

CURRICULUM VITAE

Name: Natalia Aptsiauri

Position Title: Assistant Professor of the Department of Biochemistry, Molecular Biology III and Immunology, University of Granada Medical School

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Academic and institutional titles:

MD, PhD, Assistant Professor of Immunology

Education: MD (Medical Doctor) and MS (Master of Science) in Medical Biophysics from 2nd Russian State Medical Institute by the name of Pirogov (currently Pirogov Russian National Research Medical University, Moscow, Russia)

Ph.D. in Medicine (Immunology), 1992. PhD thesis: "Cytokine-mediated priming of phagocytes"

Chronological listing of Professional Experience and Positions:

1989-1991 -Teaching Assistant, Immunology, 2nd Russian State Medical Institute by the name of Pirogov (currently Pirogov Russian National Research Medical University, Moscow, Russia)

1991-1992 - Assistant Research Scientist, Immunology, 2nd Russian State Medical Institute by the name of Pirogov (currently Pirogov Russian National Research Medical University, Moscow, Russia)

1992-1995 – Postdoctoral Fellow, University of Florida, Gainesville, FL, USA

1995–1999 - Assistant Research Scientist (UF faculty member), University of Florida, Gainesville, FL, USA
Research line: "Immune mechanism of pathogenesis of paraneoplastic syndrome, autoimmune uveitis and retinal degeneration"

1999- 2004 - Associate Research Faculty (UI faculty member), University of Iowa, Iowa City, IA, USA
Research line: "Immunological pathways involved in immune complex deposition in age-related macular degeneration: the role of Factor H"

2004 - Visiting Professor, Department of Genetics, Stanford University, Palo Alto, California, USA
Research project: "Molecular mechanisms of retinal degeneration and gene therapy approach for its correction"

2005-2011 – Miguel Servet Research Contract from the Institute of Health Carlos III (ISCIII) of the Ministry of Economy and Competitiveness. Affiliation: Department of Clinical Analysis and Immunology, University Hospital Virgen de las Nieves, Granada, Spain. *Research line: "Cancer Immune Escape, implications for Immunotherapy. HLA class I altered expression in tumor cells and its recovery using gene therapy"*

2011-2016 – Senior Investigator, Research Contract from the Program of Stabilization of the researchers of the Spanish National Healthcare System (I3 SNS, ISCIII). Affiliation: Department of Clinical Analysis and Immunology, University Hospital Virgen de las Nieves, Granada, Spain. *Research line: "Cancer Immune Escape, implications for Immunotherapy. HLA class I altered expression in tumor cells and its recovery using gene therapy"*

July-October of 2013 –visiting scientist at the Gene Therapy Centre of the University of Florida, Gainesville, FL, USA

Since 2012 - invited lecturer at the University of Granada teaching basic and clinical Immunology at the Medical School, School of Pharmacy and Faculty of Science

Since 2014 - member of the MS (Advanced Molecular and Cellular Immunology) program at the University of Granada, coordinator of the Molecular Oncology course. Supervised two PhD and six MS theses

Since 2016 - Assistant Professor - Department of Biochemistry, Molecular Biology III and Immunology, University of Granada Medical School

Research Interests

My ongoing research projects are focused on the mechanisms and role of altered tumor MHC/HLA class I expression in cancer immune escape, metastatic progression, and in response to cancer immunotherapy. I am also working on the development of cancer gene therapy aimed at increasing tumor HLA class I expression and cancer cell immunogenicity and on the analysis of HLA class I expression in tumor exosomes.

