

CV (updated June 2024)

Evi Lianidou, Ph.D.
Professor of Analytical Chemistry – Clinical Chemistry
Analysis of Circulating Tumor Cells (ACTC) Lab
Laboratory of Analytical Chemistry
Chairman, Dept of Chemistry,
National and Kapodistrian University of Athens,
Athens, Greece
email: lianidou@chem.uoa.gr,
Website: <http://en.actc-lab.chem.uoa.gr/>



General info

h-index: 61

i10-index: 150

citations: 11474

Google scholar:

https://scholar.google.gr/citations?user=gvx_1p0AAAAJ&hl=en

Publications: 185

Pubmed: <https://pubmed.ncbi.nlm.nih.gov/?term=lianidou&sort=date>

1.POSITIONS (relevant to Liquid Biopsy)

1. 2017-present: President, Hellenic Society of Liquid Biopsy, <https://hsliquidbiopsy.wixsite.com/2021>
2. 2020-present: Elected Board Member, European Association for Cancer Research: <https://www.eacr.org/governance/board>
3. 2020-present: Coordinator of CTC technologies group (together with Prof. N. Stoecklein, Univ of Dusseldorf, Germany), European Liquid Biopsy Society (ELBS): <https://www.uke.de/english/departments-institutes/institutes/tumor-biology/european-liquid-biopsy-society-elbs/news/index.html>
4. International Federation of Clinical Chemistry (IFCC):
 - 2009-2019: Elected member and Chair of the Committee for Clinical Molecular Biology Curriculum (<http://www.ifcc.org/ifcc-education-division/emd-committees/c-cmbc/>)
 - 2020-present: Elected member of the IFCC Committee on Task Force on Global Lab Quality (TF-GLQ), (<https://www.ifcc.org/executive-board-and-council/eb-task-forces/task-force-on-global-lab-quality/>).

2. EDUCATION

- **1978-1983:** B.Sc. Chemistry, University of Athens, Greece
- **1983 – 1988:** Ph.D. Analytical Chemistry – Clinical Chemistry, National and Kapodistrian University of Athens (NKUA), Greece
- **1989-1990:** Post-doctoral research Fellow, Department of Clinical Biochemistry, Mount Sinai Hospital, University of Toronto, Canada
- **1996-1997:** Sabbatical leave, Research fellow, Department of Pathology and Clinical Biochemistry, University of Toronto, Canada

3. PROFESSIONAL EXPERIENCE

- June 2023-today: Chairman, Department of Chemistry, National and Kapodistrian University of Athens, Greece

- 2011-present: **Professor** of Analytical Chemistry – Clinical Chemistry, Analysis of Circulating Tumor Cells (ACTC) Lab, Department of Chemistry, National and Kapodistrian University of Athens (NKUA), Athens, Greece
- 2004-2011: **Assoc. Professor** of Clinical Analysis, Dept of Chemistry, National and Kapodistrian University of Athens (NKUA), Greece
- 1997-2004: **Assistant Professor**, Dept of Chemistry, National and Kapodistrian University of Athens (NKUA), Greece
- 1996-1997: **Postdoctoral Research Fellow**, Department of Pathology and Clinical Biochemistry, Mount Sinai Hospital, University of Toronto, Canada
- 1990-1996: **Lecturer**, Department of Chemistry, National and Kapodistrian University of Athens (NKUA), Greece
- 1989-1990: **Postdoctoral Research Fellow**, Department of Clinical Biochemistry, Toronto Hospital, University of Toronto, Canada

3. RESEARCH EXPERIENCE

My lab (<http://en.actc-lab.chem.uoa.gr>) is specializing since 1998 in Liquid Biopsy analysis, and especially on Circulating Tumor Cells (CTCs), ctDNA, exosomes and circulating miRNAs. My lab has access to many patient samples through extensive clinical collaborations, in Greece and in many European countries.

My main research interests are especially on the following areas:

- Evaluation of tumor biomarkers in liquid biopsy (CTCs and ctDNA)
- Evaluation of epigenetic alterations as promising tumor biomarkers in liquid biopsy
- Development of single-plex and multiplex RT-qPCR assays for the detection and molecular characterization of CTCs,
- Development of single-plex and multiplex RT droplet digital PCR (RT-ddPCR) assays for gene expression in CTCs
- Development of single-plex and multiplex droplet digital PCR (ddPCR) assays for mutation analysis in CTCs and ctDNA
- Development and clinical evaluation of single-plex and multiplex DNA methylation assays based on Methylation Specific PCR (MSP) and droplet digital MSP in CTCs and ctDNA
- Development and clinical evaluation of highly sensitive real time PCR assays for mutation analysis in CTCs and ctDNA,
- Evaluation of circulating miRNAs as tumor biomarkers in plasma.

