

CV (updated Feb 2025)

Evi Lianidou, Ph.D.
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General info

h-index: 63

i10-index: 156

citations: 12088

Google scholar:

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

Publications: 192

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/>)
 - 2020-2023: 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 (co-ordinator), 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, WORKSHOPS AND SUMMER SCHOOLS

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

Year	Conference	website
2012	1 st ACTC meeting, Athens, Greece “Advances in Circulating Tumor Cells: From basic research to clinical practice”	http://actc2012.chem.uoa.gr/actc2012.org/144-76-185-131.winzone45.grserver.gr/index.html
2014	2 nd ACTC meeting, Crete, Greece, “Advances in Circulating Tumor Cells: From basic research to clinical practice”	http://actc2014.chem.uoa.gr/www.actc2014.org/index.html
2017	3 rd ACTC meeting, Rhodes, Greece “Liquid biopsy in clinical practice”	http://actc2017.chem.uoa.gr/actc2017.org/index.html
2019	4 th ACTC meeting, Corfu Greece “Liquid Biopsy: Latest Advances and Future Challenges”	http://actc2019.chem.uoa.gr/actc2019.org/index.html
2021	5 th ACTC meeting, Kalamata, Greece “Liquid Biopsy in its best”,	https://www.erasmus.gr/microsites/1206
2023	6 th ACTC meeting, Skiathos, Greece “Liquid Biopsy and Precision Oncology: Where do we stand now”	https://www.erasmus.gr/microsites/1261

5.2. Organizer of Liquid Biopsy meetings, webinars and summer school

Year	Conference	website
2024	STEPUPIORS SUMMER SCHOOL “LIQUID BIOPSY TECHNOLOGIES” Sep 30 th - October 4 th , 2024	https://www.stepupiors.eu/2024/11/newsevents/stepupiors-summer-school-liquid-biopsy-technologies-2/
2024	LIQUID BIOPSY: Latest advances and applications in oncology, Hybrid event, (Hellenic Society of Liquid Biopsy) October 4 th , 2024	https://hliquidbiopsy.wixsite.com/2021/2024conf

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, (Hellenic Society of Liquid Biopsy)	https://scep.gr/events/event/hmerida-ygri-biopsia/
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, 3) Molecular 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. (CE, IVD test). Inventors: Lianidou E, Markou A. <http://www.freepatentsonline.com/WO2016020710A1.html>
- Method for the quantification of PD-L1 expression. (CE, IVD test). 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.
2. 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>
3. Evi Lianidou: “Circulating Tumor Cells: A Noninvasive Liquid Biopsy in Cancer” in Molecular Testing in Cancer, Editor: G. Yousef, Springer, 2014
4. 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

5. **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
6. **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
7. 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 192 publications, Feb 2025)

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

Below are given ONLY SELECTED PUBLICATIONS RELEVANT TO LIQUID BIOPSY (total number: 110)