Other Experience and Professional Memberships

1992-2004 - Association for Research in Vision and Ophthalmology
1988-2001 - Russian National Scientific Society for Immunology
2002-2004 - Member of the International Editorial Board of the Russian Journal of Immunology
since 2005 - Member of the European Federation of Immunogenetics (EFI)
2005 -2014 - Member of Spanish Cancer Network
since 2011 - Member of the Editorial Board of the Journal of Immunotoxicology
since 2013 - Member of the Spanish and European Societies of Gene and Cell Therapy
since 2102 - Member of the Editorial Board of ImmunoTargets and Therapy
since 2014 - Member of the Institute of Bioscience, ibs Granada
Since 2014 - Member of the Master's program: "Research and Advances in Molecular and Cellular Immunology at the University of Granada, coordinator of the Molecular Oncology course. Supervised two PhD and six MS theses
Since 2015 - Member of the CITIM (Cancer Immunotherapy and Immunomonitoring) international network, coordinated from the University of Pittsburgh, USA
Since 2005 - Member of the Research Group CTS-143 registered by the Andalusian Government
Since 2014 – Member of the Group A-08 "Immune response and Cancer. Mechanisms of cancer immune escape" at the Institute of Biosanitary Research, ibsGranada.

Awards, Honors, Patents, Organizing Committees, Editorial Board Membership and other Merits:

- Pirogov Prize in Immunology among Young Scientists, Moscow, Russia - 1990
- International Fellowship from Research to Prevent Blindness Foundation, Gainesville, USA - 1992
- Helen Keller Research Foundation International Fellowship, Gainesville, USA - 1993
- Competitive Award, University of Florida Division of Sponsored Research Program for a new faculty Member, Gainesville, USA - 1996
- University of Florida College of Medicine Research Development Award, Gainesville, USA - 1997
- Best short oral presentation at the International Congress "Immune-Mediated Diseases", Moscow, Russia, 2007

- Factor H - 22, 1800 citations

Intellectual property, patents:

- 1) "Restoration of the tumor HLA class I expression using adenoviral vector coding for beta2-microglobulin gene". Authors: R. Méndez; N.Aptsiauri; A. Del Campo; F. Ruíz-Cabello; F. Garrido. Number: P200701222. Date: 25.04.2009.
- 2) "Expression of beta2-microglobulin as a prognostic marker for tumor immune escape and resistance to cancer immunotherapy and a diagnostic biomarker for patient selection for specific gene therapy. Authors: Natalia Aptsiauri, Ana del Campo, Javier Carretero, Federico Garrido. Application number EP12382522.6. Submission number: 300079306. Priority date: December 2012

Participation in organizing committees of international conferences and invited lectures:

- "Progress in Vaccination against cancer" (PIVAC-6), Granada, Spain, 2006
- Congress of the Spanish Society of Immunology, Granada, Spain, 2007
- "Immune-Mediated Diseases" Moscow, Russia, 2005 and 2007
- "Cancer Immunotherapy and Immunomonitoring (CITIM)", Kiev, Ukraine, 2009
- "Cancer Immunotherapy and Immunomonitoring (CITIM)", Budapest, Hungary, 2011
- "Cancer immune Escape: Implications for Immunotherapy", Granada, Spain, 2011
- "Cancer Immunotherapy and Immunomonitoring (CITIM)", Ljubljana, Slovenia, 2013
- "Cancer Immunotherapy and Immunomonitoring (CITIM)", Krakow, Poland, 2015
- "Cancer Immunotherapy and Immunomonitoring (CITIM)", Prague, Czech Republic 2017
- Invited speaker: Stanford University, USA, March, 2004,
German Cancer Center (DKFZ), Heidelberg, Germany, May 2011
University of Florida, Gainesville, FL, USA, July 2013
Invited lectures scheduled for May 2018: German Cancer Center (DKFZ), Heidelberg,
and University of Essen, Germany

Reviewer in the following journals:

- Cancer Immunology Immunotherapy
- International Journal of Cancer
- Investigative Ophthalmology and Visual Science (IOVS)
- Immunobiology
- Oncoimmunology
- Cancer Research

PhD thesis direction (past 8 years only):

Title: Loss of HLA class I expression in Prostate Cancer and restoration using adenoviral and adeno-associated viral vectors
Doctorant: FRANCISCO JAVIER CARRETERO COCA
Defense date: 2016