4. LIST OF FUNDED PROJECTS ON LIQUID BIOPSY AS COORDINATOR AND PARTNER

2018-22	CANCER blood-scan: Liquid biopsy: Development, validation and clinical evaluation of novel molecular diagnostic assays for tumor biomarkers in peripheral blood. GSRT, ESPA, Code: T1EAK-02935
2019-22	“Early Detection of Prostate Cancer by Liquid Biopsies”, Grant: ERA-NET on Translational Cancer Research (TRANSCAN). Partners: K. Pantel, Univ of Hamburg, Germany (coordinator), E. Lianidou, Univ of Athens, Greece, C. Panabieres, University Medical Centre of Montpellier Saint-Eloi Hospital, France, Desiree Bonci, Italy, Maciej Zabel, Poland
2015-19	“CANCER-ID” Cancer treatment and monitoring through identification of circulating tumour cells and tumour related nucleic acids in blood, IMI: 33 partners, https://www.cancer-id.eu/partners/academic-partners/university-of-athens/
2013-15	“Liquid biopsy: In vivo capturing and molecular characterization of circulating tumor cells as a novel tool for improving tertiary prevention in breast cancer”, GERMANY GREECE COOPERATION, Partner 1: K. Pantel, University Medical Center Hamburg-Eppendorf, Germany (the Coordinator in Germany), Partner 2: K. Lucke, GILUPI GmbH c/o Innovationszentrum Golm, R&D Company, Potsdam, Germany, Partner 3: Evi Lianidou,

	University of Athens, Greece (the Coordinator in Greece), Partner 4: V. Georgoulas, University of Crete, Greece
2012-15	Circulating Tumor Cells as Biomarker for Minimal Residual Disease in Prostate Cancer Grant: ERA-NET on Translational Cancer Research (TRANSCAN), Partners: K. Pantel, Univ of Hamburg, Germany (co-ordinator), E. Lianidou, Univ of Athens, Greece, C. Panabieres, University Medical Centre of Montpellier Saint-Eloi Hospital, France, Peter Sedlmayr, Medical University of Graz, Austria, Maciej Zabel, Poznan University of Medical Sciences, Poland
2011-14	«Study and clinical evaluation of novel molecular biomarkers for breast cancer ». Grant: Herakleitos, Funding agency: Greek Ministry of Education
2010-15	OncoSeed Diagnostics: Biology of Circulating Tumour Cells, Distal Metastasis & Development of Liquid Biopsy Methods. Grant: Cooperation Funding agency: GSRT, Greece
2008-10	Development and clinical evaluation of DNA methylation assays in paraffin-embedded breast carcinomas and in cell-free circulating DNA in plasma of patients with early-stage breast cancer Grant: KESY oncology, Funding agency: Greek Ministry of Health
2006-09	Molecular Diagnosis of micrometastatic disease in breast cancer by DNA microarrays Grant: PENED 2003, Funding agency: GSRT, Greece

5. ORGANIZER OF INTERNATIONAL MEETINGS and WORKSHOPS

5.1. Advances in Circulating Tumor Cells Meetings (ACTC meetings)

Year	Conference	website
2012	1st ACTC meeting, Athens, Greece “Advances in Circulating Tumor Cells: From basic research to clinical practice”	http://actc2012.chem.uoa.gr/
2014	2nd ACTC meeting, Crete, Greece	http://actc2014.chem.uoa.gr/
2017	3rd ACTC meeting, Rhodes, Greece “Liquid biopsy in clinical practice”	http://actc2017.chem.uoa.gr/
2019	4th ACTC meeting, Corfu Greece “Liquid Biopsy: Latest Advances and Future Challenges”	http://actc2019.chem.uoa.gr/
2021	5th ACTC meeting, Kalamata, Greece “Liquid Biopsy in its best”,	http://www.actc2021.org/
2023	6th ACTC meeting, Skiathos, Greece “Liquid Biopsy and Precision Oncology: Where do we stand now”	https://www.actc2023.org/

