopsy in early-stage breast cancer: A randomized, single centre, phase III, non-inferiority trial. **Eur J Surg Oncol**. 2017 Apr;43(4):672-679. doi: 10.1016/j.ejso.2016.12.011.
 16. Bellanger A, Donini CF, Vendrell JA, Lavaud J, Machuca-Gayet I, Ruel M, Vollaire J, Grisard E, Györffy B, Bièche I, Peyruchaud O, Coll JL, Treilleux I, Maguer-Satta V, Josserand V, Cohen PA. The critical role of the ZNF217 oncogene in promoting breast cancer metastasis to the bone. **J Pathol**. 2017 May;242(1):73-89. doi: 10.1002/path.4882.
 17. Pérez-Peña J, Alcaraz-Sanabria A, Nieto-Jiménez C, Páez R, Corrales-Sánchez V, Serrano-Oviedo L, Wali VB, Patwardhan GA, Amir E, Györffy B, Pandiella A, Ocaña A. Mitotic read-out genes confer poor outcome in luminal A breast cancer tumors. **Oncotarget**. 2017 Mar 28;8(13):21733-21740. doi: 10.18632/oncotarget.15562.
 18. Bottai G, Diao L, Baggerly KA, Paladini L, Györffy B, Raschioni C, Pusztai L, Calin GA, Santarpia L. Integrated MicroRNA-mRNA Profiling Identifies Oncostatin M as a Marker of Mesenchymal-LikeER-Negative/HER2-Negative Breast Cancer. **Int J Mol Sci**. 2017 Jan 19;18(1). pii: E194. doi: 10.3390/ijms18010194.
 19. McDermott MS, Chumanovich AA, Lim CU, Liang J, Chen M, Altilia S, Oliver D, Rae JM, Shtutman M, Kiaris H, Györffy B, Roninson IB, Broude EV. Inhibition of CDK8 mediator kinase suppresses estrogen dependent transcription and the growth of estrogen receptor positive breast cancer. **Oncotarget**. 2017 Feb 21;8(8):12558-12575. doi: 10.18632/oncotarget.14894.
 20. Xie B, Nagalingam A, Kuppusamy P, Muniraj N, Langford P, Györffy B, Saxena NK, Sharma D. Benzyl Isothiocyanate potentiates p53 signaling and antitumor effects against breast cancer through activation of p53-LKB1 and p73-LKB1 axes. 1. **Sci Rep**. 2017 Jan 10;7:40070. doi: 10.1038/srep40070.
 21. Myant KB, Cammareri P, Hodder MC, Wills J, Von Kriegsheim A, Györffy B, Rashid M, Polo S, Maspero E, Vaughan L, Gurung B, Barry E, Malliri A, Camargo F, Adams DJ, Iavarone A, Lasorella A, Sansom OJ. HUWE1 is a critical colonic tumour suppressor gene that prevents MYC signalling, DNA damage accumulation and tumour initiation. **EMBO Mol Med** 2017 Feb;9(2):181-197. doi: 10.15252/emmm.201606684.
 22. de Barrios O, Györffy B, Fernández-Aceñero MJ, Sánchez-Tilló E, Sánchez-Moral L, Siles L, Esteve-Arenys A, Roué G, Casal JI, Darling DS, Castells A, Postigo A.

- ZEB1-induced tumorigenesis requires senescence inhibition via activation of DKK1/mutant p53/Mdm2/CtBP and repression of macroH2A1. **Gut**. 2017 Apr;66(4):666-682. doi: 10.1136/gutjnl-2015-310838.
23. Szász AM, Györffy B, Marko-Varga G. Cancer heterogeneity determined by functional proteomics. **Semin Cell Dev Biol**. 2017 Apr;64:132-142. doi: 10.1016/j.semcdb.2016.08.026.
 24. Kang MH, Jeong KJ, Kim WY, Lee HJ, Gong G, Suh N, Györffy B, Kim S, Jeong SY, Mills GB, Park YY. Musashi RNA-binding protein 2 regulates estrogen receptor 1 function in breast cancer. **Oncogene**. 2017 Mar 23;36(12):1745-1752. doi: 10.1038/onc.2016.327.
 25. *Menyhárt O, Harami-Papp H, Sukumar S, Schäfer R, Magnani L, de Barrios O, Györffy B. Guidelines for the selection of functional assays to evaluate the hallmarks of cancer. **Biochim Biophys Acta**. 2016 Dec;1866(2):300-319. doi: 10.1016/j.bbcan.2016.10.002. Review. PubMed PMID: 27742530.
 26. *Lánczky A, Nagy Á, Bottai G, Munkácsy G, Szabó A, Santarpia L, Györffy B. miRpower: a web-tool to validate survival-associated miRNAs utilizing expression data from 2178 breast cancer patients. **Breast Cancer Res Treat**. 2016 Dec;160(3):439-446. PubMed PMID: 27744485.
 27. *Sztupinszki Z, Györffy B. Colon cancer subtypes: concordance, effect on survival and selection of the most representative preclinical models. **Sci Rep**. 2016 Nov 16;6:37169. doi: 10.1038/srep37169. PubMed PMID: 27849044.
 28. *Györffy B, Bottai G, Fleischer T, Munkácsy G, Budczies J, Paladini L, Børresen-Dale AL, Kristensen VN, Santarpia L. Aberrant DNA methylation impacts gene expression and prognosis in breast cancer subtypes. **Int J Cancer**. 2016 Jan 1;138(1):87-97. doi: 10.1002/ijc.29684.
 29. *Munkácsy G, Sztupinszki Z, Herman P, Bán B, Pénczvártó Z, Szarvas N, Györffy B. Validation of RNAi Silencing Efficiency Using Gene Array Data shows 18.5% Failure Rate across 429 Independent Experiments. **Mol Ther Nucleic Acids**. 2016 Sep 27;5(9):e366. doi: 10.1038/mtna.2016.66. PubMed PMID: 27673562.
 30. *Szász AM, Lánczky A, Nagy Á, Förster S, Hark K, Green JE, Boussioutas A, Busuttill R, Szabó A, Györffy B. Cross-validation of survival associated biomarkers in gastric cancer using transcriptomic data of 1,065 patients. *Oncotarget*. 2016 Jun 30. doi: 10.18632/oncotarget.10337. [Epub ahead of print]
 31. *Harami-Papp H, Pongor LS, Munkácsy G, Horváth G, Nagy ÁM, Ambrus A, Hauser P, Szabó A, Tretter L, Györffy B. TP53 mutation hits energy metabolism and increases glycolysis in breast cancer. *Oncotarget*. 2016 Aug 25. doi: 10.18632/oncotarget.11594. [Epub ahead of print]
 32. Xue X, Ramakrishnan SK, Weisz K, Triner D, Xie L, Attili D, Pant A, Györffy B, Zhan M, Carter-Su C, Hardiman KM, Wang TD, Dame MK, Varani J, Brenner D, Fearon ER, Shah YM. Iron Uptake via DMT1 Integrates Cell Cycle with JAK-STAT3 Signaling to Promote Colorectal Tumorigenesis. *Cell Metab*. 2016 Aug 17. pii:S1550-4131(16)30361-8. doi: 10.1016/j.cmet.2016.07.015. [Epub ahead of print]
 33. Szász AM, Györffy B, Marko-Varga G. Cancer heterogeneity determined by functional proteomics. *Semin Cell Dev Biol*. 2016 Aug 26. pii:S1084-9521(16)30270-1. doi: 10.1016/j.semcdb.2016.08.026. [Epub ahead of print]