Title: Beta-2-microglobulin gene transfer in HLA class I deficient tumor cells using recombinant adenovirus
Doctorant: ANA BELEN DEL CAMPO ALONSO
Defense date: 2014

Research Funding Information

Participated in 23 research grants and research networks funded by Spanish and European funding agencies, including the following grants as a principal investigator:

- Research grant from the Health Service Council of the Andalusian government (SAS), Spain, SAS IP 0382/2009, 2009-2012 (Principal Investigator)
- Research grant from the Carlos III Institute of Health, Spanish Ministry of Economy and Competitiveness and by the Ministry of Health, Social Services and Equality, 2014-2015 (Principal Investigator)
- Travel grant awarded by the Research Council of the Andalusian government (Spain) for visiting Center for Gene therapy of the University of Florida, USA, in 2013
- Research grant from the Carlos III Institute of Health, Spanish Ministry of Economy and Competitiveness and by the Ministry of Health, Social Services and Equality, 2015-2018 (Co-Principal Investigator)

Ongoing:

Title: Alteración de la presentación antigénica en las células tumorales: implicación en la inmunovigilancia e inmunoterapia.
Project number: PI17/00197
Call/Financial entity: Q2827015E - Instituto de Salud Carlos III
Duration: 2018-2020
Awarded Budget :99.220 euros
Colaborator

Completed (past 8 year only), selected:

Title: HLA de clase I en la progresión metastásica y la resistencia a la inmunoterapia de nueva generación: Implicaciones en el escape inmunológico del cáncer.

Call/Financial entity: Instituto de Salud Carlos III. PI14/01978
2015-2017
Awarded Budget : 150.000 €
Co-IP

Title: Transferencia de genes HLA a líneas celulares tumorales con alteraciones conocidas para la expresión de HLA de clase I
Awarded Budget: 42.000
Call/Financial entity: Instituto de Salud Carlos III, FIS PI040254
2005-2008
Principal Investigator

Title: Incremento de la inmunogenicidad en células tumorales tras la restauración de la expresión de hla de clase i mediante vectores adenovirales
2010-2012
Awarded Budget: 46.495
Call/Financial entity: Consejería de Innovación, Ciencia y Empresa, Junta de Andalucía
Principal Investigator

Title: Restitución de la inmunogenicidad de cáncer mediante el uso de vectores Adenovirales y genes HLA
Call/Financial entity: Consejería de Ciencia, Innovación y Empresa .Junta de Andalucía; CVI-4740
2010-2012
Awarded Budget : 199.900,90€
Colaborator

Title: El escape del cáncer a la inmunovigilancia: expresión de MHC y rechazo tumoral.
Call/Financial entity: Instituto de Salud Carlos III. PI11/01022
2012-2014
Awarded Budget: 200.540,46 €
Colaborator

Title: Las moléculas HLA y el escape inmunológico del cáncer: estudio de metástasis que progresan y regresan en pacientes sometidos a inmunoterapia.
Call/Financial entity: Consejería de Ciencia, Innovación y Empresa .Junta de Andalucía; P08-CTS 3952
2009-2013
Awarded Budget: 341.923,60€
Colaborator

Title: Restitución de la inmunogenicidad del Cáncer mediante el uso de vectores Adenovirales y genes HLA
2010-2012
Awarded Budget: 199.072€
Call/Financial entity: Consejería de Innovación, Ciencia y Empresa
Colaborator

Title: Las moléculas HLA y el escape inmunológico del Cáncer: Implicaciones Clínico-Terapéuticas.
2009-2011
Awarded Budget: 252.000€
Call/Financial entity: Fondo de Investigaciones sanitarias. Instituto de Salud Carlos III
Colaborator

Title: Cancer Immunotherapy. OJ2004/C158,518234
Investigador Principal: Thierry Boon
2006 -2009
Awarded Budget: 285.000€
Call/Financial entity: Comisión Europea
Colaborator

