### **CURRICULUM VITAE**

Areti Strati, Ph.D



### **1. PERSONAL INFORMATIONS**

Adress: Zografou, Gr. Kousidi 38 Adress:0030-6945951773 email:artyzodim@gmail.com Date of birth: 04/01/1980 Place of birth: Tripolis, ARCADIA, GREECE

# 2. STUDIES

**1/2007-12/2009:** PhD thesis, Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**Thesis:** Molecular diagnosis of micrometastatic disease in breast cancer **Degree** :10 (Excellent)

**9/2004-10/2006**: MSc in Clinical Chemistry, Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**Thesis:** Study of the expression of human telomerase reverse transcriptase (hTERT) splice variants in non-small cell lung cancer (NSCLC) and in MCF-7 cells in the presence of estrogenic/antiestrogenic agents by quantitative real time PCR **Degree** :10 (Excellent)

**9/1999-9/2004:** Bachelor of Science, Dept. of Chemistry, University of Athens, Greece. **Degree:**6,61 (Very good)

## **3. PROFESSIONAL EXPERIENCE**

**02/2016-now**: Postdoctoral researcher Research Fellow in Analysis of Circulating Tumor Cells lab (http://www.actc-lab.chem.uoa.gr/), Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**Research program**: Cancer ID-IMI Innovative Medicine Initiative, with project title «Cancer treatment and monitoring through identification of circulating tumor cells and tumor related nucleic acids in blood» (http://www.cancer-id.eu/).

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**11/2015-1/2016**: Postdoctoral researcher Research Fellow in the Division of Hematology and Medical Oncology, Weill Cornell Medicine, NY, USA.

**Scholarship:** UICC Yamagiwa-Yoshida Memorial International Cancer Study Grant, with project title «Molecular characterization of CTC in prostate cancer»

**PI**: Evi Giannakakou, Ph.D. Professor of Pharmacology in Medicine, Director of Laboratory Research, Division of Hematology and Medical Oncology, Weill Cornell Medicine, NY, USA, (Quality score: excellent)

**11/2013-10/2015:** Postdoctoral researcher Research Fellow in Analysis of Circulating Tumor Cells lab (http://www.actc-lab.chem.uoa.gr/), Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**Research program**: Greece-Germany interstate program with project title «Liquid biopsy: In vivo capturing and molecular characterization of circulating tumor cells as a novel tool for improving tertiary prevention in breast cancer».

**Coordinator**: Prof.Klaus Pantel, Director and Founder, University Medical Center Hamburg-Eppendorf, Department of Tumor Biology, Germany.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**4/2013-10/2013:** Postdoctoral researcher Research Fellow in Analysis of Circulating Tumor Cells lab (http://www.actc-lab.chem.uoa.gr/), Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

#### Research program: No funding

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**3/2011-3/2013:** Postdoctoral researcher Research Fellow in Analysis of Circulating Tumor Cells lab (http://www.actc-lab.chem.uoa.gr/), Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**Research program**: Cooperation-EPANII, Project code: Onco-Seed diagnostics « Biology of circulating tumor cells. Metastasis and development of liquid biopsy methods». **Coordinator**: Professor G. Mavrothalassitis, Medical School, University of Crete, Crete, Greece.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**1/2010-2/2010:** Postdoctoral researcher Research Fellow in Analysis of Circulating Tumor Cells lab (http://www.actc-lab.chem.uoa.gr/), Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**Research program**: No funding

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**1/2007-12/2009**: Doctoral dissertation in Analysis of Circulating Tumor Cells lab (http://www.actc-lab.chem.uoa.gr/), Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**Research program**: PENED 03 «Molecular diagnosis of micrometastatic disease in breast cancer».

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

**9/2004-10/2006**: MSc in Clinical Chemistry in Analysis of Circulating Tumor Cells lab (http://www.actc-lab.chem.uoa.gr/), Lab of Analytical Chemistry, Dept. of Chemistry, University of Athens, Greece.

**Research program**: No funding

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens

**7/2005-9/2005:** Two months training in General Panarkadiko Hospital of Tripolis "Evagelistria" in the Hematological, Biochemical and Urological laboratory as a demand of the MSc in Clinical Chemistry.

**4/2004-8/2004:** Dissertation of the undergraduate diploma thesis in the laboratory of anti-Doping control of Olympic Stadium during the period of the Olympic and Paralympic Games of Athens 2004.

**Undergraduate Diploma thesis**: "Detection of Stanozolol and Budesonide in the Urine of athletes with GC-MS during the Olympic Games, Athens 2004"

**PI**: Panagiotis Siskos, Professor of Analytical Chemistry, Dept. of Chemistry, University of Athens

**7/2002-9/2002:** Mannual training in Public Operation of Electricity in Lignitic Centre of Megalopolis.

**8/2001:** Mannual training in Public Operation of Electricity in Centre of appropriate Research and Standards in the laboratory of Analytical Chemistry.

