ALIKI NTZIFA

CURRICULUM VITAE

PERSONAL INFORMATION

Date of birth: 29/03/1985

Contact number: (+30)6946522532

E-mail: alntzi@chem.uoa.gr

Citizen: Athens, Greece

EDUCATION

11/2017-1/2022

Ph.D. in Liquid Biopsy & Molecular Diagnosis of Cancer, Analysis of Circulating Tumor Cells Laboratory, Department of Chemistry, National and Kapodistrian University of Athens, Greece (www.actc-lab.chem.uoa.gr/)

Supervisor: Evi Lianidou, PhD, Professor of Analytical Chemistry & Clinical Chemistry, National and Kapodistrian University of Athens

PhD Thesis: "Development of assays for the analysis of circulating tumor cells and circulating tumor DNA and clinical evaluation of their heterogeneity in NSCLC"

3 years scholarship by Stavros Niarchos Foundation (SNF) under the program "Liquid Biopsy – Molecular Diagnosis of Cancer"

11/2014-3/2017

M.Sc. in Clinical Chemistry, Department of Chemistry, National and Kapodistrian University of Athens, Greece

Supervisor: Evi Lianidou, PhD, Professor of Analytical Chemistry & Clinical Chemistry, National and Kapodistrian University of Athens

Master Thesis: "Study of the expression of androgen receptor (AR) and AR splice variants (ARVs) in circulating tumor cells and tissue of breast cancer patients"

Grade: 9.37/10 (Excellent)

Courses: Clinical Chemistry, Molecular Diagnostics, Modern Biochemical and Biophysical Techniques, Molecular Biology, Molecular Basis of Genetic Diseases, Biostatistics, Chemometrics, Anatomy, Pathophysiology 9/2002-9/2008 B.Sc., Graduation Faculty of Sciences, Department of Chemistry,

National and Kapodistrian University of Athens, Greece

Supervisor: Evi Lianidou, PhD, Professor of Analytical Chemistry & Clinical Chemistry, National and Kapodistrian University of

Athens, Greece

Thesis: "Comparison of cardiac biomarkers using automated

immunochemical analyzers"

Grade: 6.62/10 (Very Good)

9/1999-6/2002 Graduated from 1st High School of Pefki, Athens, Greece

Grade: 18.2/20 (Excellent)

LANGUAGES

Native Language Greek

Other Languages - English (Certificate of Proficiency in English, University of

Cambridge

-French (DELF 1er degrée)

COMPUTING SKILLS

- Very good knowledge of MS Office (Word, Excel, PowerPoint, Internet),
 European Computer Driving License (ECDL)
- Very good knowledge of IBM SPSS Statistical analysis 26.0
- *In silico* design of primers and probes (for PCR analyses) with PrimerPremier 5.0, MethPrimer

WORK EXPERIENCE

02/2022-today	Postdoctoral Researcher, Analysis of Circulating Tumor Cells
	Laboratory (ACTC Lab), Department of Chemistry, National and
	Kapodistrian University of Athens, Greece
01/2022-today	ISO 15189 Quality Manager at Analysis of Circulating Tumor Cells
	Laboratory (ACTC Lab), Department of Chemistry, National and
	Kapodistrian University of Athens, Greece (www.actc-
	<u>lab.chem.uoa.gr/</u>)
08/2016-today	Analysis of Circulating Tumor Cells Laboratory, Department of

Chemistry, National and Kapodistrian University of Athens, Greece

(www.actc-lab.chem.uoa.gr/)

 Research fellow in the clinical study (ClinicalTrials.gov number: NCT02771314): "A longitudinal study evaluating molecular changes associated with resistance to first and third (AZD9291) generation EGFR TKIs in patients with EGFR mutant NSCLC using liquid biopsy" in collaboration with Hellenic Oncology Research Group (HORG).