Title: El escape de las células cancerosas a la respuesta inmunológica: implicaciones clinicoterapéuticas. PI-0079/2007
2008 -2010
Awarded Budget: 39.900€
Call/Financial entity: Consejería de Salud. Junta de Andalucía.
Colaborator

Title: Las moléculas HLA y el escape inmunológico del cáncer. Estudios de metástasis que progresan y regresan en pacientes sometidos a inmunoterapia.
2009-2012
Awarded Budget: 341.924€
Call/Financial entity: Consejería de Innovación, Ciencia y Empresa
Colaborator

Publications (past 10 years only/Selected):

- 1) **Aptsiauri N**, Ruiz-Cabello F, Garrido F. The transition from HLA-I positive to HLA-I negative primary tumors: the road to escape from t-cell responses. *Current Opinion in Immunology*, 2018, in press. IF - 8.384 (D1)
- 2) Perea F, Sánchez-Palencia A, Gómez-Morales M, Bernal M, Concha A, Méndez García M, González-Ramírez AR, Kerick M, Martin J, Garrido F, Ruiz-Cabello F, **Aptsiauri N**. HLA class I loss and PD-L1 expression in lung cancer: impact on T-cell infiltration and immune escape. *Oncotarget*, 2018; 9:4120-4133. IF- 5,168 (Q1)
- 3) Carretero FJ, Del Campo A, Zinchenko S, Garrido F, **Aptsiauri N**. Recovery of HLA-A2 and Beta2-microglobulin expression in tumor cells using viral vectors. *J.Cancer Science and Therapy*, 2017, open access, 9:9 DOI: 10.4172/1948-5956.1000483
- 4) Garrido F, Ruiz-Cabello F, **Aptsiauri N**. Rejection versus escape: the tumor MHC dilemma. *Cancer Immunol Immunother. Vaccines (Basel)*. 2017 Feb 27;5(1). pii: E7. doi: 10.3390/vaccines5010007.
- 5) **Aptsiauri N**, Jewett A, Hurwitz AA, Shurin MR, Umansky V. Redefining cancer immunotherapy-optimization, personalization, and new predictive biomarkers: 4th Cancer Immunotherapy and Immunomonitoring (CITIM) meeting, April 27-30, 2015, Ljubljana, Slovenia. *Cancer Immunol Immunother*. 2016 Jul;65(7):875-83. IF - 4, 846 (Q1)
- 6) Garrido F, **Aptsiauri N**, Doorduyn EM, Garcia Lora AM, van Hall T. The urgent need to recover MHC class I in cancers for effective immunotherapy. *Curr Opin Immunol*. 2016 Apr;39:44-51 IF - 8.384 (D1)
- 7) Carretero FJ, Del Campo AB, Flores-Martín JF, Mendez R, García-Lopez C, Cozar JM, Adams V, Ward S, Cabrera T, Ruiz-Cabello F, Garrido F, **Aptsiauri N**. Frequent HLA class I alterations in human prostate cancer: molecular mechanisms and clinical relevance. *Cancer Immunol Immunother*. 2016 Jan;65(1):47-59. IF - 4, 846 (Q1)