## 4. EDUCATIONAL EXPERIENCE

#### 4.1 Participation in the supervision of PhD theses

2015-today: Martha Zavridou: Liquid biopsy: Analysis Study and clinical evaluation of new non-invasive molecular diagnostic methods for monitoring patients with cancer.
PI: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

**2015-today:** Sofia Mastoraki: Investigation and clinical evaluation of new markers of DNA methylation in breast cancer as a liquid biopsy tool.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

**2011-2014:** Doctoral dissertation of Mrs Maria Chimonidou **PhD thesis:** Study and clinical evaluation of DNA methylation markers in breast cancer.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

#### 4.2 Participation in the supervision of MsC theses

**2014-2015:** Hlias Aggelidis: Study of the expression of androgen receptor splice variants in circulating tumor cells in prostate cancer.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

**2016-today:** Sofia Meliou: Study of the expression of PDL-1 in CTC of breast cancer patients. **PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

### 4.3 Participation in supervising dissertations

2009: Tsoukala Maria and Farkona Sofia. Diploma Thesis: "Expression study of human telomerase reverse transcriptase (hTERT) splice variants by RT-PCR in cervical cancer"
PI: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

2008: Dimitrakopoulos Lambros and Beredaki Maria-Ioanna. Diploma Thesis: "Expression study of human telomerase reverse transcriptase (hTERT) by RT-PCR in hepatitis C"
PI: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

#### 4.4 Teaching experience

**2011-today:** Teaching in Postgraduate Program Study clinical biochemistry - molecular diagnostics. Participating Departments: Biology, Chemistry, Nursing. Postgraduate program coordinator: Professor Andreas Skorilas, Department of biology, Faculty of science, National and Kapodistrian University of Athens

Course title: Internal and external quality control in clinical laboratory. Biochemical analyzers-Automation in clinical laboratory.

2012: Teaching in Postgraduate Program Clinical Chemistry

**Title of lecture:** "In-silico design of oligonucleotides primers and probes using Primer Premier 5.0 software."

**Postgraduate program coordinator**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

#### 2015-2016: Master class on tumor Biomarkers,

**Lecture title:** a) Methodologies for the detection of CTC (molecular & other), b) Molecular profile of epithilio-mesenchymal transition and stem cells in liquid biopsy and primary tissues, c) detection of alternative transcripts of androgen receptor on circulating tumor cells in prostate cancer, d) Molecular heterogeneity of CTC

**Organizer**: Greek Oncology Research Team (Chairman Prof. Vassilis Georgoulias)

**2014-2015:** Training course for Oncologists, Pathologists and basic scientists in the Department of Medical Oncology, Laboratory of Cell Biology, University of Crete

Lecture title: a) Methodologies for the detection of CTC b) liquid biopsy Biomarkers: cell free DNA, miRNAs and methylation markers

Organizer: Greek Oncology Research Group (Chairman Prof. Vassilis Georgoulias)

2009: participation in Clinical tutorial in the 9th Hellenic Congress of clinical chemistry, Athens.

**Title of the course:** Display Real time PCR instrumentation, HRMA, and instruments for quantifying DNA, and RNA.

**2006**: Assistant in the laboratories of the undergraduate course of clinical chemistry Chemistry

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

**2005**: Assistant to the laboratories of the undergraduate course of analytical chemistry of Biology

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

## **5. SCIENTIFIC TRAINING IN EXPERIMENTAL METHODS**

- Isolation of mononuclear cells in peripheral blood,
- Isolation of circulating tumor cells using different methodologies
- Isolation of RNA and mRNA from clinical samples
- Insilico i design of oligonucleotides and probes
- Design and development of single and multiplex PCR
- Development of assays for the detection of DNA methylation
- Gel electophoresis
- Droplet digital PCR
- CellSearch (Interprentation and counting of circulating cancer cells)
- Cobas (ROCHE)

#### 6. PUBLICATIONS

The number of publications from 2007 until today is 19. These publications have been cited so far in 804 scientific publications. The h-index is 13. (Source https://scholar.google.com).

#### 6.1 Research publications

**1.** Giannopoulou L, Mastoraki S, Buderath P, Strati A, Pavlakis K, Kasimir-Bauer S, Lianidou ES. ESR1 methylation in primary tumors and paired circulating tumor DNA of patients with high-grade serous ovarian cancer. Gynecol Oncol. 2018 May 25.

**2.** Mastoraki S, **Strati A**, Tzanikou E, Chimonidou M, Politaki H, Voutsina A, Psyrri A, Georgoulias V, Lianidou ES. ESR1 methylation: a liquid biopsy-based epigenetic assay for the follow up of patients with metastatic breast cancer receiving endocrine treatment. Clin Cancer Res. 2018 Mar 15;24(6):1500-1510.

**3.** Areti Strati, Vassilis Georgoulias. Editorial on "Gene expression signatures in circulating tumor cells correlate with response to therapy in metastatic breast cancer". Journal of Laboratory and Precision Medicine 2017, 2:95 (15 December 2017)

**4.** Politaki E, Agelaki S, Apostolaki S, Hatzidaki D, **Strati A**, Koinis F, Perraki M, Saloustrou G, Stoupis G, Kallergi G, Spiliotaki M, Skaltsi T, Lianidou E, Georgoulias V, Mavroudis D. A Comparison of Three Methods for the Detection of Circulating Tumor Cells in Patients with Early and Metastatic Breast Cancer. Cell Physiol Biochem. 2017;44(2):594-606.