08/2009-10/2015

Private Employee at Reference Laboratories "PLUSma", Nea Ionia, Athens, Greece

• Laboratory chemist in the Clinical Chemistry Lab

01/2007-06/2007

Department of Clinical Biochemistry, University General Hospital "ATTIKON", Athens, Greece

• Internship for undergraduates of Faculty of Chemistry

TEACHING EXPERIENCE

11/2015-02/2016	Assistant in Laboratory of Clinical Chemistry, Faculty of Chemistry, training of undergraduate students of Faculty of Chemistry and Faculty of Pharmacy in the subject of "Clinical Chemistry"
02/2014-05/2015	Assistant in Laboratory of Analytical Chemistry, Faculty of Chemistry, training of undergraduate students of Faculty of Biology in the subject of "Analytical Chemistry"
01/2009-06/2009	Chemistry tutoring at the private secondary school "ROPI"
2003-2015	Private Chemistry tutor in High school students

TECHNICAL & LABORATORIAL EXPERIENCE

- Circulating Tumor Cells (CTCs) enrichment with automated platforms systems: Parsortix (ANGLE), ISET (RareCells), CellSearch (Menarini-Silicon Biosystems)
- DNA and RNA extraction from tissue, plasma samples and CTCs
- Development and analytical validation of real-time PCR protocols (Light Cycler Technology Roche)
- User of digital PCR systems: QX200 Droplet Digital PCR (ddPCR) System-BIORAD & naica® system (crystal digital PCR)-Stilla Technologies
- Certified user of Cobas-z480 platform (FDA Approved, CE IVD-Roche) according to ELOT EN ISO 15189:2012
- Sodium Bisulfite DNA treatment and Methylation Specific PCR (MSP) for the detection of methylated DNA
- High Resolution Melting Analysis (HRMA) for the detection of DNA mutations

 Handling of automated immunochemical analyzers, such as (Centaur XP (Siemens), Immulite 2000 (Siemens), Elecsys 2010 (Roche), Liaison (DiaSorin), Kryptor (Thermo Scientific BRAHMS)

TRAINING

- ELOT EN ISO 15189:2012 Medical Laboratories Requirements for Quality and Competence, sixteen (16) hour remote training course, TÜV Hellas (TÜV NORD), July 8-9, 2021
- 2-days remote training course on crystal digital PCR technology, naica system (Stilla Technologies), December 2020
- 3-days training on single CTC isolation technology based on DNA analysis with Puncher System, Vycap (https://www.vycap.com), University of Twente, Enschede, The Netherlands, January 2019
- 2-days onsite training on droplet digital PCR system QX200™ (BIORAD), July 2018

MEMBERSHIP IN ORGANIZATIONS

- Greek Society of Clinical Chemistry Clinical Biochemistry (GSCC-CB)
- Association of Greek Chemists (AGC)
- American Association for Cancer Research (AACR), Associate Member
- European Association for Cancer Research (EACR)
- Hellenic Society of Liquid Biopsy (HSLB)
- Hellenic Oncology Research Group (HORG)

PUBLICATIONS

- 1. <u>Buszka K, **Ntzifa A**</u>, 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
- 2. Pantazaka E, **Ntzifa A**, Roumeliotou A, Lianidou E, Georgoulias 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
- 3. Kallergi G, Kontopodis E, **Ntzifa A**, Jordana-Ariza N, Karachaliou N, Pantazaka E, Charalambous HA, Psyrri A, Tsaroucha E, Boukovinas I, Koumarianou A, Hatzidaki D, Lianidou E, Georgoulias V, Rosell R, Kotsakis A. Effect of Osimertinib on CTCs and ctDNA in EGFR Mutant Non-Small Cell Lung Cancer Patients: The Prognostic Relevance of Liquid Biopsy. Cancers (Basel). 2022 Mar 19;14(6):1574. doi: 10.3390/cancers14061574. PMID: 35326725; PMCID: PMC8946716.
- 4. **Ntzifa A**, Londra D, Rampias T, Kotsakis A, Georgoulias 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