1. Smilkou S, Ntzifa A, Tserpeli V, Balgouranidou I, Papatheodoridi A, Razis E, Linardou H, Papadimitriou C, Psyrris A, Zagouri F, Kakolyris S, Lianidou E. Detection rate for ESR1 mutations is higher in circulating-tumor-cell-derived genomic DNA than in paired plasma cell-free DNA samples as revealed by ddPCR. *Mol Oncol*. 2025 Jan 4. doi: 10.1002/1878-0261.13787. Epub ahead of print. PMID: 39754401.
2. Smilkou S, Kaklamanis L, Balgouranidou I, Linardou H, Papatheodoridi AM, Zagouri F, Razis E, Kakolyris S, Psyrris A, Papadimitriou C, Markou A, Lianidou E. Direct comparison of an ultrasensitive real-time PCR assay with droplet digital PCR for the detection of PIK3CA hotspot mutations in primary tumors, plasma cell-free DNA and paired CTC-derived gDNAs. *Front Oncol*. 2024 Dec 6;14:1435559. doi: 10.3389/fonc.2024.1435559. PMID: 39711963; PMCID: PMC11659196.
3. Ntzifa A, Marras T, Kallergi G, Kotsakis A, Georgoulas V, Lianidou E. Comprehensive liquid biopsy analysis for monitoring NSCLC patients under second-line osimertinib treatment. *Front Oncol*. 2024 Oct 21;14:1435537. doi: 10.3389/fonc.2024.1435537. PMID: 39497713; PMCID: PMC11532185.
4. Stergiopoulou D, Georgoulas V, Markou A, Lianidou E. Development and validation of a multi-marker liquid bead array assay for the simultaneous detection of PIK3CA and ESR1 hotspot mutations in single circulating tumor cells (CTCs). *Heliyon*. 2024 Sep 12;10(19):e37873. doi: 10.1016/j.heliyon.2024.e37873. PMID: 39386783; PMCID: PMC11462463.
5. Yu F, Ahmed F, Smilkou S, Yasmin-Karim S, Darbeheshti F, Markou A, Bullock M, Boukovinas I, Adalsteinsson VA, Lianidou E, Makrigiorgos GM. Pyrimidine-Dependent UV-Mediated Cross-Linking Magnifies Minor Genetic or Epigenetic Changes in Clinical Samples. *Clin Chem*. 2024 Sep 3;70(9):1151-1161. doi: 10.1093/clinchem/hvae086. PMID: 39039866; PMCID: PMC11371481.
6. Ntzifa A, Marras T, Georgoulas V, Lianidou E. Liquid biopsy for the management of NSCLC patients under osimertinib treatment. *Crit Rev Clin Lab Sci*. 2024 Aug;61(5):347-369. doi: 10.1080/10408363.2024.2302116. Epub 2024 Feb 2. PMID: 38305080.
7. Ntzifa A, Lianidou E. Pre-analytical conditions and implementation of quality control steps in liquid biopsy analysis. *Crit Rev Clin Lab Sci*. 2023 Dec;60(8):573-594. doi: 10.1080/10408363.2023.2230290. Epub 2023 Jul 30. PMID: 37518938.
8. Strati A, Economopoulou P, Lianidou E, Psyrris A. Clinical Significance of PD-L1 Status in Circulating Tumor Cells for Cancer Management during Immunotherapy. *Biomedicines*. 2023 Jun 20;11(6):1768. doi: 10.3390/biomedicines11061768. PMID: 37371863; PMCID: PMC10296703.
9. Strati A, Markou A, Kyriakopoulou E, Lianidou E. Detection and Molecular Characterization of Circulating Tumour Cells: Challenges for the Clinical Setting. *Cancers (Basel)*. 2023 Apr 6;15(7):2185. doi: 10.3390/cancers15072185. PMID: 37046848; PMCID: PMC10092977.
10. 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.
11. 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.
12. 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.
 13. 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.
 14. 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.
 15. 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.
 16. 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.
 17. 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.
 18. 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.
 19. 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.
 20. 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.
 21. 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.
 22. 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, Psyrris 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.
 23. 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.
 24. 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.
 25. 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.

26. 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.
27. 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.
28. 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.
29. 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.
30. 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.
31. Strati A, Zavridou M, Economopoulou P, Gkolfinopoulos S, Psyrris 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.
32. Mastoraki S, Balgouranidou 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.
33. Giannopoulou L, Lianidou ES. Liquid biopsy in ovarian cancer. *Adv Clin Chem.* 2020;97:13-71.
34. 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.
35. 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.
36. 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
37. 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.
38. 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:/j.cclm.ahead-of-print/cclm-2019-0783/cclm-2019-0783.xml.
39. Tzanikou E, et al. The potential of ctDNA analysis in breast cancer. *Crit Rev Clin Lab Sci.* 2020 Jan;57(1):54-72.
40. 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.
41. 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.
42. 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.
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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 School and 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-embc>

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.