**5.** Chimonidou M, **Strati A**, Malamos N, Kouneli S, Georgoulias V, Lianidou E. 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.

**6. A. Strati**, G. Koutsodontis, G. Papaxoinis, I. Angelidis, M. Zavridou, P. Economopoulou, I. Kotsantis, M. Avgeris, M. Mazel, C. Perisanidis, C. Sasaki, C.Alix-Panabières, E. Lianidou+, A. Psyrri+. 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.

**7**. Parisi C, Mastoraki S, Markou A, **Strati A**, Chimonidou M, Georgoulias V, Lianidou ES. Development and validation of a multiplex methylation specific PCR-coupled liquid bead array for liquid biopsy analysis. ClinChimActa. 2016 Oct 1;461:156-64.

**8. A. Strati**, S. Kasimir-Bauer, A. Markou, K. Parisi, E.S. Lianidou. Comparison of three molecular assays for the detection of circulating tumor cells in breast cancer. Breast Cancer Res. 2013 Mar 7;15(2):R20.

**9.** Chimonidou M\*, **Strati A**\*, Malamos N, Georgoulias V, Lianidou ES. SOX17 Promoter Methylation in Circulating Tumor Cells and Matched Cell-Free DNA Isolated from Plasma of Patients with Breast Cancer.Clin Chem. 2013 Jan;59(1):270-9. \*: **These authors contributed equally to this work.** 

**10.**Chimonidou M, Tzitzira A, **Strati A**, Sotiropoulou G, Sfikas C, Malamos N, Georgoulias V, Lianidou E. CST6 promoter methylation in circulating cell-free DNA of breast cancer patients ClinBiochem. 2013 Feb;46(3):235-40.

**11**. **Strati A**, Markou A, Parisi C, Politaki E, Mavroudis D, Georgoulias V, LianidouE.Gene expression profile of circulating tumor cells in breast cancer by RT-qPCR. BMC Cancer. 2011 Oct 4;11(1):422.

**12.** M. Chimonidou\*, **A. Strati**\*, A. Tzitzira, G. Sotiropoulou, N. Malamos, V. Georgoulias and E. S. Lianidou.DNA methylation of Tumor Suppressor and Metastasis Suppressor Genes in Circulating Tumor Cells.Clin Chem. 2011 Aug;57(8):1169-77. **\*: These authors contributed equally to this work.** 

**13.** A. Markou, **A. Strati**, N. Malamos, V. Georgoulias, and E.S. Lianidou. Molecular characterization of circulating tumor cells in breast cancer by a liquid bead array hybridization assay. Clin Chem. 2011 Mar;57(3):421-30.

**14.**Varchalama E, Rodolakis A, **Strati A**, Papageorgiou T, Valavanis C, Vorgias G, Lianidou E, Antsaklis A. Quantitative analysis of heparanase gene expression in normal cervical, cervical intraepithelial neoplastic, and cervical carcinoma tissues. Int J Gynecol Cancer. 2009 Dec;19(9):1614-9.**E.V. and A.S. contributed equally to this study.** 

**15.**Kallergi G, Markomanolaki H, Giannoukaraki V, Papadaki MA, **Strati A**, Lianidou ES, Georgoulias V, Mavroudis D, Agelaki S. Hypoxia-inducible factor-1alpha and vascular endothelial growth factor expression in circulating tumor cells of breast cancer patients. Breast Cancer Res. 2009;11(6):R84.

**16**. **A. Strati**, Z. Papoutsi, E. Lianidou, P. Moutsatsou. Effect of ellagic acid on the expression ofhumantelomerase reverse transcriptase (hTERT) alpha+beta+ transcript in estrogen receptor-positive MCF-7 breast cancer cells. ClinBiochem. 2009 Sep;42(13-14):1358-62.

**17.** E. Mavrogiannou, **A. Strati**, A. Stathopoulou, E.G. Tsaroucha, L. Kaklamanis, E.S. Lianidou.Real rime RT-PCR quantification of human telomerase reverse transcriptase (hTERT) splice variants in tumor cell lines and non small cell lung cancer. Clinical Chemistry 2007 Jan;53(1):53-61.

### 6.2 Δημοσιεύσεις βιβλιογραφικής ανασκόπησης (Reviews)

**1.** Lianidou ES, **Strati A**, Markou A. Circulating tumor cells as promising novel biomarkers in solid cancers. Crit Rev Clin Lab Sci. 2014 Jun;51(3):160-71.

**2**. Lianidou ES, Markou A, **Strati A**. Molecular characterization of circulating tumor cells in breast cancer: challenges and promises for individualized cancer treatment. Cancer Metastasis Rev. 2012 Dec;31(3-4):663-71.

#### 7. BOOK CHAPTERS

**1.** Circulating Tumor cells.editors: Cote, richard j., datar, ram h. (eds.)Evi S. Lianidou , AthinaMarkou, **Areti Strati**. Molecular Assays for the Detection and Molecular Characterization of CTCs. Chapter 4, pages 47-74, 2016.

