CURRÍCULUM VÍTAE NORMALIZADO

María Dolores Lozano Escario

Generated from: Universidad de Navarra

Date of document: 30/10/2023

v 1.4.0

ab265e997301b24de725ced60b7b3ce7

Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

ASISTENCIA: - Ctopatología, citiopatología molecular, patología pulmonar y mediastínica DOCENCIA: - Profesor titular de Anatomía Patológica en la facultad de Medicina de la Universidad e Navarra - Directora de 3 tesis doctorales ya defendidas, y actualmente directora de otras 4 INVESTIGACIÓN: - Publicación de más de 180 artículos en revistas de alto impacto nacional e internacional. índice H: 40 - Múltiples proyectos de investigación traslacional en medicina y medicina clínica nacionales e internacionales - Múltiples cursos y conferencias impartidas a nivel nacional e internacional, más de 500 - Miembro de CIBERONIC e IDISNA GESTIÓN: - Directora del departamento de Anatomía Patológica - Presidenta de la Sociedad Española de Citología -Presidenta electa Sociedad Española de Anatomía Patológica

General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

Google Scholar (24/05/2022) Total citas: 5947; Total citas desde 2017: 2679 Índice H: 40 Índice i10: 94

María Dolores Lozano Escario

Surname(s):	**Lozano Escario**
Name:	**María Dolores**
DNI:	**18015373W**
ORCID:	**0000-0002-6796-9380**
ResearcherID:	**ABD-9613-2020**
ScopusID:	**35501863900**
Date of birth:	**02/11/1961**
Gender:	**Female**
Nationality:	**Spain**
Country of birth:	**Spain**
Aut. region/reg. of birth:	**Aragon**
Contact province:	**Navarre**
City of birth:	**Huesca**
Contact address:	**c/ Pio XII, nº 36**
Postcode:	**31008**
Contact country:	**Spain**
Contact aut. region/reg.:	**Foral Community of Navarre**
Contact city:	**Pamplona**
Land line phone:	**+34948296496**
Email:	**mdlozano@unav.es**
Personal web page:	**http://www.unav.edu/**

Current professional situation

Employing entity: Clínica Universitaria de Navarra

Type of entity: University

Department: Laboratorio de Anatomía Patológica, Clínica Universidad de Navarra

Professional category: Directora

Educational Management (Yes/No): No

City employing entity: Pamplona, Spain

Phone: +34948296496

Start date: 01/01/2016

Type of contract: Permanent employment contract

Dedication regime: Full time

Primary (UNESCO code): 320000 - Medical Science

Secondary (UNESCO code): 320700 - pathology

Tertiary (UNESCO code): 320709 - Histopathology

Identify key words: Biomedicine

Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

University degree: Higher degree
Name of qualification: Licenciado en Medicina y Cirugía
City degree awarding entity: Pamplona, Spain
Degree awarding entity: Universidad de Navarra **Type of entity:** University
Date of qualification: 15/07/1986

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Medicina y Cirugía
Degree awarding entity: Universidad de Navarra **Type of entity:** University
City degree awarding entity: Pamplona, Spain
Date of degree: 11/03/1992
European doctorate: No
Thesis director: Pardo Mindán Francisco Javier
Obtained qualification: Apto
Special doctorate award: No

Specialised, lifelong, technical, professional and refresher training (other than formal academic and healthcare studies)

Type of training: Otros cursos, programas o seminarios
Training title: XLVIII REUNIÓN BIANUAL SEC
City awarding entity: GRANADA, Spain
Awarding entity: SOCIEDAD ESPAÑOLA DE CITOLOGÍA **Type of entity:** Associations and Groups
End date: 23/09/2022 **Duration in hours:** 15 hours

Teaching experience

General teaching experience

1 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08, Gr.Medicina-18, PI-Medicina-20
Course given: 3
Start date: 01/09/2020 **End date:** 30/11/2020
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 26
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

2 **Type of teaching:** Official teaching
Name of the course: Clínica Práctica VII (F. Medicina)
Type of teaching: Practical work (classroom-problems)
Type of subject: Obligatory
University degree: Gr.Medicina-08, PI-Medicina-20
Course given: 6
Start date: 01/09/2020 **End date:** 30/11/2020
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 12
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

3 **Type of teaching:** Official teaching
Name of the course: Trabajo Fin de Grado (F.Medicina)
Type of teaching: Practical work (classroom-problems)
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 6
Start date: 02/09/2019 **End date:** 27/06/2020
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 9
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

4 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08, Gr.Medicina-18
Course given: 3
Start date: 02/09/2019 **End date:** 25/11/2019
Type of hours/ ECTS credits: Hours

Hours/ECTS credits: 26
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

5 **Type of teaching:** Official teaching
Name of the course: Trabajo Fin de Grado (F.Medicina)
Type of teaching: Practical work (classroom-problems)
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 6
Start date: 03/09/2018 **End date:** 31/07/2019
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 9
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

6 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 3
Start date: 03/09/2018 **End date:** 30/11/2018
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 28
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

7 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 3
Start date: 04/09/2017 **End date:** 27/11/2017
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 27
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

8 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 3
Start date: 01/09/2016 **End date:** 28/11/2016

Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 23
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain

9 **Type of teaching:** Official teaching
Name of the course: Trabajo Fin de Grado (F.Medicina)
Type of teaching: Docencia nacional oficial
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 6
Start date: 01/09/2015 **End date:** 30/06/2016
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 12
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain
Subject language: Spanish

10 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 3
Start date: 01/09/2015 **End date:** 30/11/2015
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 23
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain

11 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 3
Start date: 01/09/2014 **End date:** 02/12/2014
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 20
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain

12 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 3
Start date: 02/09/2013 **End date:** 25/11/2013
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 20

Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain

13 **Type of teaching:** Official teaching
Name of the course: Anatomía Patológica (F.Medicina)
Type of teaching: Teórica-Práctica
Type of subject: Obligatory
University degree: Gr.Medicina-08
Course given: 3
Start date: 03/09/2012 **End date:** 26/11/2012
Type of hours/ ECTS credits: Hours
Hours/ECTS credits: 20
Faculty, institute or centre: Universidad de Navarra - Facultad de Medicina
City of entity: Pamplona, Spain

Experience supervising doctoral thesis and/or final year projects

1 **Project title:** Estudio sobre potenciales biomarcadores en pacientes con melanoma metastásico en tratamiento con inhibidores de B-RAF
Type of project: Doctoral thesis
Co-director of thesis: María Dolores Lozano Escario
Entity: Universidad de Navarra
Student: Zubiri Oteiza Leyre
Obtained qualification: SB
Date of reading: 15/11/2016
European doctorate: Yes

2 **Project title:** Manejo y comportamiento de nuevas partículas embolizantes intravasculares: Hepasphere
Type of project: Doctoral thesis
Entity: Universidad de Navarra
City of entity: Sin dato,
Obtained qualification: Sobresaliente Cum Laude
Date of reading: 22/09/2007

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

1 **Name of the project:** Cuantificación en paralelo de múltiples interacciones de puntos de control inmunitario en onco-inmunología. PREDICTEAM
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Carlos Eduardo De Andrea
Nº of researchers: 3
Funding entity or bodies:
AGENCIA ESTATAL DE INVESTIGACION

Type of participation: Investigador
Name of the programme: 2021 AEI Proyectos en Colaboración Público Privada
Code according to the funding entity: CPP2021-008390
Start-End date: 01/07/2022 - 30/06/2025 **Duration:** 2 years - 11 months - 29 days
Total amount: 166.220 €

2 **Name of the project:** Trampas Extracelulares de Neutrófilos en el Microambiente de Tumores Sólidos: Hacia un Biomarcador de Inmunoterapia.
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Carlos Eduardo De Andrea
Nº of researchers: 7
Funding entity or bodies:
INSTITUTO DE SALUD CARLOS III

Type of participation: Investigador
Name of the programme: 2021 AES Proyectos de investigación
Code according to the funding entity: PI21/01547
Start-End date: 01/01/2022 - 31/12/2024 **Duration:** 2 years - 11 months - 30 days
Total amount: 159.720 €

3 **Name of the project:** Nuevos biomarcadores para la determinación personalizada del riesgo de cáncer de pulmón en protocolos de cribado por TAC de baja dosis: desarrollo y validación de firmas proteicas de alta sensibilidad en combinación con análisis radiómico.
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Gorka Bastarrika Alemañ
Nº of researchers: 10
Funding entity or bodies:
ASTRA ZENECA FARMACEUTICA SPAIN, S.A.

Type of participation: Investigador
Name of the programme: 2021 ASTRA ZENECA - LUNG AMBITION ALLIANCE
Start-End date: 27/10/2021 - 26/10/2024 **Duration:** 2 years - 11 months - 30 days

Total amount: 114.000 €

4 **Name of the project:** Tailored Immunotherapies in 3D models of Follicular Lymphoma (TAIFOL)
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Carlos Eduardo De Andrea
Nº of researchers: 3
Funding entity or bodies:
FUNDACIO "LA MARATO DE TV3"

Type of participation: Investigador
Name of the programme: 2019 FD LA MARATÓ PROYECTOS DE INVESTIGACIÓN
Code according to the funding entity: 182/C/2019
Start-End date: 01/06/2020 - 31/12/2023 **Duration:** 3 years - 6 months - 30 days
Total amount: 63.750 €

5 **Name of the project:** LUng MAcrophage involvement in Lethal COVID-19 pathogenesis: an immunopathology approach to Actionable Mechanisms - LUMACOVID
Geographical area: National
Degree of contribution: Investigador
Nº of researchers: 6
Funding entity or bodies:
FUNDACION BBVA

Type of participation: Investigador
Name of the programme: 2020 FD BBVA Equipos de Investigación Científica SARS-CoV-2 y COVID-19
Code according to the funding entity: BBVA Melero
Start-End date: 09/10/2020 - 09/06/2023 **Duration:** 2 years - 8 months
Total amount: 201.828 €

6 **Name of the project:** Liderazgo e INnovación en inmunoTERapia del cáncer desde NAvarra
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Ignacio Javier Melero Bermejo
Nº of researchers: 8
Funding entity or bodies:
GOBIERNO DE NAVARRA

Type of participation: Investigador
Name of the programme: 2020 GN PROYECTOS ESTRATEGICOS DE I+D 2020-2022
Code according to the funding entity: 0011-1411-2020-000078
Start-End date: 01/09/2020 - 30/11/2022 **Duration:** 2 years - 2 months - 29 days
Total amount: 596.040 €

7 **Name of the project:** Tailored immunotherapies in 3D models of follicular lymphoma (TAIFOL).
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Carlos Eduardo De Andrea
Nº of researchers: 3
Funding entity or bodies:
Fundació La Marató de TV3

Type of participation: Investigador

Code according to the funding entity: 182/C/2019
Start-End date: 01/01/2019 - 31/12/2021 **Duration:** 2 years - 11 months - 30 days
Participating entity/entities: Universidad de Navarra
Total amount: 63.750 €
Relevant results: Tailored immunotherapies in 3D models of follicular lymphoma (TAIFOL)
Dedication regime: Full time

8 **Name of the project:** Desarrollo EStratégico de terapias CART para el tratamiento de Tumores Hematológicos y Sólidos (DESCARTHeS)
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Felipe Luis Prósper Cardoso
Nº of researchers: 9
Funding entity or bodies:
GOBIERNO DE NAVARRA

Type of participation: Investigador
Name of the programme: 2019 GN PROYECTOS ESTRATEGICOS DE I+D 2019-2021
Code according to the funding entity: 0011-1411-2019-000072
Start-End date: 01/04/2019 - 30/11/2021 **Duration:** 2 years - 7 months - 29 days
Total amount: 164.695,5 €

9 **Name of the project:** Papel de los neutrófilos en la invasión miometrial del carcinoma endometrioide de endometrio
Geographical area: National
Degree of contribution: Investigador
Nº of researchers: 11
Funding entity or bodies:
INSTITUTO DE SALUD CARLOS III

Type of participation: Investigador
Name of the programme: 2016 AES PROYECTOS DE INVESTIGACIÓN
Code according to the funding entity: PI16/00902
Start-End date: 01/01/2019 - 30/06/2021 **Duration:** 2 years - 5 months - 29 days
Total amount: 19.360 €

10 **Name of the project:** Integrative cancer-immunology and immunoscore for cáncer classification and immunotherapies
Geographical area: National
Name principal investigator (PI, Co-PI....): María Dolores Lozano Escario
Nº of researchers: 7
Funding entity or bodies:
Instituto de Salud Carlos III **Type of entity:** Public Research Body

Type of participation: Responsable
Code according to the funding entity: AC/1400034
Start-End date: 01/01/2017 - 31/12/2020 **Duration:** 3 years - 11 months - 30 days
Participating entity/entities: Clínica Universidad de Navarra; Universidad de Navarra
Total amount: 60.000 €
Dedication regime: Full time

11 **Name of the project:** Estudio de la respuesta inmune inducida por vacunas de células dendríticas autólogas en pacientes con cáncer de mama para el desarrollo de nuevas estrategias terapéuticas
Geographical area: National
Degree of contribution: Investigador
Nº of researchers: 6
Funding entity or bodies:
Instituto de Salud Carlos III **Type of entity:** Public Research Body

Type of participation: Investigador
Name of the programme: Evaluación de Tecnologías Sanitarias FIS
Start-End date: 01/01/2017 - 31/12/2019 **Duration:** 2 years - 11 months - 30 days
Participating entity/entities: Clínica Universidad de Navarra
Dedication regime: Part time

12 **Name of the project:** Estudio de la respuesta inmune inducida por vacunas de células dendríticas autólogas en pacientes con cáncer de mama para el desarrollo de nuevas estrategias terapéuticas.
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Marta Santisteban Eslava; Susana Inmaculada Inogés Sancho
Nº of researchers: 6
Funding entity or bodies:
INSTITUTO DE SALUD CARLOS III

Type of participation: Investigador
Name of the programme: 2016 AES PROYECTOS DE INVESTIGACIÓN
Code according to the funding entity: PI16/01245
Start-End date: 01/01/2017 - 31/12/2019 **Duration:** 2 years - 11 months - 30 days
Total amount: 96.800 €
Dedication regime: Part time

13 **Name of the project:** A non-invasive liquid biopsy approach to evaluate the DNA methylation status in patients with NSCLC
Geographical area: Others
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Carlos Eduardo De Andrea
Nº of researchers: 7
Funding entity or bodies:
UNIVERSIDAD DE NAVARRA

Type of participation: Investigador
Name of the programme: 2016 PIUNA
Code according to the funding entity: 2016-10
Start-End date: 01/09/2016 - 31/08/2019 **Duration:** 2 years - 11 months - 30 days
Total amount: 43.000 €
Dedication regime: Part time

14 **Name of the project:** Integrative cancer-immunology and Immunoscore for cancer classification and immunotherapies
Geographical area: National
Name principal investigator (PI, Co-PI....): María Dolores Lozano Escario
Nº of researchers: 5
Funding entity or bodies:
INSTITUTO DE SALUD CARLOS III

Type of participation: Responsable
Name of the programme: 2014 ISCIII-AES Acciones Complementarias
Code according to the funding entity: AC14/00034
Start-End date: 01/01/2015 - 31/12/2018 **Duration:** 3 years - 11 months - 30 days
Total amount: 75.000,64 €

15 **Name of the project:** Herramientas moleculares para el análisis pronóstico y la identificación de nuevas dianas terapéuticas en carcinoma no microcítico de pulmón.
Geographical area: National
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Luis Montuenga Badía
Nº of researchers: 10
Funding entity or bodies:
Instituto de Salud Carlos III **Type of entity:** Public Research Body

Type of participation: Investigador
Name of the programme: Fondo de Investigación Sanitaria (FIS)
Code according to the funding entity: PII3/00806
Start-End date: 01/01/2014 - 31/12/2016 **Duration:** 2 years - 11 months - 30 days
Participating entity/entities: Centro de Investigación Médica Aplicda. CIMA
Total amount: 233.227,5 €
Dedication regime: Part time

16 **Name of the project:** Estudio de seguridad y factibilidad de la utilización de células madre limbocorneales autólogas cultivadas in vitro en el tratamiento de la insuficiencia límbica
Geographical area: Regional
Nº of researchers: 1
Funding entity or bodies:
Gobierno de Navarra **Type of entity:** Body, others

Start-End date: 01/01/2004 - 01/12/2009 **Duration:** 5 years - 11 months
Total amount: 0 €
Dedication regime: Full time

17 **Name of the project:** Obtención y caracterización inicial de un ratón knock-out para el gen supresor de tumores PCBP4
Geographical area: Regional
Degree of contribution: Investigador
Name principal investigator (PI, Co-PI....): Rubén Pio Osés
Nº of researchers: 1
Funding entity or bodies:
Gobierno de Navarra **Type of entity:** Body, others

Type of participation: Investigador
Start-End date: 01/04/2006 - 31/03/2008 **Duration:** 1 year - 11 months - 30 days
Participating entity/entities: FIMA
Total amount: 29.150 €
Dedication regime: Full time

R&D non-competitive contracts, agreements or projects with public or private entities

Name of the project: Immunohistochemical (IHC) CRNN expression Study
Geographical area: Non EU International
Degree of contribution: Responsable
Name principal investigator (PI, Co-PI....): María Dolores Lozano Escario
Nº of researchers: 1
Funding entity or bodies:
Confidencial

Type of entity: Business

Start date: 05/05/2017
Duration: 5 years - 5 months
Total amount: 3.900 €

Scientific and technological activities

Scientific production

H index: 27
Date of application: 11/11/2020

Publications, scientific and technical documents

1 Marafioti T.; Lozano María D; de Andrea CE. Characterization of the immune infiltrate in mouse tissue by multiplex immunofluorescence. METHODS IN CELL BIOLOGY. 174, pp. 43 - 53. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36710050/>. ISSN 0091-679X
DOI: 10.1016/bs.mcb.2022.07.003
Type of production: Scientific paper
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 3
Impact source: ISI
Category: Science Edition - CELL BIOLOGY
Impact index in year of publication: 1.829
Journal in the top 25%: No
Position of publication: 182
No. of journals in the cat.: 194

Relevant results: Multiplexed immunofluorescence imaging of formalin-fixed, paraffin-embedded (FFPE) specimens mounted on glass slides allow the identification of multiple cell phenotypes while retaining spatial and morphological context. Multiplex immunofluorescence protocols have already been developed and validated for mouse tissues. Immunophenotyping analysis reliably depicts the immune landscape of cancer tissues that has been demonstrated to influence cancer development and progression as well as to have an impact on therapy responsiveness and resistance. Here, we describe a method for multiplexed fluorescence image analysis, enabling analysis of mouse cancer morphology and cell phenotypes in FFPE sections.

2 Lozano María D. Functional engagement of the PD-1/PD-L1 complex but not PD-L1 expression is highly predictive of patient response to immunotherapy in non-small-cell lung cancer. JOURNAL OF CLINICAL ONCOLOGY. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36821809/>. ISSN 1527-7755
DOI: 10.1200/JCO.22.01748
Type of production: Scientific paper
Format: Journal
Position of signature: 1

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 1

Relevant results: Purpose: In many cancers, the expression of immunomodulatory ligands leads to immunoevasion, as exemplified by the interaction of PD-L1 with PD-1 on tumor-infiltrating lymphocytes. Profound advances in cancer treatments have come with the advent of immunotherapies directed at blocking these immuno-suppressive ligand-receptor interactions. However, although there has been success in the use of these immune checkpoint interventions, correct patient stratification for these therapies has been challenging. Materials and methods: To address this issue of patient stratification, we have quantified the intercellular PD-1/PD-L1 interaction in formalin-fixed paraffin-embedded tumor samples from patients with non-small cell lung carcinoma, using a high-throughput automated quantitative imaging platform (quantitative functional proteomics [QF-Pro]). Results: The multisite blinded analysis across a cohort of 188 immune checkpoint inhibitor-treated patients demonstrated the intra- and intertumoral heterogeneity of PD-1/PD-L1 immune checkpoint engagement and notably showed no correlation between the extent of PD-1/PD-L1 interaction and PD-L1 expression. Importantly, PD-L1 expression scores used clinically to stratify patients correlated poorly with overall survival; by contrast, patients showing a high PD-1/PD-L1 interaction had significantly better responses to anti-PD-1/PD-L1 treatments, as evidenced by increased overall survival. This relationship was particularly strong in the setting of first-line treatments. Conclusion: The functional readout of PD-1/PD-L1 interaction as a predictive biomarker for the stratification of patients with non-small-cell lung carcinoma, combined with PD-L1 expression, should significantly improve the response rates to immunotherapy. This would both capture patients excluded from checkpoint immunotherapy (high PD-1/PD-L1 interaction but low PD-L1 expression, 24% of patients) and additionally avoid treating patients who despite their high PD-L1 expression do not respond and suffer from side effects.

3 Caballeros Fanny Meylin; Pujols P.; Ezponda A; Guillen Valderrama E; Garcia-Velloso Maria Jose; Wyss A.; García del Barrio L; Larrache Javier Carlos; Pueyo Jesús Ciro; Lozano María D; de Torres Juan Pablo; Alcaide Ana Belén; Campo Arantza; Seijo Luis Miguel; Montuenga Luis; Zulueta Javier J; Iñarrairaegui Mercedes; Herrero José Ignacio; Bastarrika Gorka. Lung cancer screening using low-dose CT and FDG-PET in liver transplant recipients. LIVER TRANSPLANTATION. 29 - 10, pp. 1100 - 1108. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36929835/>. ISSN 1527-6465

DOI: 10.1097/LVT.0000000000000121

Type of production: Scientific paper

Format: Journal

Position of signature: 10

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 19

Impact source: ISI

Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY

Impact index in year of publication: 6.112

Journal in the top 25%: No

Position of publication: 28

No. of journals in the cat.: 93

Impact source: ISI

Category: Science Edition - SURGERY

Impact index in year of publication: 6.112

Journal in the top 25%: Yes

Position of publication: 19

No. of journals in the cat.: 211

Impact source: ISI

Category: Science Edition - TRANSPLANTATION

Impact index in year of publication: 6.112

Journal in the top 25%: Yes

Position of publication: 4

No. of journals in the cat.: 24

Relevant results: To address the feasibility of implementing a lung cancer screening program in liver transplant recipients (LTR) targeted to detect early-stage lung cancer one hundred twenty-four LTR (89% male, 59.8+/-8.8 y old), who entered the lung cancer screening program at our hospital were reviewed. The results of the diagnostic algorithm using low-dose CT and F-18-fluorodeoxyglycose positron emission tomography (FDG-PET) were analyzed. Lung cancer was detected in 12 LTR (9.7%), most of which corresponded to the non-small cell subtype. Two of the 12 lung cancers were detected in the baseline study (prevalence of 1.6%), whereas 10 patients were diagnosed with lung cancer in the follow-up (incidence of 8.1%). Considering all cancers, 10 of 12 (83.3%) were diagnosed at stage I, one cancer was diagnosed at stage IIIA, and another one at stage IV. The sensitivity, specificity, diagnostic accuracy, and positive and negative predictive values of F-18-fluorodeoxyglycose

positron emission tomography to detect malignancy in our cohort were 81.8%,100%, 99.3%, 100%, and 99.3%, respectively. A carefully followed multidisciplinary lung cancer screening algorithm in LTR that includes F-18-fluorodeoxyglycose positron emission tomography and low-dose CT allows lung cancer to be diagnosed at an early stage while reducing unnecessary invasive procedures.

4 Mejías Luis Daniel; López-Janeiro Álvaro; Cordoba Iturriagagoitia A.; Pablo Sala Elarre; Belén Pérez Solans; Laura Hato Álvaro; Inoges Sancho S; López Díaz de Cerio A; Guillén-Grima F; Espinos Jaime; Susana de la Cruz Sánchez; Lozano María D; Idoate Miguel Ángel; Santisteban Marta. Modification of breast cancer milieu with chemotherapy plus dendritic cell vaccine: an approach to select best therapeutic strategies. BIOMEDICINES. 11 - 2, pp. 238. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36830775/>. ISSN 2227-9059

DOI: 10.3390/biomedicines11020238

Type of production: Scientific paper
Format: Journal
Position of signature: 12
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 14

Impact source: ISI
Category: Science Edition - BIOCHEMISTRY & MOLECULAR BIOLOGY
Impact index in year of publication: 4.757
Journal in the top 25%: No
Position of publication: 121
No. of journals in the cat.: 296

Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 4.757
Journal in the top 25%: No
Position of publication: 62
No. of journals in the cat.: 139

Impact source: ISI
Category: Science Edition - PHARMACOLOGY & PHARMACY
Impact index in year of publication: 4.757
Journal in the top 25%: No
Position of publication: 86
No. of journals in the cat.: 279

Relevant results: Background: The addition of dendritic cell vaccines (DCV) to NAC could induce immune responses in those patients with residual disease (RD) by transforming the tumor microenvironment. Methods: Core diagnostic biopsies and surgical specimens from 80 patients (38 in the vaccinated group plus NAC (VG) and 42 in the control group (CG, treated only with NAC) were selected. We quantify TILs (CD8, CD4 and CD45RO) using immunohistochemistry and the automated cellular imaging system (ACIS III) in paired samples. Results: A CD8 rise in TNBC samples was observed after NAC plus DCV, changing from 4.48% in the biopsy to 6.70% in the surgical specimen, not reaching statistically significant differences (p = 0.11). This enrichment was seen in up to 67% of TNBC patients in the experimental arm as compared with the CG (20%). An association between CD8 TILs before NAC (4% cut-off point) and pathological complete response in the VG was found in the univariate and multivariate analysis (OR = 1.41, IC95% 1.05-1.90; p = 0.02, and OR = 2.0, IC95% 1.05-3.9; p = 0.03, respectively). Conclusion: Our findings suggest that patients with TNBC could benefit from the stimulation of the antitumor immune system by using DCV together with NAC.

5 Schmitt F.; Lozano María D. Molecular/biomarker testing in lung cytology: a practical approach. DIAGNOSTIC CYTOPATHOLOGY. 51 - 1, pp. 59 - 67. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36098379/>. ISSN 8755-1039

DOI: 10.1002/dc.25054

Type of production: Scientific paper
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 2

Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 1.39
Journal in the top 25%: No
Position of publication: 24
No. of journals in the cat.: 29

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 1.39
Journal in the top 25%: No
Position of publication: 63
No. of journals in the cat.: 77

Relevant results: The increasing comprehension of molecular mechanisms underlying lung cancer and the discovery of targetable genomic alterations has dramatically change the pathological approach to lung cancer, especially non-small cell lung cancer (NSCLC). This unstoppable knowledge has taken pathologists to the leading front on lung cancer management. This is especially relevant in the world of cytopathology where doing more with less is a daily challenge. Nowadays with a growing number of predictive biomarkers needed to manage patients with NSCLC, there has been a paradigm shift in care and handling of diagnostic samples. One of the main emphasis and interest relies on the utilization of cytologic samples and small biopsies for not only diagnostic purposes but also for ancillary testing. Moreover, lung cytopathology is in continuous evolutions with implementation of new diagnostic techniques, new tools, and facing new challenges. The goal of this paper will be to provide the reader with the necessary concepts than can be used to exploit the cytological samples in order to use these samples for comprehensive diagnosis and relevant ancillary testing purposes.

6 Isla D.; Lozano María D; Paz-Ares L.; Salas C.; de Castro J.; Conde E.; Felip E.; Gómez-Román J.; Garrido P.; Enguita A. B.New update to the guidelines on testing predictive biomarkers in non-small-cell lung cancer: a National Consensus of the Spanish Society of Pathology and the Spanish Society of Medical Oncology. CLINICAL AND TRANSLATIONAL ONCOLOGY. 25 - 5, pp. 1252 - 1267. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36571695/>. ISSN 1699-048X
DOI: 10.1007/s12094-022-03046-9
Type of production: Scientific paper
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.34
Journal in the top 25%: No
Position of publication: 165
No. of journals in the cat.: 245

Relevant results: Non-small cell lung cancer (NSCLC) presents the greatest number of identified therapeutic targets, some of which have therapeutic utility. Currently, detecting EGFR, BRAF, KRAS and MET mutations, ALK, ROS1, NTRK and RET translocations, and PD-L1 expression in these patients is considered essential. The use of next-generation sequencing facilitates precise molecular diagnosis and allows the detection of other emerging mutations, such as the HER2 mutation and predictive biomarkers for immunotherapy responses. In this consensus, a group of experts in the diagnosis and treatment of NSCLC selected by the Spanish Society of Pathology and the Spanish Society of Medical Oncology have evaluated currently available information and propose a series of recommendations to optimize the detection and use of biomarkers in daily clinical practice.

7 Fernández Aceñero M. J.; Díaz del Arco C.; Dinares C.; Tania Labiano Miravalles; Tejerina E.; Bernabé M. J.; Forcen E.; Saiz-Pardo M.; Pérez P.; Lozano María D. Overview and update on molecular testing in non-small cell lung carcinoma utilizing endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) samples. DIAGNOSTIC CYTOPATHOLOGY. 51 - 1, pp. 26 - 35. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/35899869/>. ISSN 8755-1039
DOI: 10.1002/dc.25019
Type of production: Scientific paper
Format: Journal
Position of signature: 10
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10
Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 1.39
Journal in the top 25%: No
Position of publication: 24
No. of journals in the cat.: 29

Impact source: ISI
Category: Science Edition - PATHOLOGY

Impact index in year of publication: 1.39
Position of publication: 63
Journal in the top 25%: No
No. of journals in the cat.: 77

Relevant results: Lung carcinoma remains one of the most frequent and aggressive human neoplasms. Fortunately, in the last decades, the increasing knowledge of the molecular mechanisms leading to cancer development has allowed the use of targeted therapies with improvement of prognosis in many patients. Clinical management has also changed after the introduction of endobronchialultrasonographic bronchoscopy that allows a conservative staging of lung tumors, avoiding the need of mediastinoscopy for lymph node staging. Lung pathologists and cytopathologists are facing the challenge of giving the more comprehensive prognostic and predictive information with ever smaller tissue or cytological samples. The aim of this review is to summarize the molecular testing for non-small cell lung carcinoma and how pathologists can contribute to the patient's outcome with a conscious management of biological samples.

8 Gosney J. R.; Paz-Ares L.; Jaenne P.; Kerr K. M.; Leighl N. B.; Lozano María D; Malapelle U.; Mok T.; Sheffield B. S.; Tufmah A.; Wistuba I. I.; Peters S.Pathologist-initiated reflex testing for biomarkers in non-small-cell lung cancer: expert consensus on the rationale and considerations for implementation. ESMO OPEN. 8 - 4, pp. 101587. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/37356358/>. ISSN 2059-7029
DOI: 10.1016/j.esmoop.2023.101587
Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 12
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 6.883
Journal in the top 25%: Yes
Position of publication: 57
No. of journals in the cat.: 245

Relevant results: Biomarker tests in lung cancer have been traditionally ordered by the treating oncologist upon confirmation of an appropriate pathological diagnosis. The delay this introduces prolongs yet further what is already a complex, multi-stage, pre-treatment pathway and delays the start of first-line systemic treatment, which is crucially informed by the results of such analysis. Reflex testing, in which the responsibility for testing for an agreed range of biomarkers lies with the pathologist, has been shown to standardise and expedite the process. Twelve experts discussed the rationale and considerations for implementing reflex testing as standard clinical practice.

9 Malapelle U.; Pepe F.; Pisapia P.; Altimari A.; Bellevicine C.; Brunnstrom H.; Bruno R.; Buttner R.; Cirnes L.; de Andrea CE; de Biase D.; Dumur C. I.; Lindquist K. E.; Fontanini G.; Gautiero E.; Gentien D.; Hofman P.; Hofman V.; Iaccarino A.; Lozano María D; Mayo-de-Las-Casas C.; Merkelbach-Bruse S.; Pagni F.; Roman R.; Schmitt F. C.; Siemanowski J.; Roy-Chowdhuri S.; Tallini G.; Tresserra F.; Vander Borght S.; Vielh P.; Vigliar E.; Vita G. A. C.; Weynand B.; Rosell R.; Molina Vila M. A.; Troncone G.Reference standards for gene fusion molecular assays on cytological samples: an international validation study. JOURNAL OF CLINICAL PATHOLOGY. 76 - 1, pp. 47 - 52. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/34429353/>. ISSN 0021-9746
DOI: 10.1136/jclinpath-2021-207825
Type of production: Scientific paper
Format: Journal
Position of signature: 20
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 37
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.463
Journal in the top 25%: No
Position of publication: 22
No. of journals in the cat.: 77

Relevant results: Aims Gene fusions assays are key for personalised treatments of advanced human cancers. Their implementation on cytological material requires a preliminary validation that may make use of cell line slides mimicking cytological samples. In this international multi-institutional study, gene fusion reference standards were developed and validated. Methods Cell lines harbouring EML4(13)-ALK(20) and SLC34A2(4)-ROS1(32) gene fusions were adopted to prepare reference standards. Eight laboratories (five adopting amplicon-based and three hybridisation-based platforms) received, at different dilution points two sets of slides (slide A 50.0%, slide B 25.0%, slide C 12.5% and slide D wild type) stained by Papanicolaou (Pap) and May Grunwald Giemsa (MGG). Analysis

was carried out on a total of 64 slides. Results Four (50.0%) out of eight laboratories reported results on all slides and dilution points. While 12 (37.5%) out of 32 MGG slides were inadequate, 27 (84.4%) out of 32 Pap slides produced libraries adequate for variant calling. The laboratories using hybridisation-based platforms showed the highest rate of inadequate results (13/24 slides, 54.2%). Conversely, only 10.0% (4/40 slides) of inadequate results were reported by laboratories adopting amplicon-based platforms. Conclusions Reference standards in cytological format yield better results when Pap staining and processed by amplicon-based assays. Further investigation is required to optimise these standards for MGG stained cells and for hybridisation-based approaches.