- 8) Garrido F, Romero I, **Aptsiauri N**, Garcia-Lora AM Generation of MHC class I diversity in primary tumors and selection of the malignant phenotype. *Int J Cancer*. 2016 Jan 15;138(2):271-80. IF – 6,513 (Q1)
- 9) Del Campo AB, Carretero J, Muñoz JA, Zinchenko S, Ruiz-Cabello F, González-Asequinolaza G, Garrido F, **Aptsiauri N**. Adenovirus expressing β 2-microglobulin recovers HLA class I expression and antitumor immunity by increasing T-cell recognition. *Cancer Gene Ther*. 2014 Aug;21(8):317-32. IF - 3.652 (Q2)
- 10) Ana B. Del Campo, Jon Amund Kyte, Javier Carretero, Svitlana Zinchenko, Rosa M. Méndez, Gloria Gonzalez-Asequinolaza, Francisco Ruiz-Cabello, Steinal Aamdal, Gustav Gaudernak, Federico Garrido, **Natalia Aptsiauri**. Immune escape of cancer cells with beta2-microglobulin loss over the course of metastatic melanoma. *Int J Cancer*. 2014 Jan 1;134(1):102-13. IF – 6,513 (Q1)
- 11) Malyguine A, Umansky V, Kotlan B, **Aptsiauri N**, Shurin MR. Conference overview: Cancer Immunotherapy and Immunomonitoring (CITIM): Moving forward. *J Immunotoxicol*. 2012 Jul-Sep;9(3):231-5.
- 12) **Aptsiauri N**, Cabrera T, Garcia-Lora A, Garrido F. Cancer immune escape: implications for immunotherapy, Granada, Spain, October 3-5, 2011. *Cancer Immunol Immunother*. 2012;61(5):739-45. IF - 4, 846 (Q1)
- 13) del Campo AB, Carretero J, **Aptsiauri N**, Garrido F. Targeting HLA class I expression to increase tumor immunogenicity. *Tissue Antigens*. 2012 Mar;79(3):147-54. IF - 2.942 (Q2)
- 14) Umansky V, Malyguine A, Kotlan B, **Aptsiauri N**, Shurin MR. From cell regulation to patient survival: 2nd Cancer immunotherapy and immunomonitoring (CITIM) meeting, Budapest, 2-5 May 2011. *Cancer Immunol Immunother*. 2012 Feb;61(2):295-301 IF - 4, 846 (Q1)
- 15) Maleno I, **Aptsiauri N**, Cabrera T, Gallego A, Paschen A, López-Nevot MA, Garrido F. Frequent loss of heterozygosity in the β 2-microglobulin region of chromosome 15 in primary human tumors. *Immunogenetics*. 2011 Feb;63(2):65-71
- 16) Carretero R, Cabrera T, Gil H, Saenz-Lopez P, Maleno I, **Aptsiauri N**, Cozar JM, Garrido F. Bacillus Calmette-Guerin immunotherapy of bladder cancer induces selection of human leukocyte antigen class I-deficient tumor cells. *Int J Cancer*. 2011 Aug 15;129(4):839-46. IF – 6,513 (Q1)
- 17) Garrido F, Cabrera T, **Aptsiauri N**. “Hard” and “soft” lesions underlying the HLA class I alterations in cancer cells. *Int J Cancer*. 2010 Jul 15;127(2):249-56. IF – 6,513 (Q1)
- 18) Ana Belén del Campo, **Natalia Aptsiauri**, Rosa Méndez, Svitlana Zinchenko, África Vales, Annette Paschen, Stephen Ward, Francisco Ruiz-Cabello, Gloria González-Asequinolaza, Federico Garrido. Efficient recovery of HLA class I expression in human tumor cells after beta2-microglobulin gene transfer using adenoviral vector: implications for cancer immunotherapy. *Scandinavian J Immunology*, 2009 Aug;70(2):125-35. IF -2,256 (Q3)