34. Kang MH, Jeong KJ, Kim WY, Lee HJ, Gong G, Suh N, Györffy B, Kim S, Jeong SY, Mills GB, Park YY. Musashi RNA-binding protein 2 regulates estrogen receptor 1 function in breast cancer. **Oncogene**. 2016 Sep 5. doi: 10.1038/onc.2016.327. [Epub ahead of print]
35. Santarpia L, Bottai G, Kelly CM, Györffy B, Székely B, Pusztai L. Deciphering and Targeting Oncogenic Mutations and Pathways in Breast Cancer. **Oncologist**. 2016 Jul 6. [Epub ahead of print]
36. Sadik H, Korangath P, Nguyen N, Györffy B, Kumar R, Hedayati M, Teo WW, Park S, Panday H, Gonzalez Munoz T, Menyhart O, Shah N, Pandita RK, Chang JC, DeWeese TL, Chang HY, Pandita TK, Sukumar S. HOXC10 expression supports the development of chemotherapy resistance by fine tuning DNA repair in breast cancer cells. **Cancer Res**. 2016 Jun 14. [Epub ahead of print]
37. Patel H, Abduljabbar R, Lai CF, Periyasamy M, Harrod A, Gemma C, Steel J, Patel N, Busonero C, Jerjees D, Remenyi J, Smith S, Gomm JJ, Magnani L, Györffy B, Jones JL, Fuller-Pace FV, Shousha S, Buluwela L, Rakha EA, Ellis IO, Coombes RC, Ali S. CDK7, cyclin H and MAT1 is elevated in breast cancer and is prognostic in estrogen receptor-positive breast cancer. **Clin Cancer Res**. 2016 Jun 14. [Epub ahead of print]
38. Szendrői A, Szász AM, Kardos M, Tőkés AM, Idan R, Szűcs M, Kulka J, Nyirády P, Szendrői M, Szállási Z, Györffy B, Tímár J. Opposite prognostic roles of HIF1 α and HIF2 α expressions in bone metastatic clear cell renal cell cancer. **Oncotarget**. 2016 May 27. [Epub ahead of print]
39. Hitti E, Bakheet T, Al-Souhibani N, Moghrabi W, Al-Yahya S, Al-Ghamdi M, Al-Saif M, Shoukri MM, Lániczky A, Grépin R, Györffy B, Pagès G, Khabar KS. Systematic Analysis of AU-Rich Element Expression in Cancer Reveals Common Functional Clusters Regulated by Key RNA-Binding Proteins. **Cancer Res**. 2016 May 17. [Epub ahead of print]
40. Han Y, Lian S, Cui X, Meng K, Györffy B, Jin T, Huang D. Potential options for managing LOX+ ER- breast cancer patients. **Oncotarget**. 2016 Apr 28. [Epub ahead of print]
41. Rai R, Zhang F, Colavita K, Leu NA, Kurosaka S, Kumar A, Birnbaum MD, Györffy B, Dong DW, Shtutman M, Kashina A. Arginyltransferase suppresses cell tumorigenic potential and inversely correlates with metastases in human cancers. **Oncogene**. 2015 Dec 21. [Epub ahead of print]
42. García SA, Swiersy A, Radhakrishnan P, Branchi V, Nanduri LK, Györffy B, Betzler AM, Bork U, Kahlert C, Reißfelder C, Rahbari NN, Weitz J, Schölch S. LDB1 overexpression is a negative prognostic factor in colorectal cancer. **Oncotarget**. 2016 Oct 5. doi: 10.18632/oncotarget.12481. PubMed PMID: 27713177.
43. Ágoston EI, Micsik T, Ács B, Fekete K, Hahn O, Baranyai Z, Dede K, Bodoky G, Bursics A, Kulka J, Krenács T, Györffy B, Harsányi L, Szász AM. In depth evaluation of the prognostic and predictive utility of PTEN immunohistochemistry in colorectal carcinomas: performance of three antibodies with emphasis on intracellular and intratumoral heterogeneity. **Diagn Pathol**. 2016 Jul 8;11(1):61. doi: 10.1186/s13000-016-0508-0.
44. Kulka J, Székely B, Lukács LV, Kiss O, Tőkés AM, Vincze E, Turányi E, Fillinger J, Hanzély Z, Arató G, Szendrői M, Györffy B, Szász AM. Comparison of Predictive Immunohistochemical Marker Expression of Primary Breast Cancer and Paired Distant