10 A. Bronte; Rosales Juan J.; Bastidas Juan Fernando; Lozano María D; Rodriguez Paula; Garcia-Velloso Maria Jose. Afectación pancreática en una paciente con mieloma múltiple diagnosticada en la [18F]FDG PET/TC. Una rara manifestación de enfermedad extramedular. REVISTA ESPAÑOLA DE MEDICINA NUCLEAR E IMAGEN MOLECULAR. 41 - Supl. 1, pp. S48 - S50. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/34838474/>. ISSN 2253-654X

DOI: 10.1016/j.remn.2021.08.002

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 6
Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Impact index in year of publication: 1.247
Journal in the top 25%: No
Position of publication: 127
No. of journals in the cat.: 136

11 Iglesias P.; Tendobi C.; Carlos Silvia; Lozano María D; Barquín D.; Chiva L; Reina G. Characterization of human papillomavirus 16 from Kinshasa (Democratic Republic of the Congo). Implications for patho-genicity and vaccine effectiveness. MICROORGANISMS. 10 - 12, pp. 2492. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36557745/>. ISSN 2076-2607

DOI: 10.3390/microorganisms10122492

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 7
Impact source: ISI
Category: Science Edition - MICROBIOLOGY
Impact index in year of publication: 4.926
Journal in the top 25%: No
Position of publication: 54
No. of journals in the cat.: 136

Relevant results: Human Papillomavirus (HPV) type 16 is the main etiological agent of cervical cancer worldwide. Mutations within the virus genome may lead to an increased risk of cancer development and decreased vaccine response, but there is a lack of information about strains circulating in Sub-Saharan Africa. Endocervical cytology samples were collected from 480 women attending a voluntary cervical cancer screening program at Monkole Hospital and four outpatient centers in Kinshasa, Democratic Republic of the Congo (DRC). The prevalence of HPV infection was 18.8% and the most prevalent high-risk types were HPV16 (12.2%) followed by HPV52 (8.8%) and HPV33/HPV35 (7.8% each). HPV16 strains were characterized: 57.1% were classified as C lineage; two samples (28.6%) as A1 and one sample belonged to B1 lineage. HPV33, HPV35, HPV16, and HPV58 were the most frequent types associated with low-grade intraepithelial lesion while high-grade squamous intraepithelial lesions were predominantly associated with HPV16. Several L1 mutations (T266A, S282P, T353P, and N181T) were common in Kinshasa, and their potential effect on vaccine-induced neutralization, especially the presence of S282P, should be further investigated. Long control region (LCR) variability was high with frequent mutations like G7193T, G7521A, and G145T that could promote malignancy of these HPV16 strains. This study provides a helpful basis for understanding HPV16 variants circulating in Kinshasa and the potential association between mutations of LCR region and malignancy and of L1 and vaccine activity.

12 Vigliar E.; Pisapia P.; Dello Iacovo F.; Alcaraz-Mateos E.; Ali G.; Ali S. Z.; Baloch Z. W.; Bellevicine C.; Bongiovanni M.; Botsun P.; Bruzzese D.; Bubendorf L.; Buttner R.; Canberk S.; Capitanio A.; Casadio C.; Cazacu E.; Cochand-Priollet B.; D'Amuri A.; Davis K.; Eloy C.; Engels M.; Fadda G.; Fontanini G.; Fulciniti F.; Hofman P.; Iaccarino A.; Ieni A.; Jiang X. S.; Kakudo K.; Kern I.; Kholova I.; Linton McDermott K. M.; Liu C.; Lobo A.; Lozano María D; Malapelle U.; Maleki Z.; Michelow P.; Mikula M. W.; Musayev J.; Ozgun G.; Oznur M.; Peiro Marques F. M.; Poller D.; Pyzlak M.; Robinson B.; Rossi E. D.; Roy-Chowdhuri S.; Saieg M.; Prince S. S.; Schmitt F. C.; Seguí Iváñez F. J.; Stoos-Veic T.; Sulaieva O.; Sweeney B. J.; Tuccari G.; Van Velthuysen M. L.; VanderLaan P. A.; Vielh P.; Viola P.; Voorham Q. J. M.; Weynand B.; Zeppa P.; Faquin W. C.; Pitman M. B.; Troncone G.COVID-19 pandemic impact on cytopathology practice in the post-lockdown period: an international, multicenter study. CANCER CYTOPATHOLOGY. 130 - 5, pp. 344 - 351. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/35006650/>. ISSN 1934-662X

DOI: 10.1002/cncy.22547

Type of production: Scientific paper
Format: Journal
Position of signature: 36
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 67

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 4.264
Journal in the top 25%: No
Position of publication: 121
No. of journals in the cat.: 245

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.264
Journal in the top 25%: No
Position of publication: 25
No. of journals in the cat.: 77

Relevant results: Background In a previous worldwide survey, the authors showed a drastic reduction in the number of cytological specimens processed during the coronavirus disease 2019 "lockdown" period along with an increase in malignancy rates. To assess the continued impact of the pandemic on cytological practices around the world, they undertook a second follow-up worldwide survey collecting data from the post-lockdown period (2020). Methods Participants were asked to provide data regarding their cytopathology activity during the first 12 weeks of their respective national post-lockdown period (2020), which ranged from April 4 to October 31. Differences between the post-lockdown period and the corresponding 2019 period were evaluated, and the authors specifically focused on rates of malignant diagnoses. Results A total of 29 respondents from 17 countries worldwide joined the survey. Overall, a lower number of cytological specimens (n = 236,352) were processed in comparison with the same period in 2019 (n = 321,466) for a relative reduction of 26.5%. The overall malignancy rate showed a statistically significant increase (12,442 [5.26%] vs 12,882 [4.01%]; P < .001) during the same time period. Similar results were obtained if both malignancy and suspicious for malignancy rates were considered together (15,759 [6.58%] vs 16,011 [4.98%]; P < .001). Conclusions The data showed a persistent reduction in the cytological specimen volume during the post-lockdown period (2020). However, the relative increase in the cytological workload in the late part of the post-lockdown is a promising finding of a slow return to normality.

13 Melero Ignacio; Villalba María; Recalde Borja; Jiménez Daniel; Teijeira Álvaro; Argueta Allan; García-Tobar Laura; Alvarez Laura; Sainz C.; Garcia-Ros D; Toledo Estefanía Ainhoa; Abengózar Marta; Fernández-Alonso M; Rodríguez-Mateos M.A.; Reina G; Carmona Francisco de Asís; Quiroga Jorge Augusto; del Pozo Jose L; Cross A.; López-Janeiro A.; Hardisson D.; Echeveste José Ignacio; Lozano María D; Ho L. P.; Klenerman P.; Issa F.; Landecho Manuel Fortún; de Andrea CE. Neutrophil extracellular traps, local IL-8 expression, and cytotoxic T-lymphocyte response in the lungs of patients with fatal COVID-19. CHEST. 162 - 5, pp. 1006 - 1016. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/35714708/>. ISSN 0012-3692

DOI: 10.1016/j.chest.2022.06.007

Type of production: Scientific paper
Format: Journal
Position of signature: 23
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 28

Impact source: ISI
Category: Science Edition - CRITICAL CARE MEDICINE

Impact index in year of publication: 10.262
Journal in the top 25%: Yes

Position of publication: 6
No. of journals in the cat.: 35

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 10.262
Journal in the top 25%: Yes
Position of publication: 6
No. of journals in the cat.: 65

Relevant results: BACKGROUND: Excessive inflammation is pathogenic in the pneumonitis associated with severe COVID-19. Neutrophils are among the most abundantly present leukocytes in the inflammatory infiltrates and may form neutrophil extracellular traps (NETs) under the local influence of cytokines. NETs constitute a defense mechanism against bacteria, but have also been shown to mediate tissue damage in a number of diseases. RESEARCH QUESTION: Could NETs and their tissue-damaging properties inherent to neutrophil-associated functions play a role in the respiratory failure seen in patients with severe COVID-19, and how does this relate to the SARS-CoV-2 viral loads, IL-8 (CXCL8) chemokine expression, and cytotoxic T-lymphocyte infiltrates? STUDY DESIGN AND METHODS: Sixteen lung biopsy samples obtained immediately after death were analyzed methodically as exploratory and validation cohorts. NETs were analyzed quantitatively by multiplexed immunofluorescence and were correlated with local levels of IL-8 messenger RNA (mRNA) and the density of CD8+ T-cell infiltration. SARS-CoV-2 presence in tissue was quantified by reverse-transcriptase polymerase chain reaction and immunohistochemistry analysis. RESULTS: NETs were found in the lung interstitium and surrounding the bronchiolar epithelium with interindividual and spatial heterogeneity. NET density did not correlate with SARS-CoV-2 tissue viral load. NETs were associated with local IL-8 mRNA levels. NETs were also detected in pulmonary thrombi and in only one of eight liver tissues. NET focal presence correlated negatively with CD8+ T-cell infiltration in the lungs. INTERPRETATION: Abundant neutrophils undergoing NETosis are found in the lungs of patients with fatal COVID-19, but no correlation was found with viral loads. The strong association between NETs and IL-8 points to this chemokine as a potentially causative factor. The function of cytotoxic T-lymphocytes in the immune responses against SARS-CoV-2 may be interfered with by the presence of NETs.

14 Malapelle U.; Pepe F.; Pisapia P.; Sgariglia R.; Nacchio M.; Barberis M.; Bilh M.; Bubendorf L.; Buettner R.; Cabibi D.; Castiglia M.; de Andrea CE; de Biase D.; Dumur C. I.; Fontanini G.; Freire J.; Gristina V.; Hofman P.; Ilie M.; Lozano María D; Merkelbach-Bruse S.; Pappesch R.; Pelusi N.; Roma G.; Russo A.; Savic S.; Siemanowski J.; Tallini G.; Tischler V.; Vander Borght S.; Weynand B.; Xu T.; Troncone G.TargetPlex FFPE-Direct DNA Library Preparation Kit for SiRe NGS panel: an international performance evaluation study. JOURNAL OF CLINICAL PATHOLOGY. 75 - 6, pp. 416 - 421. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33766954/>. ISSN 0021-9746
DOI: 10.1136/jclinpath-2021-207450
Type of production: Scientific paper
Format: Journal
Position of signature: 20
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 33

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.463
Journal in the top 25%: No
Position of publication: 22
No. of journals in the cat.: 77

Relevant results: Aim Next generation sequencing (NGS) represents a key diagnostic tool to identify clinically relevant gene alterations for treatment-decision making in cancer care. However, the complex manual workflow required for NGS has limited its implementation in routine clinical practice. In this worldwide study, we validated the clinical performance of the TargetPlex FFPE-Direct DNA Library Preparation Kit for NGS analysis. Impressively, this new assay obviates the need for separate, labour intensive and time-consuming pre-analytical steps of DNA extraction, purification and isolation from formalin-fixed paraffin embedded (FFPE) specimens in the NGS workflow. Methods The TargetPlex FFPE-Direct DNA Library Preparation Kit, which enables NGS analysis directly from FFPE, was specifically developed for this study by TargetPlex Genomics Pleasanton, California. Eleven institutions agreed to take part in the study coordinated by the Molecular Cytopathology Meeting Group (University of Naples Federico II, Naples, Italy). All participating institutions received a specific Library Preparation Kit to test eight FFPE samples previously assessed with standard protocols. The analytical parameters and mutations detected in each sample were then compared with those previously obtained with standard protocols. Results Overall, 92.8% of the samples were successfully analysed with the TargetPlex FFPE-Direct DNA Library Preparation Kit on Thermo Fisher Scientific and Illumina platforms. Altogether, in comparison with the standard workflow, the TargetPlex FFPE-Direct DNA Library Preparation Kit was able to detect 90.5% of the variants.

Conclusion The TargetPlex FFPE-Direct DNA Library Preparation Kit combined with the SiRe panel constitutes a convenient, practical and robust cost-saving solution for FFPE NGS analysis in routine practice.

15 Tendobi C.; Fernández-Marques M.; Carlos Silvia; Amann M.; Ndaye M.; Ngoya L.; Segura G.; Núñez L.; Oliver D.; Oiz I.; Tshilanda M.; Lozano María D; Aubá María; María Caparrós Cerdán; Reina G; Mbuyi D.; Iglesias-Fernández P.; Zinga B.; Jurado Matías; Chiva L. Validation of a sustainable internationally monitored cervical cancer screening system using a visual smartphone inspection in Kinshasa, Democratic Republic of Congo. INTERNATIONAL JOURNAL OF GYNECOLOGICAL CANCER. 32 - 10, pp. 1244 - 1249. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/35858712/>. ISSN 1048-891X

DOI: 10.1136/ijgc-2022-003592

Type of production: Scientific paper
Format: Journal
Position of signature: 12
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 20

Impact source: ISI
Category: Science Edition - OBSTETRICS & GYNECOLOGY
Impact index in year of publication: 4.661
Journal in the top 25%: Yes
Position of publication: 13
No. of journals in the cat.: 85

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 4.661
Journal in the top 25%: No
Position of publication: 108
No. of journals in the cat.: 245

Relevant results: Objective To determine the sensitivity, specificity, and positive and negative predictive values of a cervical cancer screening program based on visual inspection with acetic acid and Lugol's iodine using a smartphone in a sub-urban area of very low resources in Kinshasa (Democratic Republic of Congo). Methods This cross-sectional validation study was conducted at Monkole Hospital and it included women between the ages of 25-70 years after announcing a free cervical cancer screening campaign through posters placed in the region of our hospital. Questionnaires collected sociodemographic and behavioral patients characteristics. In the first consultation, we gathered liquid-based cytology samples from every woman. At that time, local health providers performed two combined visual inspection techniques (5% acetic acid and Lugol's iodine) while a photograph was taken with a smartphone. Two international specialists evaluated the results of the smartphone cervicography. When a visual inspection was considered suspicious, patients were offered immediate cryotherapy. Cytological samples were sent to the Pathology Department of the University of Navarra for cytological assessment and human papillomavirus (HPV) DNA genotyping. Results A total of 480 women participated in the study. The mean age was 44.6 years (range 25-65). Of all the patients, only 18.7% were infected with HPV (75% had high-risk genotypes). The most frequent high-risk genotype found was 16 (12.2%). The majority (88%) of women had normal cytology. After comparing combined visual inspection results with cytology, we found a sensitivity of 66.0%, a specificity of 87.8%, a positive predictive value of 40.7%, and a negative predictive value of 95.3% for any cytological lesion. The negative predictive value for high-grade lesions was 99.7%. Conclusions Cervical cancer screening through combined visual inspection, conducted by non-specialized personnel and monitored by experts through smartphones, shows encouraging results, ruling out high-grade cytological lesions in most cases. This combined visual inspection test is a valid and affordable method for screening programs in low-income areas.

16 Ajona Daniel; Remírez A.; Sainz C.; Bértolo Cristina María; González Álvaro; Varo N; Lozano María D; Zulueta Javier J; Mesa MIguel Alejandro; Martín A. C.; Pérez-Palacios R.; Pérez José Luis; Massion P. P.; Montuenga Luis; Pio R. A model based on the quantification of complement C4c, CYFRA 21-1 and CRP exhibits high specificity for the early diagnosis of lung cancer. TRANSLATIONAL RESEARCH. 233, pp. 77 - 91. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33618009/>. ISSN 1931-5244

DOI: 10.1016/j.trsl.2021.02.009

Type of production: Scientific paper
Format: Journal
Position of signature: 7
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 15

Impact source: ISI

Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 10.171
Journal in the top 25%: Yes
Position of publication: 2
No. of journals in the cat.: 29

Impact source: ISI
Category: Science Edition - MEDICINE, GENERAL & INTERNAL
Impact index in year of publication: 10.171
Journal in the top 25%: Yes
Position of publication: 23
No. of journals in the cat.: 172

Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 10.171
Journal in the top 25%: Yes
Position of publication: 17
No. of journals in the cat.: 139

Relevant results: Lung cancer screening detects early-stage cancers, but also a large number of benign nodules. Molecular markers can help in the lung cancer screening process by refining inclusion criteria or guiding the management of indeterminate pulmonary nodules. In this study, we developed a diagnostic model based on the quantification in plasma of complement-derived fragment C4c, cytokeratin fragment 21-1 (CYFRA 21-1) and C-reactive protein (CRP). The model was first validated in two independent cohorts, and showed a good diagnostic performance across a range of lung tumor types, emphasizing its high specificity and positive predictive value. We next tested its utility in two clinically relevant contexts: assessment of lung cancer risk and nodule malignancy. The scores derived from the model were associated with a significantly higher risk of having lung cancer in asymptomatic individuals enrolled in a computed tomography (CT)-screening program (OR = 1.89; 95% CI = 1.20-2.97). Our model also served to discriminate between benign and malignant pulmonary nodules (AUC: 0.86; 95% CI = 0.80-0.92) with very good specificity (92%). Moreover, the model performed better in combination with clinical factors, and may be used to reclassify patients with intermediate-risk indeterminate pulmonary nodules into patients who require a more aggressive work-up. In conclusion, we propose a new diagnostic biomarker panel that may dictate which incidental or screening-detected pulmonary nodules require a more active work-up. (Translational Research 2021; 233:77-91)

17 Grisanti F; Zulueta Javier J; Rosales Juan J.; Morales María Isabel; Sancho Lidia; Lozano María D; Mesa MIguel Alejandro; Garcia-Velloso Maria Jose. Diagnostic accuracy of visual analysis versus dual time-point imaging with 18F-FDG PET/CT for the characterization of indeterminate pulmonary nodules with low uptake. REVISTA ESPAÑOLA DE MEDICINA NUCLEAR E IMAGEN MOLECULAR. 40 - 3, pp. 155 - 160. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33781718/>. ISSN 2253-654X

DOI: 10.1016/j.remn.2020.03.019
Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 8

Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Impact index in year of publication: 1.247
Journal in the top 25%: No
Position of publication: 127
No. of journals in the cat.: 136

Relevant results: Objective; To determine the accuracy of visual analysis and the retention index (RI) with dual-time point (18)FFDG PET/CT for the characterization of indeterminate pulmonary nodules (IPN) with low FDG uptake. Materials and methods: A retrospective analysis was performed on 43 patients (28 men, 64 +/- 11 years old, range 36-83 years) referred for IPN characterization with F-18-FDG-PET/CT and maximum standard uptakevalue <= 2.5 at 60 minutes post-injection (SUVmax1). Nodules were analyzed by size, visual score for FDGuptake on standard (OSEM 2,8) and high definition (HD) reconstructions, SUVmax1, SUVmaxat 180 minutespostinjection (SUVmax2), and RI was calculated. The definitive diagnosis was based on histopathologicalconfirmation (n = 28) or >= 2 years of follow-up. Results: Twenty-four (56%) nodules were malignant. RI >= 10% on standard reconstruction detected 18nodules that would have been considered negative using the standard SUVmax >= 2.5 criterion for malignancy. RI >= 10% had a sensitivity, specificity, PPV, NPV

and accuracy of 75, 73.7, 78.3, 70, and 74.4%, respectively, while for FDG uptake > liver on HD these were 79.1, 63.2, 73.1, 70.6, and 72.1%, respectively. SUVmax1 >= 2, SUVmax2 > 2.5 and FDG uptake > liver on standard reconstruction had a PPV of 100%. FDGuptake > mediastinum on HD had a NPV of 100%.

18 Perdomo CM; García-Goñi Marta; Sancho Lidia; Paricio José Joaquín; Lozano María D; De la Higuera Magdalena; María Currás Freixes; Arbizu Javier Ignacio; Galofre Juan Carlos. Evaluation of the role of thyroid scintigraphy in the differential diagnosis of thyrotoxicosis. CLINICAL ENDOCRINOLOGY. 94 - 3, pp. 466 - 472. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/32767493/>. ISSN 0300-0664

DOI: 10.1111/cen.14308

Type of production: Scientific paper
Format: Journal
Position of signature: 5
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 9
Impact source: ISI
Category: Science Edition - ENDOCRINOLOGY & METABOLISM
Impact index in year of publication: 3.523
Journal in the top 25%: No
Position of publication: 93
No. of journals in the cat.: 146

Relevant results: Objective: A differential diagnosis of thyrotoxicosis is crucial as the treatment of the main causes of this condition can vary significantly. Recently published diagnostic guidelines on thyrotoxicosis embrace the presence of thyrotropin receptor (TSH-R) antibodies (TRAb) as the primary and most important diagnostic step. The application of diagnostic algorithms to aid in the treatment of hyperthyroidism supports using thyroid radionuclide scintigraphy (TRSt) in baffling clinical scenarios, when TRAb are absent or when third-generation TRAb are not available. First-generation TRAb measurement may have limitations. Consequently, patients with thyrotoxicosis and first-generation TRAb results may be misdiagnosed and consequently improperly treated. Our purpose was to compare first-generation TRAb values to TRSt in the differential diagnosis of hyperthyroidism. Methods: We conducted a retrospective study of 201 untreated outpatients with overt or subclinical hyperthyroidism on whom first-generation TRAb and TRSt had been performed at the time of diagnosis. Histological specimens were analysed in patients who had previously undergone thyroid surgery at our centre. SPSS 20.0 was used in statistical analysis. Results: Seventy-three out of 201 (36.3%) patients had positive TRAb. A diffuse uptake was present in 83.5% (61/73), whereas 13.7% (10/73) had a heterogeneous uptake and 2.7% (2/73) had an absent uptake. Thirty out of 91 (33%) patients with diffuse uptake were negative for positive TRAb and were diagnosed with Graves' disease. Analysis of 37 histological specimens indicated that TRSt had greater accuracy (81% vs 75.7%) and specificity (79.2% vs 57.1%) when compared to TRAb in the differential diagnosis of thyrotoxicosis. However, TRSt sensitivity was inferior to TRAb (84.6% vs 92.3%). Conclusions: Our study endorses that initial differential diagnosis of thyrotoxicosis should not be based solely on first-generation TRAb as this approach may leave nearly 20% of the patients misdiagnosed and, consequently, improperly treated. Our results underscore that thyroid scintigraphy should also be performed when only first-generation TRAb assays are available during the initial differential diagnosis of thyrotoxicosis.

19 de Andrea CE; Ochoa María del Carmen; Villalba María; Teijeira Álvaro; Schalper K. A.; Abengózar Marta; Iñaki Eguren Santamaría; Sainz C.; Sánchez-Gregorio S.; Garasa S.; Ariz Mikel; Ortiz de Solórzano Carlos; Rodríguez María Esperanza; Pérez José Luis; Lozano María D; Echeveste José Ignacio; Sanmamed MF; Melero Ignacio. Heterogenous presence of neutrophil extracellular traps in human solid tumours is partially dependent on IL-8. JOURNAL OF PATHOLOGY. 255 - 2, pp. 190 - 201. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/34184758/>. ISSN 0022-3417

DOI: 10.1002/path.5753

Type of production: Scientific paper
Format: Journal
Position of signature: 15
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 18
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 9.883
Journal in the top 25%: Yes
Position of publication: 33
No. of journals in the cat.: 245

Impact source: ISI
Impact index in year of publication: 9.883
Position of publication: 4
Category: Science Edition - PATHOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 77

Relevant results: Neutrophil extracellular traps (NETs) are webs of extracellular nuclear DNA extruded by dying neutrophils infiltrating tissue. NETs constitute a defence mechanism to entrap and kill fungi and bacteria. Tumours induce the formation of NETs to the advantage of the malignancy via a variety of mechanisms shown in mouse models. Here, we investigated the presence of NETs in a variety of human solid tumours and their association with IL-8 (CXCL8) protein expression and CD8(+) T-cell density in the tumour microenvironment. Multiplex immunofluorescence panels were developed to identify NETs in human cancer tissues by co-staining with the granulocyte marker CD15, the neutrophil marker myeloperoxidase and citrullinated histone H3 (H3Cit), as well as IL-8 protein and CD8(+) T cells. Three ELISA methods to detect and quantify circulating NETs in serum were optimised and utilised. Whole tumour sections and tissue microarrays from patients with non-small cell lung cancer (NSCLC; n = 14), bladder cancer (n = 14), melanoma (n = 11), breast cancer (n = 31), colorectal cancer (n = 20) and mesothelioma (n = 61) were studied. Also, serum samples collected retrospectively from patients with metastatic melanoma (n = 12) and NSCLC (n = 34) were ELISA assayed to quantify circulating NETs and IL-8. NETs were detected in six different human cancer types with wide individual variation in terms of tissue density and distribution. At least in NSCLC, bladder cancer and metastatic melanoma, NET density positively correlated with IL-8 protein expression and inversely correlated with CD8(+) T-cell densities. In a series of serum samples from melanoma and NSCLC patients, a positive correlation between circulating NETs and IL-8 was found. In conclusion, NETs are detectable in formalin-fixed human biopsy samples from solid tumours and in the circulation of cancer patients with a considerable degree of individual variation. NETs show a positive association with IL-8 and a trend towards a negative association with CD8(+) tumour-infiltrating lymphocytes. (c) 2021 The Authors. The Journal of Pathology published by John Wiley & Sons, Ltd. on behalf of The Pathological Society of Great Britain and Ireland.

20 Rodriguez Maria; Ajona Daniel; Seijo Luis Miguel; Sanz Julian; Valencia Karmele; Corral Jesús; Mesa MIguel Alejandro; Pio R; Calvo Alfonso; Lozano María D; Zulueta Javier J; Montuenga Luis. Molecular biomarkers in early stage lung cancer. TRANSLATIONAL LUNG CANCER RESEARCH. 10 - 2, pp. 1165 - 1185. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33718054/>. ISSN 2218-6751

DOI: 10.21037/tlcr-20-750

Type of production: Scientific paper
Position of signature: 10
Format: Journal
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

Impact source: ISI
Impact index in year of publication: 4.726
Position of publication: 105
Category: Science Edition - ONCOLOGY
Journal in the top 25%: No
No. of journals in the cat.: 245

Impact source: ISI
Impact index in year of publication: 4.726
Position of publication: 24
Category: Science Edition - RESPIRATORY SYSTEM
Journal in the top 25%: No
No. of journals in the cat.: 65

Relevant results: Low dose computed tomography (LDCT) screening, together with the recent advances in targeted and immunotherapies, have shown to improve non-small cell lung cancer (NSCLC) survival. Furthermore, screening has increased the number of early stage-detected tumors, allowing for surgical resection and multimodality treatments when needed. The need for improved sensitivity and specificity of NSCLC screening has led to increased interest in combining clinical and radiological data with molecular data. The development of biomarkers is poised to refine inclusion criteria for LDCT screening programs. Biomarkers may also be useful to better characterize the risk of indeterminate nodules found in the course of screening or to refine prognosis and help in the management of screening detected tumors. The clinical implications of these biomarkers are still being investigated and whether or not biomarkers will be included in further decision-making algorithms in the context of screening and early lung cancer management still needs to be determined. However, it seems clear that there is much room for improvement even in early stage lung cancer disease-free survival (DFS) rates; thus, biomarkers may be the key to refine risk-stratification and treatment of these patients. Clinicians' capacity to register, integrate, and analyze all the available data in both high risk individuals and early stage NSCLC patients will lead to a better understanding of the disease's mechanisms, and will have a dire

21 Aguado C.; Teixido C.; Roman R.; Reyes R.; Gimenez-Capitan A.; Marin E.; Cabrera C.; Vinolas N.; Castillo S.; Munoz S.; Arcocha A.; Lopez-Vilaro L; Sullivan I.; Aldeguer E.; Rodriguez S.; Moya I.; Viteri S.; Cardona A. F.; Palmero R.; Sainz C.; Mesa-Guzman M; Lozano María D; Aguilar-Hernandez A; Martinez-Bueno A.; Gonzalez-Cao M.; Gonzalvo E.; Leenders W. P. J.; Rosell R.; Montuenga Luis; Prat A.; Molina-Vila M. A.; Reguart N.Multiplex RNA-based detection of clinically relevant MET alterations in advanced non-small cell lung cancer. MOLECULAR ONCOLOGY. 15 - 2, pp. 350 - 363. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33236532/>. ISSN 1574-7891

DOI: 10.1002/1878-0261.12861

Type of production: Scientific paper
Format: Journal
Position of signature: 22
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 32
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 7.449
Journal in the top 25%: Yes
Position of publication: 51
No. of journals in the cat.: 245

Relevant results: MET inhibitors have shown activity in non-small-cell lung cancer patients (NSCLC) with MET amplification and exon 14 skipping (MET Delta ex14). However, patient stratification is imperfect, and thus, response rates have varied widely. Here, we studied MET alterations in 474 advanced NSCLC patients by nCounter, an RNA-based technique, together with next-generation sequencing (NGS), fluorescence in situ hybridization (FISH), immunohistochemistry (IHC), and reverse transcriptase polymerase chain reaction (RT-PCR), exploring correlation with clinical benefit. Of the 474 samples analyzed, 422 (89%) yielded valid results by nCounter, which identified 13 patients (3%) with MET Delta ex14 and 15 patients (3.5%) with very-high MET mRNA expression. These two subgroups were mutually exclusive, displayed distinct phenotypes and did not generally coexist with other drivers. For MET Delta ex14, 3/8 (37.5%) samples positive by nCounter tested negative by NGS. Regarding patients with very-high MET mRNA, 92% had MET amplification by FISH and/or NGS. However, FISH failed to identify three patients (30%) with very-high MET RNA expression, among which one received MET tyrosine kinase inhibitor treatment deriving clinical benefit. Our results indicate that quantitative mRNA-based techniques can improve the selection of patients for MET-targeted therapies.

22 Mesa MIguel Alejandro; González Jéssica; Alcaide Ana Belén; Berto Juan Antonio; de Torres Juan Pablo; Campo Arantza; Seijo Luis Miguel; Ocón María del Mar; Pueyo Jesús Ciro; Bastarrika Gorka; Lozano María D; Pio R; Montuenga Luis; García-Granero Marta; Zulueta Javier J. Surgical Outcomes in a Lung Cancer-Screening Program Using Low Dose Computed Tomography. ARCHIVOS DE BRONCONEUMOLOGIA. 57 - 2, pp. 101 - 106. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/32600849/>. ISSN 0300-2896

DOI: 10.1016/j.arbres.2020.03.026

Type of production: Scientific paper
Format: Journal
Position of signature: 11
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 15
Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 6.333
Journal in the top 25%: Yes
Position of publication: 14
No. of journals in the cat.: 65

Relevant results: (2021);57(2):101?106

23 García-Tobar Laura; Villalba María; Abengózar Marta; Alvarez Laura; Echeveste José Ignacio; de Andrea CE; Lozano María D. Utilisation of cytological samples for multiplex immunofluorescence assay. CYTOPATHOLOGY. 32 - 5, pp. 611 - 616. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33870575/>. ISSN 0956-5507

DOI: 10.1111/cyt.12979

Type of production: Scientific paper
Format: Journal
Position of signature: 7
Total no. authors: 7
Corresponding author: Yes
Impact source: ISI
Category: Science Edition - CELL BIOLOGY

Impact index in year of publication: 1.286
Position of publication: 188
Journal in the top 25%: No
No. of journals in the cat.: 194

Impact source: ISI
Impact index in year of publication: 1.286
Position of publication: 66
Category: Science Edition - PATHOLOGY
Journal in the top 25%: No
No. of journals in the cat.: 77

Relevant results: Objective Understanding the immune environment of non-small cell lung cancer (NSCLC) is important for designing effective anticancer immunotherapies. We describe the use of multiplex immunofluorescence (mIF) assays to enable characterisation of the tumour-infiltrating immune cells and their interactions, both across and within immune subtypes. Methods Six cytological samples of NSCLC taken by transoesophageal ultrasound-guided fine needle aspiration were tested with an mIF assay designed to detect the expression of key immune cell markers such as CD3, CD8, CD20, CD11b, and CD68. Pan-cytokeratin was used to detect the NSCLC cells. Fluorescence images were acquired on a Vectra-Polaris Automated Quantitative Pathology Imaging System (Akoya Biosciences). Results MIF assay was able to reliably detect and quantify the myeloid cell markers CD11b, CD68, CD3+ and CD8+ T cells, and CD20+ B lymphocytes on cytological samples of NSCLC. Whole-tissue analysis and its correlation with the corresponding H&E stains allowed a better understanding of the tissue morphology and the relationship between tumour and stroma compartments. Additionally, a uniform, specific, and correct staining pattern was seen for every immune marker. Conclusion The implementation of mIF assay on cytological samples taken with minimally invasive methods seems feasible and can be used to explore the immune environment of NSCLC.

24 Patiño-Garcia Ana; Guruceaga Elisabet; Segura Victoriano; Sánchez-Bayona Rodrigo; Andueza María Pilar; Tamayo Ibon; Guillermo Serrano Sanz; Fusco J. P.; Pajares M. J.; Gurpide Luis Alfonso; Ocón María del Mar; Sanmamed MF; Rodríguez María Esperanza; Melero Ignacio; Lozano María D; de Andrea CE; Pita G.; González-Neira A.; González Álvaro; Zulueta Javier J; Montuenga Luis; Pio R; Pérez José Luis. Whole exome sequencing characterization of individuals presenting extreme phenotypes of high and low risk of developing tobacco-induced lung adenocarcinoma. TRANSLATIONAL LUNG CANCER RESEARCH. 10 - 3, pp. 1327 - +. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33889513/>. ISSN 2218-6751

DOI: 10.21037/tlcr-20-1197
Type of production: Scientific paper
Format: Journal
Position of signature: 15
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 23

Impact source: ISI
Impact index in year of publication: 4.726
Position of publication: 105
Category: Science Edition - ONCOLOGY
Journal in the top 25%: No
No. of journals in the cat.: 245

Impact source: ISI
Impact index in year of publication: 4.726
Position of publication: 24
Category: Science Edition - RESPIRATORY SYSTEM
Journal in the top 25%: No
No. of journals in the cat.: 65

Relevant results: Background: Tobacco is the main risk factor for developing lung cancer. Yet, some heavy smokers do not develop lung cancer at advanced ages while others develop it at young ages. Here, we assess for the first time the genetic background of these clinically relevant extreme phenotypes using whole exome sequencing (WES). Methods: We performed WES of germline DNA from heavy smokers who either developed lung adenocarcinoma at an early age (extreme cases, n=50) or did not present lung adenocarcinoma or other tumors at an advanced age (extreme controls, n=50). We selected non-synonymous variants located in exonic regions and consensus splice sites of the genes that showed significantly different allelic frequencies between both cohorts. We validated our results in all the additional extreme cases (i.e., heavy smokers who developed lung adenocarcinoma at an early age) available from The Cancer Genome Atlas (TCGA). Results: The mean age for the extreme cases and controls was respectively 49.7 and 77.5 years. Mean tobacco consumption was 43.6 and 56.8 pack-years. We identified 619 significantly different variants between both cohorts, and we validated 108 of these in extreme cases selected from TCGA. Nine validated variants, located in relevant cancer related genes, such as PARP4, HLA-A or NQO1, among others, achieved statistical significance in the False Discovery Rate test. The most significant validated variant (P=4.48x10(-5)) was located in the tumor-suppressor gene ALPK2. Conclusions: We describe genetic variants associated with extreme phenotypes of high and low risk for the

development of tobacco-induced lung adenocarcinoma. Our results and our strategy may help to identify high-risk subjects and to develop new therapeutic strategies.

25 Lozano María D; Landa A.; García-Tobar Laura; de Andrea CE; Larrache Javier Carlos; Echeveste José Ignacio; Paricio José Joaquín; Sanchez B.; Medina A.; Paisan A.A comprehensive diagnosis of a desmoplastic small round cell tumor of unusual location based on fine-needle aspiration cytology: report of a case arising in the parotid gland and review of the literature. DIAGNOSTIC CYTOPATHOLOGY. 48 - 9, pp. 827 - 832. 2020. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/32657547/>. ISSN 8755-1039

DOI: 10.1002/dc.24542

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Total no. authors: 10
Corresponding author: Yes
Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 1.582
Journal in the top 25%: No
Position of publication: 22
No. of journals in the cat.: 29

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 1.582
Journal in the top 25%: No
Position of publication: 61
No. of journals in the cat.: 77

Relevant results: Desmoplastic small round cell tumor (DSRCT) is rare and a highly aggressive neoplasm that typically involves the soft tissues of the abdomen or pelvis in children or young adults, showing a male predilection. Although it can occurs over a wide age range, the peak incidence is in the third decade of life. DSRCT usually shows widespread abdominal serosal involvement, and overall patient survival is poor. On the other hand, extra-abdominal DSRCT is very rare. DSRCT in major salivary glands has been reported, but it is extremely rare. In the majority of reported series diagnosis is made by the histological analysis of FFPE tissues together with immunohistochemistry (IHC) and molecular analysis, particularly the demonstration of chromosomal translocation involving EWSR1. Very few cases have been diagnosed so far by Fine Needle Aspiration (FNA) cytology. Moreover ancillary studies have been performed in all reported cases in FFPE samples. There is still controversy and lack of consensus regarding the suitability of cytological samples especially smears for immunocytochemical (ICC) and fluorescence in situ hybridization (FISH), what makes its standardization difficult. We report a case of a primary DSRCT of parotid gland in a 17-year-old male diagnosed by FNA cytology. The cytomorphological diagnosis was coupled with ICC and FISH analysis performed on stained smears. We emphasize the feasibility and reliability of cytological smears for the application of immunocytochemical and molecular techniques.