5.2. Liquid Biopsy meetings and webinars

Year	Conference	website
2023	Full Day meeting: Liquid Biopsy: Latest advances and potential in clinical oncology, (Hellenic Society of Liquid Biopsy)	http://www.chem.uoa.gr/wp-content/uploads/announcements/2022-23/Final-%CE%97%CE%BC%CE%B5%CF%81%CE%AF%CE%B4%CE%B1-program-23-1-23.pdf
2022	Webinar: Liquid Biopsy in the clinical setting, Webinar (Hellenic Society of Liquid Biopsy)	https://www.erasmus.gr/microsites/1243
2019	Full Day meeting: Liquid Biopsy: Latest advances and potential in clinical oncology,	https://scep.gr/events/event/hmerida-ygri-biopsia/

	(Hellenic Society of Liquid Biopsy)	
2009	7th International Symposium on Minimal Residual Disease, Athens, Greece, (co-organization with Prof K. Pantel)	http://ismrc2009.chem.uoa.gr

6. EDITORIAL AND REVIEWING TASKS

6.1. Editorial tasks: 1) Cancers, Editorial board, 2) Frontiers in Oncology, Editorial Board

6.2 Journal Referee (Reviewing tasks): 63 different Scientific Journals

7. PATENTS: (all on liquid biopsy tests)

- Development of a quantitative real-time RT-PCR assay for CK-19 mRNA expression: circulating tumor cells in peripheral blood (CTCs), (CE, IVD test). Inventors: Lianidou E, Stathopoulou A., Mavroudis D., Georgoulas V. <http://www.freepatentsonline.com/y2010/0015604.html>
- Method of determining PIK3CA mutational status in a sample. Inventors: Lianidou E, Markou A. <http://www.freepatentsonline.com/WO2016020710A1.html>
- Method for the quantification of PD-L1 expression. Inventors: Lianidou E, Strati A. <http://www.freepatentsonline.com/WO2017072539A1.html>

8. BOOK EDITOR: R.J.Cote, E. Lianidou, Editors: “Circulating Tumor Cells, Advances in Liquid Biopsy Technologies”, Springer, Current Cancer Research Series, 2nd Edition, 2023, ISBN 978-3-031-22902-2, <https://doi.org/10.1007/978-3-031-22903-9>.

9. BOOK CHAPTERS ON LIQUID BIOPSY

- 1. Richard Cote and Evi Lianidou (Editors): Circulating Tumor Cells. Advances in Liquid Biopsy Technologies, Current Cancer Research Series, ISBN 978-3-031-22902-2, SPRINGER, 2023.**
- Lianidou E** and Hoon D. Circulating Tumor Cells and circulating Tumor DNA. In: Nader Rifai, Andea Rita Horvath and Carl Wittwer Editors. **Tietz Textbook of Clinical Chemistry and Molecular Diagnostics. Sixth Edition, Elsevier, 2017, p 1111-44.** <https://evolve.elsevier.com/cs/product/9780323359214>
- Evi Lianidou:** “Circulating Tumor Cells: A Noninvasive Liquid Biopsy in Cancer” in Molecular Testing in Cancer, Editor: G. Yousef, Springer, 2014
- Evi Lianidou:** “Circulating Tumor Cells as a real time Liquid Biopsy: Isolation and detection systems, molecular characterization and clinical applications” in “Pathobiology of Human Disease: A Dynamic Encyclopedia of Disease Mechanisms”, Editor: Richard N. Mitchell and Linda M. McManus, ELSEVIER
- Evi Lianidou:** The Role of CTCs as Tumor Biomarkers, in Advances in Cancer Biomarkers, From biochemistry to clinic for a critical revision, Editor: R. Scatena, Springer, 2015
- Evi S. Lianidou, Athina Markou and Areti Strati:** “Molecular Assays for the Detection and Molecular Characterization of CTCs” in “Circulating Tumor Cells: New Approaches, Insight into Cancer Metastasis and Impact on Patient Management”, Editor(s) name(s): Richard J. Cote and Ram Datar, Springer, Series Title: Technologies for CTC Identification, 2015
- Cleo Parisi and **Evi S. Lianidou:** “Enumeration and molecular analysis of CTCs in metastatic disease: The breast cancer model” in Liquid Biopsies in Solid Tumors, Edited by Massimo Cristofanilli, Springer, 2016