- 5. **Ntzifa A**, Kotsakis A, Georgoulias 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.
- 6. **Ntzifa A**, Strati A, Koliou GA, Zagouri F, Pectasides D, Pentheroudakis G, Christodoulou C, Gogas H, Magkou C, Petraki C, Kosmidis P, Aravantinos G, Kotoula V, Fountzilas G, Lianidou E. Androgen Receptor and *PIM1* Expression in Tumor Tissue of Patients with Triple-negative Breast Cancer. Cancer Genomics Proteomics. 2021 Mar-Apr;18(2):147-156. doi: 10.21873/cgp.20249. PMID: 33608311; PMCID: PMC7943211.
- 7. **Ntzifa A**., Strati A, Kallergi G, Kotsakis A, Georgoulias V, Lianidou E., Gene expression profile of size-based enriched circulating tumor cells reveals a dynamic role of EMT and PD-L1 during osimertinib treatment in EGFR-mutant NSCLC patients, Sci Rep. 2021 Jan 27;11(1):2313. doi: 10.1038/s41598-021-82068-9. PMID: 33504904; PMCID: PMC7840727.
- 8. **Ntzifa A**, Kroupis C, Haliassos A, Lianidou E. A pilot plasma-ctDNA ring trial for the Cobas® EGFR Mutation Test in clinical diagnostic laboratories. Clin Chem Lab Med. 2019 Apr 24;57(5): e97-e101. doi: 10.1515/cclm-2018-0676. PMID: 30267626.

CONFERENCES & SEMINARS (selected)

26/6-1/7/2022	Athens Conference on Advances in Chemistry (ACAC 2022), Athens,
24-26/5/2022	Greece Liquid Biopsies (EACR Conferences), Bergamo, Italy
	(https://www.eacr.org/conference/liquidbiopsies2022)
8-13/4/2022	AACR Annual Meeting 2022 (Hybrid), New Orleans, Louisiana
	(https://www.aacr.org/meeting/aacr-annual-meeting-2022/)
22-23/10/2021	2nd International Meeting on Lung Cancer, Athens, Greece
22-25/9/2021	5th Advances in Circulating Tumor Cells: "Liquid Biopsy in its best",
	Kalamata, Greece (https://www.actc2021.org/)
9-14/4/2021	AACR Annual Meeting 2021, Virtual (https://www.aacr.org/meeting/aacr-
	annual-meeting-2021/)
23-24/10/2020	1st International Meeting on Lung Cancer, Athens, Greece
2-5/10/2019	4th ACTC "Liquid Biopsy: Latest Advances and Future Challenges" Corfu,
	Greece, 2019 (www.actc2019.org)
25/5/2019	1st Liquid Biopsy Meeting: «Liquid Biopsy: Latest advances, potentials
	and perspectives in modern oncology», Athens, Greece, 2019
17-18/5/2019	5th Symposium on Thoracic and Upper Aerodigestive Malignancies,
	Crowne Plaza, Athens
2/2/2019	Best of 19th IASCL World Conference on Lung Cancer (WCLC) 2018,
	Royal Olympic Hotel, Athens
13-15/12/2018	2 nd Annual Meeting on Cancer Biology and New Molecules in Cancer
	Therapeutics, Titania Hotel, Athens
30/10-2/11/2018	Athens Conference on Advances in Chemistry (ACAC), Athens, Greece
20-21/9/2018	Masterclass on Tumor Biomarkers, Crowne Plaza, Athens
3-5/5/2018	11th ISMRC International Symposium on Minimal Residual Cancer:
	Liquid Biopsy in Cancer Diagnostics and Treatment, Montpellier, France
14-18/4/2018	109th AACR Annual Meeting, Chicago IL, USA