26 Morales María Isabel; Erhard Álvaro Armin; Lozano María D; Quincoces Gemma; Richter José Ángel; Rodríguez-Fraile M. Diagnostico incidental de tumor neuroendocrino con 68Ga-PSMA PET/TC: a propósito de un caso. REVISTA ESPAÑOLA DE MEDICINA NUCLEAR E IMAGEN MOLECULAR. 39 - 2, pp. 102 - 103. 2020. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/31708480/>. ISSN 2253-654X

DOI: 10.1016/j.remn.2019.08.005

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 6
Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Impact index in year of publication: 1.359
Journal in the top 25%: No
Position of publication: 119
No. of journals in the cat.: 134

27 Abengózar Marta; Villalba María; Garcia-Ros D; Echeveste José Ignacio; Idoate Miguel Ángel; Lozano María D; Melero Ignacio; de Andrea CE. Diverse immune environments in human lung tuberculosis granulomas assessed by quantitative multiplexed immunofluorescence. MODERN PATHOLOGY. 33 - 12, pp. 2507 - 2519. 2020. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/32591586/>. ISSN 0893-3952

DOI: 10.1038/s41379-020-0600-6
Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 8

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 7.842
Journal in the top 25%: Yes
Position of publication: 6
No. of journals in the cat.: 77

Relevant results: The precise nature of the local immune responses in lung tuberculosis (TB) granulomas requires a comprehensive understanding of their environmental complexities. At its most basic level, a granuloma is a compact, organized immune aggregate of macrophages surrounded by myeloid, B and T cells. We established two complementary multiplex immunolabeling panels to simultaneously evaluate the myeloid and lymphocytic contexture of 14 human lung TB granulomas in formalin-fixed paraffin-embedded tissue samples. We observed diverse CD3+ and CD8+ T-cell and CD20+ B lymphocyte compositions of the granuloma immune environment and a relatively homogeneous distribution of all myeloid cells. We also found significant associations between CD8+ T-cell densities and the myeloid marker CD11b and phagocytic cell marker CD68. In addition, significantly more CD68+ macrophages and CD8+ T cells were found inMycobacterium tuberculosis-infected granulomas, as detected by Ziehl-Neelsen staining. FOXP3 expression was predominately found in a small subset of CD4+ T cells in different granulomas. As the success or failure of each granuloma is determined by the immune response within that granuloma at a local and not a systemic level, we attempted to identify the presence of reactive T cells based on expression of the T-cell activation marker CD137 (4-1BB) and programmed cell death-1 (PD-1). Only a small fraction of the CD4+ and CD8+ T cells expressed PD-1. CD137 expression was found only in a very small fra

28 Vigliar E.; Cepurnaite R.; Alcaraz-Mateos E.; Ali S. Z.; Baloch Z. W.; Bellevicine C.; Bongiovanni M.; Botsun P.; Bruzzese D.; Bubendorf L.; Buttner R.; Canberk S.; Capitanio A.; Casadio C.; Cazacu E.; Cochand-Priollet B.; D'Amuri A.; Eloy C.; Engels M.; Fadda G.; Fontanini G.; Fulciniti F.; Hofman P.; Iaccarino A.; Ieni A.; Jiang X. S.; Kakudo K.; Kern I.; Kholova I.; Liu C. H.; Lobo A.; Lozano María D; Malapelle U.; Maleki Z.; Michelow P.; Musayev J.; Ozgun G.; Oznur M.; Marques F. M. P.; Pisapia P.; Poller D.; Pyzlak M.; Robinson B.; Rossi E. D.; Roy-Chowdhuri S.; Saieg M.; Prince S. S.; Schmitt F. C.; Ivanez F. J. S.; Stoos-Veic T.; Sulaieva O.; Sweeney B. J.; Tuccari G.; van Velthuysen M. L.; VanderLaan P. A.; Vielh P.; Viola P.; Voorham R.; Weynand B.; Zeppa P.; Faquin W. C.; Pitman M. B.; Troncone G.Global impact of the COVID-19 pandemic on cytopathology practice: Results from an international survey of laboratories in 23 countries. CANCER CYTOPATHOLOGY. 2020. ISSN 1934-662X

DOI: 10.1002/cncy.22373
Type of production: Scientific paper
Format: Journal
Position of signature: 32
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 63

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 5.284
Journal in the top 25%: No
Position of publication: 83
No. of journals in the cat.: 242

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 5.284
Journal in the top 25%: Yes
Position of publication: 16
No. of journals in the cat.: 77

Relevant results: Background To the authors' knowledge, the impact of the coronavirus disease 2019 (COVID-19) pandemic on cytopathology practices worldwide has not been investigated formally. In the current study, data from 41 respondents from 23 countries were reported. Methods Data regarding the activity of each cytopathology laboratory during 4 weeks of COVID-19 lockdown were collected and compared with those obtained during the corresponding period in 2019. The overall number and percentage of exfoliative and fine-needle aspiration cytology samples from each anatomic site were recorded. Differences in the malignancy and suspicious rates between the 2 periods were analyzed using a meta-analytical approach. Results Overall, the sample volume was lower compared with 2019 (104,319 samples vs 190,225 samples), with an average volume reduction of 45.3% (range, 0.1%-98.0%). The percentage of samples from the cervicovaginal tract, thyroid, and anorectal region was

significantly reduced (P < .05). Conversely, the percentage of samples from the urinary tract, serous cavities, breast, lymph nodes, respiratory tract, salivary glands, central nervous system, gastrointestinal tract, pancreas, liver, and biliary tract increased (P < .05). An overall increase of 5.56% (95% CI, 3.77%-7.35%) in the malignancy rate in nongynecological samples during the COVID-19 pandemic was observed. When the suspicious category was included, the overall increase was 6.95% (95% CI, 4.63%-9.27%). Conclusions The COVID-19 pandemic resulted in a drastic reduction in the total number of cytology specimens regardless of anatomic site or specimen type. The rate of malignancy increased, reflecting the prioritization of patients with cancer who were considered to be at high risk. Prospective monitoring of the effect of delays in access to health services during the lockdown period is warranted.

29 Recalde Borja; García-Tobar Laura; Argueta Allan; Alvarez Laura; de Andrea CE; Fernández-Alonso M; Ezponda A; Carmona Francisco de Asís; Jordán-Iborra C; Quiroga Jorge Augusto; del Pozo Jose L; Zulueta Javier J; Echarri G; Landecho Manuel Fortún; Lozano María D. Histopathological findings in fatal COVID-19 severe acute respiratory syndrome: preliminary experience from a series of 10 Spanish patients. THORAX. 75 - 12, pp. 1116 - 1118. 2020. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/32839288/>. ISSN 0040-6376

DOI: 10.1136/thoraxjnl-2020-215577

Type of production: Scientific paper
Format: Journal
Position of signature: 15
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 15
Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 9.139
Journal in the top 25%: Yes
Position of publication: 7
No. of journals in the cat.: 64

Relevant results: In December 2019, an outbreak of severe acute respiratory syndrome associated to SARS-CoV2 was reported in Wuhan, China. To date, little is known on histopathological findings in patients infected with the new SARS-CoV2. Lung histopathology shows features of acute and organising diffuse alveolar damage. Subtle cellular inflammatory infiltrate has been found in line with the cytokine storm theory. Medium-size vessel thrombi were frequent, but capillary thrombi were not present. Despite the elevation of biochemical markers of cardiac injury, little histopathological damage could be confirmed. Viral RNA from paraffin sections was detected at least in one organ in 90% patients.

30 Hurtado Pardo L.; Álvarez-Cienfuegos Francisco Javier; Antoñanzas Javier; Valentí Víctor; Benito Alberto; Pardo Fernando; FM Regueira; Zozaya Gabriel Nicolás; Martí Pablo; Lozano María D; Subtil José Carlos; Rotellar Fernando. Incidental lesions of the pancreas. A clinicopathological study of 100 cases surgically treated. REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS. 112 - 2, pp. 85 - 89. 2020. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Incidental+lesions+of+the+pancreas.+A+clinicopathological+study+of+100+cases+surgically+treated>. ISSN 1130-0108

DOI: 10.17235/reed.2019.6118/2018

Type of production: Scientific paper
Format: Journal
Position of signature: 10
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 12
Impact source: ISI
Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 2.086
Journal in the top 25%: No
Position of publication: 84
No. of journals in the cat.: 92

Relevant results: Objective: the objective of the present study was to analyze the characteristics of resected incidental lesions of the pancreas. Material and methods: a retrospective study was performed of pancreatectomies due to incidentalomas between 1995 and 2018. Results: one hundred pancreatectomies were performed due to incidental lesions; 64 (64%) were solid and 36 (36%) were cystic lesions. The cytological analysis agreed with the diagnosis in 67/71 (88.7%) cases. Thirty-six tumors were cystic, 48 were neuroendocrine and 16 were adenocarcinomas. Disease-free survival for patients with cystic, neuroendocrine tumors and adenocarcinomas was 100%, 79% and 57.7% (p < 0.04). Conclusion: pancreatic incidentalomas have a heterogeneous phenotype and should be treated in experienced centers

31 Conde E.; Hernandez S.; Martinez R.; Angulo B.; De Castro J.; Collazo-Lorduy A.; Jimenez B.; Muriel A.; Mate J. L.; Moran T.; Aranda I.; Massuti B.; Rojo F.; Domine M.; Sansano I.; Garcia F.; Felip E.; Mancheno N.; Juan O.; Sanz J.; Gonzalez-Larriba J. L.; Atienza-Cuevas L.; Arriola-Arellano E.; Abdulkader I.; Garcia-Gonzalez J.; Camacho C.; Rodriguez-Abreu D.; Teixido C.; Reguart N.; Gonzalez-Pineiro A.; Lazaro-Quintela M.; Lozano María D; Gurpide Luis Alfonso; Gomez-Roman J.; Lopez-Brea M.; Pijuan L.; Salido M.; Arriola E.; Company A.; Insa A.; Esteban-Rodriguez I.; Saiz M.; Azkona E.; Alvarez R.; Artal A.; Plaza M. L.; Aguiar D.; Enguita A. B.; Benito A.; Paz-Ares L.; Garrido P.; Lopez-Rios F.Assessment of a new ROS1 immunohistochemistry clone (SP384) for the identification of ROS1 rearrangements in patients with non-small cell lung carcinoma: the ROSING study. JOURNAL OF THORACIC ONCOLOGY. 14 - 12, pp. 2120 - 2132. 2019. Available on-line at: <https://hdl.handle.net/10171/62012>. ISSN 1556-0864

DOI: 10.1016/j.jtho.2019.07.005

Type of production: Scientific paper
Format: Journal
Position of signature: 32
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 52

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 13.357
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 244

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 13.357
Journal in the top 25%: Yes
Position of publication: 3
No. of journals in the cat.: 64

Relevant results: Introduction: The ROS1 gene rearrangement has become an important biomarker in NSCLC. The College of American Pathologists/International Association for the Study of Lung Cancer/Association for Molecular Pathology testing guidelines support the use of ROS1 immunohistochemistry (IHC) as a screening test, followed by confirmation with fluorescence in situ hybridization (FISH) or a molecular test in all positive results. We have evaluated a novel anti-ROS1 IHC antibody (SP384) in a large multicenter series to obtain real-world data. Methods: A total of 43 ROS1 FISH-positive and 193 ROS1 FISH-negative NSCLC samples were studied. All specimens were screened by using two antibodies (clone D4D6 from Cell Signaling Technology and clone SP384 from Ventana Medical Systems), and the different interpretation criteria were compared with break-apart FISH (Vysis). FISH-positive samples were also analyzed with next-generation sequencing (Oncomine Dx Target Test Panel, Thermo Fisher Scientific). Results: An H-score of 150 or higher or the presence of at least 70% of tumor cells with an intensity of staining of 2thorn or higher by the SP384 clone was the optimal cutoff value (both with 93% sensitivity and 100% specificity). The D4D6 clone showed similar results, with an H-score of at least 100 (91% sensitivity and 100% specificity). ROS1 expression in normal lung was more frequent with use of the SP384 clone ($p < 0.0001$). The ezrin gene (EZR)-ROS1 variant was associated with membranous staining and an isolated green signal FISH pattern ($p = 0.001$ and $p = 0.017$, respectively). Conclusions: The new SP384 ROS1 IHC clone showed excellent sensitivity without compromising specificity, so it is another excellent analytical option for the proposed testing algorithm. (C) 2019 International Association for the Study of Lung Cancer. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

32 Pisapia P.; Malapelle U.; Roma G.; Saddar S.; Zheng Q.; Pepe F.; Bruzzese D.; Vigliar E.; Bellevicine C.; Luthra R.; Nikiforov Y. E.; Mayo-de-Las-Casas C.; Molina-Vila M. A.; Rosell R.; Bihl M.; Savic S.; Bubendorf L.; de Biase D.; Tallini G.; Hwang D. H.; Sholl L. M.; Vander Borght S.; Weynand B.; Stieber D.; Vielh P.; Rappa A.; Barberis M.; Fassan M.; Rugge M.; de Andrea CE; Lozano María D; Lupi C.; Fontanini G.; Schmitt F.; Dumur C. I.; Bisig B.; Bongiovanni M.; Merkelbach-Bruse S.; Buttner R.; Nikiforova M. N.; Roy-Chowdhuri S.; Troncone G.Consistency and reproducibility of next-generation sequencing in cytopathology: A second worldwide ring trial study on improved cytological molecular reference specimens. CANCER CYTOPATHOLOGY. 127 - 5, pp. 285 - 296. 2019. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Consistency+and+reproducibility+of+next-generation+sequencing+in+cytopathology%3A+A+second+worldwide+ring+trial+study+on+improved+cytological+molecular+reference+specimens>. ISSN 1934-662X

DOI: 10.1002/cncy.22134

Type of production: Scientific paper
Format: Journal

Position of signature: 31

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 42

Impact source: ISI
Impact index in year of publication: 3.703
Position of publication: 98

Category: Science Edition - ONCOLOGY
Journal in the top 25%: No
No. of journals in the cat.: 244

Impact source: ISI
Impact index in year of publication: 3.703
Position of publication: 17

Category: Science Edition - PATHOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 78

Relevant results: Background Artificial genomic reference standards in a cytocentrifuge/cytospin format with well-annotated genomic data are useful for validating next-generation sequencing (NGS) on routine cytopreparations. Here, reference standards were optimized to be stained by different laboratories before DNA extraction and to contain a lower number of cells (2 x 10(5)). This was done to better reflect the clinical challenge of working with insufficient cytological material. Methods A total of 17 worldwide laboratories analyzed customized reference standard slides (slides A-D). Each laboratory applied its standard workflow. The sample slides were engineered to harbor epidermal growth factor receptor (EGFR) c.2235_2249del15 p.E746_A750delELREA, EGFR c.2369C>T p.T790M, Kirsten rat sarcoma viral oncogene homolog (KRAS) c.38G>A p.G13D, and B-Raf proto-oncogene, serine/threonine kinase (BRAF) c.1798_1799GT>AA p.V600K mutations at various allele frequencies (AFs). Results EGFR and KRAS mutation detection showed excellent interlaboratory reproducibility, especially on slides A and B (10% and 5% AFs). On slide C (1% AF), either the EGFR mutation or the KRAS mutation was undetected by 10 of the 17 laboratories (58.82%). A reassessment of the raw data in a second-look analysis highlighted the mutations (n = 10) that had been missed in the first-look analysis. BRAF c.1798_1799GT>AA p.V600K showed a lower concordance rate for mutation detection and AF quantification. Conclusions The data show that the detection of low-abundance mutations is still clinically challenging and may require a visual inspection of sequencing reads to detect. Genomic reference standards in a cytocentrifuge/cytospin format are a valid tool for regular quality assessment of laboratories performing molecular studies on cytology with low-AF mutations.

33 Lozano María D. CT screening for lung cancer: comparison of three baseline screening protocols. EUROPEAN RADIOLOGY. 29 - 10, pp. 5217 - 5226. 2019. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/30511179/>. ISSN 0938-7994
DOI: 10.1007/s00330-018-5857-5
Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 1

Impact source: ISI
Impact index in year of publication: 4.101
Position of publication: 21

Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Journal in the top 25%: Yes
No. of journals in the cat.: 133

34 Martin-Cardona A.; Fernandez-Esparrach G.; Subtil José Carlos; Iglesias-Garcia J.; Garcia-Guix M.; Barroso A. B.; Gimeno-Garcia A. Z.; Esteban J. M.; Balteiro A. P.; Velasco-Guardado A.; Vazquez-Sequeiros E.; Loras C.; Martinez-Moreno B.; Castellot A.; Huertas C.; Martinez-Lapiedra M.; Sanchez-Yague A.; Teran A.; Morales-Alvarado V. J.; Betes M T; de la Iglesias D.; Sanchez-Montes C.; Lozano María D; Larino-Noia J.; Gines A.; Tebe C.; Gornals J. B.; Gallarreta V.; Aparicio J. R.; Castellot A.EUS-guided tissue acquisition in the study of the adrenal glands: results of a nationwide multicenter study. PLOS ONE. 14 - 6, pp. e0216658. 2019. Available on-line at: <https://hdl.handle.net/10171/62393>. ISSN 1932-6203
DOI: 10.1371/journal.pone.0216658
Type of production: Scientific paper
Format: Journal
Position of signature: 23
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 30

Impact source: ISI
Category: Science Edition - MULTIDISCIPLINARY SCIENCES
Impact index in year of publication: 2.74
Journal in the top 25%: No
Position of publication: 27
No. of journals in the cat.: 71

Relevant results: Background There are limited data about the role of endoscopic ultrasound-guided tissue acquisition (EUS-TA), by fine needle aspiration (EUS-FNA) or biopsy (EUS-FNB), in the evaluation of the adrenal glands (AG). The primary aim was to assess the diagnostic yield and safety. The secondary aims were the malignancy predictors, and to create a predictive model of malignancy. Methods This was a retrospective nationwide study involving all Spanish hospitals experienced in EUS-TA of AGs. Inclusion period was from April-2003 to April-2016. Inclusion criteria: all consecutive cases that underwent EUS-TA of AGs. EUS and cytopathology findings were evaluated. Statistical analyses: diagnostic accuracy of echoendoscopist's suspicion using cytology by EUS-TA, as gold standard; multivariate logistic regression model to predict tumor malignancy. Results A total of 204 EUS-TA of AGs were evaluated. Primary tumor locations were lung70%, others19%, and unknown 11% AG samples were adequate for cytological diagnosis in 91%, and confirmed malignancy in 60%. Diagnostic accuracy of the endosonographer's suspicion was 68%. The most common technique was: a 22-G (65%) and cytological needle (75%) with suction -syringe (66%). No serious adverse events were described. The variables most associated with malignancy were size>30mm (OR2.27; 95%CI, 1.16-4.05), heterogeneous echo pattern (OR2.11; 95%CI, 1.1-3.9), variegated AG shape (OR2.46; 95%CI, 1-6.24), and endosonographer suspicion (OR17.46; 95%CI, 6.2-58.5). The best variables for a predictive multivariate logistic model of malignancy were age, sex, echo-pattern, and AG-shape. Conclusions EUS-TA of the AGs is a safe, minimally invasive procedure, allowing an excellent diagnostic yield. These results suggest the possibility of developing a pre-EUS procedure predictive malignancy model.

35 Datar I.; Sanmamed MF; Wang J.; Henick B. S.; Choi J.; Badri T.; Dong W. L.; Mani N.; Toki M.; Mejías Luis Daniel; Lozano María D; Pérez José Luis; Velcheti V.; Hellmann M.; Gainor J. F.; McEachern K.; Jenkins D.; Syrigos K.; Politi K.; Gettinger S.; Rimm D. L.; Herbst R. S.; Melero Ignacio; Chen L. P.; Schalper K. A.Expression Analysis and Significance of PD-1, LAG-3, and TIM-3 in Human Non-Small Cell Lung Cancer Using Spatially Resolved and Multiparametric Single-Cell Analysis. CLINICAL CANCER RESEARCH. 25 - 15, pp. 4663 - 4673. 2019. ISSN 1078-0432

DOI: 10.1158/1078-0432.CCR-18-4142

Type of production: Scientific paper
Format: Journal
Position of signature: 11
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 25

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 10.107
Journal in the top 25%: Yes
Position of publication: 17
No. of journals in the cat.: 244

Relevant results: Purpose: To determine the tumor tissue/cell distribution, functional associations, and clinical significance of PD-1, LAG3, and TIM-3 protein expression in human non-small cell lung cancer (NSCLC). Experimental Design: Using multiplexed quantitative immunofluorescence, we performed localized measurements of CD3, PD-1, LAG-3, and TIM-3 protein in > 800 clinically annotated NSCLCs from three independent cohorts represented in tissue microarrays. Associations between the marker's expression and major genomic alterations were studied in The Cancer Genome Atlas NSCLC dataset. Using mass cytometry (CyTOF) analysis of leukocytes collected from 20 resected NSCLCs, we determined the levels, coexpression, and functional profile of PD-1, LAG-3, and TIM-3 expressing immune cells. Finally, we measured the markers in baseline samples from 90 patients with advanced NSCLC treated with PD-1 axis blockers and known response to treatment. Results: PD-1, LAG-3, and TIM-3 were detected in tumorinfiltrating lymphocytes (TIL) from 55%, 41.5%, and 25.3% of NSCLC cases, respectively. These markers showed a prominent association with each other and limited association with major clinicopathologic variables and survival in patients not receiv-ing immunotherapy. Expression of the markers was lower in EGFR-mutated adenocarcinomas and displayed limited association with tumor mutational burden. In single-cell CyTOF analysis, PD-1 and LAG-3 were predominantly localized on T-cell subsets/NKT cells, whereas TIM-3 expression was higher in NK cells and macrophages. Coexpression of PD-1, LAG-3, and TIM-3 was associated with prominent T-cell activation (CD69/CD137), effector function (Granzyme-B), and proliferation (Ki-67), but also with elevated levels of proapoptotic markers (FAS/BIM). LAG-3 and TIM-3 were present in TIL

subsets lacking PD-1 expression and showed a distinct functional profile. In baseline samples from 90 patients with advanced NSCLC treated with PD-1 axis blockers, elevated LAG-3 was significantly associated with shorter progressionfree survival. Conclusions: PD-1, LAG-3, and TIM-3 have distinct tissue/cell distribution, functional implications, and genomic correlates in human NSCLC. Expression of these immune inhibitory receptors in TILs is associated with prominent activation, but also with a proapoptotic T-cell phenotype. Elevated LAG-3 expression is associated with insensitivity to PD-1 axis blockade, suggesting independence of these immune evasion pathways.

36 Subtil José Carlos; Alcázar Juan Luis; Betes M T; Mínguez José Ángel; Francisco Javier Zozaya Larequi; Enrique María Chacón Cruz; Manzour Nabil; Hidalgo A.; Lozano María D; Muñoz Miguel Ángel; Jurado Matías. Gastrointestinal endoscopic ultrasound-guided fine-needle aspiration for assessing suspected deep pelvic or abdominal recurrence in gynecologic cancer: a feasibility study. JOURNAL OF ULTRASOUND IN MEDICINE. 38 - 3, pp. 761 - 765. 2019. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/30171619>. ISSN 0278-4297

DOI: 10.1002/jum.14766

Type of production: Scientific paper
Format: Journal
Position of signature: 9
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 11

Impact source: ISI
Category: Science Edition - ACOUSTICS
Impact index in year of publication: 1.759
Journal in the top 25%: No
Position of publication: 13
No. of journals in the cat.: 32

Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Impact index in year of publication: 1.759
Journal in the top 25%: No
Position of publication: 91
No. of journals in the cat.: 133

Relevant results: Objectives To assess the feasibility of gastrointestinal endoscopic ultrasound (EUS)-guided fine-needle aspiration (FNA) for histologic confirmation of cancer recurrence in women with gynecologic cancer. Methods This work was a retrospective cohort study comprising 46 consecutive women treated for gynecologic cancer and suspected of having a deep pelvic or abdominal recurrence on ultrasound imaging, computed tomography, positron emission tomography-computed tomography, or magnetic resonance imaging, evaluated at our institution from January 2010 to December 2017. Primary cancer was ovarian (n = 22), cervical (n = 13), endometrial (n = 4), sarcoma (n = 4), and other (n = 3). All women underwent EUS examinations for locating the lesion and guiding FNA. The results of FNA (benign/malignant) were assessed. Procedure-related complications were recorded. Results The patients' mean age was 57.8 years. A total of 66 procedures were performed. Eleven women underwent 2 procedures; 2 women underwent 3 procedures; and 1 woman underwent 6 procedures at different times during the study period. In 1 case, no lesion was detected on the EUS assessment, and in 2 cases, FNA was not successful. Most lesions were located in the retroperitoneum or involved the intestine. Fine-needle aspiration could be performed in 63 cases (94.5%). Cytologic samples were adequate in 62 of 63 (98.4%). Recurrence was confirmed in 56 cases (90.3%) and ruled out in 6 (9.7%). No patient had any complication related to the procedure. Conclusions Endoscopic ultrasound-guided FNA is a minimally invasive, feasible, and safe technique for confirming pelvic/abdominal recurrence of gynecologic cancer.

37 Elgendy M.; Juan Pablo Fusco Morales; Segura Victoriano; Lozano María D; Minucci S.; Echeveste José Ignacio; Gurpide Luis Alfonso; Andueza María Pilar; Melero Ignacio; Sanmamed MF; Rodríguez María Esperanza; Calvo Alfonso; Pascual Juan Ignacio; José María Velis Campillo; Miñana Bernardino; Diez Valle Ricardo; Pio R; Agorreta J; Abengózar Marta; Colecchia M.; Brich S.; Renne S. L.; Guruceaga Elisabet; Patiño-Garcia Ana; Pérez José Luis. Identification of mutations associated with acquired resistance to sunitinib in renal cell cancer. INTERNATIONAL JOURNAL OF CANCER. 145 - 7, pp. 1991 - 2001. 2019. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/30848481/>. ISSN 0020-7136

DOI: 10.1002/ijc.32256

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 25

Impact source: ISI
Impact index in year of publication: 5.145
Position of publication: 59
Category: Science Edition - ONCOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 244

Relevant results: Sunitinib is one of the most widely used targeted therapeutics for renal cell carcinoma (RCC), but acquired resistance against targeted therapies remains a major clinical challenge. To dissect mechanisms of acquired resistance and unravel reliable predictive biomarkers for sunitinib in RCC, we sequenced the exons of 409 tumor-suppressor genes and oncogenes in paired tumor samples from an RCC patient, obtained at baseline and after development of acquired resistance to sunitinib. From newly arising mutations, we selected, using in silico prediction models, six predicted to be deleterious, located in G6PD, LRP1B, SETD2, TET2, SYNE1, and DCC. Consistently, immunoblotting analysis of lysates derived from sunitinib-desensitized RCC cells and their parental counterparts showed marked differences in the levels and expression pattern of the proteins encoded by these genes. Our further analysis demonstrates essential roles for these proteins in mediating sunitinib cytotoxicity and shows that their loss of function renders tumor cells resistant to sunitinib in vitro and in vivo. Finally, sunitinib resistance induced by continuous exposure or by inhibition of the six proteins was overcome by treatment with cabozantinib or a low-dose combination of lenvatinib and everolimus. Collectively, our results unravel novel markers of acquired resistance to sunitinib and clinically relevant approaches for overcoming this resistance in RCC.

38 Elgendy M.; Juan Pablo Fusco Morales; Segura Victoriano; Lozano María D; Minucci S.; Echeveste José Ignacio; Gurpide Luis Alfonso; Andueza María Pilar; Melero Ignacio; Sanmamed MF; Rodríguez María Esperanza; Calvo Alfonso; Pascual Juan Ignacio; Velis J. M.; Miñana Bernardino; Diez Valle Ricardo; Pio R; Agorreta J; Abengózar Marta; Colecchia M.; Brich S.; Renne S. L.; Guruceaga Elisabet; Patiño-Garcia Ana; Pérez José Luis. Identification of mutations associated with acquired resistance to sunitinib in renal cell-cancer. INTERNATIONAL JOURNAL OF CANCER. 145 - 7, pp. 1991 - 2001. 2019. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/30848481>. ISSN 0020-7136
DOI: 10.1002/ijc.32256
Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 25
Impact source: ISI
Impact index in year of publication: 5.145
Position of publication: 59
Category: Science Edition - ONCOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 244

Relevant results: Sunitinib is one of the most widely used targeted therapeutics for renal cell-cancer (RCC) but acquired resistance against targeted therapies remains a major clinical challenge. To dissect mechanisms of acquired resistance and unravel reliable predictive biomarkers for sunitinib in renal cell-cancer (RCC), we sequenced the exons of 409 tumor-suppressor genes and oncogenes in paired tumor samples from an RCC patient, obtained at baseline and following development of acquired resistance to sunitinib. From newly arising mutations, we selected, using in-silico prediction models, 6 predicted to be deleterious, located in G6PD, LRP1B, SETD2, TET2, SYNE1 and DCC. Consistently, immunoblotting analysis of lysates derived from sunitinib-desensitized RCC cells and their parental counterparts showed marked differences in the levels and expression pattern of the proteins encoded by these genes. Our further analysis demonstrates essential roles for these proteins in mediating sunitinib cytotoxicity and shows that their loss of function render tumor cells resistant to sunitinib in vitro and in vivo. Finally, sunitinib resistance induced by continuous exposure or by inhibition of the 6 proteins was overcome by treatment with cabozantinib or a low-dose combination of lenvatinib and everolimus. Collectively, our results unravel novel markers of acquired resistance to sunitinib and clinically relevant approaches for overcoming this resistance in RCC.

39 Triviño-Ibáñez E. M.; Sánchez-Vañó R; Sopena-Novales P.; Romero-Fábrega J. C.; Rodríguez-Fernández A.; Carnero-Pardo C.; Lozano María D; Gómez-Río M.Impact of amyloid-PET in daily clinical management of patients with cognitive impairment fulfilling appropriate use criteria. MEDICINE (BALTIMORE). 98 - 29, pp. e16509. 2019. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/31335725/>. ISSN 0025-7974
DOI: 10.1097/MD.0000000000016509
Type of production: Scientific paper
Format: Journal

Position of signature: 7

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 8

Impact source: ISI

Category: Science Edition - MEDICINE, GENERAL & INTERNAL

Impact index in year of publication: 1.552

Journal in the top 25%: No

Position of publication: 90

No. of journals in the cat.: 165

Relevant results: To evaluate the use of amyloid-positron emission tomography (PET) in routine clinical practice, in a selected population with cognitive impairment that meets appropriate use criteria (AUC).A multicenter, observational, prospective case-series study of 211patients from 2 level-3 hospitals who fulfilled clinical AUC for amyloid-PET scan in a naturalistic setting. Certainty degree was evaluated using a 5-point Likert scale: 0 (very low probability); 1 (low probability); 2 (intermediate probability); 3 (high probability); and 4 (practically sure), before and after amyloid PET. The treatment plan was considered as cognition-specific or noncognition-specific.Amyloid-PET was positive in 118 patients (55.9%) and negative in 93 patients (44.1%). Diagnostic prescan confidence according amyloid-PET results showed that in both, negative and positive-PET subgroup, the most frequent category was intermediate probability (45.7% and 55.1%, respectively). After the amyloid-PET, the diagnostic confidence showed a very different distribution, that was, in the negative-PET group the most frequent categories are very unlikely (70.7%) and unlikely (29.3%), while in the positive-PET group were very probable (57.6%) and practically sure (39%). Only in 14/211 patients (6.6%) the result of the amyloid-PET did not influence the diagnostic confidence, while in 194 patients (93.4%), the diagnostic confidence improved significantly after amyloid-PET results. The therapeutic intention was modified in 93 patients (44.1%). Specific treatment for Alzheimer disease was started, before amyloid-PET, in 80 patients (37.9%).This naturalistic study provides evidence that the implementation of amyloid-PET is associated with a significant improvement in diagnostic confidence and has a high impact on the therapeutic management of patients with mild cognitive impairment fulfilled clinical AUC.

40 Bates M.; González Santiago; Bojórquez A; Lozano María D; Echeveste José Ignacio; Garcia-Albarran L.; Muñoz Miguel Ángel; Subtil José Carlos. Metastatic tumors in the pancreas: the role of endoscopic ultrasound-guided fine-needle aspiration. REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS. 111 - 5, pp. 345 - 350. 2019. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/30746956/>. ISSN 1130-0108

DOI: 10.17235/reed.2019.5914/2018

Type of production: Scientific paper

Format: Journal

Position of signature: 4

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 8

Impact source: ISI

Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY

Impact index in year of publication: 1.591

Journal in the top 25%: No

Position of publication: 81

No. of journals in the cat.: 88

Relevant results: Background and objectives: there are few published data on the use of EUS guided fine-needle aspiration in secondary pancreatic lesions. We describe the largest series published so far in a European country. Patients and methods: a retrospective review of the cases identified in our institution from 2004 to 2016 has been recorded. The clinical data are described, comparing the latency period from the primary tumor diagnosis to the detection of the pancreatic metastasis and the survival of patients according to the cytological diagnosis. Results: forty-four patients were diagnosed with pancreatic metastasis using EUS guided fine needle aspiration. Ancillary cytological studies were performed in 28 (63.6%). The most common primary tumor sites were kidney and lung. Thirty-four patients (77.3%) had a previous history of malignancy, with a latency period ranging from 6 months to 18.8 years. Patients diagnosed with primary renal carcinoma had a significantly longer latency period and longer survival compared to those with primary lung cancer. In 13 patients, EUS was either the only technique that detected the PM or showed a greater number of intrapancreatic lesions. These metastases were significantly smaller than those diagnosed by other imaging studies (11.9 +/- 4.1 mm vs 30.7 +/- 19.8 mm, p < 0.001). Conclusions: EUS guided fine-needle aspiration plays a crucial role in the diagnosis of pancreatic metastases and may have a major clinical impact. Patients with renal cell carcinoma could benefit from long-term follow-up with EUS.