10. LIST OF PUBLICATIONS (total 185 publications, June 2024)

Full List: <https://pubmed.ncbi.nlm.nih.gov/?term=lianidou+&sort=date>

Below are given ONLY SELECTED PUBLICATIONS RELEVANT TO LIQUID BIOPSY (total number: 100)

1. Markou AN, Londra D, Stergiopoulou D, Vamvakaris I, Potaris K, Pateras IS, Kotsakis A, Georgoulas V, Lianidou E. Preoperative Mutational Analysis of Circulating Tumor Cells (CTCs) and Plasma-cfDNA Provides Complementary Information for Early Prediction of Relapse: A Pilot Study in Early-Stage Non-Small Cell Lung Cancer. *Cancers (Basel)*. 2023 Mar 21;15(6):1877. doi: 10.3390/cancers15061877. PMID: 36980762; PMCID: PMC10047138.
2. Stergiopoulou D, Markou A, Strati A, Zavridou M, Tzanikou E, Mastoraki S, Kallergi G, Georgoulas V, Lianidou E. Comprehensive liquid biopsy analysis as a tool for the early detection of minimal residual disease in breast cancer. *Sci Rep*. 2023 Jan 23;13(1):1258. doi: 10.1038/s41598-022-25400-1. PMID: 36690653; PMCID: PMC9870904.
3. Buszka K, Ntzifa A, Owecka B, Kamińska P, Kolecka-Bednarczyk A, Zabel M, Nowicki M, Lianidou E, Budna-Tukan J. Liquid Biopsy Analysis as a Tool for TKI-Based Treatment in Non-Small Cell Lung Cancer. *Cells*. 2022 Sep 14;11(18):2871. doi: 10.3390/cells11182871. PMID: 36139444; PMCID: PMC9497234.
4. Zavridou M, Smilkou S, Tserpeli V, Sfika A, Bournakis E, Strati A, Lianidou E. Development and Analytical Validation of a 6-Plex Reverse Transcription Droplet Digital PCR Assay for the Absolute Quantification of Prostate Cancer Biomarkers in Circulating Tumor Cells of Patients with Metastatic Castration-Resistant Prostate Cancer. *Clin Chem*. 2022 Sep 12;hvac125. doi: 10.1093/clinchem/hvac125. Epub ahead of print. PMID: 36093578.
5. Markou A, Londra D, Tserpeli V, Kollias I, Tsaroucha E, Vamvakaris I, Potaris K, Pateras I, Kotsakis A, Georgoulas V, Lianidou E. DNA methylation analysis of tumor suppressor genes in liquid biopsy components of early-stage NSCLC: a promising tool for early detection. *Clin Epigenetics*. 2022 May 10;14(1):61. doi: 10.1186/s13148-022-01283-x. PMID: 35538556; PMCID: PMC9092693.
6. Stergiopoulou D, Markou A, Giannopoulou L, Buderath P, Balgkouranidou I, Xenidis N, Kakolyris S, Kasimir-Bauer S, Lianidou E. Detection of ESR1 Mutations in Primary Tumors and Plasma Cell-Free DNA in High-Grade Serous Ovarian Carcinoma Patients. *Cancers (Basel)*. 2022 Aug 4;14(15):3790. doi: 10.3390/cancers14153790. PMID: 35954453; PMCID: PMC9367392.