- 19) Zhang W, Caspell R, Karulin AY, Ahmad M, Haicheur N, Abdelsalam A, Johannesen K, Vignard V, Dudzik P, Georgakopoulou K, Mihaylova A, Silina K, **Aptsiauri N**, Adams V, Lehmann PV, McArdle S. ELISPOT assays provide reproducible results among different laboratories for T-cell immune monitoring – even in hands of ELISPOT-inexperienced investigators. *J Immunotoxicol*. 2009 Dec;6(4):227-34. IF – 1,9 (Q3)
- 20) Mendez R, **Aptsiauri N**, Del Campo A, Maleno I, Cabrera T, Ruiz-Cabello F, Garrido F, Garcia-Lora A. HLA and melanoma: multiple alterations in HLA class I and II expression in human melanoma cell lines from ESTDAB cell bank. *Cancer Immunol Immunother*. 2009 Sep;58(9):1507-15. IF - 4, 846 (Q1)
- 21) **Aptsiauri N**, Carretero R, Garcia-Lora A, Real LM, Cabrera T, Garrido F. Regressing and progressing metastatic lesions: resistance to immunotherapy is predetermined by irreversible HLA class I alterations. *Cancer Immunology Immunotherapy*. 2008 57(11):1727-33. IF - 4, 846 (Q1)
- 22) Mendez R, Rodríguez T, Del Campo A, Monge E, Maleno I, **Aptsiauri N**, Jiménez P, Pedrinaci S, Pawelec G, Ruiz-Cabello F, Garrido F. Characterization of HLA class I altered phenotypes in a panel of human melanoma cell lines. *Cancer Immunology Immunotherapy*. 2008 May;57(5):719-29. IF - 4, 846 (Q1)
- 23) Cozar JM, **Aptsiauri N**, Tallada M, Garrido F, Ruiz-Cabello F. Late pulmonary metastases of renal cell carcinoma immediately after post-transplantation immunosuppressive treatment. *BMC-Journal of Medical Case Reports* 2008 Apr 18;2:111.
- 24) **Aptsiauri N**, Cabrera T, Garcia-Lora A, Ruiz-Cabello F, Garrido F. HLA Class I expression, tumor escape and cancer progression. *Current Cancer Therapy Reviews*, 2008, Vol 5(2): 105-110. IF-5,8 (Q2)
- 25) **Aptsiauri N**, Cabrera T, Mendez R, Garcia-Lora A, Ruiz-Cabello F, Garrido F. Role of altered expression of HLA class I molecules in cancer progression. *Advances in Experimental Biology and Medicine, Immune Mediated Diseases: from theory to Therapy*. 2007; 601:123-31. IF-1,8
- 26) Cozar JM, Romero JM, **Aptsiauri N**, Vazquez F, Vilchez JR, Tallada M, Garrido F, Ruiz-Cabello F. High incidence of CTLA-4 AA (CT60) polymorphism in renal cell cancer. *Human Immunology* 2007 , 68(8):698-704 IF-2,3 (Q3)
- 27) Rodríguez T, **Aptsiauri N**, Mendez R, Jimenez P, Ruiz-Cabello F, Garrido F. Different mechanisms can lead to the same altered HLA class I phenotype in tumors. *Tissue Antigens* 2007, 69 Suppl 1:259-63. IF - 2.942 (Q2)
- 28) **Aptsiauri N**, Cabrera T, Pawelec G, Gouttenfangeas C, Derhovanesian E, Garrido F, Garcia Lora A. International conference: progress in vaccination against cancer-2006 (PIVAC 6), Granada, Spain. *Cancer Immunology Immunotherapy*. 2007, 56(8):1311-22. IF - 4, 846 (Q1)
- 29) **Aptsiauri N**, Cabrera T, Garcia-Lora A, Lopez-Nevot MA, Ruiz-Cabello F, Garrido F. Related Articles. MHC class I antigens and immune surveillance in transformed cells. *Int Rev Cytol*. 2007;256:139-89. IF-5,6 (Q1)
- 30) Rodríguez T, Mendez R, Del Campo A, **Aptsiauri N**, Martín J, Orozco G, Pawelec G, Schadendorf D, Ruiz-Cabello F, Garrido F. Patterns of constitutive and IFN-gamma inducible expression of HLA class II molecules in human melanoma cell lines. *Immunogenetics*. 2007 Feb;59(2):123-33. IF-2,2 (Q3)