- Metastasis using Surgical Material: A Practice-Based Study. **J Histochem Cytochem.** 2016 Apr;64(4):256-67. doi: 10.1369/0022155416639013.
45. Xue X, Jungles K, Onder G, Samhoun J, Győrffy B, Hardiman KM. HIF-3 α 1 promotes colorectal tumor cell growth by activation of JAK-STAT3 signaling. **Oncotarget.** 2016 Mar 8;7(10):11567-79. doi: 10.18632/oncotarget.7272.
 46. Adams BD, Wali VB, Cheng CJ, Inukai S, Booth CJ, Agarwal S, Rimm DL, Győrffy B, Santarpia L, Pusztai L, Saltzman WM, Slack FJ. miR-34a Silences c-SRC to Attenuate Tumor Growth in Triple-Negative Breast Cancer. **Cancer Res.** 2016 Feb 15;76(4):927-39. doi: 10.1158/0008-5472.CAN-15-2321.
 47. Catalano S, Campana A, Giordano C, Győrffy B, Tarallo R, Rinaldi A, Bruno G, Ferraro A, Romeo F, Lanzino M, Naro F, Bonofiglio D, Andò S, Barone I. Expression and Function of Phosphodiesterase Type 5 in Human Breast Cancer Cell Lines and Tissues: Implications for Targeted Therapy. **Clin Cancer Res.** 2016 May 1;22(9):2271-82. doi: 10.1158/1078-0432.CCR-15-1900.
 48. Madaras L, Bálint N, Győrffy B, Tőkés AM, Barshack I, Yosepovich A, Friedman E, Paluch-Shimon S, Zippel D, Baghy K, Timár J, Kovalszky I, Kulka J, Szász AM. BRCA Mutation-Related and Claudin-Low Breast Cancer: Blood Relatives or Stepsisters. **Pathobiology.** 2016;83(1):1-12. doi: 10.1159/000439135.
 49. Giordano C, Chemi F, Panza S, Barone I, Bonofiglio D, Lanzino M, Cordella A, Campana A, Hashim A, Rizza P, Leggio A, Győrffy B, Simões BM, Clarke RB, Weisz A, Catalano S, Andò S. Leptin as a mediator of tumor-stromal interactions promotes breast cancer stem cell activity. **Oncotarget.** 2016 Jan 12;7(2):1262-75. doi: 10.18632/oncotarget.6014.
 50. *Győrffy B, Stelnic-Klotz I, Sigler C, Kasack K, Redmer T, Qian Y, Schäfer R. Effects of RAL signal transduction in KRAS- and BRAF-mutated cells and prognostic potential of the RAL signature in colorectal cancer, **Oncotarget.** 2015 May 30;6(15):13334-46. PMID: 26033452.
 51. *Győrffy B, Hatzis C, Sanft T, Hofstatter E, Aktas B, Pusztai L. Multigene prognostic tests in breast cancer: past, present, future. **Breast Cancer Res.** 2015 Dec;17(1):514. PubMed PMID: 25778354.
 52. *Győrffy B, Karn T, Sztupinszki Z, Weltz B, Müller V, Pusztai L. Dynamic classification using case-specific training cohorts outperforms static gene expression signatures in breast cancer. **Int J Cancer.** 2015 May 1;136(9):2091-8. PMID: 25274406.
 53. *Pongor L, Kormos M, Hatzis C, Pusztai L, Szabó A, Győrffy B. A genome-wide approach to link genotype to clinical outcome by utilizing next generation sequencing and gene chip data of 6,697 breast cancer patients. **Genome Med.** 2015 Oct 16;7(1):104. doi: 10.1186/s13073-015-0228-1. PubMed PMID: 26474971.
 54. *Menyhárt O, Santarpia L, Győrffy B. A Comprehensive Outline of Trastuzumab Resistance Biomarkers in HER2 Overexpressing Breast Cancer. **Curr Cancer Drug Targets.** 2015;15(8):665-83. PubMed PMID: 26452383.
 55. *Ligeti B, Péneváltó Z, Vera R, Pongor S, Győrffy B. A network-based Target Overlap Score for characterizing Drug Combinations: High Correlation with Cancer Clinical Trial Results, **PLoS One.** 2015 Jun 5;10(6):e0129267. doi: 10.1371/journal.pone.0129267. eCollection 2015. PMID: 26047322.
 56. Nguyen VT, Barozzi I, Faronato M, Lombardo Y, Steel JH, Patel N, Darbre P, Castellano

- L, Györffy B, Woodley L, Meira A, Patten DK, Vircillo V, Periyasamy M, Ali S, Frige G, Minucci S, Coombes RC, Magnani L. Differential epigenetic reprogramming in response to specific endocrine therapies promotes cholesterol biosynthesis and cellular invasion. **Nat Commun**. 2015 Nov 27;6:10044. doi: 10.1038/ncomms10044.
57. Moor AE, Anderle P, Cantù C, Rodriguez P, Wiedemann N, Baruthio F, Deka J, André S, Valenta T, Moor MB, Györffy B, Barras D, Delorenzi M, Basler K, Aguet M. BCL9/9L- β -catenin Signaling is Associated With Poor Outcome in Colorectal Cancer. **EBioMedicine**. 2015 Oct 30;2(12):1932-43. doi: 10.1016/j.ebiom.2015.10.030.eCollection 2015 Dec.
58. Budczies J, Bockmayr M, Denkert C, Klauschen F, Lennerz JK, Györffy B, Dietel M, Loibl S, Weichert W, Stenzinger A. Classical pathology and mutational load of breast cancer – integration of two worlds. **Journal of Pathology: Clinical Research**. 2015;1(4):225-238.
59. Peiris-Pagès M, Smith DL, Györffy B, Sotgia F, Lisanti MP. Proteomic identification of prognostic tumour biomarkers, using chemotherapy-induced cancer-associated fibroblasts. **Aging** (Albany NY). 2015 Oct;7(10):816-38. PubMed PMID: 26539730.
60. Fan JB, Miyauchi-Ishida S, Arimoto K, Liu D, Yan M, Liu CW, Györffy B, Zhang DE. Type I IFN induces protein ISGylation to enhance cytokine expression and augments colonic inflammation. **Proc Natl Acad Sci U S A**. 2015 Nov 17;112(46):14313-8. doi: 10.1073/pnas.1505690112. Epub 2015 Oct 29. PubMed PMID: 26515094.
61. Broude EV, Györffy B, Chumanevich AA, Chen M, McDermott MS, Shtutman M, Catroppo JF, Roninson IB. Expression of CDK8 and CDK8-interacting Genes as Potential Biomarkers in Breast Cancer. **Curr Cancer Drug Targets**. 2015;15(8):739-49. PubMed PMID: 26452386.
62. Zhang H, Ramakrishnan SK, Triner D, Centofanti B, Maitra D, Györffy B, Sebolt-Leopold JS, Dame MK, Varani J, Brenner DE, Fearon ER, Omary MB, Shah YM. Tumor-selective proteotoxicity of verteporfin inhibits colon cancer progression independently of YAP1. **Sci Signal**. 2015 Oct 6;8(397):ra98. doi: 10.1126/scisignal.aac5418. PubMed PMID: 26443705.
63. Periyasamy M, Patel H, Lai CF, Nguyen VT, Nevedomskaya E, Harrod A, Russell R, Remenyi J, Ochocka AM, Thomas RS, Fuller-Pace F, Györffy B, Caldas C, Navaratnam N, Carroll JS, Zwart W, Coombes RC, Magnani L, Buluwela L, Ali S. APOBEC3B-Mediated Cytidine Deamination Is Required for Estrogen Receptor Action in Breast Cancer. **Cell Rep**. 2015 Oct 6;13(1):108-21. doi: 10.1016/j.celrep.2015.08.066. Epub 2015 Sep 24. PubMed PMID: 26411678.
64. Magnani L, Patten DK, Nguyen VT, Hong SP, Steel JH, Patel N, Lombardo Y, Faronato M, Gomes AR, Woodley L, Page K, Guttery D, Primrose L, Fernandez Garcia D, Shaw J, Viola P, Green A, Nolan C, Ellis IO, Rakha EA, Shousha S, Lam EW, Györffy B, Lupien M, Coombes RC. The pioneer factor PBX1 is a novel driver of metastatic progression in ER α -positive breast cancer. **Oncotarget**. 2015 Sep 8;6(26):21878-91. PubMed PMID: 26215677.
65. Jin K, Park S, Teo WW, Korangath P, Cho SS, Yoshida T, Györffy B, Goswami CP, Nakshatri H, Cruz LA, Zhou W, Ji H, Su Y, Ekram M, Wu Z, Zhu T, Polyak K, Sukumar S. HOXB7 Is an ER α Cofactor in the Activation of HER2 and Multiple ER Target Genes Leading to Endocrine Resistance. **Cancer Discov**. 2015 Sep;5(9):944-59. doi:

- 10.1158/2159-8290.CD-15-0090. Epub 2015 Jul 15. PubMed PMID: 26180042;
66. Deng L, Gyórfy B, Na F, Chen B, Lan J, Xue J, Zhou L, Lu Y. Association of PDCD1 and CTLA-4 gene expression with clinicopathological factors and survival in non-small cell lung cancer: results from a large and pooled microarray database, **J Thorac Oncol** 2015 Jul;10(7):1020-6. PMID: 26134222.
67. Lan L, Holland JD, Qi J, Grosskopf S, Vogel R, Gyórfy B, Wulf-Goldenberg A, Birchmeier W. Shp2 signaling suppresses senescence in PyMT-induced mammary gland cancer in mice. **EMBO J**. 2015 Jun 3;34(11):1493-508. PMID: 25736378.
68. Grabner B, Schramek D, Mueller KM, Moll HP, Svinka J, Hoffmann T, Bauer E, Blaas L, Hruschka N, Zboray K, Stiedl P, Nivarthi H, Bogner E, Gruber W, Mohr T, Zwick RH, Kenner L, Poli V, Aberger F, Stoiber D, Egger G, Esterbauer H, Zuber J, Moriggl R, Eferl R, Gyórfy B, Penninger JM, Popper H, Casanova E. Disruption of STAT3 signalling promotes KRAS-induced lung tumorigenesis. **Nat Commun**. 2015 Mar 3;6:6285. PubMed PMID: 25734337.
69. Budczies J, Pfitzner BM, Gyórfy B, Winzer KJ, Radke C, Dietel M, Fiehn O, Denkert C. Glutamate enrichment as new diagnostic opportunity in breast cancer. **Int J Cancer**. 2015 Apr;136(7):1619-28. PMID: 25155347.
70. Labidi-Galy SI, Clauss A, Ng V, Duraisamy S, Elias KM, Piao HY, Bilal E, Davidowitz RA, Lu Y, Badalian-Very G, Gyórfy B, Kang UB, Ficarro S, Ganesan S, Mills GB, Marto JA, Drapkin R. Elafin drives poor outcome in high-grade serous ovarian cancers and basal-like breast tumors. **Oncogene**. 2015 Jan 15;34(3):373-83. PMID: 24469047.
71. Sängler N, Ruckhäberle E, Gyórfy B, Engels K, Heinrich T, Fehm T, Graf A, Holtrich U, Becker S, Karn T. Acid ceramidase is associated with an improved prognosis in both DCIS and invasive breast cancer. **Mol Oncol**. 2015 Jan;9(1):58-67. PMID: 25131496.
72. *Gyórfy B, Bottai G, Lehmann-Che J, Kéri G, Órfi L, Iwamoto T, Desmedt C, Bianchini G, Turner NC, de Thè H, André F, Sotiriou C, Hortobagyi GN, Di Leo A, Pusztai L, Santarpia L. TP53 mutation-modulated genes predict the risk of tumor relapse and identify MPS1 as a potential therapeutic kinase in TP53-mutated breast cancers, **Mol Oncol**, 2014 May;8(3):508-19.
73. *Péneváltó Z, Lánckzy A, Lénárt J, Meggyesházi N, Krenács T, Szoboszlai N, Denkert C, Pete I, Gyórfy B. MEK1 is associated with carboplatin resistance and is a prognostic biomarker in epithelial ovarian cancer. **BMC Cancer**. 2014 Nov 18;14:837.
74. *Péneváltó Z, Surowiak P, Gyórfy B. Biomarkers for Systemic Therapy in Ovarian Cancer, **Curr Cancer Drug Targets**, 2014 Mar;14(3):259-73
75. Nguyen NT, Vendrell JA, Poulard C, Gyórfy B, Goddard-Léon S, Biècheg I, Corbo L, Le Romancer M, Bachelot T, Treilleux I, Cohen PA. A functional interplay between ZNF217 and Estrogen Receptor alpha exists in luminal breast cancers, **Mol Oncol** 2014 Dec;8(8):1441-57.
76. Teleki I, Szász AM, Maros ME, Gyórfy B, Kulka J, Meggyeshazi N, Kiszner G, Balla P, Samu A, Krenács T. Correlations of differentially expressed gap junction connexins Cx26, Cx30, Cx32, Cx43 and Cx46 with breast cancer progression and prognosis. **PLoS One**. 2014 Nov 10;9(11):e112541. doi: 10.1371/journal.pone.0112541.
77. Petrič I, Oláh B, Gyórfy B, Pongor S. Biomedical Hypothesis Generation by Text Mining and Gene Prioritization. **Protein & Peptide Letters**, 2014;21(8):847-57.