4-7/10/2017	3 rd International Symposium ACTC, Advances in Circulating Tumor Cells (ACTC): Liquid Biopsy in Clinical Practice, Rhodes, Greece
11-15/6/2017	22nd IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine, Megaron Athens International Conference, Athens (Certificate of scholarship appreciation)
6-9/4/2017	4 th Symposium on Thoracic and Upper Aerodigestive Malignancies, Royal Olympic Hotel Athens, Athens
3-4/3/2017	Best of 17 th IASLC World Conference on Lung Cancer (WCLC)2016, Radisson Blu Park, Athens
8-9/1/2017	Advances in Cancer Immunology and Immunotherapy, Athens
11-12/11/2016	15 th Symposium on New Molecules in Cancer Therapeutics, Cretan Association of Biomedical Research, St.George Lycabettus Hotel, Athens
12-13/5/2016	Masterclass on Tumor Biomarkers, Hellenic Oncology Research Group, Athens Ledra Hotel, Athens
05/2016	Educational Seminars (10 hours) "Structure and operation of In Vitro Diagnostic Laboratories", Greek Society of Clinical Chemistry-Clinical Biochemistry, Evangelismos Hospital, Athens
03/2016	10 th ISMRC International Symposium on Minimal Residual Cancer: "Liquid Biopsy in Cancer Diagnostics and Treatment", Universitätsklinikum Hamburg-Eppendorf, Germany
03/2016	Best of San Antonio Breast Cancer Symposium – Greece 2016, Divani Caravel, Athens
12/2015	14 th Symposium on New Molecules in Cancer Therapeutics, Stratos Vassilikos, Athens
05/2015	19th Educational Seminar, "Body fluids biochemistry analysis", Greek Society of Clinical Chemistry-Clinical Biochemistry, Evangelismos Hospital, Athens
01/2015	1st Educational Genetic Seminar: The recent progress in genetic laboratory analysis, Choremeio Research Laboratory, Athens
11/2014	12 th National Congress of Clinical Chemistry, Greek Society of Clinical Chemistry-Clinical Biochemistry, Athens
10/2008	"XVI Meeting of Balkan Clinical Laboratory Federation & 7th Hellenic Congress of Clinical Chemistry", Greek Society of Clinical Chemistry-Clinical Biochemistry, Athens
04/2007	2 nd National Congress of Medical Biochemistry, Greek Association for Medical Biochemistry, Athens

ORAL PRESENTATIONS

- "Detection of EGFR Mutations in Plasma cfDNA and Paired CTCs of NSCLC Patients before and after Osimertinib Therapy Using Crystal Digital PCR", 2nd International Meeting on Lung Cancer, October 2021, Athens, Greece
- "Methodology for Circulating Tumor Cells (CTCs)", Masterclass on Tumor Biomarkers, September 2021, Athens, Greece
- "Gene expression in circulating tumor cells reveals a dynamic role of EMT and *PD-L1* during osimertinib treatment in NSCLC patients", 1st International Meeting on Lung Cancer, October 2020, Athens, Greece

- "Gene expression profiling of CTCs isolated with a size-based microfluidics platform in patients with EGFR mutated NSCLC during treatment with AZD9291", 17th National Conference of Clinical Chemistry, November 21-23, 2019, Athens, Greece
- "Accreditation of laboratories and external quality control in liquid biopsy: detection of EGFR mutations in NSCLC", 1st Liquid Biopsy Meeting: «Liquid Biopsy: latest advances, potentials and perspectives in modern oncology», Athens, Greece, 25 May2019