**2.** Evi S. Lianidou , Athina Markou, **Areti Strati** .The Role of CTCs as Tumor Biomarkers. AdvExp Med Biol. 2015;867:341-67.

#### 9. HONORS AND AWARDS

9.1. National Conferences

2015-2016: Scholarship award

Scholarship title: UICC Yamagiwa-Yoshida Memorial International Cancer Study Grant, Union for International Cancer Control following an International Scientific Review by experts at Joan & Sanford I. Weill Medical College of Cornell University, NY, USA

**2014**: Award for the presentation of the poster presentation "Comparison of SOX17 promoter methylation status in primary tumors, Circulating Tumor Cells and Cell Free DNA and evaluation of its prognostic significance in breast cancer ", of the authors Maria Chimonidou, **Areti Strati**, Nikos Malamos, Vassilis Georgoulias, Evi Lianidou **Conference**:2<sup>nd</sup> Advances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, Crete, Greece, 2014

**2013:** Award for the presentation of the poster presentation "Prognostic significance of Stem cell and EMT phenotype in Circulating Tumor Cells", of the authors **Areti Strati**, Vasilis Georgoulias, Evi S. Lianidou

Award title :2013 AACR-GlaxoSmithKline Outstanding Clinical Scholar Award Conference: AACR Annual Meeting 2013, Washington, DC

**2013:** Award for the presentation of the oral presentation "DNA Methylation of Tumor Suppressor and Metastasis Suppressor Genes inCirculating Tumor Cells and corresponding circulating tumor DNA", of the authors Maria Chimonidou, **Areti Strati**, Nikos Malamos, Vassilis Georgoulias, EviLianidou

Award title: Young Investigator travel grant 1<sup>st</sup> Prize

**Conference**: ISMRC 9<sup>th</sup> International Symposium on Minimal Residual Cancer, Paris, France

**2012:** Award for the presentation of the poster presentation "Comparison of three molecular assays for the detection of circulating tumor cells in breast cancer", of the authors **A. Strati**, O. Hoffmann, A. Markou, K. Parisi, S. Kasimir-Bauer, Evi S. Lianidou.

**Conference**: Advances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, Athens, Greece

**2011:** Award for the presentation of the poster presentation "Molecular characterization of circulating tumor cells in breast cancer by liquid bead array hybridization assay" of the authors Athina N. Markou, **Areti Strati**, Nikos Malamos, Vassilis Georgoulias, Evi Lianidou. **Award title:** AACR 2011 - SUZAN COMEN Scholar-in-Training Award

**Conference**: AACR 2011: 102nd Annual Meeting of American Association of Cancer Research , Philadelphia, USA

**2008:** Award for the presentation of the poster presentation "Evaluation of the prognostic significance of mature miR-10b expression in early breast cancer" of the authors A. N. Markou, **A. Strati**, L. Kaklamanis, M. Kafoussi, S. Stathopoulos, V. Georgoulias, E.S. Lianidou **Award title:** AACR 2008 - AVON FOUNDATION INTERNATIONAL TRAVEL AWARD **Conference**: AACR Annual Meeting 2008, San Diego, USA

**2008:** Award for the presentation of the poster presentation "TWIST1 expression in circulating tumor cells of early breast cancer patients" of the authors **A. Strati**, A. Markou,N. Malamos, Dimitris Mavroudis, Vassilis Georgoulias, Evi S. Lianidou. **Award title:** AACR 2008 - AVON FOUNDATION INTERNATIONAL TRAVEL AWARD. **Conference**: AACR Annual Meeting 2008, San Diego, USA

#### 9.2. Greek conferences

**2012:** Award for the presentation of the oral presentation "Development of a liquid bead microarray methodology combined with a multiplex RT-PCR for the molecular characterization of circulating tumor cells (CTCs)", of the authors  $\tau\omega\nu$  Parisi K., Markou A., **Strati A.**, E.S. Lianidou

**Conference**: 10th Panhellenic Congress of clinical chemistry, Athens, Greece

**2007:** Award for the presentation of the poster presentation " Study of the expression of human telomerase reverse transcriptase (hTERT) splice variants in non-small cell lung cancer (NSCLC) by quantitative real time PCR".", of the authors, **A. Strati**, E. Mavrogiannou, A. Stathopoulou, E. Tsarouxa, L. Kaklamanis, E. Lianidou.

Award title: 3° Dietairiko Cancer Conference, Athens, Greece

## **10. PARTICIPATION IN CONFERENCES**

### **10.1.** Oral presentations

**1. A. Strati.** "Liquid biopsy in the diagnosis of cancer". 23 June 2018. Genetics of hereditary cancer. St Sophia's Children's Hospital, Athens, Greece.