78. Shi W, Balazs B, Qi Y, Györffy B, Wang B, Liu CG, Shiang CY, Valero V, Moulder-Thompson S, Avritscher R, Powis G, Hortobagyi GN, Natowicz R, Weinstein J, Symmans WF, Pusztai L. Combined analysis of gene expression, DNA copy number and mutation profiling data to display biological process anomalies in individual cancers. **Breast Cancer Res Treat**, 2014 Apr;144(3):561-8.
79. Sánchez-Tilló E, Fanlo L, Siles L, Montes-Moreno S, Moros A, Chiva-Blanch G, Estruch R, Martinez A, Colomer D, Györffy B, Roué G, Postigo A. The EMT activator ZEB1 promotes tumor growth and determines differential response to chemotherapy in mantle cell lymphoma. **Cell Death Differ**. 2014 Feb;21(2):247-57.
80. Györffy A, Kormos M, Bartha L, Szabó A, Györffy B, Budczies J, Vásárhelyi B. Validation of biomarkers in gene expression datasets of inflammatory bowel disease: IL13RA2, PTGS2 and WNT5A as predictors of responsiveness to infliximab therapy **J Proteomics Bioinform** 2014; 7(9):272-277.
81. *Györffy B, Surowiak P, Budczies J, Lániczky A. Online survival analysis software to assess the prognostic value of biomarkers using transcriptomic data in non-small-cell lung cancer. **PLoS One**. 2013 Dec 18;8(12):e82241. doi: 10.1371/journal.pone.0082241. PubMed PMID: 24367507; PubMed Central PMCID: PMC3867325.
82. *Mihály Zs, Kormos M, Lániczky A, Dank M, Budczies J, Szász AM, Györffy B. A meta-analysis of gene expression based biomarkers predicting outcome after tamoxifen treatment in breast cancer. **Breast Cancer Res Treat**, 2013 Jul;140(2):219-32. doi: 10.1007/s10549-013-2622-y.
83. *Pénzváltó Zs, Tegze B, Szász AM, Sztupinszki Zs, Likó I, Szendrői A, Schäfer R, Györffy B. Identifying Resistance Mechanisms against five Tyrosine Kinase Inhibitors Targeting the ERBB/RAS Pathway in 45 Cancer Cell Lines. **PLoS One**, 2013;8(3):e59503. doi: 10.1371/journal.pone.0059503.
84. *Mihály Zs, Györffy B. Improving Pathological Assessment of Breast Cancer by Employing Array-Based Transcriptome Analysis, **Microarrays** 2013, 2(3), 228-242; doi: 10.3390/microarrays2030228
85. Magnani L, Stoeck A, Zhang X, Lániczky A, Mirabella AC, Wang TL, Györffy B, Lupien M. Genome-wide reprogramming of the chromatin landscape underlies endocrine therapy resistance in breast cancer. **Proc Natl Acad Sci U S A**. 2013 Apr 16;110(16):E1490-9. doi: 10.1073/pnas.1219992110
86. Staiger C, Cadot S, Györffy B, Wessels LF, Klau GW. Current composite-feature classification methods do not outperform simple single-genes classifiers in breast cancer prognosis. **Front Genet**. 2013 Dec 23;4:289. doi: 10.3389/fgene.2013.00289. PubMed PMID: 24391662; PubMed Central PMCID: PMC3870302
87. Holland JD, Györffy B, Vogel R, Eckert K, Valenti G, Fang L, Lohneis P, Elezkurtaj S, Ziebold U, Birchmeier W. Combined Wnt/ β -Catenin, Met, and CXCL12/CXCR4 Signals Characterize Basal Breast Cancer and Predict Disease Outcome. **Cell Rep**. 2013 Dec 12;5(5):1214-27. doi: 10.1016/j.celrep.2013.11.001
88. Bockmayr M, Klauschen F, Györffy B, Denkert C, Budczies J. New network topology approaches reveal differential correlation patterns in breast cancer. **BMC Syst Biol**. 2013 Aug 15;7:78. doi: 10.1186/1752-0509-7-78
89. Malek A, Györffy B, Catapano CV, Schäfer R. Selection of optimal combinations of target genes for therapeutic multi-gene silencing based on miRNA co-regulation. **Cancer Gene**

- Therapy**, 2013 May;20(5):326-9. doi: 10.1038/cgt.2013.20
90. Maciejczyk A, Szelachowska J, Czapiga B, Matkowski R, Halon A, Györffy B, Surowiak P. Elevated BUBR1 Expression Is Associated with Poor Survival in Early Breast Cancer Patients--16 Years Follow-up Analysis. **J Histochem Cytochem**. 2013 May;61(5):330-9. doi: 10.1369/0022155413480148.
 91. Szász AM, Eklund AC, Li Q, Sztupinszki Z, Tökés AM, Rowan A, Székely B, Kiss A, Szendrői M, Györffy B, Szállási Z, Swanton C, Kulka J. The CIN4 chromosomal instability qPCR classifier defines tumour aneuploidy and stratifies outcome in grade 2 breast cancer. **PLoS One**, 2013;8(2):e56707. doi: 10.1371/journal.pone.0056707.
 92. Nagy GR, Györffy B, Nagy B, Rigó J Jr. Lower risk for Down syndrome associated with longer oral contraceptive use: a case-control study of women of advanced maternal age presenting for prenatal diagnosis. **Contraception**. 2013 Apr;87(4):455-8. doi: 10.1016/j.contraception.2012.08.040.
 93. Maciejczyk A, Lacko A, Ekiert M, Jagoda E, Wysocka T, Matkowski R, Halon A, Györffy B, Lage H, Surowiak P. Elevated nuclear S100P expression is associated with poor survival in early breast cancer patients. **Histology and Histopathology**, 2013 Apr;28(4):513-24.
 94. Mihály Z, Sztupinszki Z, Surowiak P, Györffy B. A comprehensive overview of targeted therapy in metastatic renal cell carcinoma. **Curr Cancer Drug Targets**. 2012 Sep 1;12(7):857-72.
 95. Györffy B, Lánckzy A, Szállási Z. Implementing an online tool for genome-wide validation of survival-associated biomarkers in ovarian-cancer using microarray data of 1287 patients, **Endocrine-Related Cancer**. 2012 Apr 10;19(2):197-208.
 96. Györffy B, Benke Z, Lánckzy A, Balázs B, Szállási Z, Timár J, Schäfer R. RecurrenceOnline: an online analysis tool to determine breast cancer recurrence and hormone receptor status using microarray data, **Breast Cancer Res Treat**, 2012;132:1025–1034.
 97. Fekete T, Rásó E, Pete I, Tegze B, Liko I, Munkácsy G, Sipos N, Rigó J, Györffy B. Meta-analysis of gene expression profiles associated with histological classification and survival in 829 ovarian cancer samples. **Int J Cancer**, 2012 Jul 1;131(1):95-105. doi: 10.1002/ijc.26364.
 98. Tegze B, Szállási Z, Haltrich I, Péntzváltó Z, Tóth Z, Likó I, Györffy B. Parallel Evolution under Chemotherapy Pressure in 29 Breast Cancer Cell Lines Results in Dissimilar Mechanisms of Resistance. **PLoS One**. 2012;7(2):e30804. Epub 2012 Feb 2.
 99. Porter DC, Farmaki E, Altília S, Schools GP, West DK, Chen M, Chang DB, Puzyrev AT, Lim C, Rokow-Kittell R, Friedhoff RT, Papavassiliou AG, Kalurupalle S, Hurteau G, Shi J, Baran PS, Györffy B, Wentland MP, Broude EV, Kiaris H, Roninson IB. CDK8 mediates chemotherapy-induced tumor-promoting paracrine activities. **Proc Natl Acad Sci U S A**. 2012 Aug 21;109(34):13799-804.
 100. Budczies J, Klauschen F, Sinn BV, Györffy B, Schmitt WD, Darb-Esfahani S, Denkert C. Cutoff finder: a comprehensive and straightforward web application enabling rapid biomarker cutoff optimization. **PLoS One**. 2012;7(12):e51862. doi: 10.1371/journal.pone.0051862.
 101. Budczies J, Denkert C, Müller BM, Brockmüller SF, Klauschen F, Györffy B,