POSTER PRESENTATIONS

- Aliki Ntzifa, Athanasios Kotsakis, Vassilis Georgoulias, Evi Lianidou, Detection of EGFR Mutations in Plasma cfDNA and Paired CTCs of NSCLC Patients before and after Osimertinib Therapy Using Crystal Digital PCR, Athens Conference on Advances in Chemistry (ACAC 2022), June 26 – July 1, 2022, Athens, Greece
- Aliki Ntzifa, Athanasios Kotsakis, Vassilis Georgoulias, Evi Lianidou, Detection of EGFR Mutations in Plasma cfDNA and Paired CTCs of NSCLC Patients before and after Osimertinib Therapy Using Crystal Digital PCR, Liquid Biopsies (EACR Conferences), May 24-26, 2022, Bergamo, Italy (https://www.eacr.org/conference/liquidbiopsies2022)
- Aliki Ntzifa, Athanasios Kotsakis, Vassilis Georgoulias, Evi Lianidou, Detection of EGFR
 Mutations in Plasma cfDNA and Paired CTCs of NSCLC Patients before and after
 Osimertinib Therapy Using Crystal Digital PCR, AACR Annual Meeting 2022 (Hybrid),
 April 8-13, 2022, New Orleans, Louisiana (https://www.aacr.org/meeting/aacr-annual-meeting-2022/)
- Aliki Ntzifa, Athanasios Kotsakis, Vassilis Georgoulias, Evi Lianidou, Detection of EGFR
 Mutations in Plasma cfDNA and Paired CTCs of NSCLC Patients before and after
 Osimertinib Therapy Using Crystal Digital PCR, 5th Advances in Circulating Tumor Cells:
 "Liquid Biopsy in its best", Kalamata, Greece, September 22-25, 2021
 (https://www.actc2021.org/)
- Aliki Ntzifa, Areti Strati, A. Kotsakis, Vassilis Georgoulias, Evi Lianidou, Gene expression
 profiling of CTCs isolated with a size-based microfluidics platform in patients with EGFR
 mutated NSCLC during treatment with AZD9291, AACR Virtual Annual Meeting II, 22-24
 June 2020 (https://www.aacr.org/meeting/aacr-annual-meeting-2020/
- A.Ntzifa , C. Kroupis , A.Haliassos , E.Lianidou, A pilot plasma-ctDNA ring trial for the Cobas® EGFR Mutation Test in clinical diagnostic laboratories, 4th ACTC "Liquid Biopsy: Latest Advances and Future Challenges" Corfu, Greece, on October 2–5, 2019
- A.Ntzifa, A.Strati, A.Kotsakis, V.Georgoulias, E.Lianidou Gene expression profiling of CTCs isolated with a size-based microfluidics platform in patients with EGFR mutated NSCLC during treatment with AZD9291, 4th ACTC "Liquid Biopsy: Latest Advances and Future Challenges" Corfu, Greece, on October 2–5, 2019
- G. Kallergi, A. Ntzifa, N. Karachaliou, E. Lianidou, V. Georgoulias, Phenotypic evaluation of circulating tumor cells at baseline and during treatment with AZD9291, 4th ACTC "Liquid Biopsy: Latest Advances and Future Challenges" Corfu, Greece, on October 2–5, 2019
- A.Ntzifa, A.Kotsakis, V.Georgoulias, E.Lianidou Detection of CK-19 mRNA positive CTCs, isolated with a size-based microfluidics platform, in NSCLC patients under osimertinib therapy. March 29 Apr 3, 2019, AACR Annual Meeting, Georgia World Congress Center Atlanta, USA