41 Patricia Martín Romano; Belén Pérez Solans; Cano David; Subtil José Carlos; Chopitea Ana; Arbea Leire; Lozano María D; Castañón Eduardo; Baraibar Iosune; Salas Diego; Hernández José Luis; Fernández de Trocóniz José Ignacio; Rodríguez Javier. Neoadjuvant therapy for locally advanced gastric cancer patients. A population pharmacodynamic modeling. PLOS ONE. 14 - 5, pp. e0215970. 2019. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Neoadjuvant+therapy+for+locally+advanced+gastric+cancer+patients.+A+population+pharmacodynamic+modeling>. ISSN 1932-6203

DOI: 10.1371/journal.pone.0215970

Type of production: Scientific paper
Format: Journal
Position of signature: 7
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 13
Impact source: ISI
Category: Science Edition - MULTIDISCIPLINARY SCIENCES
Impact index in year of publication: 2.74
Journal in the top 25%: No
Position of publication: 27
No. of journals in the cat.: 71

Relevant results: Background Perioperative chemotherapy (CT) or neoadjuvant chemoradiotherapy (CRT) in patients with locally advanced gastric (GC) or gastroesophageal junction cancer (GEJC) has been shown to improve survival compared to an exclusive surgical approach. However, most patients retain a poor prognosis due to important relapse rates. Population pharmacokinetic-pharma-codynamic (PK/PD) modeling may allow identifying at risk-patients. We aimed to develop a mechanistic PK/PD model to characterize the relationship between the type of neoadjuvant therapy, histopathologic response and survival times in locally advanced GC and GEJC patients. Methods Patients with locally advanced GC and GEJC treated with neoadjuvant CT with or without preoperative CRT were analyzed. Clinical response was assessed by CT-scan and EUS. Pathologic response was defined as a reduction on pTNM stage compared to baseline cTNM. Metastasis development risk and overall survival (OS) were described using the population approach with NONMEM 7.3. Model evaluation was performed through predictive checks. Results A low correlation was observed between clinical and pathologic TNM stage for both T (R = 0.32) and N (R = 0.19) categories. A low correlation between clinical and pathologic response was noticed (R = -0.29). The OS model adequately described the observed survival rates. Disease recurrence, cTNM stage >= 3 and linitis plastica absence, were correlated to a higher risk of death. Conclusion Our model adequately described clinical response profiles, though pathologic response could not be predicted. Although the risk of disease recurrence and survival were linked, the identification of alternative approaches aimed to tailor therapeutic strategies to the individual patient risk warrants further research.

42 Lozano María D; Abengózar Marta; Echeveste José Ignacio; Subtil José Carlos; Berto Juan Antonio; Gurpide Luis Alfonso; Calvo Alfonso; de Andrea CE. Programmed death-ligand 1 expression on direct Pap-stained cytology smears from non-small cell lung cancer: comparison with cell blocks and surgical resection specimens. CANCER CYTOPATHOLOGY. 127 - 7, pp. 470 - 480. 2019. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Programmed+death-ligand+1+expression+on+direct+Pap-stained+cytology+smears+from+non-small+cell+lung+cancer%3A+Comparison+with+cell+blocks+and+surgical+resection+specimens>. ISSN 1934-662X

DOI: 10.1002/cncy.22155

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 8
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.703
Journal in the top 25%: No
Position of publication: 98
No. of journals in the cat.: 244

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.703
Journal in the top 25%: Yes
Position of publication: 17
No. of journals in the cat.: 78

Relevant results: Background Programmed death-ligand 1 (PD-L1) expression, as assessed by immunohistochemistry (IHC), is used to select patients with non-small cell lung cancer (NSCLC) for anti-programmed cell death protein 1 (PD-1)/PD-L1 therapy. The current study evaluated the feasibility and

efficacy of PD-L1 immunostaining and quantitation on direct Papanicolaou-stained cytological smears compared with formalin-fixed paraffin-embedded samples (cytological cell blocks and surgical resection specimens) in NSCLC cases using 2 commercially available assays: the PD-L1 IHC 22C3 pharmDx assay (Agilent Technologies/Dako, Carpinteria, CA, USA) and the Ventana SP263 Assay (Ventana Medical Systems Inc, Tucson, Arizona). Methods PD-L1 immunostaining using either both or one of the assays was tested in 117 sets of paired samples obtained from 62 NSCLC cases. The tumor proportion score was reported in every case following the recommendations of the International Association for the Study of Lung Cancer (IASLC). Results In 57 sets of samples, both PD-L1 assays were used. Due to the availability of samples, only 1 assay was performed in 3 sets of samples and in 2 cases, only cytology smears were used and tested for both assays. A total of 113 sets of paired samples finally were evaluated; 4 cases could not be studied due to intense nonspecific background staining. A significant concordance between the 2 assays on cytological smears was found. Concordance between paired cytological smears and formalin-fixed paraffin-embedded samples was observed in 97.3% of the cases. Conclusions The quantification of PD-L1 expression on direct Papanicolaou-stained cytology smears is feasible and reliable for both PD-L1 assays.

43 Lozano María D. Survival with parenchymal and pleural invasion of non-small cell lung cancers less than 30 mm. JOURNAL OF THORACIC ONCOLOGY. 14 - 5, pp. 890 - 902. 2019. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/30685507/>. ISSN 1556-0864

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 1

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 13.357
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 244

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 13.357
Journal in the top 25%: Yes
Position of publication: 3
No. of journals in the cat.: 64

Relevant results: Objective: To determine long-term survival of visceral pleural invasion (VPI) and parenchymal invasion (PAI) (angiolymphatic and/or vascular) on survival of NSCLCs less than 30 mm in maximum diameter. Methods: Kaplan-Meier survivals for NSCLCs, with and without VPI and/or PAI, were determined for a prospective cohort of screening participants stratified by pathologic tumor size (¿10 mm, 11-20 mm, and 21-30 mm) and nodule consistency. Log-rank test statistics were calculated. Results: The frequency of PAI versus VPI was significantly lower in patients with subsolid nodules than in those with solid nodules (4.9% versus 27.7% [p < 0.0001]), and correspondingly, Kaplan-Meier lung cancer survival was significantly higher among patients with subsolid nodules (99.1% versus 91.3% [p = 0.0009]). Multivariable Cox regression found that only tumor diameter (adjusted hazard ratio [HR] =1.07, 95% confidence interval [CI]: 1.01-1.14, p = 0.02) and PAI (adjusted HR = 3.15, 95% CI: 1.25-7.90, p = 0.01) remained significant, whereas VPI was not significant (p = 0.15). When clinical and computed tomography findings were included with the pathologic findings, Cox regression showed that the risk of dying of lung cancer increased 10-fold (HR = 10.06, 95% CI: 1.35-75.30) for NSCLCs in patients with solid nodules and more than twofold (by a factor of 2.27) in patients with moderate to severe emphysema (HR = 2.27, 95% CI: 1.01-5.11), as well as with increasing tumor diameter (HR = 1.06, 95% CI: 1.01-1.13), whereas PAI was no longer significant (p = 0.19). Conclusions: Nodule consistency on computed tomography was a more significant prognostic indicator than either PAI or VPI. We propose that patients with NSCLC with VPI and a maximum tumor diameter of 30 mm or less not be upstaged to T2 without further large, multicenter studies of NSCLCs, stratified by the new T status and that classification be considered separately for patients with subsolid or solid nodules.

44 Villalba María; Expósito Francisco; Pajares María Josefa; Sainz C.; Redrado. M.; Remírez A.; Wistubal I.; Bherens C.; Jantus-Lewintre E.; Camps C.; Montuenga Luis; Pio R; Lozano María D; de Andrea CE; Calvo Alfonso. TMPRSS4: A Novel Tumor Prognostic Indicator for the Stratification of Stage IA Tumors and a Liquid Biopsy Biomarker for NSCLC Patients. JOURNAL OF CLINICAL MEDICINE. 8 - 12, pp. E2134. 2019. Available on-line at: <https://hdl.handle.net/10171/62302>. ISSN 2077-0383

DOI: 10.3390/jcm8122134
Type of production: Scientific paper
Format: Journal

Position of signature: 13

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 15

Impact source: ISI

Category: Science Edition - MEDICINE, GENERAL & INTERNAL

Impact index in year of publication: 3.303

Journal in the top 25%: Yes

Position of publication: 36

No. of journals in the cat.: 165

Relevant results: Relapse rates in surgically resected non-small-cell lung cancer (NSCLC) patients are between 30% and 45% within five years of diagnosis, which shows the clinical need to identify those patients at high risk of recurrence. The eighth TNM staging system recently refined the classification of NSCLC patients and their associated prognosis, but molecular biomarkers could improve the heterogeneous outcomes found within each stage. Here, using two independent cohorts (MDA and CIMA-CUN) and the eighth TNM classification, we show that TMPRSS4 protein expression is an independent prognostic factor in NSCLC, particularly for patients at stage I: relapse-free survival (RFS) HR, 2.42 (95% CI, 1.47-3.99), p < 0.001; overall survival (OS) HR, 1.99 (95% CI, 1.25-3.16), p = 0.004). In stage IA, high levels of this protein remained associated with worse prognosis (p = 0.002 for RFS and p = 0.001 for OS). As TMPRSS4 expression is epigenetically regulated, methylation status could be used in circulating tumor DNA from liquid biopsies to monitor patients. We developed a digital droplet PCR (ddPCR) method to quantify absolute copy numbers of methylated and unmethylated CpGs within the TMPRSS4 and SHOX2 (as control) promoters in plasma and bronchoalveolar lavage (BAL) samples. In case-control studies, we demonstrated that TMPRSS4 hypomethylation can be used as a diagnostic tool in early stages, with an AUROC of 0.72 (p = 0.008; 91% specificity and 52% sensitivity) for BAL and 0.73 (p = 0.015; 65% specificity and 90% sensitivity) for plasma, in early stages. In conclusion, TMPRSS4 protein expression can be used to stratify patients at high risk of relapse/death in very early stages NSCLC patients. Moreover, analysis of TMPRSS4 methylation status by ddPCR in blood and BAL is feasible and could serve as a non-invasive biomarker to monitor surgically resected patients.

45 Martinez-Terroba E.; Behrens C.; de Miguel F. J.; Agorreta J; Monso E.; Millares L.; Sainz C.; Mesa MIguel Alejandro; Pérez José Luis; Lozano María D; Zulueta Javier J; Pio R; Wistuba I. I.; Montuenga Luis; Pajares María Josefa. A novel protein-based prognostic signature improves risk stratification to guide clinical management in early-stage lung adenocarcinoma patients. JOURNAL OF PATHOLOGY. 245 - 4, pp. 421 - 432. 2018. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=A+novel+protein-based+prognostic+signature+improves+risk+stratification+to+guide+clinical+management+in+early-stage+lung+adenocarcinoma+patients>. ISSN 0022-3417

DOI: 10.1002/path.5096

Type of production: Scientific paper

Format: Journal

Position of signature: 10

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 15

Impact source: ISI

Category: Science Edition - ONCOLOGY

Impact index in year of publication: 5.942

Journal in the top 25%: Yes

Position of publication: 36

No. of journals in the cat.: 229

Impact source: ISI

Category: Science Edition - PATHOLOGY

Impact index in year of publication: 5.942

Journal in the top 25%: Yes

Position of publication: 8

No. of journals in the cat.: 76

Relevant results: Each of the pathological stages (I-IIIa) of surgically resected non-small-cell lung cancer has hidden biological heterogeneity, manifested as heterogeneous outcomes within each stage. Thus, the finding of robust and precise molecular classifiers with which to assess individual patient risk is an unmet medical need. Here, we identified and validated the clinical utility of a new prognostic signature based on three proteins (BRCA1, QKI, and SLC2A1) to stratify early-stage lung adenocarcinoma patients according to their risk of recurrence or death. Patients were staged according to the new International Association for the Study of Lung Cancer (IASLC) staging criteria (8th edition, 2018). A test cohort (n=239) was used to assess the value of this new prognostic index (PI) based on the three proteins. The prognostic signature was developed by Cox regression with the use of stringent statistical criteria (TRIPOD: Transparent reporting of a multivariable prediction model for individual

prognosis or diagnosis). The model resulted in a highly significant predictor of 5-year outcome for disease-free survival (p<0.001) and overall survival (p<0.001). The prognostic ability of the model was externally validated in an independent multi-institutional cohort of patients (n=114, p=0.021). We also demonstrated that this molecular classifier adds relevant information to the gold standard TNM-based pathological staging, with a highly significant improvement of the likelihood ratio. We subsequently developed a combined PI including both the molecular and the pathological data that improved the risk stratification in both cohorts (p <= 0.001). Moreover, the signature may help to select stage I-IIA patients who might benefit from adjuvant chemotherapy. In summary, this protein-based signature accurately identifies those patients with a high risk of recurrence and death, and adds further prognostic information to the TNM-based clinical staging, even when the new IASLC 8th edition staging criteria are applied. More importantly, it may be a valuable tool for selecting patients for adjuvant therapy. Copyright (C) 2018 Pathological Society of Great Britain and Ireland. Published by John Wiley & Sons, Ltd.

46 Lozano María D; Echeveste José Ignacio; Abengózar Marta; Mejías Luis Daniel; Idoate Miguel Ángel; Calvo Alfonso; de Andrea CE. Cytology smears in the era of molecular biomarkers in non-small cell lung cancer: doing more with less. ARCHIVES OF PATHOLOGY AND LABORATORY MEDICINE. 142 - 3, pp. 291 - 298. 2018. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Cytology+smears+in+the+era+of+molecular+biomarkers+in+non-small+cell+lung+cancer+doing+more+with+less>. ISSN 0003-9985

DOI: 10.5858/arpa.2017-0208- RA

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 7

Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 4.151
Journal in the top 25%: Yes
Position of publication: 4
No. of journals in the cat.: 29

Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 4.151
Journal in the top 25%: No
Position of publication: 40
No. of journals in the cat.: 136

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.151
Journal in the top 25%: Yes
Position of publication: 12
No. of journals in the cat.: 76

Relevant results: CONTEXT: - The rapid advances in targeted therapies in non-small cell lung cancer (NSCLC) make the optimization and implementation of cytology specimens for molecular testing a priority. Up to 70% of patients with NSCLC are diagnosed at advanced stages and tissue biopsies often cannot be taken. Although cytology samples provide high-quality material for molecular testing, molecular cytopathology is not yet well known or widely used. OBJECTIVE: - To report the many advances in molecular cytopathology and the suitability and utility of cytology samples in molecular and genetic testing of NSCLC. DATA SOURCES: - Data sources comprised published peer-reviewed literature and personal experience of the authors. CONCLUSIONS: - Molecular testing can be performed on cytologic specimens, especially on direct smears. Rapid on-site evaluation by cytopathologists has improved the adequacy and the management of cytology samples for molecular testing. Mutational profiling of NSCLC using next-generation sequencing can be performed on cytology samples from very small amounts of DNA. Fluorescence in situ hybridization assays on cytology specimens, including stained direct smear, offer some distinct advantages over their histologic counterpart, and are used to detect ALK and ROS1 rearrangements in NSCLC. Cytology specimens allow assessment of the entire tumor cell nucleus, avoiding signal loss from truncation artifacts. The use of cytology samples for assessing programmed death ligand-1 protein expression is currently being developed. Protocols for bisulfite conversion and DNA droplet digital polymerase chain reaction assays have been optimized for cytology smear to investigate aberrant DNA methylation of several NSCLC-related genes

47 Keppens C.; Palma J. F.; Das P.. M.; Scudder S.; Wen W.; Normanno N.; van Krieken J. H.; Sacco A.; Fenizia F.; de Castro D. G.; Honigschnabl S.; Kern I.; Lopez-Rios F.; Lozano María D; Marchetti A.; Halfon P.; Schuuring E.; Setinek U.; Sorensen B.; Taniere P.; Tiemann M.; Vosmikova H.; Dequeker E. M. C.Detection of EGFR variants in plasma: A multilaboratory comparison of a Real-Time PCR EGFR mutation test in Europe. JOURNAL OF MOLECULAR DIAGNOSTICS. 20 - 4, pp. 483 - 494. 2018. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Detection+of+EGFR+Variants+in+Plasma+A+Multilaboratory+Comparison+of+a+Real-Time+PCR+EGFR+Mutation+Test+in+Europe>. ISSN 1525-1578

DOI: 10.1016/j.jmoldx.2018.03.006

Type of production: Scientific paper
Format: Journal
Position of signature: 14
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 23
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.426
Journal in the top 25%: Yes
Position of publication: 10
No. of journals in the cat.: 76

Relevant results: Molecular testing of EGFR is required to predict the response likelihood to targeted therapy in non-small cell lung cancer. Analysis of circulating tumor DNA in plasma may complement limitations of tumor tissue. This study evaluated the interlaboratory performance and reproducibility of a real-time PCR EGFR mutation test (cobas EGFR Mutation Test v2) to detect EGFR variants in plasma. Fourteen laboratories received two identical panels of 27 single-blinded plasma samples. Samples were wild type or spiked with plasmid DNA to contain seven common EGFR variants at six predefined concentrations from 50 to 5000 copies per milliliter. The circulating tumor DNA was extracted by a cell-free circulating DNA sample preparation kit (cobas cfDNA Sample Preparation Kit), followed by duplicate analysis with the real-time PCR EGFR mutation test (Roche Molecular Systems, Pleasanton, CA). Lowest sensitivities were obtained for the c.2156G>C p.(Gly719Ala) and c.2573T>G p.(Leu858Arg) variants for the lowest target copies. For all other variants, sensitivities varied between 96.3% and 100.0%. All specificities were 98.8% to 100.0%. Coefficients of variation indicated good intralaboratory and interlaboratory repeatability and reproducibility but increased for decreasing concentrations. Prediction models revealed a significant correlation for all variants between the predefined copy number and the observed semiquantitative index values, which reflect the samples' plasma mutation load. This study demonstrates an overall robust performance of the real-time PCR EGFR mutation test kit in plasma. Prediction models may be applied to estimate the plasma mutation load for diagnostic or research purposes.

48 Arean-Cuns C.; Mercado-Gutierrez M.; Paniello-Alastruey I.; Mallor-Gimenez F.; Cordoba-Iturriagagoitia A.; Lozano María D; Santamaria-Martinez M.Dual staining for p16/Ki67 is a more specific test than cytology for triage of HPV-positive women. VIRCHOWS ARCHIV. 473 - 5, pp. 599 - 606. 2018. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/30094492>. ISSN 0945-6317

DOI: 10.1007/s00428-018-2432-z

Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 7
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 2.868
Journal in the top 25%: No
Position of publication: 24
No. of journals in the cat.: 76

Relevant results: Globally, cervical cancer (CC) screening is moving from cytology-based to HPV screening or a combination of both (co-testing). Most HPV-positive women clear the virus and do not develop relevant disease. Additional triage approaches are needed to reduce unnecessary colposcopy referrals. The p16/Ki67 dual stain cytology test (DSCT) is one of the most promising, but it has not (yet) been included as a recommendation in European guidelines. Previous studies in Spain on this issue are lacking. We studied the performance of p16/Ki67 DSCT for the triage of HPV-positive women in Navarra to detect precursor lesions (PLs) and CC compared to cytology only. We selected 1865 HPV-positive women with p16/Ki67 DSCT results and 304 women with an available biopsy result. Sensitivity, specificity and predictive values of the p16/Ki67 DSCT to detect underlying PLs and CC compared to cytology were calculated, using the biopsy as the gold standard. Cytology and p16/Ki67 DSCT showed similar sensitivity (99.0% vs. 98.0%), but cytology had significantly lower specificity (6.9 vs. 39.1%).

Of the CIN2+/HPV+ women, triage using cytology only would have resulted in 40.2% true PLs and CC, while using p16/Ki67 DSCT this was 98.0% qualifying the women for colposcopy referral. Our results show that p16/Ki67 DSCT detects more than twice as many true PLs and CC than cytology only in this population. Thus, this test can be considered as an important additional tool in HPV testing-based screening strategies, to avoid unnecessary colposcopy referrals and to reduce health care costs.

49 Juan Pablo Fusco Morales; Pita G.; Pajares María Josefa; Andueza María Pilar; Patiño-Garcia Ana; de Torres Juan Pablo; Gurpide Luis Alfonso; Zulueta Javier J; Alonso R.; Noelia Álvarez Zallo; Pio R; Melero Ignacio; Sanmamed MF; Rodríguez María Esperanza; Gil Ignacio; López-Picazo José María; Casanova C.; Baz-Davila R.; Agudo A.; Lozano María D; González Álvaro; Sala N.; Eduardo Larequi Ardanaz; Benitez J.; Montuenga Luis; Gonzalez-Neira A.; Pérez José Luis. Genomic characterization of individuals presenting extreme phenotypes of high and low risk to develop tobacco-induced lung cancer. CANCER MEDICINE. 7 - 7, pp. 3474 - 3483. 2018. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Genomic+characterization+of+individuals+presenting+extreme+phenotypes+of+high+and+low+risk+to+develop+tobacco-induced+lung+cancer>. ISSN 2045-7634

DOI: 10.1002/cam4.1500

Type of production: Scientific paper
Format: Journal
Position of signature: 20
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 27
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.357
Journal in the top 25%: No
Position of publication: 98
No. of journals in the cat.: 229

Relevant results: Single nucleotide polymorphisms (SNPs) may modulate individual susceptibility to carcinogens. We designed a genome-wide association study to characterize individuals presenting extreme phenotypes of high and low risk to develop tobacco-induced non-small cell lung cancer (NSCLC), and we validated our results. We hypothesized that this strategy would enrich the frequencies of the alleles that contribute to the observed traits. We genotyped 2.37 million SNPs in 95 extreme phenotype individuals, that is: heavy smokers that either developed NSCLC at an early age (extreme cases); or did not present NSCLC at an advanced age (extreme controls), selected from a discovery set (n=3631). We validated significant SNPs in 133 additional subjects with extreme phenotypes selected from databases including >39,000 individuals. Two SNPs were validated: rs12660420 (p(combined)=5.66x10(-5); ORcombined=2.80), mapping to a noncoding transcript exon of PDE10A; and rs6835978 (p(combined)=1.02x10(-4); ORcombined=2.57), an intronic variant in ATP10D. We assessed the relevance of both proteins in early-stage NSCLC. PDE10A and ATP10D mRNA expressions correlated with survival in 821 stage I-II NSCLC patients (p=0.01 and p<0.0001). PDE10A protein expression correlated with survival in 149 patients with stage I-II NSCLC (p=0.002). In conclusion, we validated two variants associated with extreme phenotypes of high and low risk of developing tobacco-induced NSCLC. Our findings may allow to identify individuals presenting high and low risk to develop tobacco-induced NSCLC and to characterize molecular mechanisms of carcinogenesis and resistance to develop NSCLC.

50 Elgendy M.; Abdel-Aziz AK.; Renne S. L.; Bornaghi V.; Procopio G.; Colecchia M.; Kanesvaran R.; Toh C. K.; Bossi D.; Pallavicini I.; Pérez José Luis; Lozano María D; Giandomenico V.; Mercurio C.; Lanfrancone L.; Fazio N.; Nole F.; Teh BT.; Renne G.; Minucci S.Dual modulation of MCL-1 and mTOR determines the response to sunitinib. JOURNAL OF CLINICAL INVESTIGATION. 127 - 1, pp. 153 - 168. 2017. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Dual+modulation+of+MCL-1+and+mTOR+determines+the+response+to+sunitinib>. ISSN 0021-9738

DOI: 10.1172/JCI84386

Type of production: Scientific paper
Format: Journal
Position of signature: 12
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 20
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 13.251
Journal in the top 25%: Yes

Position of publication: 4 **No. of journals in the cat.:** 133

Relevant results: Most patients who initially respond to treatment with the multi-tyrosine kinase inhibitor sunitinib eventually relapse. Therefore, developing a deeper understanding of the contribution of sunitinib's numerous targets to the clinical response or to resistance is crucial. Here, we have shown that cancer cells respond to clinically relevant doses of sunitinib by enhancing the stability of the antiapoptotic protein MCL-1 and inducing mTORC1 signaling, thus evoking little cytotoxicity. Inhibition of MCL-1 or mTORC1 signaling sensitized cells to clinically relevant doses of sunitinib in vitro and was synergistic with sunitinib in impairing tumor growth in vivo, indicating that these responses are triggered as prosurvival mechanisms that enable cells to tolerate the cytotoxic effects of sunitinib. Furthermore, higher doses of sunitinib were cytotoxic, triggered a decline in MCL-1 levels, and inhibited mTORC1 signaling. Mechanistically, we determined that sunitinib modulates MCL-1 stability by affecting its proteasomal degradation. Dual modulation of MCL-1 stability at different dose ranges of sunitinib was due to differential effects on ERK and GSK3 beta activity, and the latter also accounted for dual modulation of mTORC1 activity. Finally, comparison of patient samples prior to and following sunitinib treatment suggested that increases in MCL-1 levels and mTORC1 activity correlate with resistance to sunitinib in patients.

51 Mercado Gutiérrez M. R.; Arean Cuns C.; Gómez Dorronsoro M. L.; Paniello Alastruey I.; Mallor Giménez F.; Lozano María D; Santamaría Martínez M.Influence of age in the prevalence of high-risk human papiloma virus in women with pre-neoplasic cervical lesions in Navarra. REVISTA ESPAÑOLA DE SALUD PUBLICA. 91, pp. e201702018. 2017. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Influence+of+age+in+the+prevalence+of+high-risk+human+papiloma+virus+in+women+with+pre-neoplasic+cervical+lesions+in+Navarra>. ISSN 1135-5727

Type of production: Scientific paper **Format:** Journal
Position of signature: 6 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 7

Relevant results: Background: Cervical carcinoma (CC) is the second cause of death among women aged 15 and 44 in Spain. CC is linked to hig-risk human papillomavirus (HR-HPV) infection and its prevalence varies according age and geographical region. The awereness of the latter is essential for public health prevention efforts. The aim was to study the age related in HR-HPV genotypes in cytologies with squamous intraepithelial lesion (SIL). Methods: From a total of 67,935 ginecologic cytologies over a four-year period, we selected cytologic specimens with SIL. We used the Cervista r test to detect HR-HPV DNA. Women were classified into two groups under 35 and over 35 years old. Proportions were estimated with confidence intervals at 95% (95% CI). Results: HR-HPV prevalence was 59,7%; 64,6% in women under 35 years old. HR-HPV species alpha 9 type 16 (HR-HPV 16) and alpha 5 type 51 (HR-HPV 51) were the most prevalent (60,9% and 51,7%). High-grade squamous intraepithelial lesions (H-SIL) were twice as high in women under 35 years (6,5 vs. 3,7%). 88,8% of H-SIL was associated HR-HPV 16, which increases the probability of H-SIL against Low-grade squamous intraepithelial lesions (L-SIL) regardless of age. Conclusions: In our population HR-HPV 16 was associated to H-SIL whereas HR-HPV specie alpha 7 type 18 and HR-HPV 51 to L-SIL regardless of age. The high prevalence of HR-HPV 51 in Navarra ' s population (51,7%), suggests that local vaccination programs be re-assessed.

52 Garcia-Velloso Maria Jose; Bastarrika Gorka; de Torres Juan Pablo; Lozano María D; Pablo Antonio Sánchez Salcedo; Sancho Lidia; Núñez Jorge María; Campo Arantza; Alcaide Ana Belén; Torre Wenceslao; Richter José Ángel; Zulueta Javier J. Assessment of indeterminate pulmonary nodules detected in lung cancer screening: Diagnostic accuracy of FDG PET/CT.LUNG CANCER. 97, pp. 81 - 86. 2016. Available on-line at: <http://www.sciencedirect.com/science/journal/01695002/97/supp/C?sdc=1>. ISSN 0169-5002

DOI: 10.1016/j.lungcan.2016.04.025

Type of production: Scientific paper **Format:** Journal
Position of signature: 4 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

Impact source: ISI **Category:** Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 4.294 **Journal in the top 25%:** Yes
Position of publication: 11 **No. of journals in the cat.:** 59

Impact source: ISI **Category:** Science Edition - ONCOLOGY

Impact index in year of publication: 4.294
Journal in the top 25%: No
Position of publication: 59
No. of journals in the cat.: 217

Relevant results: A major drawback of lung cancer screening programs is the high frequency of false-positive findings on computed tomography (CT). We investigated the accuracy of selective 2-[fluorine-18]-fluoro-2-deoxy-d-glucose (FDG) Positron Emission Tomography/Computed Tomography (PET/CT) scan in assessing radiologically indeterminate lung nodules detected in lung cancer screening. Methods: FDG PET/CT was performed to characterize 64 baseline lung nodules >10 mm and 36 incidence nodules detected on low-dose CT screening in asymptomatic current or former smokers (83 men, age range 40¿83 years) at high risk for lung cancer. CT images were acquired without intravenous contrast. Nodules were analyzed by size, density, and metabolic activity and visual scored on a 5-point scale for FDG uptake. Nodules were classified as negative for malignancy when no FDG uptake was observed, or positive when focal uptake was observed in the visual analysis, and the maximum standardized uptake value (SUVmax) was measured. Final diagnosis was based on histopathological evaluation or at least 24 months of follow-up. Results: A total of 100 nodules were included. The prevalence of lung cancer was 1%. The sensitivity, specificity, NPV and PPV of visual analysis to detect malignancy were 84%, 95%, 91%, and 91%, respectively, with an accuracy of 91% (AUC 0.893). FDG PET/CT accurately detected 31 malignant tumors (diameters 9¿42 mm, SUVmax range 0.6¿14.2) and was falsely negative in 6 patients. With SUVmax threshold

53 Alegre Estíbaliz; Juan Pablo Fusco Morales; Restituto Patricia; Salas Diego; Rodríguez María Esperanza; Andueza María Pilar; Pajares María Josefa; Patiño-Garcia Ana; Pio R; Lozano María D; Gurpide Luis Alfonso; Lopez-Picazo J. M.; Gil Ignacio; Pérez José Luis; González Álvaro. Total and mutated EGFR quantification in cell-free DNA from non-small-cell lung cancer patientes detects tumor heterogeneity and presents prognostic value. TUMOR BIOLOGY. 37 - 10, pp. 13687 - 13694. 2016. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Total+and+mutated+EGFR+quantification+in+cell-free+DNA+from+non-small-cell+lung+cancer+patientes+detects+tumor+heterogeneity+and+presents+prognostic+value>. ISSN 1010-4283
DOI: 10.1007/s13277-016-5282-9

Type of production: Scientific paper
Format: Journal
Position of signature: 10
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 15

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.65
Journal in the top 25%: No
Position of publication: 81
No. of journals in the cat.: 217

Relevant results: Mutation analysis of epidermal growth factor receptor (EGFR) gene is essential for treatment selection in non-small cell lung cancer (NSCLC). Analysis is usually performed in tumor samples. We evaluated the clinical utility of EGFR analysis in plasma cell-free DNA (cfDNA) from patients under treatment with EGFR inhibitors. We selected 36 patients with NSCLC and EGFR-activating mutations. Blood samples were collected at baseline and during treatment with EGFR inhibitors. Wild-type EGFR, L858R, delE746-A750, and T790M mutations were quantified in cfDNA by droplet digital PCR. Stage IV patients had higher total circulating EGFR copy levels than stage I (3523 vs. 1003 copies/mL; $p < 0.01$). There was high agreement for activating mutations between baseline cfDNA and tumor samples, especially for L858R mutation (kappa index = 0.679; $p = 0.001$). In 34 % of advanced NSCLC patients, we detected mutations in cfDNA not previously detected in tumor samples and double mutations in 17 %. Patients with baseline total EGFR copy levels above the median presented decreased overall survival (OS) (341 vs. 870 days, $p < 0.05$) and progression-free survival (PFS) (238 vs. 783 days; $p < 0.05$) compared with those with total EGFR copy levels below the median. Patients with baseline concentrations of activating mutations above the median (94 copies/mL) had lower OS (317 vs. 805 days; $p < 0.05$) and PFS (195 vs. 724 days; $p < 0.05$). During follow-up, T790M resistance mutation was detected in 53 % of patients. Total and mutated EGFR analysis in cfDNA seems a relevant tool to characterize the molecular profile and prognosis of NSCLC patients harboring EGFR mutations.

54 Lozano María D; Tania Labiano Miravalles; Echeveste José Ignacio; Gurpide Luis Alfonso; Martín Algarra Salvador; Zhang G.; Sharma A.; Palma J. F.Assessment of EGFR and KRAS mutation status from FNAs and core-needle biopsies of non-small cell lung cancer. CANCER CYTOPATHOLOGY. 123 - 4, pp. 230 - 236. 2015. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Assessment+of+EGFR+and+KRAS+mutation+status+from+FNAs+and+core-needle+biopsies+of+non-small+cell+lung+cancer.>. ISSN 1934-662X

DOI: 10.1002/cncy.21513
Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 8

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.183
Journal in the top 25%: Yes
Position of publication: 17
No. of journals in the cat.: 79

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.183
Journal in the top 25%: No
Position of publication: 89
No. of journals in the cat.: 213

Relevant results: BACKGROUNDMolecular testing to determine gene mutation status is now the recommended standard of care for patients with advanced or metastatic Non-small cell lung cancer (NSCLC). Because the majority of patients with NSCLC present with metastatic disease, minimally invasive procedures are necessary for diagnosis, staging, and molecular analysis. However, the resulting samples have perceived limitations in the oncology community, and most commercially available tests have not been validated for these sample types. The current study was undertaken to assess the feasibility of determining epidermal growth factor receptor (EGFR) and Kirsten rat sarcoma viral oncogene homolog (KRAS) mutation status in fine-needle aspirates (FNAs) and core-needle biopsies (CNBs) after staining with Papanicolaou or hematoxylin and eosin, respectively. METHODSGene mutation status was determined in 140 NSCLC tumor samples with proprietary tests for EGFR and KRAS mutations (cobas tests) followed by Sanger sequencing of exons 18 through 21 of the EGFR gene and exon 2 of the KRAS gene. The results were analyzed based on FNA (n=91) or CNB (n=49) sampling. RESULTSThe cobas tests yielded valid results in the majority of FNA and CNB samples for both EGFR (97.9%) and KRAS (93.6%). Moreover, valid results were obtained for 90% of samples that had DNA concentrations below the values recommended by the manufacturer. For samples with valid results from both cobas testing and Sanger sequencing, 95.7% and 93% agreement were observed for EGFR status and KRAS status, respectively. CONCLUSIONSGene mutation testing can be successfully performed on cytology and CNB samples, expanding the potential of personalized cancer treatment to patients who have limited tissue samples. Cancer (Cancer Cytopathol) 2015;123:230-236. (c) 2014 The Authors. Cancer Cytopathology published by Wiley Periodicals, Inc. on behalf of American Cancer Society. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. EGFR or KRAS mutation status can be successfully determined in Papanicolaou-stained fine-needle aspiration samples and hematoxylin and eosin-stained core-needle biopsy samples using polymerase chain reaction-based tests. The findings from this pilot study highlight the feasibility of rapid and accurate mutation testing for patient samples derived from minimally invasive diagnostic procedures or from samples with limited available tissue.