7. Buszka K, Ntzifa A, Owecka B, Kamińska P, Kolecka-Bednarczyk A, Zabel M, Nowicki M, Lianidou E, Budna-Tukan J. Liquid Biopsy Analysis as a Tool for TKI-Based Treatment in Non-Small Cell Lung Cancer. *Cells*. 2022 Sep 14;11(18):2871. doi: 10.3390/cells11182871. PMID: 36139444; PMCID: PMC9497234.
8. Pantazaka E, Ntzifa A, Roumeliotou A, Lianidou E, Georgoulas V, Kotsakis A, Kallergi G. PD-L1/pS6 in Circulating Tumor Cells (CTCs) during Osimertinib Treatment in Patients with Non-Small Cell Lung Cancer (NSCLC). *Biomedicines*. 2022 Aug 5;10(8):1893. doi: 10.3390/biomedicines10081893. PMID: 36009440; PMCID: PMC9405335.
9. Markou A, Tzanikou E, Lianidou E. The potential of liquid biopsy in the management of cancer patients. *Semin Cancer Biol*. 2022 Sep;84:69-79. doi: 10.1016/j.semcancer.2022.03.013. Epub 2022 Mar 21. PMID: 35331850.
10. Froelich MF, Capoluongo E, Kovacs Z, Patton SJ, Lianidou ES, Haselmann V. The value proposition of integrative diagnostics for (early) detection of cancer. On behalf of the EFLM interdisciplinary Task and Finish Group "CNAPS/CTC for early detection of cancer". *Clin Chem Lab Med*. 2022 Feb 24;60(6):821-829. doi: 10.1515/cclm-2022-0129. PMID: 35218176.
11. Ntzifa A, Londra D, Rampias T, Kotsakis A, Georgoulas V, Lianidou E. DNA Methylation Analysis in Plasma Cell-Free DNA and Paired CTCs of NSCLC Patients before and after Osimertinib Treatment. *Cancers (Basel)*. 2021 Nov 27;13(23):5974. doi: 10.3390/cancers13235974. PMID: 34885084; PMCID: PMC8656722.
12. Strati A, Zavridou M, Kallergi G, Politaki E, Kuske A, Gorges TM, Riethdorf S, Joosse SA, Koch C, Bohnen AL, Mueller V, Koutsodontis G, Kontopodis E, Poulakaki N, Psyrii A, Mavroudis D, Georgoulas V, Pantel K, Lianidou ES. A Comprehensive Molecular Analysis of in Vivo Isolated EpCAM-Positive Circulating Tumor Cells in Breast Cancer. *Clin Chem*. 2021 Oct 1;67(10):1395-1405. doi: 10.1093/clinchem/hvab099. PMID: 34322698.
13. Londra D, Mastoraki S, Bournakis E, Zavridou M, Thanos A, Rampias T, Lianidou ES. USP44 Promoter Methylation in Plasma Cell-Free DNA in Prostate Cancer. *Cancers (Basel)*. 2021 Sep 14;13(18):4607. doi: 10.3390/cancers13184607. PMID: 34572834; PMCID: PMC8467003.
14. Danesi R, Lo YMD, Oellerich M, Beck J, Galbiati S, Re MD, Lianidou E, Neumaier M, van Schaik RHN. What do we need to obtain high quality circulating tumor DNA (ctDNA) for routine diagnostic