- Kontopodis E, Nuria Jordana, Ntzifa A, Katsaounis P, Charalambous Ch, Boukovinas I, Tsaroucha A, Psyrri A, Koumarianou A, Nikolaou M, Kentepozidis N, Rosell R, Georgoulias V, Karachaliou N, Kotsakis A. Activity of osimertinib/AZD9291 in pretreated patients with epidermal Growth factor receptor (EGFRmt) non-small cell lung cancer (NSCLC), according to EGFR mutations detected in circulating plasma DNA (ctDNA), 55th Annual Meeting of the American Society of Clinical Oncology (ASCO), 31 May-4 June, Chicago IL, USA
- <u>G. Kallergi, A. Ntzifa</u>, N. Karachaliou, E. Lianidou, V. Georgoulias, Phenotypic evaluation of circulating tumor cells at baseline and during treatment with AZD9291, 5th Symposium on Thoracic and Upper Aerodigestive Malignacies, May 2019, Crowne Plaza, Athens
- A. Ntzifa, M. Zavridou, P. Pollakis, G. Bardi, V. Georgoulias, A. Kotsakis, E. Lianidou, Fluorescence in situ hybridization analysis in CTCs of non-small cell lung cancer patients isolated with the PARSORTIX platform, 30 October-2 November 2018, Athens Conference on Advances in Chemistry (ACAC), Athens, Greece
- A. Ntzifa, M. Zavridou, P. Pollakis, G. Bardi, V. Georgoulias, A. Kotsakis, E. Lianidou, Fluorescence in situ hybridization analysis in CTCs of non-small cell lung cancer patients isolated with the PARSORTIX platform, May 2018, 11th ISMRC International Symposium on Minimal Residual Cancer: Liquid Biopsy in Cancer Diagnostics and Treatment, Montpellier, France
- A.Ntzifa, A.Kotsakis, V.Georgoulias, E.Lianidou, Detection of CK-19 mRNA positive CTCs, isolated with a size-based microfluidics platform, in NSCLC patients under osimertinib therapy, April 2018, 109th AACR Annual Meeting, Chicago IL, USA
- A. Ntzifa, M. Zavridou, P. Pollakis, G. Bardi, V. Georgoulias, A. Kotsakis, E. Lianidou. Combination of a label-independent CTC enrichment platform with fluorescence in situ hybridization for the molecular characterization of CTCs in non-small cell lung cancer patients, 3rd Advances in Circulating Tumor Cells (ACTC): Liquid Biopsy in Clinical Practice, October 2017, Rhodes, Greece (www.actc2017.org).
- A. Ntzifa, G. Kallergi, N. Karachaliou, C. Charalambous, N. Kentepozidis, M. Nikolaou, I. Boukovinas, E. Lianidou, V. Georgoulias, A. Kotsakis. Preliminary results of phenotypic characterization of circulating tumor cells and monitoring of EGFR mutations using liquid biopsy in patients with EGFRmut NSCLC, 3rd Advances in Circulating Tumor Cells (ACTC): Liquid Biopsy in Clinical Practice, October 2017, Rhodes, Greece (www.actc2017.org).
- E. Tzanikou, A. Markou, A. Ntzifa, E. Politaki, G. Koutsodontis, A. Psyrri, V. Georgoulias, E. Lianidou. Detection of ESR1 D538G mutation in circulating tumor cells (CTCs) and paired circulating tumor DNA (ctDNA(samples of breast cancer patients, 3rd Advances in Circulating Tumor Cells (ACTC): Liquid Biopsy in Clinical Practice, October 2017, Rhodes, Greece (www.actc2017.org) (Poster Award)
- E. Tzanikou, A. Markou, A. Ntzifa, E. Politaki, G. Koutsodontis, A. Psyrri, V. Georgoulias, E. Lianidou. PIK3CA mutational status in circulating tumor cells (CTCs) and corresponding circulating tumor DNA (ctDNA) in breast cancer patients, 3rd Advances in Circulating Tumor Cells (ACTC): Liquid Biopsy in Clinical Practice, October 2017, Rhodes, Greece (www.actc2017.org).
- A. Ntzifa K. Parisi, , A. Panagiotou, E. Stathopoulou, C. Kroupis, A. Thrasivoulides, G. Kontelia, G. Antonakos, M. Dalamaga, C. Dimas. Comparative evaluation of serum homocysteine levels measured at two automated analyzers, XVI Meeting of Balkan Clinical Laboratory Federation & 7th National Conference of Clinical Chemistry, 16-18 October 2008, Athens, Greece

- A. Ntzifa, K. Parisi, A. Panagiotou, G. Kontelia, N. Spanos, K. Saounatsou, A. Marouga, K. Geromeriati, M. Dalamaga, G. Antonakos, C. Dimas. Comparative study of serum troponin T and troponin I levels measured at three automated immunological analyzers, XVI Meeting of Balkan Clinical Laboratory Federation & 7th National Conference of Clinical Chemistry, 16-18 October 2008, Athens, Greece
- A. Ntzifa, K. Parisi, , A. Panagiotou, M. Lagiou, A. Thrasivoulides, E.Stathopoulou, C. Kroupis, G. Antonakos, K. Geromeriati, M. Dalamaga, C. Dimas. Comparative evaluation of serum BNP and NT-proBNP levels measured on a randomized group of patients, XVI Meeting of Balkan Clinical Laboratory Federation & 7th National Conference of Clinical Chemistry, 16-18 October 2008, Athens, Greece