55 Aramburu A.; Zudaire María Isabel; Pajares María Josefa; Agorreta J; Orta Alberto; Lozano María D; Gurpide A.; Gomez-Roman J.; Martínez José Ángel; Jassem J.; Skrzypski M.; Suraokar M.; Behrens C.; Wistuba I. I.; Pio R; Rubio A; Montuenga Luis. Combined clinical and genomic signatures for the prognosis of early stage non-small cell lung cancer based on gene copy number alterations. BMC GENOMICS. 16, pp. 752. 2015. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Combined+clinical+and+genomic+signatures+for+the+prognosis+of+early+stage+non-small+cell+lung+cancer+based+on+gene+copy+number+alterations.>. ISSN 1471-2164
DOI: 10.1186/s12864-015-1935-0
Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 17

Impact source: ISI
Category: Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Impact index in year of publication: 3.867
Journal in the top 25%: Yes
Position of publication: 32
No. of journals in the cat.: 161

Impact source: ISI
Category: Science Edition - GENETICS & HEREDITY

Impact index in year of publication: 3.867
Journal in the top 25%: No
Position of publication: 43
No. of journals in the cat.: 166

Relevant results: Background: The development of a more refined prognostic methodology for early non-small cell lung cancer (NSCLC) is an unmet clinical need. An accurate prognostic tool might help to select patients at early stages for adjuvant therapies. Results: A new integrated bioinformatics searching strategy, that combines gene copy number alterations and expression, together with clinical parameters was applied to derive two prognostic genomic signatures. The proposed methodology combines data from patients with and without clinical data with a priori information on the ability of a gene to be a prognostic marker. Two initial candidate sets of 513 and 150 genes for lung adenocarcinoma (ADC) and squamous cell carcinoma (SCC), respectively, were generated by identifying genes which have both: a) significant correlation between copy number and gene expression, and b) significant prognostic value at the gene expression level in external databases. From these candidates, two panels of 7 (ADC) and 5 (SCC) genes were further identified via semi-supervised learning. These panels, together with clinical data (stage, age and sex), were used to construct the ADC and SCC hazard scores combining clinical and genomic data. The signatures were validated in two independent datasets (n = 73 for ADC, n = 97 for SCC), confirming that the prognostic value of both clinical-genomic models is robust, statistically significant (P = 0.008 for ADC and P = 0.019 for SCC) and outperforms both the clinical models (P = 0.060 for ADC and P = 0.121 for SCC) and the genomic models applied separately (P = 0.350 for ADC and P = 0.269 for SCC). Conclusion: The present work provides a methodology to generate a robust signature using copy number data that can be potentially used to any cancer. Using it, we found new prognostic scores based on tumor DNA that, jointly with clinical information, are able to predict overall survival (OS) in patients with early-stage ADC and SCC.

56 Pablo Antonio Sánchez Salcedo; Berto Juan Antonio; de Torres Juan Pablo; Campo Arantza; Alcaide Ana Belén; Bastarrika Gorka; Pueyo Jesús Ciro; Villanueva Alberto José; Echeveste José Ignacio; Lozano María D; Garcia-Velloso Maria Jose; Seijo Luis Miguel; García José Javier; Torre Wenceslao; Pajares María Josefa; Pio R; Montuenga Luis; Zulueta Javier J. Cribado de cáncer de pulmón: catorce años de experiencia del programa internacional de detección precoz de cáncer de pulmón con TBDR de Pamplona (P-IELCAP). ARCHIVOS DE BRONCONEUMOLOGIA. 51 - 4, pp. 169 - 176. 2015. ISSN 0300-2896

DOI: 10.1016/j.arbr.2015.02.015

Type of production: Scientific paper
Format: Journal
Position of signature: 10
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 18
Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 1.771
Journal in the top 25%: No
Position of publication: 41
No. of journals in the cat.: 58

Relevant results: The experience in Spain's longest lung cancer screening program is comparable to what has been described in the rest of Europe, and confirms the feasibility and efficacy of lung cancer screening using LDCT.

57 Ajona Daniel; Razquin Cristina; Pastor M. D.; Pajares María Josefa; García J.; Cardena F.; Fleischhacker M.; Lozano María D; Zulueta Javier J; Schmidt B.; Eva María Nadal Elduayen; Paz-Ares L.; Montuenga Luis; Pio R. Elevated levels of the complement activation product C4d in bronchial fluids for the diagnosis of lung cancer. PLOS ONE. 10 - 3, pp. e0119878. 2015. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Elevated+levels+of+the+complement+activation+product+C4d+in+bronchial+fluids+for+the+diagnosis+of+lung+cancer>. ISSN 1932-6203

DOI: 10.1371/journal.pone.0119878

Type of production: Scientific paper
Format: Journal
Position of signature: 8
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 14
Impact source: ISI
Category: Science Edition - MULTIDISCIPLINARY SCIENCES
Impact index in year of publication: 3.057
Journal in the top 25%: Yes

Position of publication: 11 **No. of journals in the cat.:** 63

Relevant results: Molecular markers in bronchial fluids may contribute to the diagnosis of lung cancer. We previously observed a significant increase of C4d-containing complement degradation fragments in bronchoalveolar lavage (BAL) supernatants from lung cancer patients in a cohort of 50 cases and 22 controls (CUN cohort). The present study was designed to determine the diagnostic performance of these complement fragments (hereinafter jointly referred as C4d) in bronchial fluids. C4d levels were determined in BAL supernatants from two independent cohorts: the CU cohort (25 cases and 26 controls) and the HUVR cohort (60 cases and 98 controls). A series of spontaneous sputum samples from 68 patients with lung cancer and 10 controls was also used (LCCCIO cohort). Total protein content, complement C4, complement C5a, and CYFRA 21-1 were also measured in all cohorts. C4d levels were significantly increased in BAL samples from lung cancer patients. The area under the ROC curve was 0.82 (95%CI = 0.71-0.94) and 0.67 (95%CI = 0.58-0.76) for the CU and HUVR cohorts, respectively. In addition, unlike the other markers, C4d levels in BAL samples were highly consistent across the CUN, CU and HUVR cohorts. Interestingly, C4d test markedly increased the sensitivity of bronchoscopy in the two cohorts in which cytological data were available (CUN and HUVR cohorts). Finally, in the LCCCIO cohort, C4d levels were higher in sputum supernatants from patients with lung cancer (area under the ROC curve: 0.7; 95%CI

58 Alfaro Carlos; Echeveste José Ignacio; Rodríguez María Esperanza; Solorzano Jose Luis; Pérez José Luis; Idoate Miguel Ángel; López-Picazo José María; Sanchez-Paulete A.R.; Labiano Sara; Rouzaut Ana; Carmen Oñate Salafranca; Aznar María Ángela; Lozano María D; Melero Ignacio. Functional expression of CD137 (4-1BB) on T helper follicular cells. ONCOIMMUNOLOGY. 4 - 12, pp. e1054597. 2015. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Functional+expression+of+CD137+(4-1BB)+on+T+helper+follicular+cells>. ISSN 2162-4011

DOI: 10.1080/2162402X.2015.1054597

Type of production: Scientific paper **Format:** Journal

Position of signature: 13 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 14

Relevant results: CD137 (4-1BB) is a surface marker discovered on activated T lymphocytes. However, its expression pattern is broader and has also been described on activated NK cells, B-cells and myeloid cells including mature dendritic cells. In this study, we have immunostained for CD137 on paraffin-embedded lymphoid tissues including tonsils, lymph nodes, ectopic tertiary lymphoid tissue in Hashimoto thyroiditis and cancer. Surprisingly, immunostaining mainly decorates intrafollicular lymphocytes in the tissues analyzed, with only scattered staining in interfollicular areas. Moreover, pathologic lymphoid follicles in follicular lymphoma and tertiary lymphoid tissue associated to non-small cell lung cancer showed a similar pattern of immunostaining. Multicolor flow cytometry demonstrated that CD137 expression was restricted to CD4+ CXCR5+ follicular T helper lymphocytes in tonsils and lymph nodes. Short term culture of lymph node cell suspensions in the presence of an agonist anti-CD137 mAb or CD137-ligand results in the functional upregulation of TFH cells, including CD40L surface expression and cytokine production, in three out of six cases. As a consequence, immunostimulatory monoclonal antibodies, anti-CD137 mAb such as urelumab and PF-05082566 should be expected to primarily act on this lymphocyte subset, thus modifying ongoing humoral immune responses.

59 Sanmamed MF; Fernández Sara; Rodriguez C.; Zarate Ruth Noemí; Lozano María D; Leyre Zubiri Oteiza; Pérez José Luis; Martín Algarra Salvador; González Álvaro. Quantitative cell-free circulating BRAFV600E mutation analysis by use of droplet digital PCR in the follow-up of patients with melanoma being treated with BRAF inhibitors. CLINICAL CHEMISTRY. 61 - 1, pp. 297 - 304. 2015. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Quantitative+cell-free+circulating+BRAFV600E+mutation+analysis+using+droplet+digital+PCR+in+the+follow-up+of+patients+with+melanoma+being+treated+with+BRAF>. ISSN 0009-9147

DOI: 10.1373/clinchem.2014.230235

Type of production: Scientific paper **Format:** Journal

Position of signature: 5 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 9

Impact source: ISI **Category:** Science Edition - MEDICAL LABORATORY TECHNOLOGY

Impact index in year of publication: 7.457
Position of publication: 1
Journal in the top 25%: Yes
No. of journals in the cat.: 30

Relevant results: BACKGROUND: Around 50% of cutaneous melanomas harbor the BRAF(V600E) mutation and can be treated with BRAF inhibitors. DNA carrying this mutation can be released into circulation as cell-free BRAF(V600E) (cfBRAF(V600E)). Droplet digital PCR (ddPCR) is an analytically sensitive technique for quantifying small concentrations of DNA. We studied the plasma concentrations of cfBRAF(V600E) by ddPCR in patients with melanoma during therapy with BRAF inhibitors. METHODS: Plasma concentrations of cfBRAF(V600E) were measured in 8 controls and 20 patients with advanced melanoma having the BRAF(V600E) mutation during treatment with BRAF inhibitors at baseline, first month, best response, and progression. RESULTS: The BRAF(V600E) mutation was detected by ddPCR even at a fractional abundance of 0.005% in the wild-type gene. Agreement between tumor tissue BRAF(V600E) and plasma cfBRAF(V600E) was 84.3%. Baseline cfBRAF(V600E) correlated with tumor burden (r = 0.742, P < 0.001). cfBRAF(V600E) concentrations decreased significantly at the first month of therapy (basal median, 216 copies/mL; Q1-Q3, 27-647 copies/mL; first response median, 0 copies/mL; Q1-Q3, 0-49 copies/mL; P < 0.01) and at the moment of best response (median, 0 copies/mL; Q1-Q3, 0-33 copies/mL; P < 0.01). At progression, there was a significant increase in the concentration of cfBRAF(V600E) compared with best response (median, 115 copies/mL; Q1-Q3, 3-707 copies/mL; P = 0.013). Lower concentrations of basal cfBRAF(V600E) were significantly associated with longer overall survival and progression-free survival (27.7 months and 9 months, respectively) than higher basal concentrations (8.6 months and 3 months, P < 0.001 and P = 0.024, respectively). CONCLUSIONS: cfBRAF(V600E) quantification in plasma by ddPCR is useful as a follow-up to treatment response in patients with advanced melanoma.

60 Lozano María D; Tania Labiano Miravalles; Zudaire María Isabel; Subtil José Carlos; Gurpide Luis Alfonso; Echeveste José Ignacio; Zulueta Javier J; Martín Algarra Salvador; Pérez José Luis. Variations in molecular profile in NSCLC can be analyzed using cytological samples: development of EGFR resistance mutations and coexistence of ALK-EML4 translocation in an EGFR-sensitive patient. INTERNATIONAL JOURNAL OF SURGICAL PATHOLOGY. 23 - 2, pp. 111 - 115. 2015. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Variations+in+molecular+profile+in+NSCLC+can+be+analyzed+using+cytological+samples%3A+development+of+EGFR+resistance+mutations+and+coexistence+of+ALK-EML4+translocation+in+an+EGFR-sensitive+patient.>. ISSN 1066-8969
DOI: 10.1177/1066896914539551
Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 9

Impact source: ISI
Impact index in year of publication: 0.782
Position of publication: 70
Category: Science Edition - PATHOLOGY
Journal in the top 25%: No
No. of journals in the cat.: 79

Impact source: ISI
Impact index in year of publication: 0.782
Position of publication: 158
Category: Science Edition - SURGERY
Journal in the top 25%: No
No. of journals in the cat.: 200

Relevant results: As a result of therapeutic advances, a revolution is taking place in the lung cancer field with major implications for pathologic diagnosis and tissue management. We report a case of a non-small cell lung carcinoma patient with coexistence of EGFR mutations and ALK-EML4 rearrangements that responded to EGFR inhibitors and in which the development of a new resistance mutation in exon 20 of EGFR-determined treatment resistance. All the molecular determinations were performed in cytological samples. To our knowledge, this is the first case reported with these characteristics, and the 11th case described with coexistence of EGFR mutations and ALK-EML4 rearrangements. The EGFR L858R mutation in exon 21 was found at diagnosis, and the patient presented a 4-year response to erlotinib. On progression, the T790M resistance mutation in the EGFR exon 20 was also confirmed in cytological samples. At this point, fluorescence in situ hybridization also detected ALK-EML4 translocation. This case emphasizes the usefulness of cytological samples for molecular analysis in lung adenocarcinoma, as well as the relevance of repeating biopsies/fine-needle aspirations in tumor recurrences to assess the mutation profile of the disease.

61 Idoate Miguel Ángel; Echeveste José Ignacio; Diez Valle Ricardo; Lozano María D; Aristu José Javier. Biological and clinical significance of the intratumour heterogeneity of PTEN protein expression and the corresponding molecular abnormalities of the PTEN gene in glioblastomas. NEUROPATHOLOGY AND APPLIED NEUROBIOLOGY. 40 - 6, pp. 736 - 746. 2014. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Biological+and+clinical+significance+of+the+intratumour+heterogeneity+of+PTEN+protein+expression+and+the+corresponding+molecular+abnormalities+of+the+PTEN+gene+in+glioblastomas>. ISSN 0305-1846
DOI: 10.1111/nan.12117

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 5

Impact source: ISI
Category: Science Edition - NEUROSCIENCES
Impact index in year of publication: 3.927
Journal in the top 25%: No
Position of publication: 69
No. of journals in the cat.: 252

Impact source: ISI
Category: Science Edition - CLINICAL NEUROLOGY
Impact index in year of publication: 3.927
Journal in the top 25%: Yes
Position of publication: 34
No. of journals in the cat.: 192

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.927
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 76

Relevant results: AIMS: Glioblastomas display marked phenotypic and molecular heterogeneity. The expression of the PTEN protein in glioblastomas also shows great intratumour heterogeneity, but the significance of this heterogeneity has so far received little attention. METHODS: We conducted a comparative study on paraffin and frozen samples from 60 glioblastomas. Based on PTEN immunostaining, paraffin glioblastomas were divided into positive (homogeneous staining) and both positive and negative (heterogeneous staining) tumours. DNA was extracted from manually microdissected samples from representative areas, and from frozen samples taken randomly from the same tumours. Loss of heterozygosity (LOH) of 10q23 and hypermethylation status of the PTEN promoter were studied, and the molecular findings were correlated with overall survival. RESULTS: PTEN protein was present heterogeneously in 42 cases and homogeneously in 18 cases. In homogeneous glioblastomas, no correlation was found between PTEN protein expression and the LOH of the gene. Surprisingly, in the heterogeneous glioblastomas, LOH was found significantly more frequently ($P < 0.001$) in PTEN-positive areas (81%) than in PTEN-negative ones (35.7%). In general, molecular results of frozen tissue were representative of the tumour. Only two cases of methylation of the PTEN promoter were identified. A significant difference was found for overall survival for LOH10q23 status ($P = 0.005$) and for homogeneous vs. heterogeneous tumours ($P = 0.014$). CONCLUSION: The expression of PTEN protein does not correlate with the abnormalities of the LOH of the gene. Interestingly, patients with glioblastomas presenting either LOH of 10q23 or heterogeneous PTEN expression have a poorer prognosis.

62 Prior Celia; Pérez José Luis; García-Donas J.; Rodríguez-Antona C.; Guruceaga Elisabet; Esteban E.; Suarez C.; Castellano D.; Del Alba A. G.; Lozano María D; Carles J.; Climent M. A.; Arranz J. A.; Gallardo E.; Puente J.; Bellmunt J.; Gurpide Luis Alfonso; López-Picazo José María; González Álvaro; Mellado B.; Martínez E.; Moreno F.; Font A.; Calvo Alfonso. Identification of tissue microRNAs predictive of sunitinib activity in patients with metastatic renal cell carcinoma. PLOS ONE. 9 - 1, 2014. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=edswsc&AN=000330339800035&lang=es&site=eds-live>. ISSN 1932-6203
DOI: 10.1371/journal.pone.0086263

Type of production: Scientific paper
Format: Journal
Position of signature: 10
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 24

Impact source: ISI
Category: Science Edition - MULTIDISCIPLINARY SCIENCES

Impact index in year of publication: 3.234
Journal in the top 25%: Yes
Position of publication: 9
No. of journals in the cat.: 57

Relevant results: Purpose: To identify tissue microRNAs predictive of sunitinib activity in patients with metastatic renal-cell-carcinoma (MRCC) and to evaluate in vitro their mechanism of action in sunitinib resistance. Methods: We screened 673 microRNAs using TaqMan Low-density-Arrays (TLDAs) in tumors from MRCC patients with extreme phenotypes of marked efficacy and resistance to sunitinib, selected from an identification cohort (n = 41). The most relevant differentially expressed microRNAs were selected using bioinformatics-based target prediction analysis and quantified by qRT-PCR in tumors from patients presenting similar phenotypes selected from an independent cohort (n = 101). In vitro experiments were conducted to study the role of miR-942 in sunitinib resistance. Results: TLDAs identified 64 microRNAs differentially expressed in the identification cohort. Seven candidates were quantified by qRT-PCR in the independent series. MiR-942 was the most accurate predictor of sunitinib efficacy (p = 0.0074). High expression of miR-942, miR-628-5p, miR-133a, and miR-484 was significantly associated with decreased time to progression and overall survival. These microRNAs were also overexpressed in the sunitinib resistant cell line Caki-2 in comparison with the sensitive cell line. MiR-942 overexpression in Caki-2 up-regulates MMP-9 and VEGF secretion which, in turn, promote HBMEC endothelial migration and sunitinib resistance. Conclusions: We identified differentially expressed microRNAs in MRCC patients presenting marked sensitivity or resistance to sunitinib. MiR-942 was the best predictor of efficacy. We describe a novel paracrine mechanism through which high miR-942 levels in MRCC cells up-regulates MMP-9 and VEGF secretion to enhance endothelial migration and sunitinib resistance. Our results support further validation of these miRNA in clinical confirmatory studies.

63 Sanmamed MF; Fernández Sara; María del Carmen Milagros Rodríguez Jiménez; Lozano María D; Echeveste José Ignacio; Pérez José Luis; Alegre Estíbaliz; Omar Esteban Carranza Rua; Leyre Zubiri Oteiza; Martín Algarra Salvador; González Álvaro. Relevance of MIA and S100 serum tumor markers to monitor BRAF inhibitor therapy in metastatic melanoma patients. CLINICA CHIMICA ACTA. 429, pp. 168 - 174. 2014. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Relevance+of+MIA+and+S100+serum+tumor+markers+to+monitor+BRAF+inhibitor+therapy+in+metastatic+melanoma+patients.>. ISSN 0009-8981
DOI: 10.1016/j.cca.2013.11.034

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 11
Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 2.824
Journal in the top 25%: Yes
Position of publication: 5
No. of journals in the cat.: 30

Relevant results: BRAF V600 mutation has been reported in more than 50% of melanoma cases and its presence predicts clinical activity of BRAF inhibitors (iBRAF). We evaluated the rote of MIA, S100 and LDH to monitor iBRAF efficiency in advanced melanoma patients presenting BRAF V600 mutations. This was a prospective study of melanoma patients harboring the BRAF V600 mutation and treated with iBRAF within a clinical trial (dabrafenib) or as part of an expanded access program (vemurafenib). MIA, S100 and LDH were analyzed in serum at baseline, and every 4-6 weeks during treatment. Eighteen patients with melanoma stages IIIc-IV were enrolled with 88.8% of response rate to iBRAF. Baseline concentrations of all the tumor markers correlated with tumor burden. MIA and S100 concentrations decreased significantly one month after the beginning of treatment and, upon progression, their concentrations increased significantly above the minimum levels previously achieved. MIA levels lower than 9 mu g/L one month after the beginning of treatment and S100 concentrations lower than 0.1 mu g/L at the moment of best response were associated With improved progression-free survival. In conclusion, MIA and S100 are useful to monitor response in melanoma patients treated with iBRAF.

64 Caicedo Carlos Javier; Garcia-Velloso Maria Jose; Lozano María D; Tania Labiano Miravalles; Carmen Vigil Díaz; López-Picazo José María; Gurpide Luis Alfonso; Zulueta Javier J; Richter José Ángel; Pérez José Luis. Role of [F-18]FDG PET in prediction of KRAS and EGFR mutation status in patients with advanced non-small-cell lung cancer. EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING. 41 - 11, pp. 2058 - 2065. 2014. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/24990403/>. ISSN 1619-7070
DOI: 10.1007/s00259-014-2833-4

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING

Impact index in year of publication: 5.383
Journal in the top 25%: Yes
Position of publication: 7
No. of journals in the cat.: 125

Relevant results: Purpose The tumour molecular profile predicts the activity of epidermal growth factor receptor (EGFR) inhibitors in non-small-cell lung cancer (NSCLC). However, tissue availability and tumour heterogeneity limit its assessment. We evaluated whether [F-18]FDG PET might help predict KRAS and EFGR mutation status in NSCLC. Methods Between January 2005 and October 2011, 340 NSCLC patients were tested for KRAS and EGFR mutation status. We identified patients with stage III and IV disease who had undergone [F-18]FDG PET/CT scanning for initial staging. SUVpeak, SUVmax and SUVmean of the single hottest tumour lesions were calculated, and their association with KRAS and EGFR mutation status was assessed. A receiver operator characteristic (ROC) curve analysis and a multivariate analysis (including SUVmean, gender, age and AJCC stage) were performed to identify the potential value of [F-18]FDG PET/CT for predicting KRAS mutation. Results From 102 patients staged using [F-18]FDG PET/CT, 28 (27 %) had KRAS mutation (KRAS+), 22 (22 %) had EGFR mutation (EGFR+) and 52 (51 %) had wild-type KRAS and EGFR profiles (WT). KRAS+ patients showed significantly higher [F-18]FDG uptake than EGFR+ and WT patients (SUVmean 9.5, 5.7 and 6.6, respectively; p < 0.001). No significant differences were observed in [F-18]FDG uptake between EGFR+ patients and WT patients. ROC curve analysis for KRAS mutation status discrimination yielded an area under the curve of 0.740 for SUVmean (p < 0.001). The multivariate analysis showed a sensitivity and specificity of 78.6 % and 62.2 %, respectively, and the AUC was 0.773. Conclusion NSCLC patients with tumours harbouring KRAS mutations showed significantly higher [F-18]FDG uptake than WT patients, as assessed in terms of SUVpeak, SUVmax and SUVmean. A multivariate model based on age, gender, AJCC stage and SUVmean might be used as a predictive marker of KRAS mutation status in patients with stage III or IV NSCLC.

65 Caicedo C; Garcia-Velloso Maria Jose; Lozano María D; Labiano T; Vigil Diaz C; López-Picazo José María; Gurpide Luis Alfonso; Zulueta Javier J; Richter José Ángel; Pérez José Luis. Role of [18F]FDG PET in prediction of KRAS and EGFR mutation status in patients with advanced non-small-cell lung cancer. EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING. 41 - 11, pp. 2058 - 65. 2014. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/24990403>. ISSN 1619-7070

DOI: 10.1007/s00259-014-2833-4

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING

Impact index in year of publication: 5.383
Journal in the top 25%: Yes
Position of publication: 7
No. of journals in the cat.: 125

Relevant results: PURPOSE: The tumour molecular profile predicts the activity of epidermal growth factor receptor (EGFR) inhibitors in non-small-cell lung cancer (NSCLC). However, tissue availability and tumour heterogeneity limit its assessment. We evaluated whether [(18)F]FDG PET might help predict KRAS and EFGR mutation status in NSCLC. METHODS: Between January 2005 and October 2011, 340 NSCLC patients were tested for KRAS and EGFR mutation status. We identified patients with stage III and IV disease who had undergone [(18)F]FDG PET/CT scanning for initial staging. SUVpeak, SUVmax and SUVmean of the single hottest tumour lesions were calculated, and their association with KRAS and EGFR mutation status was assessed. A receiver operator characteristic (ROC) curve analysis and a multivariate analysis (including SUVmean, gender, age and AJCC stage) were performed to identify the potential value of [(18)F]FDG PET/CT for predicting KRAS mutation. RESULTS: From 102 patients staged using [(18)F]FDG PET/CT, 28 (27%) had KRAS mutation (KRAS+), 22 (22%) had EGFR mutation (EGFR+) and 52 (51%) had wild-type KRAS and EGFR profiles (WT). KRAS+ patients showed significantly higher [(18)F]FDG uptake than EGFR+ and WT patients (SUVmean 9.5, 5.7

and 6.6, respectively; p¿<¿0.001). No significant differences were observed in [(18)F]FDG uptake between EGFR+ patients and WT patients. ROC curve analysis for KRAS mutation status discrimination yielded an area under the curve of 0.740 for SUVmean (p¿<¿0.001).

66 Castañón Eduardo; Joaquim Bosch Barrera; Lopez I.; Collado V.; Moreno-Jiménez Marta; López-Picazo José María; Arbea Leire; Lozano María D; Calvo Alfonso; Gil Ignacio. Id1 and Id3 co-expression correlates with clinical outcome in stage III-N2 non-small cell lung cancer patients treated with definitive chemoradiotherapy. JOURNAL OF TRANSLATIONAL MEDICINE. 11, pp. 13. 2013. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/23311395/>. ISSN 1479-5876

DOI: 10.1186/1479-5876-11-13

Type of production: Scientific paper
Format: Journal
Position of signature: 8
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 3.991
Journal in the top 25%: Yes
Position of publication: 24
No. of journals in the cat.: 124

Relevant results: Background: Inhibitor of DNA binding 1 (Id1) and 3 (Id3) genes have been related with the inhibition of cell differentiation, cell growth promotion and tumor metastasis. Recently, Id1 has been identified as an independent prognostic factor in patients with lung adenocarcinoma, regardless of the stage. Furthermore, Id1 may confer resistance to treatment (both, radiotherapy and chemotherapy). Methods: We have studied, using monoclonal antibodies for immunohistochemistry, the Id1 and Id3 tumor epithelial expression in 17 patients with stage III-N2 non-small cell lung cancer (NSCLC) treated with definitive chemoradiotherapy. Results: Id1 expression is observed in 82.4% of the tumors, whereas Id3 expression is present in 41.2% of the samples. Interestingly, Id1 and Id3 expression are mutually correlated (R = 0.579, p = 0.015). In a subgroup analysis of patients with the most locally advanced disease (T4N2 stage), co-expression of Id1 and Id3 showed to be related with a worse overall survival (45 vs 6 months, p = 0.002). A trend towards significance for a worse progression free survival (30 vs 1 months, p = 0.219) and a lower response rate to the treatment (RR = 50% vs 87.5%, p = 0.07) were also observed. Conclusions: A correlation between Id1 and Id3 protein expression is observed. Id1 and Id3 co-expression seems associated with a poor clinical outcome in patients with locally advanced NSCLC treated with definitive chemoradiotherapy.

67 Ajona Daniel; Pajares María Josefa; Leticia Corrales Pecino; Pérez José Luis; Agorreta J; Lozano María D; Torre Wenceslao; Massion P. P.; de Torres Juan Pablo; Jantus-Lewintre E.; Camps C.; Zulueta Javier J; Montuenga Luis; Pio R. Investigation of complement activation product c4d as a diagnostic and prognostic biomarker for lung cancer. JOURNAL OF THE NATIONAL CANCER INSTITUTE. 105 - 18, pp. 1385 - 1393. 2013. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=Investigation+of+complement+activation+product+c4d+as+a+diagnostic+and+prognostic+biomarker+for+lung+cancer.>. ISSN 1460-2105

DOI: 10.1093/jnci/djt205

Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 14

Relevant results: BACKGROUND: There is a medical need for diagnostic biomarkers in lung cancer. We evaluated the diagnostic performance of complement activation fragments. METHODS: We assessed complement activation in four bronchial epithelial and seven lung cancer cell lines. C4d, a degradation product of complement activation, was determined in 90 primary lung tumors; bronchoalveolar lavage supernatants from patients with lung cancer (n = 50) and nonmalignant respiratory diseases (n = 22); and plasma samples from advanced (n = 50) and early lung cancer patients (n = 84) subjects with inflammatory lung diseases (n = 133), and asymptomatic individuals enrolled in a lung cancer computed tomography screening program (n = 190). Two-sided P values were calculated by Mann-Whitney U test. RESULTS: Lung cancer cells activated the classical complement pathway mediated by C1q binding that was inhibited by phosphomonoesters. Survival was decreased in patients with high C4d deposition in tumors (hazard ratio [HR] = 3.06; 95% confidence interval [CI] = 1.18 to 7.91). C4d levels were increased in bronchoalveolar lavage fluid from lung cancer patients compared with patients with nonmalignant

respiratory diseases (0.61 ± 0.87 vs 0.16 ± 0.11 µg/mL; P < .001). C4d levels in plasma samples from lung cancer patients at both advanced and early stages were also increased compared with control subjects (4.13 ± 2.02 vs 1.86 ± 0.95 µg/mL, P < 0.001; 3.18 ± 3.20 vs 1.13 ± 0.69 µg/mL, P < .001, respectively). C4d plasma levels were associated with shorter survival in patients at advanced (HR = 1.59; 95% CI = 0.97 to 2.60) and early stages (HR = 5.57; 95% CI = 1.60 to 19.39). Plasma C4d levels were reduced after surgical removal of lung tumors (P < .001) and were associated with increased lung cancer risk in asymptomatic individuals with (n = 32) or without lung cancer (n = 158) (odds ratio = 4.38; 95% CI = 1.61 to 11.93). CONCLUSIONS: Complement fragment C4d may serve as a biomarker for early diagnosis and prognosis of lung cancer.

68 Pajares María Josefa; Agorreta J; Larráyoz Marta; Vesin Aurélien; Ezponda Teresa; Zudaire María Isabel; Torre Wenceslao; Lozano María D; Brambilla Elizabeth; Brambilla Christian; Wistuba Ignacio I.; Behrens Carmen; Timsit Jean Francoise; Pio R; Field John K; Montuenga Luis. Expression of tumor-derived vascular endothelial growth factor and its receptors is associated with outcome in early squamous cell carcinoma of the lung. Journal of Clinical Oncology. 30 - 10, pp. 1129 - 1136. 2012. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=22355056&lang=es&site=eds-live>. ISSN 0732-183X

DOI: 10.1200/JCO.2011.37.4231

Type of production: Scientific paper
Format: Journal
Position of signature: 8
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 16
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 18.038
Journal in the top 25%: Yes
Position of publication: 5
No. of journals in the cat.: 196

Relevant results: Purpose: Antiangiogenic therapies targeting the vascular endothelial growth factor (VEGF) pathway have yielded more modest clinical benefit to patients with non-small-cell lung cancer (NSCLC) than initially expected. Clinical data suggest a distinct biologic role of the VEGF pathway in the different histologic subtypes of lung cancer. To clarify the influence of histologic differentiation in the prognostic relevance of VEGF-mediated signaling in NSCLC, we performed a concomitant analysis of the expression of three key elements of the VEGF pathway in the earliest stages of the following two principal histologic subtypes: squamous cell carcinoma (SCC) and adenocarcinoma (ADC). Patients and Methods: We evaluated tumor cell expression of VEGF, VEGF receptor (VEGFR) 1, and VEGFR2 using automatic immunostaining in a series of 298 patients with early-stage NSCLC recruited as part of the multicenter European Early Lung Cancer Detection Group project. A score measuring the VEGF signaling pathway was calculated by adding the tumor cell expression value of VEGF and its two receptors. The results were validated in two additional independent cohorts of patients with NSCLC. Results: The combination of high VEGF, VEGFR1, and VEGFR2 protein expression was associated with lower risk of disease progression in early SCC (univariate analysis, P = .008; multivariate analysis, hazard ratio, 0.62; 95% CI, 0.42 to 0.92; P = .02). The results were validated in two independent patient cohorts, confirming the favorable prognostic value of high VEGF signaling score in early lung SCC. Conclusion: Our results clearly indicate that the combination of high expression of the three key elements in the VEGF pathway is associated with a good prognosis in patients with early SCC but not in patients with ADC.

69 Lozano María D; Zulueta Javier J; Echeveste José Ignacio; Gurpide Luis Alfonso; Seijo Luis Miguel; Martín Algarra Salvador; Anabel Del Barrio Diaz Aldagalan; Pio R; Idoate Miguel Ángel; Tania Labiano Miravalles; Pérez José Luis. Assessment of epidermal growth factor receptor and K-Ras mutation status in cytological stained smears of non small cell lung cancer patients: Correlation with clinical outcomes. ONCOLOGIST. 16 - 6, pp. 877 - 885. 2011. Available on-line at: <http://hdl.handle.net/10171/23549>. ISSN 1083-7159

DOI: 10.1634/theoncologist.2010-0155 .

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 11
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.91
Journal in the top 25%: No

Position of publication: 50 **No. of journals in the cat.:** 194

Relevant results: The mutation status was identical in patients who had both biopsies and cytological samples analyzed. Conclusion. Assessment of EGFR and K-ras mutations in cytological samples is feasible and comparable with biopsy results, making individualized treatment

70 Lozano María D; Zulueta Javier J; Echeveste José Ignacio; Gurpide Luis Alfonso; Seijo Luis Miguel; Martín Algarra Salvador; Anabel Del Barrio Diaz Aldagalan; Pio R; Idoate Miguel Ángel; Tania Labiano Miravalles; Pérez José Luis. Assessment of epidermal growth factor receptor and K-ras mutation status in cytological stained smears of non-small cell lung cancer patients: correlation with clinical outcomes. ONCOLOGIST. 16 - 6, pp. 877 - 885. 2011. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/21572125/>. ISSN 1083-7159

DOI: 10.1634/theoncologist.2010-0155

Type of production: Scientific paper **Format:** Journal

Position of signature: 1

Total no. authors: 11 **Corresponding author:** Yes

Impact source: ISI **Category:** Science Edition - ONCOLOGY

Impact index in year of publication: 3.91 **Journal in the top 25%:** No

Position of publication: 50 **No. of journals in the cat.:** 194

Relevant results: Objective. Epidermal growth factor receptor (EGFR) and K-ras mutations guide treatment selection in non-small cell lung cancer (NSCLC) patients. Although mutation status is routinely assessed in biopsies, cytological specimens are frequently the only samples available. We determined EGFR and K-ras mutations in cytological samples. Methods. DNA was extracted from 150 consecutive samples, including 120 Papanicolau smears (80%), 10 cell blocks (7%), nine fresh samples (6%), six ThinPrep(R) tests (4%), and five body cavity fluids (3.3%). Papanicolau smears were analyzed when they had > 50% malignant cells. Polymerase chain reaction and direct sequencing of exons 18-21 of EGFR and exon 2 of K-ras were performed. EGFR mutations were simultaneously determined in biopsies and cytological samples from 20 patients. Activity of EGFR tyrosine kinase inhibitors (TKIs) was assessed. Results. The cytological diagnosis was adenocarcinoma in 110 samples (73%) and nonadenocarcinoma in 40 (27%) samples. EGFR mutations were identified in 26 samples (17%) and K-ras mutations were identified in 18 (12%) samples. EGFR and K-ras mutations were mutually exclusive. In EGFR-mutated cases, DNA was obtained from stained smears in 24 cases (92%), pleural fluid in one case (4%), and cell block in one case (4%). The response rate to EGFR TKIs in patients harboring mutations was 75%. The mutation status was identical in patients who had both biopsies and cytological samples analyzed. Conclusion. Assessment of EGFR and K-ras mutations in cytological samples is feasible and comparable with biopsy results, making individualized treatment selection possible for NSCLC patients from whom tumor biopsies are not available.