- Dietel M, Richter-Ehrenstein C, Marten U, Salek RM, Griffin JL, Hilvo M, Orešič M, Wohlgemuth G, Fiehn O. Remodeling of central metabolism in invasive breast cancer compared to normal breast tissue - a GC-TOFMS based metabolomics study. **BMC Genomics**. 2012 Jul 23;13:334.
102. Halon A, Nowak-Markwitz E, Donizy P, Matkowski R, Maciejczyk A, Gansukh T, Gyórfy B, Spaczynski M, Zabel M, Lage H, Surowiak P. Enhanced Immunoreactivity of TIMP-2 in the Stromal Compartment of Tumor as a Marker of Favorable Prognosis in Ovarian Cancer Patients. **J Histochem Cytochem**. 2012 Jul;60(7):491-501.
103. Li Q, Birkbak NJ, Gyórfy B, Szallasi Z, Eklund AC. Jetset: selecting the optimal microarray probe set to represent a gene, **BMC Bioinformatics**, 2011 Dec 15;12:474.
104. Maciejczyk A, Jagoda E, Wysocka T, Matkowski R, Gyórfy B, Lage H, Surowiak P. ABCC2 (MRP2, cMOAT) Localized in the Nuclear Envelope of Breast Carcinoma Cells Correlates with Poor Clinical Outcome. **Pathol Oncol Res**. 2012 Apr;18(2):331-42.
105. Szász AM, Németh Z, Gyórfy B, Micsinai M, Krenács T, Baranyai Z, Harsányi L, Kiss A, Schaff Z, Tóké AM, Kulka J. Identification of a claudin-4/E-cadherin score (CURIO) to predict prognosis in breast cancer. **Cancer Sci**. 2011 Dec;102(12):2248-2254.
106. Halon A, Nowak-Markwitz E, Maciejczyk A, Pudelko M, Gansukh T, Gyórfy B, Donizy P, Murawa D, Matkowski R, Spaczynski M, Lage H, Surowiak P. Loss of estrogen receptor beta expression correlates with shorter overall survival and lack of clinical response to chemotherapy in ovarian cancer patients. **Anticancer Res**. 2011 Feb;31(2):711-8.
107. Gyórfy B, Schäfer R. Biomarkers Downstream of RAS: A Search for Robust Transcriptional Targets. **Curr Cancer Drug Targets**. 2010 Dec 1;10(8):858-68.
108. Gyórfy B, Lanczky A, Eklund AC, Denkert C, Budczies J, Li Q, Szallasi Z. An online survival analysis tool to rapidly assess the effect of 22,277 genes on breast cancer prognosis using microarray data of 1809 patients, **Breast Cancer Res Treatment**, 2010 Oct;123(3):725-31.
109. Tchernitsa O, Kasajima A, Schäfer R, Kuban RJ, Ungethüm U, Gyórfy B, Neumann U, Simon E, Weichert W, Ebert MP, Röcken C. Systematic evaluation of the miRNA-ome and its downstream effects on mRNA expression identifies gastric cancer progression. **J Pathol**. 2010 Nov;222(3):310-9.
110. Swanton C, Larkin JM, Gerlinger M, Eklund AC, Howell M, Stamp G, Downward J, Gore M, Futreal PA, Escudier B, Andre F, Albiges L, Beuselinck B, Oudard S, Hoffmann J, Gyórfy B, Torrance C, Boehme KA, Volkmer H, Toschi L, Nicke B, Beck M, Szallasi Z. Predictive biomarker discovery through the parallel integration of clinical trial and functional genomics datasets. **Genome Med**. 2010 Aug 11;2(8):53.
111. Tímár J, Gyórfy B, Rásó E. Gene signature of the metastatic potential of cutaneous melanoma: too much for too little? **Clin Exp Metastasis**. 2010 Aug;27(6):371-87.
112. Darb-Esfahani S, Sinn BV, Weichert W, Budczies J, Lehmann A, Noske A, Buckendahl AC, Müller BM, Sehoul J, Koengen D, Gyórfy B, Dietel M, Denkert C. Expression of classical NF-kappaB pathway effectors in human ovarian carcinoma. **Histopathology**. 2010 May;56(6):727-39.
113. Munkácsy G, Abdul-Ghani R, Mihály Z, Tegze B, Tchernitsa O, Surowiak P,