Book:

Aptsiauri N, Garcia-Lora A, Cabrera T

BOOK TITLE: MHC Class I antigens in malignant cells: Immune escape and response to immunotherapy. Springer Briefs in Cancer Research, Springer, New York, Heidelberg, 2013, 51 pages.

Book chapters:

- 1) **N. Aptsiauri**, AM. Garcia-Lora, F. Garrido. 'Hard' and 'soft' loss of MHC class I expression in cancer cells. In: Tumor Immunology and Immunotherapy. Editor: Robert Rees. Oxford University Press, Oxford, 2014, p 63-78
- 2) **Aptsiauri N**, Cabrera T, Garcia-Lora A, Ruiz-Cabello F, Garrido F. MHC Class I antigens and the tumor microenvironment. In: The tumor immunoenvironment. Editors: Surin M, Umansky V, Malyguine A. Springer, New York, 2013, p 253-286.

Meeting Abstracts (past 8 years only):

Participated in more than 70 international conferences, in many of them with oral presentations.

Selected abstracts:

F. Perea, J. Flores, F. Ruiz-Cabello, F. Garrido, N. Aptsiauri. Correlation between HLA class I and PD-L1/PD1 expression in human tumors. . 4th International conference Cancer Immunotherapy & Immunomonitoring (CITIM). 22-25 April 2017, Prague, Czech Republic

F.J. Carretero Coca, A.B. del Campo, S. Zinchenko, F. Garrido, N. Aptsiauri. Increasing tumor cell immunogenicity by restoration of tumor HLA class I expressing using adeno- and adeno-associated viral vectors coding for HLA-A2 and beta2-microglobulin genes. Congreso de la Sociedad Española de Inmunología. Alicante del 5 al 7 de Mayo del 2016.

Méndez García, F.J. Carretero Coca, F.J. Perea García, J.F. Flores Martín, J.M. Cozar, A. Sanchez-Palencia Ramos, F. Ruiz-Cabello Osuna, Garrido F, N. Aptsiauri. HLA class I and PDL-1 expression in lung and bladder tumors and in cancer cell lines treated with anti-"immune checkpoint" antibodies or HLA-correcting gene therapy. Congreso de la Sociedad Española de Inmunología. Alicante del 5 al 7 de Mayo del 2016.

Natalia Aptsiauri, Federico Garrido. Immunoescape of MHC Class I-Negative tumor cells: Implications for cancer immunotherapy. 28Th European Immunogenetics and Histocompatibility Conference. Estocolmo, Suecia. 25-28 Junio, 2014. Tissue Antigens Vol. 84 N° 1, 2014.

J. Carretero, S. Zinchenko, F. Garrido, N. Aptsiauri. HLA class I recovery in human tumor cell lines after transfection with adeno-associated virus carrying HLA-A0201 gene. 27th European Immunogenetics and Histocompatibility (EFI) Conference. May 11-14 2013 Maastricht, The Netherlands TISSUE ANTIGENS VOL. 81 N°5 2013

N. Aptsiauri. Targeting tumor HLA expression to increase cancer cell immunogenicity. 3d International conference Cancer Immunotherapy & Immunomonitoring (CITIM). 22-25 April 2013, Krakow, Poland.

J. Carretero, A. del Campo, S. Zinchenko, A. Moreno, F. Ruiz-Cabello, F. Garrido, N. Aptsiauri. A deletion in beta-2 microglobulin gene is responsible for a total loss of HLA class I expression in a human prostate carcinoma cell line. 26th European Immunogenetics and Histocompatibility (EFI) Conference. May 31-June 3 2012 Liverpool, UK; TISSUE ANTIGENS VOL. 79 N°6 2012

A. del Campo, J. Carretero, S. Zinchenko, A. Rodriguez, A. Gallego, G. Gonzalez Asequinolaza, F. Garrido, N. Aptsiauri. The modulation of the antigen presentation machinery in human b2m-deficient melanoma cell lines by adenoviral vectors. PIVAC-11. 11th International Conference on progress in vaccination against cancer. 10-13 October 2011. Radisson Blu, Copenhagen, Denmark.