- test in oncology? - Considerations on pre-analytical aspects by the IFCC workgroup cfDNA. *Clin Chim Acta*. 2021 Sep;520:168-171. doi: 10.1016/j.cca.2021.05.033. Epub 2021 Jun 1. PMID: 34081934.
15. Ntzifa A, Kotsakis A, Georgoulas V, Lianidou E. Detection of EGFR Mutations in Plasma cfDNA and Paired CTCs of NSCLC Patients before and after Osimertinib Therapy Using Crystal Digital PCR. *Cancers (Basel)*. 2021 May 31;13(11):2736. doi: 10.3390/cancers13112736. PMID: 34073111; PMCID: PMC8197887.
 16. Lianidou E. Detection and relevance of epigenetic markers on ctDNA: recent advances and future outlook. *Mol Oncol*. 2021 Jun;15(6):1683-1700. doi: 10.1002/1878-0261.12978. Epub 2021 May 14. PMID: 33942482; PMCID: PMC8169441.
 17. Strati A, Nikolaou M, Georgoulas V, Lianidou ES. RNA-Based CTC Analysis Provides Prognostic Information in Metastatic Breast Cancer. *Diagnostics (Basel)*. 2021 Mar 14;11(3):513. doi: 10.3390/diagnostics11030513. PMID: 33799422; PMCID: PMC7998407.
 18. Zavridou M, Strati A, Bournakis E, Smilkou S, Tserpeli V, Lianidou E. Prognostic Significance of Gene Expression and DNA Methylation Markers in Circulating Tumor Cells and Paired Plasma Derived Exosomes in Metastatic Castration Resistant Prostate Cancer. *Cancers (Basel)*. 2021 Feb 13;13(4):780. doi: 10.3390/cancers13040780. PMID: 33668490; PMCID: PMC7918693.
 19. Stergiopoulou D, Markou A, Tzanikou E, Ladas I, Makrigiorgos GM, Georgoulas V, Lianidou E. ESR1 NAPA Assay: Development and Analytical Validation of a Highly Sensitive and Specific Blood-Based Assay for the Detection of ESR1 Mutations in Liquid Biopsies. *Cancers (Basel)*. 2021 Feb 1;13(3):556. doi: 10.3390/cancers13030556. PMID: 33535614; PMCID: PMC7867152.
 20. Ntzifa A, Strati A, Kallergi G, Kotsakis A, Georgoulas V, Lianidou E. Gene expression in circulating tumor cells reveals a dynamic role of EMT and PD-L1 during osimertinib treatment in NSCLC patients. *Sci Rep*. 2021 Jan 27;11(1):2313. doi: 10.1038/s41598-021-82068-9. PMID: 33504904; PMCID: PMC7840727.
 21. Strati A, Zavridou M, Economopoulou P, Gkolfinopoulos S, Psyri A, Lianidou E. Development and Analytical Validation of a Reverse Transcription Droplet Digital PCR (RT-ddPCR) Assay for PD-L1 Transcripts in Circulating Tumor Cells. *Clin Chem*. 2021 Mar 31;67(4):642-652. doi: 10.1093/clinchem/hvaa321. PMID: 33421061.
 22. Mastoraki S, Balgkouranidou I, Tsaroucha E, Klinakis A, Georgoulas V, Lianidou E. KMT2C promoter methylation in plasma-circulating tumor DNA is a prognostic biomarker in non-small cell lung cancer. *Mol Oncol*. 2021 Sep;15(9):2412-2422. doi: 10.1002/1878-0261.12848. Epub 2020 Dec 25. PMID: 33159839; PMCID: PMC8410531.
 23. Giannopoulou L, Lianidou ES. Liquid biopsy in ovarian cancer. *Adv Clin Chem*. 2020;97:13-71.
 24. Economopoulou P, et al. Prognostic impact of indoleamine 2,3-dioxygenase 1 (IDO1) mRNA expression on circulating tumour cells of patients with head and neck squamous cell carcinoma. *ESMO Open*. 2020 May;5(3):e000646.
 25. Markou A, et al. PIM-1 is Overexpressed at a High Frequency in Circulating Tumor Cells from Metastatic Castration-Resistant Prostate Cancer Patients. *Cancers (Basel)*. 2020 May 8;12(5):E1188.
 26. Zavridou M, et al. Direct comparison of size-dependent versus EpCAM-dependent CTC enrichment at the gene expression and DNA methylation level in head and neck squamous cell carcinoma. *Sci Rep*. 2020 Apr 16;10(1):6551
 27. Schneegans S, et al. Pre-analytical factors affecting the establishment of a single tube assay for multiparameter liquid biopsy detection in melanoma patients. *Mol Oncol*. 2020 May;14(5):1001-1015.
 28. Tzanikou E, et al. Direct comparison study between droplet digital PCR and a combination of allele-specific PCR, asymmetric rapid PCR and melting curve analysis for the detection of BRAF V600E mutation in plasma from melanoma patients. *Clin Chem Lab Med*. 2020 Jan 18;18(1):j.cclm.ahead-of-print/cclm-2019-0783/cclm-2019-0783.xml.
 29. Tzanikou E, et al. The potential of ctDNA analysis in breast cancer. *Crit Rev Clin Lab Sci*. 2020 Jan;57(1):54-72.
 30. Lampignano R, et al. Multicenter Evaluation of Circulating Cell-Free DNA Extraction and Downstream Analyses for the Development of Standardized (Pre)analytical Work Flows. *Clin Chem*. 2019 Oct 18;clinchem.2019.306837.
 31. Strati A, et al. Expression pattern of androgen receptors, AR-V7 and AR-567es, in circulating tumor cells and paired plasma-derived extracellular vesicles in metastatic castration resistant prostate cancer. *Analyst*. 2019 Nov 4;144(22):6671-6680.
 32. Markou A, et al. Nuclease-Assisted Minor Allele Enrichment Using Overlapping Probes-Assisted Amplification-Refractory Mutation System: An Approach for the Improvement of Amplification-Refractory Mutation System-Polymerase Chain Reaction Specificity in Liquid Biopsies. *Anal Chem*. 2019 Oct 15;91(20):13105-13111.