**2. A.Strati.** "Molecular characterization of in-vivo isolated EpCAM-positive circulating tumor cells in breast cancer". 15th Symposium on New Molecules in Cancer Therapeutics, 11 & 12 November 2016, Athens, Greece

**3. A.Strati.** "Circulating Tumor Cells (CTCs) in cancer patients" 15th Symposium on New Molecules in Cancer Therapeutics, 11 & 12 November 2016, Athens, Greece

#### **10.2.** Oral announcements

**1. A.Strati.** "PD-L1 expressing CTCs in patients with head and neck squamous cell carcinoma (HNSCC)." 10th ISMRC International Symposium on Minimal Residual Cancer: Liquid Biopsy in Cancer Diagnostics and Treatment, March 19-21 2016, Hamburg, Germany

**2. A.Strati.** "Development and validation of a realtime multiplex PCR assay for the simultaneous quantification of ER, PR, HER2 and EGFR in circulating tumor cells of breast cancer patients", 12th Hellenic Congress of Clinical Chemistry, 7-8 Nov. 2014, Athens, Greece and ", 22th Conference of Clinical Oncology, 13-16 Nov. 2014, Heraklion, Greece.

**3. A.Strati.** "Comparison of three molecular assays for the detection of circulating tumor cells in breast cancer", 20th Conference of Clinical Oncology, 1-3 Nov. 2012, Heraklion, Greece.

**4. A.Strati.** "Molecular characterization of circulating tumor cells with RT qPCR", 19th Conference of Clinical Oncology, 27-29 Oct. 2011, Heraklion, Greece.

**5. A. Strati.** "Expression of TWIST1 and CK19 transcripts in circulating tumor cells of breast cancer patients", 9th Hellenic Congress of Clinical Chemistry, 7-9 Oct. 2010, Athens, Greece.

**6. A. Strati.** "Development and validation of a real time multiplex PCR assayfor the simultaneous quantification of CK19, MAGEA3, HER2 and PBGD in circulating tumor cells of breast cancer patients", 17th Conference of Clinical Oncology, 4-8 Nov. 2009, Heraklion, Greece, 7th International Symposium on Minimal Residual Cancer, 16-19 Sep. 2009, Athens, Greece.

**7. A. Strati**. "Evaluation of Real time PCR Quantification kit for Cytokeratin 19 (CK19): Application for the detection of circulating tumor cells (CTCs) in peripheral blood of early breast cancer patients", XVI Meeting of Balkan Clinical Laboratory Federation7th Hellenic Congress of Clinical Chemistry, 16-18 Oct. 2008, Athens, Greece.

**8. A. Strati.** "Real rime RTPCR quantification of human telomerase reverse transcriptase (hTERT) splice variants in non small cell lung cancer (NSCLC)" 98th American Association for Cancer Research, 1418 Apr. 2007, Los Angeles, California.

**9. A. Strati.** "Real rime RTPCR quantification of human telomerase reverse transcriptase (hTERT) splice variants in non small cell lung cancer (NSCLC)", 14th Conference of Clinical Oncology, 25-28 Oct. 2006, Heraklion, Crete, Greece.

### **10.3.** Poster presentations

**1**. Sofia Mastoraki, Areti Strati, Eleni Tzanikou, Maria Chimonidou, Eleni Politaki2, Alexandra Voutsina, Amanda Psyrri, Vassilis Georgoulias, Evi S. Lianidou. ESR1 methylation: A liquid biopsy-based epigenetic assay for the follow up of patients with metastatic breast cancer receiving endocrine treatment. AACR Annual Meeting 2018, Chicago., USA.

**2**. Lydia Giannopoulou, Sofia Mastoraki, Areti Strati, Issam Chebouti, Kitty Pavlakis, Sabine Kasimir-Bauer, Evi Lianidou. ESR1 methylation in primary tumors and paired circulating tumor DNA of patients with high-grade serous ovarian cancer. AACR Annual Meeting 2018, Chicago., USA.

**3**. Martha Zavridou, Areti Strati, George Koutsodontis, Amanda Psyrri, Evi Lianidou. RT-qPCR gene expression analysis of CTCs isolated through an epitope-independent enrichment microfluidic device in patients with head and neck squamous cell carcinoma. AACR Annual Meeting 2017, Washington, D.C., USA.

**4**. Sophia Mastoraki, Areti Strati, Eleni Tzanikou, Eleni Politaki, George Koutsodontis, Loukas Kaklamanis, Nikolaos Malamos, Amanda Psyrri, Vassilis Georgoulias, Evi Lianidou. ESR1 methylation in circulating tumor cells, ctDNA and primary tumors of breast cancer patients. AACR Annual Meeting 2017, Washington, D.C., USA .

**5.** Ada Gjyrezi, Giuseppe Galletti, Areti Strati, Seaho Kim, Evi Lianidou, David M. Nanus, Jun Luo, Emmanuel Antonarakis, Scott T. Tagawa, Andrew Armstrong, Paraskevi Giannakakou. A digital droplet PCR assay for the quantitation of androgen receptor and splice variant expression in CTCs from metastatic castration resistant prostate cancer patients. AACR Annual Meeting 2017, Washington, D.C., USA .

**6**. Lydia Giannopoulou, Sophia Mastoraki, Areti Strati, Isaam Chebouti, Sabine Kasimir-Bauer, Evi S. Lianidou. ESR1 methylation in plasma cfDNA of patients with high-grade serous ovarian cancer. AACR Annual Meeting 2017, Washington, D.C., USA .