71 Lozano María D; Subtil José Carlos; Tania Labiano Miravalles; Echeveste José Ignacio; Prieto-Frías C; Betes M T; Álvarez-Cienfuegos Francisco Javier; Idoate Miguel Ángel. EchoBrush may be superior to standard EUS-guided FNA in the evaluation of cystic lesions of the pancreas: preliminary experience. CANCER CYTOPATHOLOGY. 119 - 3, pp. 209 - 2014. 2011. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=edswsc&AN=000291756200011&lang=es&site=eds-live>. ISSN 1934-662X

DOI: 10.1002/cncy.20133

Type of production: Scientific paper **Format:** Journal

Position of signature: 1 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 8

Impact source: ISI **Category:** Science Edition - ONCOLOGY

Impact index in year of publication: 3.333 **Journal in the top 25%:** No

Position of publication: 65 **No. of journals in the cat.:** 194

Impact source: ISI **Category:** Science Edition - PATHOLOGY

Impact index in year of publication: 3.333 **Journal in the top 25%:** Yes

Position of publication: 16 **No. of journals in the cat.:** 78

Relevant results: Cystic lesions of the pancreas are being detected with increasing frequency. Endoscopic ultrasound-guided fine-needle aspiration (EUS-FNA) is one of the most precise methods of diagnosis but still has limited accuracy. A new, through-the-needle cytologic brush system (EchoBrush; Cook Medical, Bloomington, Ind) has been approved for use during EUS evaluation of cystic pancreatic lesions. METHODS: Data from 127 EUS-FNAs of pancreatic cystic lesions were analyzed to compare the cytologic yield of EchoBrush with conventional EUS-FNA. An attending cytopathologist was present on site to assess specimen adequacy in all the cases. Diagnostic yields of both procedures, as well as related adverse events, were recorded. Statistical analysis was performed with the SPSS 15.0 version software (SPSS, Chicago, Ill). RESULTS: A total of 127 cystic lesions of the pancreas from 120 patients (42 men and 78 women, mean age of 62.17 ± 12.17 years) were included in the study. Mean size of lesions was 23.58 ± 21.69 mm. Adequacy of the samples and diagnostic yield were higher using EchoBrush. In 80 (63 %) cases, conventional EUS-FNA was performed, whereas in 47 (37%), we used EchoBrush. Diagnostic material was obtained in 85.1% (40 of 47) of cases using EchoBrush and in 66.3% (53 of 80) with conventional EUS-FNA. (P < .05). There were very few clinically relevant complications related to EUS-FNA and EUS-EchoBrush techniques. CONCLUSIONS: This study suggests that cytological specimens from pancreatic cystic lesions obtained using EchoBrush at the time of EUS are superior to conventional EUS-FNA mainly because of the higher yield of epithelial cells. Larger studies are needed to compare both methods.

72 Seijo Luis Miguel; Campo Arantza; de Torres Juan Pablo; Lozano María D; María Elena Martino Casado; Bastarrika Gorka; Alcaide Ana Belén; María del Mar Lacunza Lizasoain; Zulueta Javier J; Garcia-Velloso Maria Jose. FDG uptake and the diagnostic yield of transbronchial needle aspiration. JOURNAL OF BRONCHOLOGY & INTERVENTIONAL PULMONOLOGY. 18 - 1, pp. 7 - 14. 2011. ISSN 1944-6586

DOI: 10.1097/LBR.0b013e318206fc03

Type of production: Scientific paper

Format: Journal

Position of signature: 4

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Relevant results: Objective: The objective of our study was to investigate whether fluorodeoxyglucose (FDG) positron emission tomography scanning uptake impacts the yield of transbronchial needle aspiration (TBNA). Methods: We carried out a retrospective analysis of data from 140 consecutive patients (178 lymph nodes) undergoing positron emission tomography-computed tomography scanning and subsequent TBNA with rapid onsite cytologic evaluation of the specimen. Patient and lymph node characteristics, including nodal station, size, FDG uptake, number of passes with the needle, sample adequacy, and the final diagnosis were recorded. Results: The diagnostic yield of TBNA was 75%. Themean short axis lymph node diameter was 18.7+/-9 mm and mean maximum standardized uptake value (SUVmax) was 7.7+/-4. The diagnostic yield depended on the lymph node size [odds ratio (OR)=1.07 (1.00-1.14); P=0.04], clinical suspicion of malignancy [OR=5.13 (1.95-13.52); P=0.001], malignant diagnosis [OR=4.91 (1.71-14.09); P=0.003], and FDG uptake [for SUVmax cutoff of 3.0: OR=33.8 (9.2-124); P<0.001]. Only clinical suspicion of cancer [OR=6.2 (2.2-17.2); P=0.001] and FDG uptake [for SUVmax cutoff of 3.0: OR=33.8 (9.2-123.8); P<0.001] remained significant on multivariate analysis. Receiver operating characteristic curves combining 3 key variables (lymph node size, clinical suspicion of malignancy, and SUVmax) showed an area of 0.83 under the curve for a 2.5 SUVmax cutoff and 0.84 for a 3.0 cutoff. Conclusions: FDG uptake is the single most important variable impacting the TBNA yield. TBNA of lymph nodes with an SUVmax less than 3.0 is rarely diagnostic.

73 Ponz-Sarvise Mariano; Nguewa Paul; Pajares María Josefa; Agorreta J; Lozano María D; Redrado M; Pio R; Behrens C; Wistuba II; Carlos Enrique García Franco; Jesús Miguel García-Foncillas López; Montuenga Luis; Calvo Alfonso; Gil Ignacio. Inhibitor of differentiation-1 as a novel prognostic factor in NSCL patients with adenocarcinoma histology and its potential contribution to therapy resistance. CLINICAL CANCER RESEARCH. 17 - 12, pp. 4155 - 4166. 2011. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=21540238&lang=es&site=eds-live>. ISSN 1078-0432

DOI: 10.1158/1078-0432.CCR-10-3381

Type of production: Scientific paper

Format: Journal

Position of signature: 5

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 14

Impact source: ISI

Category: Science Edition - ONCOLOGY

Impact index in year of publication: 7.742
Position of publication: 14
Journal in the top 25%: Yes
No. of journals in the cat.: 194

74 Pio R; García José Javier; Leticia Corrales Pecino; Ajona Daniel; Flischhacker M; Pajares María Josefa; Cardenal F; Seijo Luis Miguel; Zulueta Javier J; Nadal E; Witt C; Lozano María D; Schmidt B; Montuenga Luis. Complement factor H is elevated in bronchoalbeolar lavage fluid and sputum from patients with lung cancer. Cancer epidemiology, biomarkers & prevention. 19 - 10, pp. 2655 - 2672. 2010. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=20802023&lang=es&site=eds-live>. ISSN 1055-9965
DOI: 10.1158/1055-9965.EPI-10-0467
Type of production: Scientific paper
Format: Journal
Position of signature: 12
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 14
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 4.19
Journal in the top 25%: No
Position of publication: 47
No. of journals in the cat.: 184
Impact source: ISI
Category: Science Edition - PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH
Impact index in year of publication: 4.19
Journal in the top 25%: Yes
Position of publication: 9
No. of journals in the cat.: 140

75 Pio R; Blanco David; Pajares María Josefa; Aibar E.; Durany O.; Ezponda Teresa; Agorreta J; Gomez-Roman J.; Miguel Ángel Antón González; Rubio A; Lozano María D; López-Picazo José María; Subirada F.; Maes T.; Montuenga Luis. Development of a novel splice array platform and its application in the identification of alternative splice variants in lung cancer. BMC GENOMICS. 11, pp. 352. 2010. Available on-line at: <http://hdl.handle.net/10171/12913>. ISSN 1471-2164
DOI: 10.1186/1471-2164-11-352
Type of production: Scientific paper
Format: Journal
Position of signature: 11
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 15
Impact source: ISI
Category: Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Impact index in year of publication: 4.206
Journal in the top 25%: Yes
Position of publication: 24
No. of journals in the cat.: 160
Impact source: ISI
Category: Science Edition - GENETICS & HEREDITY
Impact index in year of publication: 4.206
Journal in the top 25%: Yes
Position of publication: 34
No. of journals in the cat.: 156

Relevant results: Background: Microarrays strategies, which allow for the characterization of thousands of alternative splice forms in a single test, can be applied to identify differential alternative splicing events. In this study, a novel splice array approach was developed, including the design of a high-density oligonucleotide array, a labeling procedure, and an algorithm to identify splice events. Results: The array consisted of exon probes and thermodynamically balanced junction probes. Suboptimal probes were tagged and considered in the final analysis. An unbiased labeling protocol was developed using random primers. The algorithm used to distinguish changes in expression from changes in splicing was calibrated using internal non-spliced control sequences. The performance of this splice array was validated with artificial constructs for CDC6, VEGF, and PCBP4 isoforms. The platform was then applied to the analysis of differential splice forms in lung cancer samples compared to matched normal lung tissue. Overexpression of splice isoforms was identified for genes encoding CEACAM1, FHL-1, MLPH, and SUSD2. None of these splicing isoforms had been previously associated with lung cancer. Conclusions:

This methodology enables the detection of alternative splicing events in complex biological samples, providing a powerful tool to identify novel diagnostic and prognostic biomarkers for cancer and other pathologies.

76 Seijo Luis Miguel; de Torres Juan Pablo; Lozano María D; Bastarrika Gorka; Alcaide Ana Belén; María del Mar Lacunza Lizasoain; Zulueta Javier J. Diagnostic yield of electromagnetic navigation bronchoscopy is highly dependent on the presence of a bronchus sign on CT; results from a prospective study. CHEST. 138 - 6, pp. 1316 - 1321. 2010. ISSN 0012-3692

DOI: http://dx.doi.org/10.1378/chest.09-2708

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 7
Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 6.519
Journal in the top 25%: Yes
Position of publication: 3
No. of journals in the cat.: 46

77 Álvarez-Cienfuegos Francisco Javier; Rotellar Fernando; Martí Pablo; Valentí Víctor; Zozaya Gabriel Nicolás; Álvaro Bueno Delgado; Nicolas Pedano Rodriguez; Lozano María D; Sola Jesús Javier; Pardo Fernando. Intraductal papillary mucinous neoplasms (IPMN) of the pancreas: clinico-pathologic results. REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS. 102 - 5, pp. 314 - 320. 2010. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/20524759/?from_term=1.%09Intraductal+papillary+mucinous+neoplasms+%28IPMN%29+of+the+pancreas%3A+clinico-pathologic+results.&from_pos=1>. ISSN 1130-0108

DOI: 10.4321/s1130-01082010000500005

Type of production: Scientific paper
Format: Journal
Position of signature: 8
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10
Impact source: ISI
Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 1.13
Journal in the top 25%: No
Position of publication: 57
No. of journals in the cat.: 71

Relevant results: Background: intraductal papillary mucinous neoplasm (IPMN) shows a series of lesions which evolve from benign lesions -adenoma- to invasive carcinoma. Aim: To analyze the clinical and pathological results of 15 patients diagnosed of IPMN, and surgically treated according to the guidelines of International Consensus Conference. Material and methods: A retrospective analysis of 15 patients surgically treated between March 1993 and September 2009, according to the International Consensus recommendation. Demographic, diagnostic tools, surgical report, pathologic database and actuarial survival were analyzed with a follow-up from one and a half month through nine years. Results: 6 Patients underwent pancreaticoduodenectomies, 4 total pancreatectomies, 2 body or central pancreatectomies, 2 partial pancreatectomies (enucleation) and 1 distal pancreatectomy. A morbidity of 46 and 0% hospital mortality were assessed, with a median length hospital stay of 10 days. In five cases, the IPMN was combined type (both main and branch pancreatic ducts involved) in four main duct-type and branch duct-type in the another six as well. Several atypia (IPMN carcinoma in situ) was observed in 2 patients and invasive carcinoma with negative lymph nodes was identified in 3 patients. A patient without invasive carcinoma died at 66 months of follow-up for pancreas adenocarcinoma. The actuarial survival up to recurrence or death was 105,133 months with a range of follow-up from 1 month and a half until 9 years. Conclusions: IPMN main duct or mixed type warrants complete resection due to its incidence of invasive carcinoma or precursor lesions of malignancy as well. Due to its multifocal pattern, patients should be followed in long-term surveillance. The management of asymptomatic IPMN type branch less than 3 cm is controversial.

78 Álvarez-Cienfuegos Francisco Javier; Lozano María D; Rotellar Fernando; Martí Pablo; Nicolas Pedano Rodriguez; Arredondo Jorge; Bellver Manuel Jose; Sola Jesús Javier; Pardo Fernando. Solid pseudopapillary tumor of the pancreas (SPPT). Still an unsolved enigma. REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS. 102 - 12, pp. 722 - 728. 2010. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/21198316/?

from_single_result=Solid+pseudopapillary+tumor+of+the+pancreas+%28SPPT%29.+Still+an+unsolved+enigma&expanded_search_query=Solid+pseudopapillary+tumor+of+the+pancreas+%28SPPT%29.+Still+an+unsolved+enigma>. ISSN 1130-0108
DOI: 10.4321/s1130-01082010001200009
Type of production: Scientific paper
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 9
Impact source: ISI
Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 1.13
Journal in the top 25%: No
Position of publication: 57
No. of journals in the cat.: 71

Relevant results: Solid pseudo-papillary tumor (SPPT) is a rare cystic tumor of the pancreas (1-3% of exocrine tumors of the pancreas) which shows an "enigmatic" behavior on the clinical and molecular pattern. A retrospective analysis of the cytological studies and resected specimens of pancreatic cystic tumors from May 1996 to February 2010 was carried out. Three cases of SPPT were found, which are the objective of this study. The diagnosis was established upon occasional finding in the abdominal CT, in spite of sizing between 3 and 6 cm of diameter. In the three cases the preoperative diagnosis was confirmed by cytology and specific immunohistochemical staining. Cases 2 and 3 showed strong immunoreactivity for Beta-Catenin and E-Cadherin staining. Radical resection (R0) was carried out in the three cases. A young male -21 years of age (case 1)- who had duodenal infiltration and two lymph nodes metastases died of hepatic and peritoneal recurrence 20 months following surgery. The other two cases are free of disease. The current review of the literature reports roughly 800 cases since the first report in 1959, and shows the enigmatic character of this tumor regarding the cellular origin, molecular pathways, prognostic factors and clinical behavior.

79 Marta Irigoyen Goñi; Pajares María Josefa; Agorreta J; Ponz-Sarvise Mariano; Elizabeth Salvo Brugarolas; Lozano María D; Pio R; Gil Ignacio; Rouzaut Ana. TGFBI expression is associated with a better response to chemotherapy in NSCLC. Molecular Cancer. 28 - 9, pp. 130. 2010. ISSN 1476-4598
DOI: 10.1186/1476-4598-9-130.
Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 9
Impact source: ISI
Category: Science Edition - BIOCHEMISTRY & MOLECULAR BIOLOGY
Impact index in year of publication: 3.779
Journal in the top 25%: No
Position of publication: 100
No. of journals in the cat.: 286

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.779
Journal in the top 25%: No
Position of publication: 54
No. of journals in the cat.: 184

80 Field J. K.; Liloglou T.; Niaz A.; Bryan J.; Gosney J.R.; Giles T.; Brambilla C.; Brambilla E.; Vesin A.; Timsit J. F.; Hainaut P.; Martínez Y.; Vignaud J. M.; Thunnissen F. B.; Prinsen C.; Snijders P. J.; Smit E. F.; Smit E. F.; Sozzi G.; Roz L.; Risch A.; Becker H. D.; Elborn S. J.; Magee N. D.; Montuenga Luis; Pajares María Josefa; Lozano María D; O'Byrne K. J.; Harrison D. J.; Niklisli J.; Cassidy A.; EUELC Collaborators. EUELC project: a multi-centre, multipurpose study to investigate early stage NSCLC, and to establish a biobank for ongoing collaboration. EUROPEAN RESPIRATORY JOURNAL. 34 - 6, pp. 1477 - 1486. 2009. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/?term=EUELC+project%3A+a+multi-centre%2C+multipurpose+study+to+investigate+early+stage+NSCLC%2C+and+to+establish+a+biobank+for+ongoing+collaboration>. ISSN 0903-1936
DOI: 10.1183/09031936.00077809
Type of production: Scientific paper
Format: Journal

Position of signature: 27

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 32

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 5.527
Journal in the top 25%: Yes
Position of publication: 4
No. of journals in the cat.: 43

Relevant results: The European Early Lung Cancer (EUELC) project aims to determine if specific genetic alterations occurring in lung carcinogenesis are detectable in the respiratory epithelium. In order to pursue this objective, nonsmall cell lung cancer (NSCLC) patients with a very high risk of developing progressive lung cancer were recruited from 12 centres in eight European countries: France, Germany, southern Ireland, Italy, the Netherlands, Poland, Spain and the UK. In addition, NSCLC patients were followed up every 6 months for 36 months. A European Bronchial Tissue Bank was set up at the University of Liverpool (Liverpool, UK) to optimise the use of biological specimens. The molecular-pathological investigations were subdivided into specific work packages that were delivered by EUELC Partners. The work packages encompassed mutational analysis, genetic instability, methylation profiling, expression profiling utilising immunohistochemistry and chip-based technologies, as well as in-depth analysis of FHIT and RARbeta genes, the telomerase catalytic subunit hTERT and genotyping of susceptibility genes in specific pathways. The EUELC project engendered a tremendous collaborative effort, and it enabled the EUELC Partners to establish protocols for assessing molecular biomarkers in early lung cancer with the view to using such biomarkers for early diagnosis and as intermediate end-points in future chemopreventive programmes.

81 Pardo Francisco Javier; Ana Martínez-Peñuela Marco; Sola Jesús Javier; Ángel Fernando Panizo Santos; Gurpide Luis Alfonso; Martinez-Peñuela J. M.; Lozano María D. Large cell carcinoma of the lung: an endangered species?. APPLIED IMMUNOHISTOCHEMISTRY & MOLECULAR MORPHOLOGY. 17 - 5, pp. 383 - 392. 2009. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/19444077/>. ISSN 1541-2016

DOI: 10.1097/PAI.0b013e31819bfd59

Type of production: Scientific paper
Format: Journal
Position of signature: 7
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 7

Relevant results: This study aims to evaluate large cell carcinomas (LCC) of the lung with a panel of immunohistochemical markers in an attempt to identify tumors belonging to other categories. We analyzed a tissue microarray platform of 101 LCC with a panel of 31 monoclonal antibodies. The tumors were 82 (81.3%) classic LCC, 7 (6.9%) neuroendocrine LCC, 6 (5.9'%) lymphoepithelioma-like LCC, 3 (2.9%) basaloid LCC, 2 (2%) clear cell LCC, and 1 (1%) LCC with rhabdoid phenotype. Characteristic classic LCC immunophenotype was loss of staining with CK5/6, CK14 positive in most squamous cell carcinoma (SCC), lack of MOC 31 positive in most adenocarcinomas, and positive immunoreactivity to EGFR, PDGFR-alpha and c-kit. 27 of 82 classic LCC (32.9%) were re-classified as adenocarcinomas, because they coexpressed TTF-1, CK7, and CK19, and were negative for p63. 31 (37.8%) of 82 classic LCC were reclassified as poorly differentiated SCC, based on their immunoreactivity with 34 beta E12, p63, thrombomodulin, and CD44v6. 16 (19.5%) of 82 classic LCC correspond to undifferentiated adenosquamous carcinomas, since they displayed conflicting immunostaining for markers of both SCC and adenocarcinomas. The use of 7 immunohistochemical markers, consisting of TTF-1, CK7, CK19, p63, 34 beta E12, thrombomodulin, and CD44v6, markedly reduces dramatically to less than 10%, the number of classic LCC by readily identifying cases of poorly differentiated SCCs, adenosquatnous carcinoma and adenocarcinomas.

82 Pardo Francisco Javier; Ana Martínez-Peñuela Marco; Sola Jesús Javier; Ángel Fernando Panizo Santos; Gurpide Luis Alfonso; Martinez-Peñuela J.M.; Lozano María D. Large cell carcinoma of the lung endangered species?. APPLIED IMMUNOHISTOCHEMISTRY AND MOLECULAR MORPHOLOGY. 17 - 5, pp. 383 - 392. 2009. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=19444077&lang=es&site=eds-live>. ISSN 1062-3345

DOI: 10.1097/PAI.0b013e31819bfd59

Type of production: Scientific paper
Format: Journal
Position of signature: 7
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 7

Impact source: ISI
Category: Science Edition - ANATOMY & MORPHOLOGY
Impact index in year of publication: 1.709
Journal in the top 25%: No
Position of publication: 8
No. of journals in the cat.: 16

Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 1.709
Journal in the top 25%: No
Position of publication: 12
No. of journals in the cat.: 28

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 1.709
Journal in the top 25%: No
Position of publication: 40
No. of journals in the cat.: 71

Relevant results: This study aims to evaluate large cell carcinomas (LCC) of the lung with a panel of immunohistochemical markers in an attempt to identify tumors belonging to other categories. We analyzed a tissue microarray platform of 101 LCC with a panel of 31 monoclonal antibodies. The tumors were 82 (81.3%) classic LCC, 7 (6.9%) neuroendocrine LCC, 6 (5.9%) lymphoepithelioma-like LCC, 3 (2.9%) basaloid LCC, 2 (2%) clear cell LCC, and 1 (1%) LCC with rhabdoid phenotype. Characteristic classic LCC immunophenotype was loss of staining with CK5/6, CK14 positive in most squamous cell carcinoma (SCC), lack of MOC 31 positive in most adenocarcinomas, and positive immunoreactivity to EGFR, PDGFR-alpha and c-kit. 27 of 82 classic LCC (32.9%) were re-classified as adenocarcinomas, because they coexpressed TTF-1, CK7, and CK19, and were negative for p63. 31 (37.8%) of 82 classic LCC were reclassified as poorly differentiated SCC, based on their immunoreactivity with 34betaE12, p63, thrombomodulin, and CD44v6. 16 (19.5%) of 82 classic LCC correspond to undifferentiated adenosquamous carcinomas, since they displayed conflicting immunostaining for markers of both SCC and adenocarcinomas. The use of 7 immunohistochemical markers, consisting of TTF-1, CK7, CK19, p63, 34betaE12, thrombomodulin, and CD44v6, markedly reduces dramatically to less than 10%, the number of classic LCC by readily identifying cases of poorly differentiated SCCs, adenosquamous carcinoma and adenocarcinomas.

83 Lozano María D. Citología aspirativa de lesiones pancreáticas dirigida por ecoendoscopia. REVISTA ESPAÑOLA DE PATOLOGIA. 41, 2008. ISSN 1699-8855

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 1

84 Bilbao José Ignacio; Esther de Luis Pastor; García de Jalon J.A.; de Martino A.; Lozano María D; Martínez Antonio; Sangro Bruno. Comparative study of four different spherical embolic particles in an animal model. A morphologic and histologic evaluation. Journal of vascular and interventional radiology (Print). 19 - 11, pp. 1625 - 1638. 2008. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=edswsc&AN=000260694700015&lang=es&site=eds-live>. ISSN 1051-0443

DOI: 10.1016/j.jvir.2008.07.014
Type of production: Scientific paper
Format: Journal
Position of signature: 5
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 7

Impact source: ISI
Category: Science Edition - PERIPHERAL VASCULAR DISEASE
Impact index in year of publication: 2.217
Journal in the top 25%: No
Position of publication: 30
No. of journals in the cat.: 56

Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Impact index in year of publication: 2.217
Journal in the top 25%: No

Position of publication: 40 **No. of journals in the cat.:** 90

Relevant results: To perform a study in a porcine model comparing four different spherical embolic particles in terms of postembolization patency, deformation, and potential for recanalization, with a focus on a relatively new agent--HepaSphere. MATERIALS AND METHODS: Partial embolization of both kidneys was performed in 18 pigs. Nine animals were sacrificed at 48 hours and nine at 4 weeks. In the same animal, the right kidney was embolized with HepaSphere particles ("dry" size, 50-100 microm; presumed final size, 200-300 microm), and the left kidney was alternatively embolized with EmboSphere (100-300 microm), Contour (150-350 microm), or Bead Block (150-350 microm) particles. The authors analyzed the size, deformation, and number of particles in each vessel, their morphologic characteristics, and recanalization. RESULTS: Particle sizes and deformation (1,096 particles) were as follows: HepaSphere, 225.3 microm +/- 67 and 26% +/- 19.7, respectively; EmboSphere, 132.9 microm +/- 36 and 18.1% +/- 14.2; Bead Block, 108.1 microm +/- 38 and 16.5% +/- 13.9; and Contour, 240.8 microm +/- 135 and 55.5% +/- 33. HepaSphere and Bead Block particles were distally located, and EmboSphere and Contour particles were located more proximally. EmboSphere and Bead Block particles were round, HepaSphere particles were round and/or ovoid, and Contour particles had an amorphous aspect. EmboSphere particles had a higher tendency to aggregate. No recanalization was seen with HepaSphere particles, and variable recanalization was observed with the others. CONCLUSIONS: Despite similar initial morphologic characteristics, the performance of the agents tested in this study differed in terms of final size, shape, deformation, and luminal recanalization. These differences have potential clinical relevance, and the knowledge of the differing embolic performance may be helpful in choosing agents for specific therapeutic purposes.

85 Jordi Broncano Cabrero; Lozano María D; Seijo Luis Miguel; Tamura A.Hiperplasia adenomatosa atípica pulmonar: A propósito de un caso. REVISTA DE MEDICINA. 52 - 3, pp. 20 - 23. 2008. Available on-line at: <https://dialnet.unirioja.es/servlet/articulo?codigo=2790129#?>. ISSN 0034-8554

Type of production: Scientific paper **Format:** Journal

Position of signature: 2 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 4

Relevant results: La Hiperplasia adenomatosa atípica (HAA) es una entidad infrecuente en la población general. Se manifi esta en TC como un nódulo pulmonar en vidrio deslustrado sin componente sólido y persistente a pesar de tratamiento antibiótico. Se presenta un caso de HAA, descubierto a raíz del programa de detección precoz de cáncer de pulmón de la Clínica Universitaria de Navarra. Se muestran los hallazgos en TC y Anatomía Patológica, así como la correlación radio patológica. Se plantea el diagnóstico diferencial con otras entidades incluidas lesiones con potencial maligno (carcinoma bronquioloalveolar y adenocarcinoma de bajo grado). Se comenta el método empleado en el manejo de las lesiones nodulares en vidrio deslustrado en el contexto de este programa de detección precoz.

86 Nguewa Paul; Agorreta J; Blanco David; Lozano María D; Gomez J; Sanchez BA; Vallés Iñaki; Pajares María Josefa; Pio R; Rodriguez MJ; Montuenga Luis; Calvo Alfonso. Identification of importin 8 (IPO8) as the most accurate reference gene for the clinicopathological analysis of lung specimens. BMC MOLECULAR BIOLOGY. 9, pp. 103 - 103. 2008. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=19014639&lang=es&site=eds-live>. ISSN 1471-2199

DOI: 10.1186/1471-2199-9-103

Type of production: Scientific paper **Format:** Journal

Position of signature: 4 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

Impact source: ISI **Category:** Science Edition - BIOCHEMISTRY & MOLECULAR BIOLOGY

Impact index in year of publication: 2.81 **Journal in the top 25%:** No

Position of publication: 125 **No. of journals in the cat.:** 276

Relevant results: BACKGROUND: The accurate normalization of differentially expressed genes in lung cancer is essential for the identification of novel therapeutic targets and biomarkers by real time RT-PCR and microarrays. Although classical "housekeeping" genes, such as GAPDH, HPRT1, and beta-actin have been widely used in the past, their accuracy as reference genes for lung tissues has not been proven. RESULTS: We have conducted

a thorough analysis of a panel of 16 candidate reference genes for lung specimens and lung cell lines. Gene expression was measured by quantitative real time RT-PCR and expression stability was analyzed with the softwares GeNorm and NormFinder, mean of |Delta Ct| (= |Ct Normal-Ct tumor|) +/- SEM, and correlation coefficients among genes. Systematic comparison between candidates led us to the identification of a subset of suitable reference genes for clinical samples: IPO8, ACTB, POLR2A, 18S, and PPIA. Further analysis showed that IPO8 had a very low mean of |Delta Ct| (0.70 +/- 0.09), with no statistically significant differences between normal and malignant samples and with excellent expression stability. CONCLUSION: Our data show that IPO8 is the most accurate reference gene for clinical lung specimens. In addition, we demonstrate that the commonly used genes GAPDH and HPRT1 are inappropriate to normalize data derived from lung biopsies, although they are suitable as reference genes for lung cell lines. We thus propose IPO8 as a novel reference gene for lung cancer samples

87 Esther de Luis Pastor; Bilbao José Ignacio; García Jalón de Ciércoles J.A.; Martínez Antonio; de Martino A.; Lozano María D. In vivo evaluation of a new embolic spherical particle (Hepasphere) in a kidney animal model. CARDIOVASCULAR AND INTERVENTIONAL RADIOLOGY. 31 - 2, pp. 367 - 376. 2008. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=edswsc&AN=000254087400018&lang=es&site=eds-live>. ISSN 0174-1551

DOI: 10.1007/s00270-007-9240-1

Type of production: Scientific paper
Format: Journal
Position of signature: 6
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 6

Impact source: ISI
Category: Science Edition - CARDIAC & CARDIOVASCULAR SYSTEMS
Impact index in year of publication: 1.721
Journal in the top 25%: No
Position of publication: 46
No. of journals in the cat.: 78

Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Impact index in year of publication: 1.721
Journal in the top 25%: No
Position of publication: 50
No. of journals in the cat.: 90

Relevant results: HepaSphere is a new spherical embolic material developed in a dry state that absorbs fluids and adapts to the vessel wall, leaving no space between the particle and the arterial wall. The aim of this study was to elucidate the final in vivo size, deformation, final location, and main properties of the particles when reconstituted with two different contrast media (Iodixanol and Ioxaglate) in an animal model. Two sizes of "dry-state" particles (50-100 and 150-200 mu m) were reconstituted using both ionic and nonionic contrast media. The mixture was used to partly embolize both kidneys in an animal model (14 pigs). The animals were sacrificed 4 weeks after the procedure and the samples processed. The final size of the particles was 230.2 +/- 62.5 mu m for the 50- to 100-mu m dry-state particles and 314.4 +/- 71 mu m for the 150- to 200-mu m dry-state particles. When the contrast medium (ionic versus nonionic) used for the reconstitution was studied to compare (Student's t-test) the final size of the particles, no differences were found ($p > 0.05$). The mean in vivo deformation for HepaSphere was 17.1% +/- 12.3%. No differences ($p > 0.05$) were found in the deformation of the particle regarding the dry-state size or the contrast medium (Mann-Whitney test). We conclude that HepaSphere is stable, occludes perfectly, and morphologically adapts to the vessel lumen of the arteries embolized. There is no recanalization of the arteries 4 weeks after embolization. Its final in vivo size is predictable and the particle has the same properties in terms of size and deformation with the two different contrast media (Iodixanol and Ioxaglate).

88 María de Lourdes Díaz Dorronsoro; María del Puy Garrastachu Zumarán; Lozano María D; Villanueva Alberto José; Idoate Miguel Ángel. Invasión de una vena pulmonar por una metástasis de sarcoma sinovial: correlacion radiopatológica. REVISTA DE MEDICINA DE LA UNIVERSIDAD DE NAVARRA. 2 - 52, pp. 29 - 33. 2008. ISSN 0556-6177

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 5

89 Zudaire María Isabel; Lozano María D; Vazquez MF; Pajares María Josefa; Agorreta J; Pio R; Zulueta Javier J; Yankelevitz DF; Henschke CI; Montuenga Luis. Molecular characterization of small peripheral lung tumors based on the analysis of fine needle aspirates. Histopathology. 23 - 1, pp. 33 - 40. 2008. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=17952855&lang=es&site=eds-live>. ISSN 0309-0167

Type of production: Scientific paper
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - CELL BIOLOGY
Impact index in year of publication: 4.131
Journal in the top 25%: No
Position of publication: 57
No. of journals in the cat.: 157

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.131
Journal in the top 25%: Yes
Position of publication: 10
No. of journals in the cat.: 68

Relevant results: The computed tomography (CT)-based early lung cancer diagnostic technologies allow the detection of very small stage I lung tumors. As part of these screening protocols any suspicious nodule has to be diagnosed morphologically, which requires CT-guided Fine Needle Aspiration, open biopsy or surgery. Fine Needle Aspiration (FNA) cytology is a well-recognised method for a rapid and accurate diagnosis of small lung tumors. Molecular analysis of the FNA specimens could complement cytology diagnosis by the characterization of the biological traits at the preoperative stage. In this study, we aimed to characterize the biological profile of 33 paraffin-embedded transthoracic FNA samples obtained from three groups of lung cancer patients: two groups of small early-detected lung adenocarcinomas (radiologically subsolid and solid nodules) and a third group of small metastatic adenocarcinomas. Genetic analysis was performed by fluorescence in situ hybridization using the four-color LAVysion probe. p53 and Ki-67 protein expression was also evaluated by immunocytochemistry. The samples showed gains for all targets analyzed; two cases had EGFR gene amplification and two cases had MYC amplification. There were no significant differences in the percentage of genetically malignant cells and the expression of Ki-67 among the three groups. However, p53 accumulation was significantly higher in the metastatic group compared to the subsolid early-detected group (P = 0.001). In conclusion, molecular analysis of FNA specimens may provide useful information at preoperative stages. In our series, a good prognostic profile in subsolid early detected adenocarcinomas is suggested.