33. Strati A, et al. Prognostic Significance of *TWIST1*, *CD24*, *CD44*, and *ALDH1* Transcript Quantification in EpCAM-Positive Circulating Tumor Cells from Early Stage Breast Cancer Patients. *Cells*. 2019 Jun 29;8(7):652.
34. Tzanikou E, et al. PIK3CA hotspot mutations in circulating tumor cells and paired circulating tumor DNA in breast cancer: a direct comparison study. *Mol Oncol*. 2019 Dec;13(12):2515-2530.
35. Klotten V et al. Multicenter Evaluation of Circulating Plasma MicroRNA Extraction Technologies for the Development of Clinically Feasible Reverse Transcription Quantitative PCR and Next-Generation Sequencing Analytical Work Flows. *Clin Chem*. 2019 Sep;65(9):1132-1140.
36. Economopoulou P, et al. HPV16 E6/E7 expression in circulating tumor cells in oropharyngeal squamous cell cancers: A pilot study. *PLoS One*. 2019 May 9;14(5):e0215984.
37. Giannopoulou L, et al. *ESR1* methylation in primary tumors and paired circulating tumor DNA of patients with high-grade serous ovarian cancer. *Gynecol Oncol*. 2018 Aug;150(2):355-360.
38. Giannopoulou L, et al. Liquid biopsy in ovarian cancer: the potential of circulating miRNAs and exosomes. *Transl Res*. 2018 Oct 12.
39. Lianidou E, Pantel K. Liquid biopsies. *Genes Chromosomes Cancer*. 2019 Apr;58(4):219-232.
40. Markou A, et al. Multiplex Gene Expression Profiling of In Vivo Isolated Circulating Tumor Cells in High-Risk Prostate Cancer Patients. *Clin Chem*. 2018 Feb;64(2):297-306
41. Ntzifa A, et al. A pilot plasma-ctDNA ring trial for the Cobas® EGFR Mutation Test in clinical diagnostic laboratories. *Clin Chem Lab Med*. 2018
42. Parisi CA, et al. Development and validation of Multiplex Liquid Bead Array (MLBA) assay for the simultaneous expression of fourteen genes in Circulating Tumor Cells (CTCs). *Anal Chem*. 2019 Jan 21.
43. Zavridou M, et al. Evaluation of Preanalytical Conditions and Implementation of Quality Control Steps for Reliable Gene Expression and DNA Methylation Analyses in Liquid Biopsies. *Clin Chem*. 2018 Oct;64(10):1522-1533.
44. Strati A, et al. Prognostic significance of *PD-L1* expression on circulating tumor cells in patients with head and neck squamous cell carcinoma. *Ann Oncol*. 2017 Aug 1;28(8):1923-1933.
45. Mastoraki S, et al. *ESR1* methylation: a liquid biopsy-based epigenetic assay for the follow up of patients with metastatic breast cancer receiving endocrine treatment. *Clin Cancer Res*. 2017 Dec 28. pii: clincanres.1181.2017. doi: 10.1158/1078-0432.CCR-17-1181. [Epub ahead of print] PubMed PMID: 29284708.
46. Chimonidou M, et al. Direct comparison study of DNA methylation markers in EpCAM-positive circulating tumour cells, corresponding circulating tumour DNA, and paired primary tumours in breast cancer. *Oncotarget*. 2017 Jun 27;8(42):72054-72068.
47. Giannopoulou L, et al. Liquid biopsy in ovarian cancer: recent advances on circulating tumor cells and circulating tumor DNA. *Clin Chem Lab Med*. 2017 Jul 28. pii: j/cclm.ahead-of-print/cclm-2017-0019/cclm-2017-0019.xml.
48. Giannopoulou L, et al. RASSF1A promoter methylation in high-grade serous ovarian cancer: A direct comparison study in primary tumors, adjacent morphologically tumor cell-free tissues and paired circulating tumor DNA. *Oncotarget*. 2017 Mar 28;8(13):21429-21443.
49. Markou A et al. miRNA-21 as a novel therapeutic target in lung cancer. *Lung Cancer (Auckl)*. 2016 Mar 2;7:19-27.
50. Kuske A, et al. Improved detection of circulating tumor cells in non-metastatic high-risk prostate cancer patients. *Sci Rep*. 2016 Dec 21;6:39736.
51. Parisi C, et al. Development and validation of a multiplex methylation specific PCR-coupled liquid bead array for liquid biopsy analysis. *Clin Chim Acta*. 2016 Oct 1;461:156-64.
52. Markou A, et al. Direct Comparison of Metastasis-Related miRNAs Expression Levels in Circulating Tumor Cells, Corresponding Plasma, and Primary Tumors of Breast Cancer Patients. *Clin Chem*. 2016 Jul;62(7):1002-11.
53. Lianidou ES. Gene expression profiling and DNA methylation analyses of CTCs. *Mol Oncol*. 2016 Mar;10(3):431-42.
54. Balgkouranidou I, et al. SOX17 promoter methylation in plasma circulating tumor DNA of patients with non-small cell lung cancer. *Clin Chem Lab Med*. 2016 Aug 1;54(8):1385-93.
55. Lianidou ES, et al. The Role of CTCs as Tumor Biomarkers. *Adv Exp Med Biol*. 2015;867:341-67.
56. Balgkouranidou I, et al. Prognostic role of APC and RASSF1A promoter methylation status in cell free circulating DNA of operable gastric cancer patients. *Mutat Res*. 2015 Jun 11;778:46-51.
57. Mastoraki S, et al. A rapid and accurate closed-tube Methylation-Sensitive High Resolution Melting Analysis assay for the semi-quantitative determination of SOX17 promoter methylation in clinical samples. *Clin Chim Acta*. 2015 Apr 15;444:303-9.
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10. TEACHING EXPERIENCE