**Areti Strati**, George Koutsodontis, Ilias Angelidis, Clarence Sasaki, MargaritisAvgeris, Amanda Psyrri, Evi S. Lianidou. PD-L1 expressing circulating tumor cells (CTCs) in patients with head and neck squamous cell carcinoma (HNSCC). AACR Annual Meeting 2016, New Orleans, USA.

**7.** Sofia Mastoraki, **Areti Strati**, Maria Chimonidou, Nikos S. Malamos, Vasilis Georgoulias, Evi S. Lianidou. ESR1 methylation in circulating tumor cells of patients with breast cancer. 10th ISMRC: Liquid Biopsy in Cancer Diagnostics and Treatment, March 19-21 2016 in Hamburg, Germany and AACR, April 16-20, 2016

8. Areti Strati, Martha Zavridou, Nikos Malamos, Vassilis Georgoulias, Evi Lianidou. PD-L1 expressing circulating tumor cells (CTCs) in patients with breast cancer. 10th ISMRC: Liquid Biopsy in Cancer Diagnostics and Treatment, March 19-21 2016 in Hamburg, Germany and AACR, April 16-20, 2016

**9. Areti Strati**, Martha Zavridou, Galateia Kallergi, Eleni Politaki, Tobias Gorges, Andra Kuske , Anna-Lena Bohnen, George Koutsodontis, Amanda Psyrri, Klaus Lucke, Vasilis Georgoulias, Klaus Pantel, Evi S. Lianidou. Molecular characterization of in-vivo isolated EpCAM-positive circulating tumor cells in breast cancer. 10th ISMRC: Liquid Biopsy in Cancer Diagnostics and Treatment, March 19-21 2016 in Hamburg, Germany and AACR, April 16-20, 2016.

**10.Areti Strati**, Athina Markou, Aliki Stathopoulou, Stella Apostolaki, Dimitris Mavroudis, Vasilis Georgoulias, Evi S. Lianidou. Analytical and clinical validation of an EpCAM-independent assay for CTC detection in peripheral blood of early breast cancer patients based on Cytokeratin-19 (CK-19) RT-qPCR. AACR, 18-22 April 2015, Pensylvania

**11** S. Hubold, I.F. Loncarevic, S. Hauch, L. Plappert, D. Schellbach, A. Markou, **A. Strati**, J. Rasch, U. Kirsch, A.Hanssen, H. Wikman, T. Gorges, E. S. Lianidou, K. Pantel, S.Kasimir-Bauer. "Comparative CTC analysis using the fully automated Alere™ q CTC Breast Detect and the manual AdnaTestBreastCancer Detect assays". 2nd Advances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 8-11 October 2014, Crete, Greece

**12. A. Strati**, V. Georgoulias, E. Lianidou. "Simultaneous quantification of ER, PR, HER-2 and EGFR mRNA transcripts in CTCs by a novel real time multiplex RT-qPCR assay". 2nd Advances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 8-11 Octomber 2014, Crete, Greece

**13.**G. Koutsodontis, **A. Strati**, E.M. Vagia, A. Giagini, S. Siolos, N. Charalambakis, K. Tsigaridas, G. Kotsantis, P. Economopoulou, V.S. Ramfidis, C. Perisanidis, C. Sasaki, V. Bartzi, A.S. Strimpakos, E. Lianidou, A. Psyrri. "Prognostic significance of circulating cancer cells (CTCs) in head and neck squamous cell carcinoma (HNSCC)".2nd Advances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 8-11 Octomber 2014, Crete, Greece.

**14. Areti D. Strati**, Evi S. Lianidou."Development and analytical validation of a novel realtime multiplex RT-qPCR assay for the simultaneous quantification of ER, PR, HER-2 and EGFR mRNA expression in circulating tumor cells of breast cancer patients". 105 American Association for Cancer Research, Apr. 5 – Apr. 9 2014, San Diego. **15.** Maria Chimonidou, **Areti Strati**, Nikos Malamos, Vassilis Georgoulias, Evi Lianidou. "DNA methylation of tumor suppressor and metastasis suppressor genes in primary tumors, circulating tumor cells and cell free DNA in the same breast cancer patients". 105 American Association for Cancer Research, Apr. 5 – Apr. 9 2014, San Diego and 2nd Advances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 8-11 Octomber 2014, Crete, Greece.

**16. Areti D. Strati**, Vasilis Georgoulias, Evi Lianidou. "Prognostic significance of stem cell and EMT phenotype in Circulating Tumor Cells". 104rd American Association for Cancer Research, Apr. 6 – Apr. 10 2013, Washington DC.

**17.**Cleo Parisi, Athina Markou, **Areti Strati**, Evi Lianidou. "Development of a multiplexed RT-PCR-coupled liquid bead array assay for the molecular characterization of CTCs".104rd American Association for Cancer Research, Apr. 6 – Apr. 10 2013, Washington DC.