- Schäfer R, Gyórrffy B. PSMB7 is associated with anthracycline resistance and is a prognostic biomarker in breast cancer, **Br J Cancer**. 2010 Jan 19;102(2):361-8.
114. Gyórrffy B, Schafer R. Meta-analysis of gene expression profiles related to relapse-free survival in 1079 breast cancer patients, **Breast Cancer Res Treatment**, 2009 Dec;118(3):433-41.
115. Gyórrffy B, Molnar B, Lage H, Szallasi Z, Eklund A. Evaluation of Microarray Preprocessing Algorithms Based on Concordance with RT-PCR in Clinical Samples, **PLoS One**, 2009 May 21;4(5):e5645.
116. Denkert C, Budczies J, Darb-Esfahani S, Gyórrffy B, Sehouli J, Könsgen D, Zeillinger R, Weichert W, Noske A, Buckendahl AC, Müller BM, Dietel M, Lage H. A prognostic gene expression index in ovarian cancer-validation across different independent data sets. **J Pathol**. 2009 Jun;218(2):273-80.
117. Gyórrffy B, Dietel M, Fekete T, Lage H. A snap shot of microarray-generated gene expression signatures associated with ovarian carcinoma, **Int J Gynecol Cancer**. 2008 Nov-Dec;18(6):1215-33.
118. Gosepath EM, Eckstein N, Hamacher A, Servan K, Jonquieres G, Royer HD, Lage H, Gyórrffy B, Kassack MU. Acquired cisplatin resistance in the head-neck cancer cell line Cal27 is associated with decreased DKK1 expression and can partially be reversed by overexpression of DKK1. **Int J Cancer**. 2008 Nov 1;123(9):2013-9.
119. Gyórrffy B, Galamb O, Sipos F, Spisák S, Németh AM, Miheller P, Tulassay Z, Dinya E, Molnár B. Inflammation, adenoma and cancer: objective classification of colon biopsy specimens with gene expression signature **Dis Markers**. 2008;25(1):1-16.
120. Gyórrffy A, Baranyai Z, Cseh A, Munkácsy G, Jakab F, Tulassay Z, Gyórrffy B. Promoter analysis suggests the implication of NFkB/C-Rel transcription factors in biliary atresia **Hepatogastroenterology**. 2008 Jul-Aug;55(85):1189-92.
121. Galamb O, Gyórrffy B, Sipos F, Dinya E, Krenács T, Berczi L, Szöke D, Spisák S, Solymosi N, Németh AM, Juhász M, Molnár B, Tulassay Z. Helicobacter pylori and antrum erosion-specific gene expression patterns: the discriminative role of CXCL13 and VCAM1 transcripts. **Helicobacter**. 2008 Apr;13(2):112-26.
122. Szoke D, Gyórrffy A, Surowiak P, Tulassay Z, Dietel M, Gyórrffy B. Identification of consensus genes and key regulatory elements in 5-fluorouracil resistance in gastric and colon cancer. **Onkologie**. 2007 Sep;30(8-9):421-6.
123. Gyórrffy A, Surowiak P, Tulassay Z, Gyórrffy B. Highly expressed genes are associated with inverse antisense transcription in mouse. **J Genet**. 2007 Aug;86(2):103-9.
124. Schafer R, Tchernitsa OI, Gyórrffy B, Serra V, Abdul-Ghani R, Lund P, Sers C. Functional transcriptomics: an experimental basis for understanding the systems biology for cancer cells. **Adv Enzyme Regul**. 2007;47:41-62.
125. Gyórrffy B, Lage H. A Web-Based Data Warehouse on Gene Expression in Human Malignant Melanoma. **J Invest Dermatol**. 2007 Feb;127(2):394-9.
126. Gyórrffy A, Tulassay Z, Surowiak P, Gyórrffy B. Computational analysis reveals 43% antisense transcription in 1182 transcripts in mouse muscle, **DNA Sequence** 2006 Dec;17(6):422-30.
127. Nagy GR, Gyórrffy B, Galamb O, Molnar B, Nagy B, Papp Z. Use of routinely

- collected amniotic fluid for whole-genome expression analysis of polygenic disorders. **Clin Chem.** 2006 Nov;52(11):2013-20.
128. Surowiak P, Materna V, Győrffy B, Matkowski R, Wojnar A, Maciejczyk A, Paluchowski P, Dziegiel P, Pudelko M, Kornafel J, Dietel M, Kristiansen G, Zabel M, Lage H. Multivariate analysis of estrogen receptor alpha, pS2, metallothionein and CD24 expression in invasive breast cancers. **Brit J Cancer**, 2006 Aug 7;95(3):339-46.
129. Győrffy A, Vasarhelyi B, Szoke D, Dietel M, Tulassay T, Győrffy B. Comparative promoter analysis of doxorubicin resistance associated genes suggests e47 as a key regulatory element. **Anticancer Res**, 2006 Jul-Aug;26(4B):2971-6.
130. Surowiak P, Suchocki S, Győrffy B, Gansukh T, Wojnar A, Maciejczyk A, Pudelko M, Zabel M. Stromal myofibroblasts in breast cancer: relations between their occurrence, tumor grade and expression of some tumor markers. **Folia Histochem Cytobiol**, 2006;44(2):111-6.
131. Győrffy B, Serra V, Materna V, Schafer R, Dietel M, Schadendorf D, Lage H. Analysis of gene expression profiles in melanoma cells with acquired resistance against antineoplastic drugs. **Melanoma Res.** 2006 Apr;16(2):147-155.
132. Győrffy B, Surowiak P, Kiesslich O, Denkert C, Schafer R, Dietel M, Lage H. Gene expression profiling of 30 cancer cell lines predicts resistance towards 11 anticancer drugs at clinically achieved concentrations. **Int J Cancer.** 2006 Apr 1;118(7):1699-712.
133. Abdul-Ghani R, Serra V, Győrffy B, Jurchott K, Solf A, Dietel M, Schafer R. The PI3K inhibitor LY294002 blocks drug export from resistant colon carcinoma cells overexpressing MRP1. **Oncogene.** 2006 Mar 16;25(12):1743-52.
134. Vannay A, Vasarhelyi B, Kornyei M, Treszl A, Kozma G, Győrffy B, Tulassay T, Sulyok E. Single-nucleotide polymorphisms of VEGF gene are associated with risk of congenital valvuloseptal heart defects. **Am Heart J.** 2006 Apr;151(4):878-81.
135. Vasarhelyi B, Cseh A, Kocsis I, Treszl A, Győrffy B, Rigo J Jr. Three mechanisms in the pathogenesis of pre-eclampsia suggested by over-represented transcription factor-binding sites detected with comparative promoter analysis. **Mol Hum Reprod.** 2006 Jan;12(1):31-4.
136. Győrffy B, Serra V, Jurchott K, Abdul-Ghani R, Garber M, Stein U, Petersen I, Lage H, Dietel M, Schäfer R: Prediction of Doxorubicin Sensitivity in Breast Tumors Based on Gene Expression Profiles of Drug Resistant Cell Lines Correlates with Patient Survival, **Oncogene.** 2005;24(51):7542-51.
137. Győrffy B, Surowiak P, Lage H: Application of Microarrays for the Prediction of Therapy Response in Breast Cancer, **Cancer Genomics and Proteomics**, 2005,2:255-264.
138. Surowiak P, Matkowski R, Materna V, Győrffy B, Wojnar A, Pudelko M, Dziegiel P, Kornafel J, Zabel M. Elevated metallothionein (MT) expression in invasive ductal breast cancers predicts tamoxifen resistance. **Histol Histopathol.** 2005 Oct;20(4):1037-44.
139. Kocsis I, Vásárhelyi B, Győrffy A, Győrffy B: Reanalysis of genotype distributions published in Neurology between 1999 and 2002, **Neurology**, 2004 Jul 27;63(2):357-8.
140. Kocsis I, Győrffy B, Vásárhelyi B: Examination of Hardy-Weinberg equilibrium in