R. Carretero, T. Cabrera, A. Rodriguez, H. Gil, P. Saenz-Lopez, I. Maleno, N. Aptsiauri, JM Cozar, F. Garrido. Immunotherapy of bladder cancer induces selection of HLA class I-deficient tumor cells. International Conference "Cancer Immune escape: Implications for immunotherapy". October 3-5. Dilar, Granada 2011

AB del Campo, J. Carretero, S. Zinchenko, N. Aptsiauri, F. Garrido. HLA class I and II antigen expression in human bladder cancer cell lines. International Conference "Cancer Immune escape: Implications for immunotherapy". October 3-5. Dilar, Granada 2011

J. Carretero, A. del Campo, T. Cabrera, A. Rodriguez, A. Gallego, A. Suarez, JM Cozar, F. Garrido, N. Aptsiauri. High frequency of HLA class I altered expression in human prostate cancer as compared to prostatic hyperplasia. International Conference "Cancer Immune escape: Implications for immunotherapy". October 3-5. Dilar, Granada 2011

P. Saenz-López, M. Bernal, A.I. Rodriguez, I. Maleno, N. Aptsiauri, A. Concha, y F. Garrido. Estudio de la Frecuencia y Mecanismos que determinan la pérdida de Expresión de Moléculas HLA de Clase I en cáncer de Mama. XXXVI Congreso de la Sociedad Española de Inmunología. Junio 8 al 11. Pamplona 2011. INMUNOLOGÍA Vol. 30 Especial Congreso Junio 2011. Pág. 85

R. Méndez, T. Hidalgo, JM Romero, S. Brackenridge, AB Garcia-Ruano, AB del Campo, N. Aptsiauri, F. Ruiz-Cabello, A. McMichael y F. Garrido. Estudio de la Expresión del Locus HLA-C en un panel de Líneas celulares de Melanoma. XXXVI Congreso de la Sociedad Española de Inmunología. Junio 8 al 11. Pamplona 2011. INMUNOLOGÍA Vol. 30 Especial Congreso Junio 2011. Pág. 82

J. Carretero, AB. del Campo, AI. Rodriguez, A. Suarez, T. Cabrera, JM Cozar, N. Aptsiauri, F. Garrido. Analysis of the underlying HLA class I altered expression in human prostate cancer and in prostatic hyperplasia. 25th European Immunogenetics and Histocompatibility (EFI) Conference. May 4-7 2011. Prague, Czech Republic. TISSUE ANTIGENS Vol. 77, N°5, May 2011 Pag. 500

P. Saenz-Lopez, I. Maleno, M. Bernal, N. Aptsiauri, A. Concha, F. Garrido. Frequency and underlying molecular mechanisms of altered HLA class I expression in breast carcinomas. 25th European Immunogenetics and Histocompatibility (EFI) Conference. May 4-7 2011. Prague, Czech Republic. TISSUE ANTIGENS Vol. 77, N°5, May 2011 Pag. 497

R. Carretero, T. Cabrera, AI Rodriguez, H. Gil, P. Saenz-Lopez, I. Maleno, N. Aptsiauri, JM Cozar, F. Garrido. Immunotherapy of bladder cancer induces selection of HLA class I-deficient tumor cells. 25th European Immunogenetics and Histocompatibility (EFI) Conference. May 4-7 2011. Prague, Czech Republic. TISSUE ANTIGENS Vol. 77, N°5, May 2011 Pag. 395

J. Carretero, A. del Campo, T. Cabrera, A. Rodriguez, A. Gallego, A. Suarez, JM Cozar, F. Garrido, N. Aptsiauri. High frequency of HLA class I altered expression in human prostate cancer as compared to prostatic hyperplasia. 2nd International conference. (CITIM). Mayo 2-5, 2011 Budapest (Hungary) Pag. 69

AB del Campo, J. Carretero, S. Zinchenko, G. Gozalez-Aseguinolaza, F. Garrido, N. Aptsiauri. The modulation of the antigen presentation machinery in human beta2m-deficient melanoma cell lines by adenoviral vectors. 2nd International conference CITIM. Mayo 2-5, 2011 Budapest (Hungary) Pag. 68

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