**18**. **Areti Strati**, Oliver Hoffmann, Athina Markou, Kleo Parisi, Sabine Kasimir-Bauer, Evi S. Lianidou. "Comparison of three molecular assays for the detection of circulating tumor cells in breast cancer", 1stAdvances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 26-29 September 2012, Athens, Greece.

**19.** Cleo Parisi, Athina Markou, **Areti Strati** and Evi S. Lianidou. "Development of a multiplexed RT-PCR coupled liquid bead array assay for the molecular characterization of CTCs". 1stAdvances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 26-29 September 2012, Athens, Greece.

**20.** Maria Chimonidou, **Areti Strati**, Nikos Malamos, Vasilis Georgoulias, Evi S. Lianidou. "SOX17 promoter methylation in CTC and cell free DNA isolated from plasma of breast cancer patients". 1stAdvances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 26-29 September 2012, Athens, Greece.

**21.** Athina Markou, Ioanna Sourvinou, **Areti Strati**, Nikos Malamos, Vasilis Georgoulias and Evi S. Lianidou.miR-21 expression in Circulating Tumor Cells and matched plasma samples of metastatic breast cancer patients. 1stAdvances in Circulating Tumour Cells (ACTC) from Basic Research to Clinical Practice, 26-29 September 2012, Athens, Greece.

**22. Areti Strati**, Vasilis Georgoulias, Evi S. Lianidou "Multiplex RT-qPCR study on the expression of stem cell markers CD24, CD44, and ALDH1 in Circulating Tumor Cells of breast cancer patients", 103rd American Association for Cancer Research, Mar. 31 – Apr. 4, 2012, Chicago, IL.

**23.** Maria Chimonidou, **Areti Strati**, Nikos Malamos, Vasilis Georgoulias, Evi S. Lianidou. "SOX17 promoter methylation in CTC and cell free DNA isolated from plasma of breast cancer patients". 103rd American Association for Cancer Research, Mar. 31 – Apr. 4, 2012, Chicago, IL.

**24. A. Strati**, A. Markou, C. Parisi, E. Politaki, D. Mavroudis, V. Georgoulias, E. Lianidou. "Gene expression profile of circulating tumor cells in breast cancer by RT-qPCR".102th American Association for Cancer Research, 2-6 Apr. 2011, Orlando, Florida. **25.** M. Chimonidou, **A. Strati**, A. Tzitzira, G. Sotiropoulou, N. Malamos, V. Georgoulias, E. Lianidou. "DNA methylation of tumor suppressor and metastasis suppressor genes in circulating tumor cells".102th American Association for Cancer Research, 2-6 Apr. 2011, Orlando, Florida.

**26. A. Strati**, A. Markou, O. Hoffmann, R. Kimmig, E. S. Lianidou, S. Kazimir-Bauer. "CK-19, MAGE-A3, HER-2 and TWIST-1 expression by RT-qPCR in CTCs of primary breast cancer patients after positive immune-magnetic selection using anti-EpCAM and anti-MUC1 magnetic beads".102th American Association for Cancer Research, 2-6 Apr. 2011, Orlando, Florida.

**27.** A. Markou, **A. Strati**, N. Malamos, V. Georgoulias, E. S. Lianidou. "Expression of mature miR-21 and let-7a in CTCs of breast cancer patients with verified metastasis".8th Panhellenic Conference of Clinical Chemistry, 2-4 Oct. 2009, Patra, Greece.

**28.** A. Tzitzira, **A. Strati**, G. Sotiropoulou, N.Malamos, V. Georgoulias and E. S. Lianidou."DNA methylation of the tumor supressor gene CST6 in Circulating Tumor Cells (CTCs) of breast cancer patients" 7th International Symposium on Minimal Residual Cancer, 16-19 Sept. 2009, Athens, Greece.

**29.** N. Konstantinidou, **A. Strati**, E.G. Tsaroucha, L. Kaklamanis, E.S Lianidou."Expression of EMT regulators TWIST1, SNAIL and VIMENTIN in non-small cell lung cancer (NSCLC) by quantitative RT-PCR".7th International Symposium on Minimal Residual Cancer, 16-19 Sept. 2009, Athens, Greece.

**30.** N. Konstantinidou, **A. Strati**, E.Varhalama, E.S Lianidou. "Expression of EMT regulator TWIST-1 in cervical cancer by quantitative RT-PCR".7th International Symposium on Minimal Residual Cancer, 16-19 Sept. 2009, Athens, Greece.

**31. A. Strati**, A. Markou, A. Stathopoulou, D. Mavroudis, V. Georgoulias and E. S. Lianidou. "Evaluation of Real time PCR Quantification kit for Cytokeratin 19 (CK-19): Application for the detection of circulating tumor cells (CTCs) in peripheral blood of early breast cancer patients". 100th American Association for Cancer Research, 18-22 Apr. 2009, Denver and in the 8th Panhellenic Conference of Clinical Chemistry, 2-4 Oct. 2009, Patra, Greece.