- papers of *Kidney International*: an underused tool, **Kidney Int**, 2004 May;65(5):1956-1958.
141. Győrffy B, Kocsis I, Vászárhelyi B: Missed calculations and new conclusions: re-calculation of genotype distribution data published in *J Invest Dermatol*, 1998-2003, **J Invest Dermatol**, 2004 Mar;122(3):644-6.
142. Győrffy B, Kocsis I, Vászárhelyi B: Biallelic genotype distributions in papers published in *Gut* between 1998 and 2003: altered conclusions after re-calculating the Hardy-Weinberg equilibrium, **Gut**, 2004 Apr;53(4):614-5.
143. Németh É, Vászárhelyi B, Győrffy B, Kocsis I: Prevalence of unreported skewness of genotype distributions in papers published in *Critical Care Medicine* between 1999 and 2003. **Crit Care Med**, 2004 Jun;32(6):1431-3.
144. Bardóczy Zs, Győrffy B, Kocsis I, Vászárhelyi B: Re-calculated Hardy-Weinberg values in papers published in *Atherosclerosis* between 1995 and 2003. **Atherosclerosis** 2004 Mar;173(1):141-3.
145. Győrffy B, Vászárhelyi B, Krikovszky D, Madácsy L, Tordai A, Tulassay T, Szabó A: Gender-specific association of vitamin D receptor polymorphism combinations with type 1 diabetes mellitus. **Eur J Endocrinol** 2002 Dec;147(6):803-8.

PhD theses submitted under my supervision:

1. **Dr. Zsófia Péncz**: *Gene expression based predictive biomarkers in the systemic therapy of solid tumors*, Semmelweis University, 2015
2. **Dr. Bálint Tegze**: *Modeling the independently developing resistance in 29 chemoresistant cancer cell lines*, Semmelweis University, 2013
3. **Dr. Tibor Fekete**: *Prediction of ovarian cancer prognosis using gene expression signatures obtained by microarrays*, Semmelweis University, 2013
4. **Dr. Gyöngyi Munkácsy**: *PSMB7 is associated with doxorubicin resistance and is a prognostic biomarker in breast cancer*, Semmelweis University, 2012
5. **Dr. András Győrffy**: *Systems Biology: Gene Expression Signatures and the Regulation of Transcription*, Semmelweis University, 2007

MSc theses submitted under my supervision:

1. **Csonka Gábor**: *Investigation of tumor heterogeneity in melanoma malignum using next generation sequencing data*, Pázmány Péter Catholic University Faculty of Information Technology, 2016.
2. **Homonnay Csilla**: *Utilization of cell culture models to investigate new target genes of personalized anticancer therapy*, Pázmány Péter Catholic University Faculty of Information Technology, 2016.
3. **Bartha Luca**: *Identification of new gene expression based biomarkers of resistance in HER2 positive solid tumors*, Semmelweis University, Faculty of General Medicine, 2016.

4. **Lénárt Júlia:** *Investigating chemotherapy resistance of solid tumors in cell culture models*, Semmelweis University, Faculty of General Medicine, 2015.
5. **Kalmár Boglárka:** *Functional analysis of a cell culture based model of the parallel evolution*, Pázmány Péter Catholic University Faculty of Information Technology, 2014.
6. **Máté Kormos:** *Developing quality control functions for an online system predicting clinical outcome by utilizing gene arrays*, Pázmány Péter Catholic University Faculty of Information Technology, 2014.
7. **László Bálint:** *Investigating new biomarker candidates of anti-HER2-therapy resistance*, Pázmány Péter Catholic University Faculty of Information Technology, 2014.
8. **Ádám Kiss:** *Predicting aging of normal lung tissue using transcriptome level data*, Pázmány Péter Catholic University Faculty of Information Technology, 2014.
9. **Zsófia Sztupinszki:** *Dean's first prize award accepted as theses*, Semmelweis University, Faculty of General Medicine, 2013
10. **Boglárka Weltz:** *Developing a classification algorithm for predicting relapse-free survival in breast cancer patients*, Pázmány Péter Catholic University Faculty of Information Technology, 2012.
11. **Eszter Tilesch:** *Ordering of genes into hierarchical structures according to their biological functions*, Pázmány Péter Catholic University Faculty of Information Technology, 2012.
12. **Attila Viktor:** *Developing bioinformatical systems for gene sequence based medical classification tools*, Pázmány Péter Catholic University Faculty of Information Technology, 2012.
13. **Márton Kokas:** *Resistance mechanisms against tyrosine kinase inhibitors in solid tumors*. Semmelweis University Faculty of Pharmacy, 2012.
14. **Mihály Zsuzsanna:** *First author paper accepted as theses*, Semmelweis University, Faculty of General Medicine, 2012
15. **Bálint Balázs:** *Celmetrix: Comprehensive online pre-processing for microarray files*, Pázmány Péter Catholic University Faculty of Information Technology, 2011.
16. **András Lániczky:** *Application of classification algorithms for the identification of tumors of unknown origin using microarray data*, Pázmány Péter Catholic University Faculty of Information Technology, 2010.
17. **Zsombor Benke:** *Adapting a microarray-based classification algorithm for predicting relapse-free survival in breast cancer patients*, Pázmány Péter Catholic University Faculty of Information Technology, 2010.
18. **Zsófia Péneváltó:** *Application of microarray-based gene expression signatures of a cell line panel for the prediction of resistance against targeted therapy agents*, Eötvös Loránd University Faculty of Science, 2010
19. **Bálint Tegze:** *Dean's first prize award accepted as theses*, Semmelweis University, Faculty of General Medicine, 2008

Patents and innovation:

- Dynamic methods for diagnosis and prognosis of cancer, patent submitted: 29.08.2013., patent number (USA): 61/871,503 (Docket number: 38602-733.101)
- Automata measuring system for electrochemical and biochemical measurements, submitted: 2005, number: P0500671
- Positioning technique and unit specially to positioning pipette tips, submitted: 2005, number: P0500670
- Hungarian Innovation TechShow, One of the 20 most innovative ideas, 2011