10.1.Coordination and teaching at the M.Sc. program: “Clinical Biochemistry – Molecular Diagnostics”, Departments of Biology, Chemistry, Medical Schhol, Nursing, University of Athens, website: <http://kb-md.biol.uoa.gr/STRUCTURE.html>

10.2.Teaching postgraduate level:

- Molecular Diagnostics
- Clinical Chemistry
- Novel Technologies in the biomedical laboratory

10.3. Teaching undergraduate level:

- Clinical Chemistry (Students of Chemistry, Students of Pharmacy)
- Molecular dIagnostics ((Students of Chemistry)
- Analytical Chemistry, (students of Biology)

11. INTERNATIONAL TEACHING ACTIVITIES

2014-2019: Elected member and Chair of the Committee for Clinical Molecular Biology Curriculum of the International Federation of Clinical Chemistry (IFCC), (<http://www.ifcc.org/ifcc-education-division/emd-committees/c-cmbc/>) that offers training in

Molecular Diagnostics all over the world by the way of courses and hands on workshop in combination with lectures and methodological issues.

Dr. Evi Lianidou is an Elected Member and Chair of the Committee for Clinical Molecular Biology Curriculum of the International Federation of Clinical Chemistry (IFCC). The Committee offers training in Molecular Diagnostics by the way of courses and hands on workshop in combination with lectures and methodological issues

Dr Lianidou is the organizer and tutor of the following IFCC Molecular Diagnostics Practical Workshops

Website: <http://www.ifcc.org/ifcc-education-division/emd-committees/c-cmbc>

Date	Position	Description	Location
Dec. 2016	IFCC, Head of the C-MBC committee	Organizer:C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	Tirgu Mures, Romania
July 2015	IFCC, Head of the C-MBC committee	Organizer: C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	Vilnius, Lithuania
Dec. 2014	IFCC, Head of the C-MBC committee	Organizer: C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	Manilla, Philippines
July 2013	IFCC, International faculty member of the C-MBC committee	Organizer: C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	Cape Town, South Africa
Nov 2012	IFCC, International faculty member of the C-MBC committee	Tutor: C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	Kuala Lumpur, Malaysia
Dec 2011	IFCC, International faculty member of the C-MBC committee	Tutor: C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	Guatemala City, Guatemala
Dec 2010	IFCC, International faculty member of the C-MBC committee	Tutor: C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	MonteVideo, Uruguay
Dec 2009	IFCC, International faculty member of the C-MBC committee	Tutor: C-MBC COURSE (IFCC Workshop in Basic Molecular Diagnostics)	Damaskus, Syria

Relevant publication: Lianidou E, Ahmad-Nejad P, Ferreira-Gonzalez A, Izuhara K, Cremonesi L, Schroeder ME, Richter K, Ferrari M, Neumaier M. Advancing the education in molecular diagnostics: the IFCC-Initiative "Clinical Molecular Biology Curriculum" (C-CMBC); a ten-year experience. Clin Chim Acta. 2014 Sep 25;436:5-8. doi: 10.1016/j.cca.2014.04.031. Epub 2014 May 9. PubMed PMID: 24815033.