**32.** A. Markou, **A. Strati**, L. Kaklamanis, M. Kafoussi, S. Stathopoulos, V. Georgoulias, E.S. Lianidou. "Evaluation of the prognostic significance of mature miR-10b expression in early breast cancer.". 99th American Association for Cancer Research, 12-16 Apr. 2008, San Diego, California and in the 33nd FEBS congress & 11th IUBMB conference, 28 Jun.-3 Jul. 2008, Athens, Greece.

**33. A. Strati**, A. Markou, N. Malamos, D. Mavroudis, V. Georgoulias, E.S. Lianidou. "TWIST1 expression in circulating tumor cells of early breast cancer patients". 99th American Association for Cancer Research, 12-16 Apr. 2008, San Diego, California and in the 33nd FEBS congress & 11th IUBMB conference, 28 Jun.-3 Jul. 2008, Athens, Greece.

**34.** M. Kioulafa, **A. Strati**, A. Stathopoulou, N. Malamos, D. Mavrudis, V. Georgoulias and E. S. Lianidou. "Detection of RASSF1A promoter methylation in cell free circulating DNA in plasma of early breast cancer patients". 6th International Symposium on Minimal Residual Cancer (ISMRC), 19-22 Sep. 2007, Hamburg, Germany.

**35. A. Strati**, E. Mavrogiannou, A. Stathopoulou, E.G. Tsaroucha, L. Kaklamanis, E.S. Lianidou. "Real rime RT-PCR quantification of human telomerase reverse transcriptase (hTERT) splice variants in non small cell lung cancer (NSCLC)". 3nd Annual Greek Anticancer Conference, 26-29 Apr. 2007, Athens, Greece and in the 17th IFCC - FESCC European Congress of Clinical Chemistry and Laboratory Medicine, 3-7 Jun. 2007, Amsterdam, Netherlands.

**36. A. Strati**, Z. Papoutsi , E. Lianidou , P. Moutsatsou. "Effect of ellagic acid on expression of human telomerase reverse transcriptase (hTERT) in estrogen receptor-positive MCF-7 breast cancer cells".12th International Congress on Hormonal Steroids and Hormones and Cancer, 16-20 April.2005, Athens, Greece.

## **11. MONITORING EXPERTISE SEMINARS (TRAINING)**

2016:Cell Search Interprentation training Janssen Diagnostics, , Beerse, 6-10 June, Belgium

**2014:** Training for the use of Adnagen's products. 10-18 June, Hannover, Germany.

### **12. REVIEWER IN SCIENTIFIC JOURNALS**

- 1. Measurement Impact Factor 2014: 1.484
- 2. Clinical Chemistry and Laboratory Medicine (CCLM) Impact Factor 2014: 2.707
- 3. Journal of Translational Medicine Impact Factor 2015:3.93
- 4. Advances in Clinical Chemistry Impact Factor 2016:2.64
- 5. Nature Reviews Urology Impact Factor 2016/2017: 7.735

## **13. PARTICIPATION IN RESEARCH GRANTS**

#### **13.1 Completed Research Grants**

**2015-2016: UICC Yamagiwa-Yoshida Memorial International Cancer Study** Grant by the Union for International Cancer Control following an international scientific review by experts at Joan & Sanford I. Weill Medical College of Cornell University (3/2015-2/2016) **PI:** Evi Giannakakou, Ph.D.

**2014-2015**: **INTERSTATE PROGRAMME GREECE-GERMANY** 3. Liquid biopsy: In vivo capturing and molecular characterization of circulating tumor cells as a novel tool for improving tertiary prevention in breast cancer. This program is co-funded by the European Regional Development Fund and National Resources (General Secretariat of Research and Technology in Greece)

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

Role: Researcher (Postdoc)

2009-2014. "SYNERGASIA 2009 PROGRAMME". This program is co-funded by the European Regional Development Fund and National Resources (General Secretariat of Research and Technology in Greece), Project code: Onco-Seed diagnostics. (16/12/2010 -15/12/2015)
PI: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

**Role:** Researcher (Postdoc)

**2003: PENED grant** of the Greek General Secretariat of Research and Technology and Bioanalytica SA.The goal of this project was to develop a multiplex real time PCR assay for the expression of 4 specific genes in breast cancer CTC.

**PI**: Evi Lianidou, Professor of Analytical Chemistry – Clinical Chemistry, Dept. of Chemistry, University of Athens.

Role: Ph.D. student

### **13.2 Active Research Grants**

**2016-2019:** Cancer ID-IMI Innovative Medicine Initiative, with project title «Cancer treatment and monitoring through identification of circulating tumor cells and tumor related nucleic acids in blood» (<u>http://www.cancer-id.eu/</u>).

### 14. PATENTS

**1.** Lianidou Evrykleia and Strati Areti, Pharmassist Ltd, (PCT Application No. PCT/GR2015/000054, 27.10.2015). "METHOD FOR THE QUANTIFICATION OF PD-L1 EXPRESSION".

## **15. STATE OF SCIENTIFIC COMMUNITIES**

Associate member of American Association of Cancer Research

## **16. LANGUAGES / COMPUTER SKILLS**

- English: First (FCE) | Cambridge English
- Microsoft word, excel, power point
- Στατιστικό πρόγραμμα <u>IBM SPSS Statistics</u>