90 Lozano María D. PAAF de pulmón mediante las distintas vías de abordaje (TAC, broncoscopia, ecoendoscopia). Ventajas e inconvenientes. Revista española de patología. 41 - 104, 2008. ISSN 1699-8855

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 1

91 de Torres Juan Pablo; Bastarrika Gorka; Wisnivesky J. P.; Alcaide Ana Belén; Campo Arantza; Seijo Luis Miguel; Pueyo Jesús Ciro; Villanueva Alberto José; Lozano María D; Usua Montes Ona; Montuenga Luis; Zulueta Javier J. Assessing the relationship between lung cancer risk and emphysema dertected on low-dose CT of the chest. CHEST. 132 - 6, pp. 1932 - 1938. 2007. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/18079226>. ISSN 0012-3692

DOI: 10.1378/chest.07-1490

Type of production: Scientific paper
Format: Journal
Position of signature: 9
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 4.143
Journal in the top 25%: Yes
Position of publication: 6
No. of journals in the cat.: 34

Relevant results: Results suggest that the presence of emphysema on LDCT is an independent risk factor for lung cancer.

92 Seijo Luis Miguel; Bastarrika Gorka; Lozano María D; Zulueta Javier J. La navegación electromagnética en el diagnóstico de nódulos periféricos y adenopatías mediastínicas: experiencia preliminar.ARCHIVOS DE BRONCONEUMOLOGIA. 43 - 8, pp. 460 - 463. 2007. Available on-line at: <https://www.sciencedirect.com/science/article/pii/S0300289607711079>. ISSN 0300-2896

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 4

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 1.563
Journal in the top 25%: No
Position of publication: 26
No. of journals in the cat.: 34

Relevant results: La navegación electromagnética es una técnica novedosa capaz de facilitar la obtención mediante broncoscopio de muestras de lesiones nodulares periféricas de pequeño tamaño y adenopatías mediastínicas. Permite realizar tanto biospias transbronquiales como punciones con aguja citológica, y por ello es muy versátil. Publicamos el resultado de 2 casos en los que la combinación de navegación con el sistema superDimension/Bronchus y de técnicas diagnósticas convencionales facilitó el diagnóstico definitivo mediante broncoscopia. La navegación electromagnética ofrece la posibilidad de evitar métodos diagnósticos invasivos como la cirugía, con el consiguiente ahorro económico, de tiempo y de complicaciones.

93 Arraiza María; María del Puy Garrastachu Zumarán; Lozano María D; Alcaide Ana Belén. Lesiones traqueales focales. A propósito de un caso. REVISTA DE MEDICINA DE LA UNIVERSIDAD DE NAVARRA. 51 - 3, pp. 26 - 28. 2007. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/18183784>. ISSN 0556-6177

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 4

Relevant results: We present a case of adenoid cystic tracheal carcinoma detected by computerized tomography (64-MDCT) with cyto-histological correlation in a patient with hemoptysis. In this article we review the differential diagnosis of solitary focal tracheal lesions as they appear in computerized tomography (CT). In this case, image methods suggested the diagnosis but underestimated the tracheal wall invasion, which was established by histologycal examination of the resected tumor.

94 Pajares María Josefa; Zudaire María Isabel; Lozano María D; Agorreta J; Bastarrika Gorka; Torre W; Remirez A.; Pio R; Zulueta Javier J; Montuenga Luis. Molecular profiling of computed tomography screen-detected lung nodules shows multiple malignant features. Cancer epidemiology, biomarkers & prevention. 15 - 2, pp. 373 - 380. 2006. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=ir00048a&AN=dadun.10171.16768&lang=es&site=eds-live>. ISSN 1055-9965

DOI: 10.1158/1055-9965.EPI-05-0320

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 4.289
Journal in the top 25%: No
Position of publication: 36
No. of journals in the cat.: 127

Impact source: ISI
Category: Science Edition - PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH
Impact index in year of publication: 4.289
Journal in the top 25%: Yes
Position of publication: 9
No. of journals in the cat.: 98

Relevant results: RATIONALE AND PURPOSE: Low-dose spiral computerized axial tomography (spiral CT) is effective for the detection of small early lung cancers. Although published data seem promising, there has been a significant degree of discussion concerning the potential of overdiagnosis in the context of spiral CT-based screening. The objective of the current study was to analyze the phenotypic and genetic alterations in the small pulmonary malignancies resected after detection in the University of Navarra/International Early Lung Cancer Action Project spiral CT screening trial and to determine whether their malignant molecular features are similar to those of resected lung tumors diagnosed conventionally. EXPERIMENTAL DESIGN: We analyzed 17 biomarkers of lung epithelial malignancy in a series of 11 tumors resected at our institution during the last 4 years (1,004 high-risk individuals screened), using immunohistochemistry and fluorescence in situ hybridization (FISH). A parallel series of 11 gender-, stage-, and histology-matched lung cancers diagnosed by other means except screening was used as control. RESULTS: The molecular alterations and the frequency of phenotypic or genetic aberrations were very similar when screen-detected and nonscreen-detected lung cancers were compared. Furthermore, most of the alterations found in the screen-detected cancers from this study were concordant with what has been described previously for stage I-II lung cancer. CONCLUSIONS: Small early-stage lung cancers resected after detection in a spiral CT-based screening trial reveal malignant molecular features similar to those found in conventionally diagnosed lung cancers, suggesting that the screen-detected cancers are not overdiagnosed.

95 Martínez-Peñuela Ana; Echeveste José Ignacio; Gemma Rosa Toledo Santana; Lozano María D; Sola Jesús Javier. Tumor sólido pseudopapilar de páncreas simulador de pseudoquiste pancreático: descripción de un caso y revisión de la literatura. Revista española de patología. 39 - 3, pp. 184 - 189. 2006. ISSN 1699-8855

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 5

96 Bastarrika Gorka; Garcia-Velloso Maria Jose; Lozano María D; Usua Montes Ona; Torre Wenceslao; Rodríguez-Spiteri Natalia; Campo Arantza; Seijo Luis Miguel; Alcaide Ana Belén; Pueyo Francisco Javier; Cano David; Vivas Isabel; Octavio Cosin Sales; Domínguez Pablo Daniel; Patricia Serra Arbeloa; Richter José Ángel; Montuenga Luis; Zulueta Javier J. Early lung cancer detection using spiral computed tomography and positron emission tomography. AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE. 171 - 12, pp. 1378 - 1383. 2005. ISSN 1073-449X

DOI: 10.1164/rccm.200411-1479OC

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 18

Impact source: ISI
Category: Science Edition - CRITICAL CARE MEDICINE
Impact index in year of publication: 8.689
Journal in the top 25%: Yes
Position of publication: 1
No. of journals in the cat.: 18

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 8.689
Journal in the top 25%: Yes
Position of publication: 1
No. of journals in the cat.: 33

Relevant results: A protocol for early lung cancer detection using spiral CT and FDG-PET is useful and may minimize unnecessary invasive procedures for benign lesions.

97 Pio R; Zudaire María Isabel; Pino I.; Zafira Castaño Corsino; Natalia Zabalegui Merino; Vicent Silvestre; Fermín García Amigot; Odero María D.; Lozano María D; Jesús Miguel García-Foncillas López; Calasanz María José; Montuenga Luis. Alpha CP-4, encoded by a putative tumor suppressor gene at 3p21, but not its alternative splice variant alpha CP-4a, is underexpressed in lung cancer. CANCER RESEARCH. 64 - 12, pp. 4171 - 4179. 2004. Available on-line at: <http://hdl.handle.net/10171/18810>. ISSN 0008-5472

DOI: 10.1158/0008-5472.CAN-03-2982

Type of production: Scientific paper
Format: Journal
Position of signature: 9
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 7.69
Journal in the top 25%: Yes
Position of publication: 8
No. of journals in the cat.: 123

Relevant results: alpha CP-4 is an RNA-binding protein coded by PCBP4, a gene mapped to 3p21, a common deleted region in lung cancer. In this study we characterized the expression of alpha CP-4 and alpha CP-4a, an alternatively spliced variant of alpha CP-4, in lung cancer cell lines and non-small cell lung cancer (NSCLC) samples from early stage lung cancer patients. In NSCLC biopsies, an immunocytochemical analysis showed cytoplasmic expression of alpha CP-4 and alpha CP-4a in normal lung bronchiolar epithelium. In contrast, alpha CP-4 immunoreactivity was not found in 47% adenocarcinomas and 83% squamous cell carcinomas, whereas all of the tumors expressed alpha CP-4a. Besides, lack of alpha CP-4 expression was associated with high proliferation of the tumor (determined by Ki67 expression). By fluorescence in situ hybridization, >30% of NSCLC cell lines and tumors showed allelic losses at PCBP4, correlating with the absence of the protein. On the other hand, no mutations in the coding region of the gene were found in any of the 24 cell lines analyzed. By Northern blotting and real-time reverse transcription-PCR, we detected the expression of alpha CP-4 and alpha CP-4a messages in NSCLC and small cell lung cancer cell lines. Our data demonstrate an abnormal expression of alpha CP-4 in lung cancer, possibly associated with an altered processing of the alpha CP-4 mRNA leading to a predominant expression of alpha CP-4a. This may be considered as an example of alternative splicing involved in tumor suppressor gene inactivation. Finally, induction of alpha CP-4 expression reduced cell growth, in agreement with its proposed role as a tumor suppressor, and suggesting an association of this RNA-binding protein with lung carcinogenesis.

98 Vicent Silvestre; López-Picazo José María; Gemma Rosa Toledo Santana; Lozano María D; Torre W; María Carmen García Corchón; Quero C; Soria J.C; Martín Algarra Salvador; G-Manzano R; Montuenga Luis. ERK1/2 is activated in non-small cell lung cancer and associated with advanced tumors. British Journal of Cancer. 90 - 5, pp. 1047 - 1052. 2004. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/14997206>. ISSN 0007-0920
DOI: 10.1038/sj.bjc.6601644
Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 11

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.742
Journal in the top 25%: No
Position of publication: 33
No. of journals in the cat.: 123

99 Gemma Rosa Toledo Santana; Sola Jesús Javier; Lozano María D; Elena Soria Saldise; Pardo Francisco Javier. Loss of FHIT protein expression is related to high proliferation low apoptosis and worse prognosis in non small cell lung cancer. MODERN PATHOLOGY. 17 - 4, pp. 440 - 448. 2004. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=14976524&lang=es&site=eds-live>. ISSN 0893-3952
DOI: 10.1038/modpathol.3800081
Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 5

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.643
Journal in the top 25%: Yes
Position of publication: 7
No. of journals in the cat.: 65

Relevant results: The fragile histidine triad (FHIT) gene, located at chromosome 3p14.2, is deleted in many solid tumors, including lung cancer. Its protein product is presumed to have tumor suppressor function. We investigated the incidence of loss of heterozygosity and loss of FHIT expression in a series of non-small-cell lung carcinomas and its correlation to apoptosis, proliferation index and prognosis. FHIT expression was determined by immunohistochemistry in formalin-fixed paraffin-embedded tissues from 54 squamous cell carcinomas (SCC) and 44 adenocarcinomas (AC) of the lung. DNA from frozen tumor and corresponding normal tissues were analyzed for allelic losses at two loci located internal (D3S1300, D3S1234) and three loci in flanking regions centromeric and telomeric (D3S1210, D3S1312, D3S1313) to the FHIT gene. Apoptosis was detected by terminal deoxynucleotidyltransferase-mediated dUTP nick end labeling (TUNEL). Proliferation index was determined with ki-67 and flow cytometric analysis. We correlated the results with tumor histology, prognosis and some immunohistochemical markers (p53, bcl-2, bax, c-myc, p21(waf1), cyclin-D1). FHIT expression was related to tumor histology: 52 of 54 (96.3%) SCC and 20 of 44 (45.5%) AC were negative for FHIT (P<0.0001). We found LOH at 3p14.2 in 67.8% of the 98 cases: 72.3% of SCC and 61.4% of AC. Loss of FHIT expression was associated with a higher proliferation index (ki-67, P=0.007; flow cytometry, P<0.004) and lower apoptotic index (P=0.018). LOH at FHIT gene were associated to a high proliferation (flow cytometry, P<0.001) and lower apoptotic level (P=0.043). The log-rank test demonstrated a significant inverse correlation (P=0.039) between loss of FHIT expression and patient survival. FHIT plays an important role in the development of non-small-cell lung cancer, particularly in SCC. Loss of FHIT protein is correlated with a high proliferation and low apoptotic index in tumor cells, and is an independent prognostic indicator for the clinical outcome in patients with these tumors.

100 Vicent Silvestre; Garayoa María Mercedes; López-Picazo José María; Lozano María D; Gemma Rosa Toledo Santana; Thunnissen F.B; Torres Daniel; G-Manzano R; Montuenga Luis. Mitogen-activated protein kinase phosphatase-1 is overexpressed in non-small cell lung cancer and is an independent predictor of outcome in patients. Clinical cancer research. 10 - 11, pp. 3639 - 3649. 2004. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/15173070>. ISSN 1078-0432

DOI: 10.1158/1078-0432.CCR-03-0771

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 9

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 5.623
Journal in the top 25%: Yes
Position of publication: 14
No. of journals in the cat.: 123

101 Pino I; Pio R; Gemma Rosa Toledo Santana; Natalia Zabalegui Merino; Vicent Silvestre; Natalia Rey Gallego; Lozano María D; Torre W; Jesús Miguel García-Foncillas López; Montuenga Luis. Altered patterns of expression of members of the heterogeneous nuclear ribonucleaoprotein (hnRNP) family in lung cancer. Lung Cancer. 41 - 2, pp. 131 - 143. 2003. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=ir00048a&AN=dadun.10171.18819&lang=es&site=eds-live>. ISSN 0169-5002

Type of production: Scientific paper
Format: Journal
Position of signature: 7
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 1.798
Journal in the top 25%: No
Position of publication: 76
No. of journals in the cat.: 120

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 1.798
Journal in the top 25%: No
Position of publication: 15
No. of journals in the cat.: 31

Relevant results: hnRNP A2/B1 has been suggested as a useful early detection marker for lung carcinoma. hnRNP A2/B1 is a member of a large family of heterogeneous nuclear ribonucleoproteins (hnRNP proteins) involved in a variety of functions, including regulation of transcription, mRNA metabolism, and translation. In lung

cancer, we have evaluated the expression and cellular localization of several members of the hnRNP family, hnRNP A1, A2, B1, C1, C2 and K. 16 cell lines (SCLC and NSCLC) and biopsies from 32 lung cancer patients were analyzed. Our results suggest that, besides hnRNP A2/B1, the expression of other members of the hnRNP family is altered both in SCLC and NSCLC. In the biopsies, negative or low expression of the hnRNP proteins analyzed was observed in normal epithelial cells whereas lung cancer cells showed highly intense nuclear or cytoplasmic immunolocalization. In all the lung cancer cell lines, the mRNA for all the hnRNP proteins was detected. In general, higher levels of hnRNP mRNAs were found in SCLC as compared with NSCLC. Our results also suggest that the expression and processing of each hnRNP protein in lung cancer is independently regulated and is not exclusively related to proliferation status. In SCLC cell lines, hnRNP A1 protein expression correlated with that of Bcl-x(L). In the lung cancer cell lines, hnRNP K protein localization varied with the cellular confluence.

102 Ángel Fernando Panizo Santos; Sola I.; Enrique de Álava Casado; Lozano María D; Idoate Miguel Ángel; Pardo Francisco Javier. Angiomyolipoma and PEComa are immunoreactive for MyoD1 in cell cytoplasmic staining pattern. APPLIED IMMUNOHISTOCHEMISTRY AND MOLECULAR MORPHOLOGY. 11 - 2, pp. 156 - 160. 2003. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Angiomyolipoma+and+PEComa+are+immunoreactive+for+MyoD1+in+cell+cytoplasmic+staining+pattern>. ISSN 1062-3345

DOI: 10.1097/00129039-200306000-00012

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 6

Impact source: ISI
Category: Science Edition - ANATOMY & MORPHOLOGY
Impact index in year of publication: 1.5
Journal in the top 25%: No
Position of publication: 9
No. of journals in the cat.: 17

Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 1.5
Journal in the top 25%: No
Position of publication: 12
No. of journals in the cat.: 26

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 1.5
Journal in the top 25%: No
Position of publication: 30
No. of journals in the cat.: 64

Relevant results: The family of tumors derived from mesenchymal perivascular epithelioid cells (so-called PEComas) includes angiomyolipoma, lymphangioleiomyomatosis, clear cell sugar tumor of the lung, clear cell myomelanocytic tumor of ligamentum teres/falciform ligament, and abdominopelvic sarcoma of perivascular epithelioid cells. These tumors were characterized by coexpression of melanocytic (HMB-45) and muscle markers. MyoD1 transcription factor has crucial role in commitment and differentiation of mesenchymal progenitor cells to myogenic lineage. Antibodies to MyoD1 protein (nuclear immunoreactivity) have been shown highly valuable adjuncts in the diagnosis of rhabdomyosarcomas. To evaluate expression of the transcription factor MyoD1 in PEComas, we performed immunohistochemistry. Monoclonal antibody 5.8A for MyoD1 was used on a series of cases of formalin-fixed, paraffin-embedded angiomyolipoma (n = 19), lymphangioleiomyomatosis (n = 3), clear cell sugar tumor of the lung (n = 1), and abdominopelvic sarcoma of perivascular epithelioid cells (n = 2). All cases showed strong granular immunostaining in the tumor cell cytoplasm with the anti-MyoD1 antibody. Cytoplasmic reactivity was noted in the spindle cells, fat cells, and epithelioid cells. Nuclei were negative in all tumors studied, and a clean background was obtained. Several normal and neoplastic human tissues have also been immunostained for MyoD1 without any positive cytoplasmic staining, with the exception of 2 alveolar soft part sarcomas. Cytoplasmic immunostaining with monoclonal antibody 5.8A for MyoD1 in PEComas may correspond to cross-reactivity with an undetermined cytoplasmic protein. Great caution should be exercised in interpreting the immunostaining results with anti-MyoD1 antibody 5.8A.

103 Bastarrika Gorka; Pueyo Jesús Ciro; Lozano María D; Montuenga Luis; Zulueta Javier J. Detección precoz del cáncer de pulmón por tomografía computarizada de baja dosis de radiación: resultados de una muestra de 150 individuos asintomáticos. MEDICINA CLINICA. 121 - 2, pp. 41 - 47. 2003. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/12828882/>. ISSN 0025-7753

DOI: 10.1016/s0025-7753(03)73850-0

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 5
Impact source: ISI
Category: Science Edition - MEDICINE, GENERAL & INTERNAL
Impact index in year of publication: 1.018
Journal in the top 25%: No
Position of publication: 41
No. of journals in the cat.: 102

Relevant results: Background and objective: Our aim is to present initial baseline data from a screening trial on low-dose spiral computed tomography (CT). We describe enrollment criteria and a diagnostic algorithm based on initial low-dose CT findings. Subjects and method: From September 2000 to May 2001, 150 asymptomatic smokers (age range 40-78 years; mean 55 years) were studied using non-enhanced low-dose spiral CT of the chest. Repeated short-term high resolution CT follow-up was performed for non-calcified pulmonary nodules smaller than 10 mm in diameter. Non-calcified pulmonary nodules 10 mm or larger were considered as potentially malignant and a complementary positron emission tomography (PET) exam was recommended. Results: 54 non-calcified pulmonary nodules were found in 34 out of 141 (24.15%) symptom-free subjects. The diameter was 5 mm or shorter in 24 participants (70.6%), 6-10 mm in 7 (20.6%) and longer than 10 mm in 3 (8.8%) individuals. One patient with a non-calcified pulmonary nodule of at least 10 mm underwent a complementary PET exam, which was positive. Biopsy of this nodule demonstrated lung cancer (squamous cell carcinoma). CT follow-up over one year was decided in the other two subjects having non-calcified pulmonary nodules longer than 10 mm, as no radiographic signs indicative of malignancy were observed in the baseline scan. Conclusion: Following this low-dose CT based screening programme, detection of early-stage lung cancer in asymptomatic subjects at high risk of developing the disease is feasible. Further studies are however necessary to pursue more definitive results.

104 Lozano María D; Rodríguez Javier; Martín Algarra Salvador; Ángel Fernando Panizo Santos; Sola Jesús Javier; Pardo Francisco Javier. Fine-needle aspiration cytology and immunocytochemistry in the diagnosis of 24 gastrointestinal stromal tumors: a quick, reliable diagnostic method. DIAGN CYTOPATHOL. 28 - 3, pp. 131 - 135. 2003. ISSN 8755-1039

Type of production: Scientific paper
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 6
Impact source: ISI
Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY
Impact index in year of publication: 1.092
Journal in the top 25%: No
Position of publication: 17
No. of journals in the cat.: 26

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 1.092
Journal in the top 25%: No
Position of publication: 40
No. of journals in the cat.: 64

105 Idoate Miguel Ángel; Elena Soria Saldise; Lozano María D; Sola Jesús Javier; Ángel Fernando Panizo Santos; De Álava E; Miguel Manrique Smela; Pardo Francisco Javier. PTEN protein expression correlates with PTEN gene molecular changes but not with VEGF expression in astrocytomas. DIAGNOSTIC MOLECULAR PATHOLOGY. 12 - 3, pp. 160 - 165. 2003. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=12960698&lang=es&site=eds-live>. ISSN 1052-9551

Type of production: Scientific paper
Format: Journal

Position of signature: 3

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 8

Impact source: ISI
Impact index in year of publication: 2.145
Position of publication: 20
Category: Science Edition - PATHOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 64

Impact source: ISI
Impact index in year of publication: 2.145
Position of publication: 142
Category: Science Edition - BIOCHEMISTRY & MOLECULAR BIOLOGY
Journal in the top 25%: No
No. of journals in the cat.: 261

Impact source: ISI
Impact index in year of publication: 2.145
Position of publication: 43
Category: Science Edition - BIOTECHNOLOGY & APPLIED MICROBIOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 132

Relevant results: PTEN gene (10q23) is a relevant tumor suppressor gene whose protein is a phosphatase involved in the control of angiogenesis of some tumors including astrocytomas. There are no studies correlating molecular changes of PTEN and the immunohistochemical expression of its protein (pPTEN) with the expression of vascular endothelial growth factor (VEGF) in astrocytomas. Fifty-six surgically resected brain gliomas, 10 grade 2, 16 grade 3, and 30 grade 4, were studied by a combined approach, consisting of (1) PCR analysis using four microsatellite markers against the PTEN gene region (10q23), (2) the FISH technique to test chromosome 10 using a pericentromeric probe, and (3) immunohistochemical evaluation of pPTEN and VEGF. Loss of heterozygosity (LOH) of PTEN was observed in 10% of fibrillary grade 2 astrocytomas and all gemistocytic ones. In high-grade tumors, LOH was more frequent in grade 4 than in grade 3 (> or =2 loci deleted, 83% and 56%, respectively). Monosomy for chromosome 10 was observed especially in high-grade tumors (6% of grade 3 and 50% of grade 4) and in 20% of grade 2 tumors, corresponding to gemistocytic astrocytomas. Results with both antibodies against PTEN were concordant: loss of cytoplasmic immunoreactivity was frequently observed according to homogeneous or heterogeneous patterns in 70% and 50% of grades 4 and 3, respectively, but not in grade 2. Immunonegativity of pPTEN was associated with PTEN gene deletion (> or =2 loci deleted) (P = 0.04) but not with monosomy. Cytoplasmic immunoreactivity against VEGF was observed in high-grade and in gemistocytic astrocytomas, but not in conventional grade 2 tumors. Tumor expression of pPTEN was not associated with immunoreactivity against VEGF when the same areas were considered. In conclusion, loss of PTEN expression is frequent in high-grade astrocytomas, but not in grade 2 tumors, and correlates with PTEN deletion and loss of chromosome 10. PTEN immunoreactivity does not correlate with VEGF expression in astrocytomas when similar areas are considered.

106 Juana María Rodríguez González; Enrique de Álava Casado; Lozano María D; Echeveste José Ignacio; Sola Jesús Javier; Pardo Francisco Javier. Carcinoma de células renales multiquísticas. ¿Existe una "verdadera evidencia" de que estos tumores son neoplasias malignas? Estudio clínico-patológico de seis casos. Revista española de patología. 35 - 2, pp. 201 - 206. 2002. ISSN 1699-8855

Type of production: Scientific paper
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 6

107 Zudaire María Isabel; Pio R; Martín-Subero I.; Lozano María D; Blanco David; García José Javier; Odero María D.; Natalia Rey Gallego; Zulueta Javier J; Siebert R.; Calasanz María José; Montuenga Luis. Desarrollo de la técnica de FICTION como nueva herramienta para el diagnóstico precoz de cáncer de pulmón. ANALES DEL SISTEMA SANITARIO DE NAVARRA. 25 - 3, pp. 305 - 315. 2002. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/12861287>. ISSN 1137-6627

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

108 Zudaire María Isabel; Pio R; Martín-Subero I; Lozano María D; Blanco David; García José Javier; Odero María D.; Natalia Rey Gallego; Zulueta Javier J; Siebert R; Calasanz María José; Montuenga Luis. FICTION as a new tool to early lung cancer diagnosis. ANALES DEL SISTEMA SANITARIO DE NAVARRA. 25 - 3, pp. 305 - 315. 2002. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=cmedm&AN=12861287&lang=es&site=eds-live>. ISSN 1137-6627

Type of production: Scientific paper
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

Relevant results: Lung cancer is one of the most frequent causes of cancer death in Western countries. Overall 5-year survival rate is lower than 15% mainly due to the late diagnosis of the disease. Primary prevention (reduction of tobacco consumption) and more effective methods for early detection are needed. Some studies have recently shown that low-dose spiral computed tomography (CT) is a useful technique to the detection of pulmonary malignant nodules in early stages. Studies are developing to evaluate its efficacy in series of high-risk patients. A new cytogenetic technique has been developed: the FICTION technique (Fluorescence Immunophenotyping and Interphase Cytogenetics as a Tool for the Investigation of Neoplasms). This technique allows the simultaneous study of immunophenotypic markers and genetic abnormalities present in tumour cells. The goal of our project is optimise this technique in sputum and bronchoalveolar lavage specimens from lung cancer patients. The overall goal of this project is evaluate the usefulness of this technique, together with the new radiological techniques, in early detection programs of lung cancer in high-risk patients. In the present study we review the cytogenetic studies on lung cancer carried out in the recent years. We also introduce the basic methodological aspects that will be developed in our project.

109 Ángel Fernando Panizo Santos; Lozano María D; Salvatore di Stefano; Inoges Sancho S; Pardo Francisco Javier. Clinico-pathologic, immunohistochemical, and TUNEL study in early cardiac allograft failure. CARDIOVASCULAR PATHOLOGY. 9 - 3, pp. 153 - 159. 2000. Available on-line at: <http://www.ncbi.nlm.nih.gov/pubmed/10989315>. ISSN 1054-8807

DOI: 10.1016/S1054-8807(00)00039-9

Type of production: Scientific paper
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 5

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 0.347
Journal in the top 25%: No
Position of publication: 63
No. of journals in the cat.: 67

Impact source: ISI
Category: Science Edition - CARDIAC & CARDIOVASCULAR SYSTEMS
Impact index in year of publication: 0.347
Journal in the top 25%: No
Position of publication: 59
No. of journals in the cat.: 63

110 Lozano María D; de Andrea CE; Jhala DN; Rosenbaum MW. Pancreaticobiliary cytopathology techniques: Molecular testing. WHO Reporting System for Pancreaticobiliary Cytopathology. pp. 26 - 29. IAC-IARC-WHO Cytopathology Reporting Systems, 2022. ISBN 978-92-832-4518-6

Type of production: Book chapter
Format: Book
Position of signature: 1
Degree of contribution: Author or co-author of chapter in book

Total no. authors: 4

111 Azcona María Cristina; Sierrasesúmaga Luis; Lozano María D; Guerrero R.Tumores endocrinos. Tratado de oncología pediátrica. Capítulo 30, pp. 673 - 692. MADRID(Spain): Pearson Educación , 2005. ISBN 978-84-205-4248-5

Legal deposit: M 41235-2005

Type of production: Book chapter
Format: Book

Position of signature: 3

Degree of contribution: Author or co-author of chapter in book

Total no. authors: 4

112 Pitman M. B.; Centeno B. A.; Reid M. D.; Siddiqui M. T.; Layfield L. J.; Pérez-Machado M.; Weynand B.; Stelow E. B.; Lozano María D; Fukushima N.; Cree I. A.; Mehrotra R.; Schmitt F. C.; Field A. S.The World Health Organization reporting system for pancreaticobiliary cytopathology. ACTA CYTOLOGICA. 67 - 3, pp. 304 - 320. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36516741/>. ISSN 0001-5547

DOI: 10.1159/000527912

Type of production: Bibliographic review

Format: Journal

Position of signature: 9

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 14

Impact source: ISI

Category: Science Edition - PATHOLOGY

Impact index in year of publication: 3.0

Journal in the top 25%: No

Position of publication: 43

No. of journals in the cat.: 77

Relevant results: The World Health Organization (WHO), the International Academy of Cytology, and the International Agency for Research on Cancer, with expert contributors from around the world, present an international approach to standardized reporting of pancreaticobiliary cytopathology. This reporting system is one of the first in a series from various body sites that mirror the WHO Classification of Tumours series and provides an evidence-based terminology system with associated risk of malignancy and diagnostic management recommendation per diagnostic category. The WHO Reporting System for Pancreaticobiliary Cytopathology (WHO system) revises the Papanicolaou Society of Cytopathology (PSC) system for Reporting Pancreaticobiliary Cytology published in 2015 and replaces the six-tiered system with a seven-tiered system: insufficient/inadequate/nondiagnostic; benign (negative for malignancy), atypical, pancreaticobiliary neoplasm of low risk/low grade, pancreatic neoplasm of high risk/high grade, suspicious for malignancy, and malignant. The principal differences between the WHO and the PSC systems revolve around the classification of neoplasia. In the PSC system, there was a single category for neoplastic lesions that includes two groups, one for benign neoplasms [primarily serous cystadenoma] and one named other, dominated by premalignant intraductal neoplasms (primarily intraductal papillary mucinous neoplasms) and low-grade malignant neoplasms [pancreatic neuroendocrine tumors (PanNETs) and solid pseudopapillary neoplasms (SPNs)]. In the WHO system, benign neoplasms with virtually no risk of malignancy are included in the benign category and low-grade malignancies (PanNET and SPN) are included in the malignant category, as per the WHO Classification of Digestive System Tumours, thus leaving in the neoplasm category primarily those noninvasive premalignant lesions of the ductal system. These neoplasms are divided by the cytomorphological grade of the epithelium into low risk/low-grade and high risk/high-grade, with distinctly different risks of malignancy. As with the PSC system, the WHO system advocates close correlation with imaging and encourages incorporation of ancillary testing into the final diagnosis, such as biochemical (CEA and amylase) and molecular testing of cyst fluid and bile duct brushings. Key diagnostic cytopathological features of specific lesions or neoplasms, ancillary studies for diagnostic and prognostic evaluation, and implications of diagnosis for patient care and management are discussed. In addition, the WHO system includes reporting and diagnostic management options that recognize the variations in the availability of diagnostic and prognostic ancillary testing modalities in low- and middle-income countries, where cytopathology is particularly useful and is increasingly available in the absence of histopathological services.

113 Conde E.; Rojo F.; Gómez J.; Enguita A. B.; Abdulkader I.; González A.; Lozano María D; Mancheno N.; Salas C.; Salido M.; Salido-Ruiz E.; de Álava E.Molecular diagnosis in non-small-cell lung cancer: expert opinion on ALK and ROS1 testing. JOURNAL OF CLINICAL PATHOLOGY. 75 - 3, pp. 145 - 153. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/33875457/>. ISSN 0021-9746

DOI: 10.1136/jclinpath-2021-207490

Type of production: Bibliographic review

Format: Journal

Position of signature: 7

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 12

Impact source: ISI

Category: Science Edition - PATHOLOGY

Impact index in year of publication: 4.463
Journal in the top 25%: No
Position of publication: 22
No. of journals in the cat.: 77

Relevant results: The effectiveness of targeted therapies with tyrosine kinase inhibitors in non-small-cell lung cancer (NSCLC) depends on the accurate determination of the genomic status of the tumour. For this reason, molecular analyses to detect genetic rearrangements in some genes (ie, ALK, ROS1, RET and NTRK) have become standard in patients with advanced disease. Since immunohistochemistry is easier to implement and interpret, it is normally used as the screening procedure, while fluorescence in situ hybridisation (FISH) is used to confirm the rearrangement and decide on ambiguous immunostainings. Although FISH is considered the most sensitive method for the detection of ALK and ROS1 rearrangements, the interpretation of results requires detailed guidelines. In this review, we discuss the various technologies available to evaluate ALK and ROS1 genomic rearrangements using these techniques. Other techniques such as real-time PCR and next-generation sequencing have been developed recently to evaluate ALK and ROS1 gene rearrangements, but some limitations prevent their full implementation in the clinical setting. Similarly, liquid biopsies have the potential to change the treatment of patients with advanced lung cancer, but further research is required before this technology can be applied in routine clinical practice. We discuss the technical requirements of laboratories in the light of quality assurance programmes. Finally, we review the recent updates made to the guidelines for the determination of molecular biomarkers in patients with NSCLC.

114 Lozano María D. The World Health Organization reporting system for pancreatobiliary cytopathology. ACTA CYTOLOGICA. 14, pp. 1 - 17. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36516741/>. ISSN 0001-5547
DOI: 10.1159/000527912
Type of production: Bibliographic review
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 1

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.0
Journal in the top 25%: No
Position of publication: 43
No. of journals in the cat.: 77

Relevant results: The World Health Organization (WHO), the International Academy of Cytology, and the International Agency for Research on Cancer, with expert contributors from around the world, present an international approach to standardized reporting of pancreaticobiliary cytopathology. This reporting system is one of the first in a series from various body sites that mirror the WHO Classification of Tumours series and provides an evidence-based terminology system with associated risk of malignancy and diagnostic management recommendation per diagnostic category. The WHO Reporting System for Pancreaticobiliary Cytopathology (WHO system) revises the Papanicolaou Society of Cytopathology (PSC) system for Reporting Pancreaticobiliary Cytology published in 2015 and replaces the six-tiered system with a seven-tiered system: "insufficient/inadequate/nondiagnostic"; "benign (negative for malignancy)," "atypical," "pancreaticobiliary neoplasm of low risk/low grade," "pancreatic neoplasm of high risk/high grade," "suspicious for malignancy," and "malignant." The principal differences between the WHO and the PSC systems revolve around the classification of neoplasia. In the PSC system, there was a single category for "neoplastic" lesions that includes two groups, one for "benign neoplasms" [primarily serous cystadenoma] and one named "other," dominated by premalignant intraductal neoplasms (primarily intraductal papillary mucinous neoplasms) and low-grade malignant neoplasms [pancreatic neuroendocrine tumors (PanNETs) and solid pseudopapillary neoplasms (SPNs)]. In the WHO system, benign neoplasms with virtually no risk of malignancy are included in the "benign" category and low-grade malignancies (PanNET and SPN) are included in the "malignant" category, as per the WHO Classification of Digestive System Tumours, thus leaving in the "neoplasm" category primarily those noninvasive premalignant lesions of the ductal system. These neoplasms are divided by the cytomorphological grade of the epithelium into low risk/low-grade and high risk/high-grade, with distinctly different risks of malignancy. As with the PSC system, the WHO system advocates close correlation with imaging and encourages incorporation of ancillary testing into the final diagnosis, such as biochemical (CEA and amylase) and molecular testing of cyst fluid and bile duct brushings. Key diagnostic cytopathological features of specific lesions or neoplasms, ancillary studies for diagnostic and prognostic evaluation, and implications of diagnosis for patient care and management are discussed. In addition, the WHO system includes reporting and diagnostic management options that recognize the variations in the availability of

diagnostic and prognostic ancillary testing modalities in low- and middle-income countries, where cytopathology is particularly useful and is increasingly available in the absence of histopathological services.

115 Tejerina E.; García-Tobar Laura; Echeveste José Ignacio; de Andrea CE; Vigliar E.; Lozano María D. PD-L1 in cytological samples: a review and a practical approach. FRONTIERS IN MEDICINE. 8, pp. 668612. 2021. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/34026795/>. ISSN 2296-858X

DOI: 10.3389/fmed.2021.668612

Type of production: Bibliographic review
Format: Journal
Position of signature: 6
Total no. authors: 6
Corresponding author: Yes
Impact source: ISI
Category: Science Edition - MEDICINE, GENERAL & INTERNAL
Impact index in year of publication: 5.058
Journal in the top 25%: No
Position of publication: 52
No. of journals in the cat.: 172

Relevant results: With a growing number of predictive biomarkers needed to manage patients with non-small cell lung cancer (NSCLC), there has been a paradigm shift in care and handling of diagnostic samples. Among the various testing methods, immunohistochemistry (IHC) is the most cost- effective and widely available. Furthermore, over the past decade immunotherapy has emerged as one of the most promising cancer treatments. In this scenario IHC is the most used testing method available for PDL-1/PD1 immunotherapy. Several monoclonal antibodies targeting programmed death 1 (PD-1)/programmed death ligand-1 (PD-L1) pathways have been integrated into standard-of-care treatments of a wide range of cancer types, once provided evidence of PD-L1 expression in tumor cells by immunohistochemistry (IHC). Since currently available PD-L1 assays have been developed on formalin-fixed paraffin embedded (FFPE) histological specimens, a growing body of research is being dedicated to confirm the feasibility of applying PDL-1 assays also to cytological samples. Albeit promising results have been reported, several important issues still need to be addressed. Among these are the type of cytological samples, pre-analytical issues, cyto-histological correlation, and inter-observer agreement. This review briefly summarizes the knowledge of the role of cytopathology in the analysis of PD-L1 by immunocytochemistry (ICC) and future directions of cytopathology in the immunotherapy setting.

116 Pisapia P.; Lozano María D; Vigliar E.; Bellevicine C.; Pepe F.; Malapelle U.; Troncone G.ALK and ROS1 testing on lung cancer cytologic samples: perspectives. CANCER CYTOPATHOLOGY. 2017. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=ALK+and+ROS1+testing+on+lung+cancer+cytologic+samples%3A+Perspectives>. ISSN 1934-662X

DOI: 10.1002/cncy.21899

Type of production: Bibliographic review
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 7
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.866
Journal in the top 25%: No
Position of publication: 75
No. of journals in the cat.: 222

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.866
Journal in the top 25%: Yes
Position of publication: 14
No. of journals in the cat.: 79

Relevant results: Cytologic sampling is the mainstay of diagnosing advanced lung cancer. Moreover, to select patients for personalized first-line or second-line treatment, epidermal growth factor receptor (EGFR) mutations and anaplastic lymphoma kinase (ALK) and c-ros oncogene 1 (ROS1) rearrangements are tested on cytologic preparations. Commercially available fluorescence in situ hybridization (FISH) and immunocytochemistry (ICC) assays have primarily been used for the identification of cells harboring ALK or ROS1 gene fusions on histologic rather than cytologic preparations. However, it is now recognized that FISH and ICC also can be applied on cytologic samples provided the cytopathologist is aware that FISH and ICC results are not always concordant and that the performance of ICC largely depends on antibody clones, signal detection systems, and scoring systems.

Notably, the routine clinical use of FISH and ICC may be replaced by emerging next-generation sequencing and digital, color-coded barcode technologies, which have the advantage of simultaneously evaluating ALK, ROS1, and EGFR alterations in a single analysis. Although their use in clinical cytologic practice remains to be fully established, it is conceivable that this technology will replace both FISH and ICC analyses in future diagnostic algorithms. Here, the authors review studies devoted to testing ALK and ROS1 on cytology specimens in an attempt to provide an update for the cytopathologist regarding current and evolving practice.

117 Berrocal A.; Espinosa E.; Marín S.; Moreno D.; Lozano María D; Martín Algarra Salvador; Lopez J. A.; Conill C.; Rodriguez-Peralto J. L.Spanish multidisciplinary melanoma group (GEM) guidelines for the management of patients with advanced melanoma. EUROPEAN JOURNAL OF DERMATOLOGY. 25 - 5, pp. 392 - 403. 2015. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Spanish+multidisciplinary+melanoma+group+(GEM)+guidelines+for+the+management+of+patients+with+advanced+melanoma>. ISSN 1167-1122

DOI: 10.1684/ejd.2015.2594

Type of production: Bibliographic review
Format: Journal
Position of signature: 5
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 9

Impact source: ISI
Category: Science Edition - DERMATOLOGY
Impact index in year of publication: 2.069
Journal in the top 25%: No
Position of publication: 21
No. of journals in the cat.: 61

Relevant results: Advanced melanoma is a relatively uncommon condition whose therapeutic management has undergone major changes over the past four years. The present article aims to establish recommendations for the management of these patients based on the best available evidence reached by consensus of a group of professionals familiar in the treatment of these patients. These professionals, belonging to Spanish Multidisciplinary Melanoma Group, reviewed the diagnostic process and the incorporation of new techniques of molecular diagnosis of advanced disease; treatment and monitoring of stage III both as adjuvant locoregional treatments have been addressed, as well as new therapies for stage IV. We have reviewed the palliative treatment alternatives for disseminated disease, such as surgery, radiotherapy or non-cytotoxic systemic treatments. Finally, we have also reviewed the most relevant toxicities of new drugs and their management in clinical practice.

118 Isla D.; Lozano María D; Paz-Ares L.; Salas C.; de Castro J.; Conde E.; Felip E.; Gómez-Román J.; Garrido P.; Enguita A. B.Correction to: new update to the guidelines on testing predictive biomarkers in non¿small¿cell lung cancer: a National Consensus of the Spanish Society of Pathology and the Spanish Society of Medical Oncology. CLINICAL AND TRANSLATIONAL ONCOLOGY. 25 - 5, pp. 1488. 2023. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/36752960/>. ISSN 1699-048X

DOI: 10.1007/s12094-023-03103-x

Type of production: Corrección
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.34
Journal in the top 25%: No
Position of publication: 165
No. of journals in the cat.: 245

119 Vigliar E.; Lozano María D; Roy-Chowdhuri S.Editorial: advances in molecular cytopathology. FRONTIERS IN MEDICINE. 9, pp. 851949. 2022. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/35223934/>. ISSN 2296-858X

DOI: 10.3389/fmed.2022.851949

Type of production: Editorial
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 3

Impact source: ISI

Category: Science Edition - MEDICINE, GENERAL & INTERNAL
Impact index in year of publication: 5.058
Journal in the top 25%: No
Position of publication: 52
No. of journals in the cat.: 172

120 Romano Martínez A.; Jiménez Daniel; Echeveste José Ignacio; Martín Algarra Salvador; Lozano María D; de Andrea CE. Artificial intelligence as a potential tool for pathologists to evaluate lymphocyte infiltration in melanoma. VIRCHOWS ARCHIV. 481 - Supl. 1, pp. S46 - S47. 2022. ISSN 0945-6317
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 5
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 6
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.535
Journal in the top 25%: No
Position of publication: 21
No. of journals in the cat.: 77

121 Labiano T.; Lozano María D; Bronte M.; Rodríguez Y.; Dot Gómara T.; Elizalde J.; Almudevar E.; Echegoyen A.; Curi S.; Morilla I.; Guerrero D.Next generation sequencing (NGS) testing on endobrochial ultrasound - guided fine needle aspiration (EBUS-FNA) in Pap-stained smears: results in patients with lung adenocarcinoma. LABORATORY INVESTIGATION. 102 - Supl. 1, pp. 271. 2022. ISSN 0023-6837
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 11
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 5.502
Journal in the top 25%: No
Position of publication: 50
No. of journals in the cat.: 139

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 5.502
Journal in the top 25%: Yes
Position of publication: 16
No. of journals in the cat.: 77

122 Labiano T.; Lozano María D; Bronte M.; Rodríguez Y.; Dot Gómara T.; Elizalde J.; Almudevar E.; Echegoyen A.; Curi S.; Morilla I.; Guerrero D.Next generation sequencing (NGS) testing on endobrochial ultrasound - guided fine needle aspiration (EBUS-FNA) in Pap-stained smears: results in patients with lung adenocarcinoma. MODERN PATHOLOGY. 35 - Supl. 2, pp. 271. 2022. ISSN 0893-3952
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 11
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 8.209
Journal in the top 25%: Yes
Position of publication: 6
No. of journals in the cat.: 77

123 Guillermo García Porrero; Argueta Allan; Villalba María; Ramón Robledano Soldevilla; Bayo María Luisa; Echeveste José Ignacio; Alvarez Laura; Abengózar Marta; García-Tobar Laura; de Andrea CE; Lozano María D. PD-L1 expression in cytological NSCLC cell-blocks: a comparative study of the inter and intra-observer variability between conventional and algorithm-based assessments. LABORATORY INVESTIGATION. 102 - Supl. 1, pp. 258. 2022. ISSN 0023-6837
Type of production: Meeting-Abstracts
Format: Journal

Position of signature: 11

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 11

Impact source: ISI

Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL

Impact index in year of publication: 5.502

Journal in the top 25%: No

Position of publication: 50

No. of journals in the cat.: 139

Impact source: ISI

Category: Science Edition - PATHOLOGY

Impact index in year of publication: 5.502

Journal in the top 25%: Yes

Position of publication: 16

No. of journals in the cat.: 77

124 Lozano María D. Recommendations for optimizing the use of cytology in the diagnosis and management of patients with lung cancer. REVISTA ESPAÑOLA DE PATOLOGIA. 56 - 1, pp. 56 - 68. 2022. ISSN 1699-8855

DOI: 10.1016/j.patol2022.04.001

Type of production: Meeting-Abstracts

Format: Journal

Position of signature: 1

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 1

125 Morales María Isabel; Erhard Álvaro Armin; Lozano María D; Quincoces Gemma; Richter José Ángel; Rodríguez-Fraile M. Incidental diagnosis of neuroendocrine tumour with 68 Ga-PSMA PET/CT: report of clinical case. REVISTA ESPAÑOLA DE MEDICINA NUCLEAR E IMAGEN MOLECULAR. 39 - 2, pp. 102 - 103. 2020. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/31708480/>. ISSN 2253-654X

DOI: 10.1016/j.remn.2019.08.005

Type of production: Editorial

Format: Journal

Position of signature: 3

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 6

Impact source: ISI

Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING

Impact index in year of publication: 1.359

Journal in the top 25%: No

Position of publication: 119

No. of journals in the cat.: 134

126 Saieg M.; Lozano María D; Perez-Machado M.The role of cytopathology practice and research in the development of personalized medicine in Iberoamerica. DIAGNOSTIC CYTOPATHOLOGY. 48 - 9, pp. 819 - 820. 2020. Available on-line at: <https://pubmed.ncbi.nlm.nih.gov/32485070/>. ISSN 8755-1039

DOI: 10.1002/dc.24509

Type of production: Editorial

Format: Journal

Position of signature: 2

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 3

Impact source: ISI

Category: Science Edition - MEDICAL LABORATORY TECHNOLOGY

Impact index in year of publication: 1.582

Journal in the top 25%: No

Position of publication: 22

No. of journals in the cat.: 29

Impact source: ISI

Category: Science Edition - PATHOLOGY

Impact index in year of publication: 1.582

Journal in the top 25%: No

Position of publication: 61

No. of journals in the cat.: 77

127 Lozano María D; Abengózar Marta; Alvarez M.; García-Tobar Laura; Argueta Allan; Villalba María; Echeveste José Ignacio; de Andrea CE. Developing and validating multiplex immunofluorescence panels for immune-profiling of non-small cell lung cancer using cytological cell-blocks. LABORATORY INVESTIGATION. 100 - Supl. 1, pp. 390 - 391. 2020. ISSN 0023-6837

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 8
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 5.662
Journal in the top 25%: No
Position of publication: 38
No. of journals in the cat.: 140

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 5.662
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 77

128 Lozano María D; García-Tobar Laura; Abengózar Marta; Echeveste José Ignacio; Ignacio Ortego Zabalza; Alvarez M.; Paricio José Joaquín; Argueta Allan; Guillermo García Porrero; Gomez N.; de Andrea CE. Feasibility of PD-L1 expression in cytological stained smears: comparison with cellblocks and relationship with the outcomes of NSCLC patients treated with check-point inhibitors. LABORATORY INVESTIGATION. 100 - Supl. 1, pp. 392. 2020. ISSN 0023-6837

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 11
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 5.662
Journal in the top 25%: No
Position of publication: 38
No. of journals in the cat.: 140

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 5.662
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 77

129 Lozano María D; Abengózar Marta; Alvarez M.; Echeveste José Ignacio; Royuela E. H.; García-Tobar Laura; Paricio José Joaquín; Argueta Allan; Guillermo García Porrero; Moreno M.; Gomez N.; de Andrea CE. Feasibility, reliability and therapeutic implications of cytological stained smears as a source of starting material for next-generation sequencing-based molecular testing in NSCLC patients. LABORATORY INVESTIGATION. 100 - Supl. 1, pp. 391 - 392. 2020. ISSN 0023-6837

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 12
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 5.662
Journal in the top 25%: No
Position of publication: 38
No. of journals in the cat.: 140

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 5.662
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 77

130 de Andrea CE; Villalba María; Expósito Francisco; Lozano María D; Calvo Alfonso. A minimally invasive approach to evaluate the DNA methylation status in patients with non-small-cell lung cancer. MODERN PATHOLOGY. 32 - Supl. 2, 2019. ISSN 0893-3952

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 5
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 5.988
Journal in the top 25%: Yes
Position of publication: 5
No. of journals in the cat.: 78

131 Bertoglio P.; Cattoni M.; Nachira D.; Lococo F.; Aprile V.; Rodriguez Maria; Guerrera F.; Franzi F.; Viti A.; Bellafiore S.; Rindi G.; Bacchin D.; Lozano María D; Femia F.; Querzoli G.; Tobar L. G.; Ruffini E.; Paci M.; Margaritora S.; Lucchi M.; Imperatori A.; Terzi A.Impact of second predominant pattern on recurrence in early stage resected lung adenocarcinoma: a multicentric study. JOURNAL OF THORACIC ONCOLOGY. 14 - 10, pp. S895 - S896. 2019. ISSN 1556-0864

DOI: 10.1016/j.jtho.2019.08.1940

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 13
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 22
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 13.357
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 244

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 13.357
Journal in the top 25%: Yes
Position of publication: 3
No. of journals in the cat.: 64

132 de Andrea CE; Abengózar Marta; Garcia-Ros D; Carte García J.; Lozano María D; Melero Ignacio. Quantitative multiplex immunofluorescence lymphocyte characterization of tuberculosis granulomas shows prominent heretogeneity. LABORATORY INVESTIGATION. 99 - Supl. 1, pp. 1820. 2019. ISSN 0023-6837

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 5
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 6
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 4.197
Journal in the top 25%: No
Position of publication: 42
No. of journals in the cat.: 138

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.197
Journal in the top 25%: Yes
Position of publication: 12
No. of journals in the cat.: 78

133 Campo Arantza; Olmos P. E. Y.; Ocón María del Mar; Alcaide Ana Belén; de Torres Juan Pablo; Berto Juan Antonio; Pueyo Jesús Ciro; Lozano María D; Zulueta Javier J. Risk factors and prognosis of non-solid nodules in a lung cancer screening program. EUROPEAN RESPIRATORY JOURNAL. 54 - Supl. 63, 2019. ISSN 0903-1936

DOI: 10.1183/13993003.congress-2019.PA3026

Type of production: Meeting-Abstracts
Format: Journal

Position of signature: 8

Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 9

Impact source: ISI
Impact index in year of publication: 12.339
Position of publication: 4

Category: Science Edition - RESPIRATORY SYSTEM
Journal in the top 25%: Yes
No. of journals in the cat.: 64

134 Conde E.; Hernandez S.; Martinez R.; De Castro J.; Collazo-Lorduy A.; Jimenez B.; Muriel A.; Mate J. L.; Moran T.; Aranda I.; Massuti B.; Rojo F.; Domine M.; Sansano I.; Garcia F.; Felip E.; Mancheno N.; Juan O.; Sanz J.; Gonzalez-Larriba J. L.; Atienza-Cuevas L.; Arriola-Arellano E.; Abdulkader I.; Garcia J.; Camacho C.; Rodriguez-Abreu D.; Teixido C.; Reguart N.; Gonzalez-Pineiro A.; Lazaro-Quintela M.; Lozano María D; Gurpide Luis Alfonso; Gomez-Roman J.; Lopez-Brea M.; Pijuan L.; Salido M.; Arriola E.; Company A.; Insa A.; Esteban I.; Saiz M.; Azkona E.; Alvarez R.; Artal A.; Enguita A. B.; Benito A.; Paz-Ares L.; Garrido P.; Lopez-Rios F.Evaluation of a Novel ROS1 immunohistochemistry clone (SP384) for the identification of ROS1 rearrangements in NSCLC patients. JOURNAL OF THORACIC ONCOLOGY. 13 - 10, pp. S553 - S554. 2018. ISSN 1556-0864
DOI: 10.1016/j.jtho.2018.08.785
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 31
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 49

Impact source: ISI
Impact index in year of publication: 12.46
Position of publication: 10

Category: Science Edition - ONCOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 229

Impact source: ISI
Impact index in year of publication: 12.46
Position of publication: 3

Category: Science Edition - RESPIRATORY SYSTEM
Journal in the top 25%: Yes
No. of journals in the cat.: 63

135 Lozano María D; Abengózar Marta; Tania Labiano Miravalles; Mejías Luis Daniel; Pablo Panadero Meseguer; García-Tobar Laura; Gómez Pérez N.; Idoate Miguel Ángel; Echeveste José Ignacio; de Andrea CE. PD-L1 expression in cytological stained smears using two commercially available assays: comparison with cell-blocks and resection specimens. MODERN PATHOLOGY. 31 - Supl. 2, pp. 158. 2018. ISSN 0893-3952
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Impact index in year of publication: 6.365
Position of publication: 5

Category: Science Edition - PATHOLOGY
Journal in the top 25%: Yes
No. of journals in the cat.: 76

136 Grisanti F; García Berta; Morales María Isabel; Rosales Juan J.; Sancho Lidia; Guillen Valderrama E; Acosta M. L.; Lozano María D; Garcia-Velloso Maria Jose. Protocolo de imagen tardía en la exploración 18F-FDG PET/TC para la caracterización del nódulo pulmonar solitario con captación baja. REVISTA ESPAÑOLA DE MEDICINA NUCLEAR E IMAGEN MOLECULAR. 37 - Supl 1, pp. 87. 2018. Available on-line at: <http://www.elsevier.es/es-revista-revista-espanola-medicina-nuclear-e-125-congresos-37-congreso-sociedad-espanola-medicina-75-sesion-oncologia-pet-4260-comunicacion-protocolo-de-imagen-tardia-en-50759>. ISSN 2253-654X
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 8
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 9

Impact source: ISI

Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING

Impact index in year of publication: 0.928
Position of publication: 118
Journal in the top 25%: No
No. of journals in the cat.: 129

137 Biermann K.; Lozano María D; Hebert-Magee S.; Rindi G.; Doglioni C.How to prepare, handle, read, and improve EUS-FNA and fine-needle biopsy for solid pancreatic lesions: the pathologist's role. ENDOSCOPIC ULTRASOUND. 6 - Supl. 3, pp. S95 - S98. 2017. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=How+to+prepare%2C+handle%2C+read%2C+and+improve+EUS-FNA+and+fine-needle+biopsy+for+solid+pancreatic+lesions%3A+The+pathologist%27s+role>. ISSN 2303-9027
DOI: 10.4103/eus.eus_71_17
Type of production: Editorial
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 5
Impact source: ISI
Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 3.323
Journal in the top 25%: No
Position of publication: 34
No. of journals in the cat.: 80

138 Lozano María D; Mejías Luis Daniel; Abengózar Marta; Tania Labiano Miravalles; Subtil José Carlos; Gurpide Luis Alfonso; Aguirre María Mercedes; Gómez N.; Concepción María Esther Echarri Elosegui; Maset M. A.; Árabe Jorge Alí; Pablo Panadero Meseguer; Paricio José Joaquín; Idoate Miguel Ángel; Echeveste José Ignacio. A comparative analysis of different cytological samples for the assessment of ALK gene rearrangements in NSCLC patients. JOURNAL OF THORACIC ONCOLOGY. 12 - 1, pp. S503 - S503. 2017. ISSN 1556-0864
DOI: 10.1016/j.jtho.2016.11.610
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 15
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 10.336
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 222

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 10.336
Journal in the top 25%: Yes
Position of publication: 4
No. of journals in the cat.: 59

139 Lozano María D; Aguirre María Mercedes; Concepción María Esther Echarri Elosegui; Echeveste José Ignacio; Gómez N.; Maset M. A.; Abengózar Marta; Mejías Luis Daniel; Gurpide Luis Alfonso; Martín Algarra Salvador. Comparison of two different commercially available probes for the detection of ALK rearrangements in cytological smears. JOURNAL OF THORACIC ONCOLOGY. 12 - 1, pp. S519 - S520. 2017. ISSN 1556-0864
DOI: 10.1016/j.jtho.2016.11.637
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 10.336
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 222

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 10.336
Journal in the top 25%: Yes

Position of publication: 4 **No. of journals in the cat.:** 59

140 Datar I.; Sanmamed M. F.; Choi J.; Wang J.; Henick B. S.; Badri T.; Mejías Luis Daniel; Lozano María D; Pérez José Luis; Velcheti V.; Herbst R.; Melero Ignacio; Chen L.; Schalper K. A.In patients with advanced non-small cell lung cancer (NSCLC) LAG-3 is expressed on activated TILs and predicts resistance to PD-1 axis blockers. ANNALS OF ONCOLOGY. 28, pp. 5 - 5. 2017. ISSN 0923-7534

Type of production: Meeting-Abstracts **Format:** Journal
Position of signature: 8 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 14
Impact source: ISI **Category:** Science Edition - ONCOLOGY
Impact index in year of publication: 13.926 **Journal in the top 25%:** Yes
Position of publication: 9 **No. of journals in the cat.:** 222

141 Lozano María D. Guía para la determinación de ALK en extensiones citológicas. seap, 2016.

Type of production: Guía **Format:** Book
Position of signature: 1 **Degree of contribution:** Author or co-author of entire book
Total no. authors: 1

142 Lozano María D; Tania Labiano Miravalles; López-Picazo José María; Gurpide Luis Alfonso; Aguirre María Mercedes; Echarri M. E.; Maset M. A.; Gómez N.; Árabe Jorge Alí; Sánchez-Bayona Rodrigo; Echeveste José Ignacio; Idoate Miguel Ángel; Martín Algarra Salvador. EGFR, KRAS, and ALK: are really mutually exclusive?. Report of five cases harboring two different "theoretically exclusive" double mutations diagnosed by FNA cytology. MODERN PATHOLOGY. 29 - Supl. 2, pp. 108A. 2016. ISSN 0893-3952

Type of production: Meeting-Abstracts **Format:** Journal
Position of signature: 1 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 13
Impact source: ISI **Category:** Science Edition - PATHOLOGY
Impact index in year of publication: 5.728 **Journal in the top 25%:** Yes
Position of publication: 4 **No. of journals in the cat.:** 79

143 Iago Israel Rodríguez Lago; de la Riva Susana Rosa; Subtil José Carlos; Lozano María D; López-Picazo José María; Muñoz Miguel Ángel. Pseudoachalasia secondary to infiltration of the pillars of the diaphragm by an urotelial tumor: diagnostic approach with endoscopic ultrasound. REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS. 107 - 2, pp. 121 - 122. 2015. Available on-line at: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Pseudoachalasia+secondary+to+infiltration+of+the+pillars+of+the+diaphragm+by+an+urotelial+tumor%3A+Diagnosti+approach+with+endoscopic+ultrasound>. ISSN 1130-0108

Type of production: Carta **Format:** Journal
Position of signature: 4 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 6
Impact source: ISI **Category:** Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 1.455 **Journal in the top 25%:** No
Position of publication: 67 **No. of journals in the cat.:** 79

144 Lozano María D; Echeveste José Ignacio; Tania Labiano Miravalles; Gurpide Luis Alfonso; Solorzano Jose Luis; Hernán Dario Quiceno Arias; Gómez N.; Preciado P.; Maset M. A.; Martín Algarra Salvador. BRAF mutations in NSCLC: clinical features and outcome of a clinical series of patients diagnosed by cytology. LABORATORY INVESTIGATION. 95 - Supl. 1, pp. 98A. 2015. ISSN 0023-6837

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 4.202
Journal in the top 25%: Yes
Position of publication: 12
No. of journals in the cat.: 79
Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 4.202
Journal in the top 25%: Yes
Position of publication: 23
No. of journals in the cat.: 124

145 María del Carmen Reyna Fortes; Antonio Viudez Berral; Lozano María D; Echeveste José Ignacio; Zarate Ruth Noemí; Bastarrika Gorka; Jordi Broncano Cabrero; Subtil José Carlos. Spinal meningioma diagnosis based on transesophageal endoscopic ultrasound-guided fine-needle aspiration (EUS-FNA). REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS. 105 - 8, pp. 500 - 501. 2013. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url&db=edssci&AN=edssci.S1130.01082013000800012&lang=es&site=eds-live>. ISSN 1130-0108

Type of production: Carta
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 8
Impact source: ISI
Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 1.317
Journal in the top 25%: No
Position of publication: 64
No. of journals in the cat.: 75

146 Lozano María D; Tania Labiano Miravalles; Echeveste José Ignacio; Montañana M.; Gómez N.; Aguirre María Mercedes; Shieh F.; Ramos T.; Zulueta Javier J; Gurpide Luis Alfonso; Pérez José Luis; Martín Algarra Salvador. Clinical validation of mutational analysis of EGFR and KRAS in fine needle aspiration and small core needle biopsies using a real-time PCR method. JOURNAL OF CLINICAL ONCOLOGY. 31 - 15, 2013. ISSN 0732-183X

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 12
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 17.96
Journal in the top 25%: Yes
Position of publication: 5
No. of journals in the cat.: 203

147 Lozano María D; Tania Labiano Miravalles; Montañana M.; Gómez N.; Aguirre María Mercedes; Maset M.; Echeveste José Ignacio; Sanmamed MF; Gurpide Luis Alfonso; Idoate Miguel Ángel; Martín Algarra Salvador. Clinico-pathological correlations of BRAF and C-KIT mutations in metastatic melanoma (MM). LABORATORY INVESTIGATION. 93 - Supl. 1, pp. 117A. 2013. ISSN 0023-6837

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 11

Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 3.828
Journal in the top 25%: Yes
Position of publication: 26
No. of journals in the cat.: 124

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.828
Journal in the top 25%: Yes
Position of publication: 14
No. of journals in the cat.: 76

148 Lozano María D; Tania Labiano Miravalles; Montañana M.; Gómez N.; Aguirre María Mercedes; Echeveste José Ignacio; Palma J. F.; Ramos T.; Gurpide Luis Alfonso; Martín Algarra Salvador. EGFR and KRAS mutational analysis using small amounts of DNA from FNA and small CNB is feasible and reproducible using a commercial real time PCR method. Validation of this PCR method in cytological samples. JOURNAL OF THORACIC ONCOLOGY. 8 - Supl. 2, pp. S962. 2013. ISSN 1556-0864

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 5.8
Journal in the top 25%: Yes
Position of publication: 26
No. of journals in the cat.: 203

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 5.8
Journal in the top 25%: Yes
Position of publication: 5
No. of journals in the cat.: 54

149 Castañón Eduardo; Lozano María D; Juan Pablo Fusco Morales; Estefanía Arévalo Vázquez; Omar Esteban Carranza Rua; López-Picazo José María; Pérez José Luis; Gurpide Luis Alfonso; Gil Ignacio. EGFR-activating mutations and treatment with tyrosine-kinase inhibitors (TKI) to revert poor-prognosis (PP) associated with liver metastases (LM) in stage IV non-small cell lung cancer (NSCLC) patients (pts). JOURNAL OF CLINICAL ONCOLOGY. 31 - 15, 2013. ISSN 0732-183X

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 2
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 9

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 17.96
Journal in the top 25%: Yes
Position of publication: 5
No. of journals in the cat.: 203

150 Caicedo Carlos Javier; Garcia-Velloso Maria Jose; Lozano María D; Carmen Vigil Díaz; López-Picazo José María; Gurpide Luis Alfonso; Zulueta Javier J; Richter José Ángel; Rodríguez-Fraile M; Pérez José Luis. Role of [18F]-FDG-PET-CT in prediction of Kras and EGFR molecular profile in advanced non-small-cell lung cancer patients. EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING. 40 - Supl. 2, pp. S223 - S224. 2013. ISSN 1619-7070

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 3
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING
Impact index in year of publication: 5.217
Journal in the top 25%: Yes

Position of publication: 7 **No. of journals in the cat.:** 122

151 Tania Labiano Miravalles; Zudaire M.; Montañana M.; Echeveste José Ignacio; Aguirre María Mercedes; Gurpide Luis Alfonso; Pérez José Luis; Martín Algarra Salvador; Juan Pablo Fusco Morales; Lozano María D. Usefulness of cytological samples for the assessment of ALK rearrangements in NSCLC patients. JOURNAL OF THORACIC ONCOLOGY. 8 - Supl. 2, pp. S416 - S417. 2013. ISSN 1556-0864

Type of production: Meeting-Abstracts **Format:** Journal
Position of signature: 10 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI **Category:** Science Edition - ONCOLOGY
Impact index in year of publication: 5.8 **Journal in the top 25%:** Yes
Position of publication: 26 **No. of journals in the cat.:** 203

Impact source: ISI **Category:** Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 5.8 **Journal in the top 25%:** Yes
Position of publication: 5 **No. of journals in the cat.:** 54

152 Tania Labiano Miravalles; Caicedo Carlos Javier; Garcia-Velloso Maria Jose; Seijo Luis Miguel; Gurpide Luis Alfonso; Pérez José Luis; Lozano María D. Association of KRAS mutation in non small cell lung cancer and 18F-FDG uptake in PET/CT. LABORATORY INVESTIGATION. 92 - Supl. 1, pp. 481A. 2012. ISSN 0023-6837

Type of production: Meeting-Abstracts **Format:** Journal
Position of signature: 7 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 7

Impact source: ISI **Category:** Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 3.961 **Journal in the top 25%:** No
Position of publication: 30 **No. of journals in the cat.:** 121

Impact source: ISI **Category:** Science Edition - PATHOLOGY
Impact index in year of publication: 3.961 **Journal in the top 25%:** Yes
Position of publication: 14 **No. of journals in the cat.:** 77

153 Lozano María D; Tania Labiano Miravalles; Montanana M.; Echeveste José Ignacio; Gurpide Luis Alfonso; Pérez José Luis; Shieh F.; Ramos T.; Zulueta Javier J; Martín Algarra Salvador. Feasibility and usefulness of determining EGFR and KRAS mutations in cytological samples and CNB of NSCLC using an automated real-time PCR system. ANNALS OF ONCOLOGY. 23 - Supl. 9, pp. 432. 2012. ISSN 0923-7534

Type of production: Meeting-Abstracts **Format:** Journal
Position of signature: 1 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI **Category:** Science Edition - ONCOLOGY
Impact index in year of publication: 7.384 **Journal in the top 25%:** Yes
Position of publication: 18 **No. of journals in the cat.:** 196

154 Lozano María D; Tania Labiano Miravalles; Zudaire María Isabel; Gurpide Luis Alfonso; Zulueta Javier J; López-Picazo José María; Echeveste José Ignacio; Seijo Luis Miguel; Idoate Miguel Ángel; Martín Algarra Salvador; Pérez José Luis. Usefulness of cytological samples (CS) for the assessment of ALK rearrangements in non-small cell lung cancer (NSCLC). JOURNAL OF CLINICAL ONCOLOGY. 30 - 15, 2012. ISSN 0732-183X

Type of production: Meeting-Abstracts **Format:** Journal

Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 11

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 18.038
Journal in the top 25%: Yes
Position of publication: 5
No. of journals in the cat.: 196

155 Tania Labiano Miravalles; Echeveste José Ignacio; Seijo Luis Miguel; Pérez José Luis; Gurpide Luis Alfonso; Idoate Miguel Ángel; Aguirre María Mercedes; Zudaire María Isabel; Lozano María D. Usefulness of cytological samples for the assessment of ALK gene rearrangements in NSCLC patients. LABORATORY INVESTIGATION. 92 - Supl. 1, pp. 96A. 2012. ISSN 0023-6837

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 9
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 9

Impact source: ISI
Category: Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL
Impact index in year of publication: 3.961
Journal in the top 25%: No
Position of publication: 30
No. of journals in the cat.: 121

Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.961
Journal in the top 25%: Yes
Position of publication: 14
No. of journals in the cat.: 77

156 Lozano María D; Tania Labiano Miravalles; Echeveste José Ignacio; Gurpide Luis Alfonso; Seijo Luis Miguel; Zulueta Javier J; Anabel Del Barrio Diaz Aldagalan; Martín Algarra Salvador; Pio R; Pérez José Luis. Feasibility of mutational analysis of EGFR and K-RAS in cytological samples of NSCLC patients: correlation with clinical outcomes. JOURNAL OF THORACIC ONCOLOGY. 6 - 6. Supl. 2, pp. S392 - S393. 2011. ISSN 1556-0864

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 1
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 3.661
Journal in the top 25%: No
Position of publication: 54
No. of journals in the cat.: 194

Impact source: ISI
Category: Science Edition - RESPIRATORY SYSTEM
Impact index in year of publication: 3.661
Journal in the top 25%: Yes
Position of publication: 9
No. of journals in the cat.: 48

157 Agorreta J; Pajares María Josefa; Larráyoz Marta; Vesin A.; Ezponda Teresa; Zudaire María Isabel; Torre Wenceslao; Lozano María D; Gurpide Luis Alfonso; Brambilla E.; Brambilla C.; Wistuba I. I.; Behrens C.; Timsit J. F.; Pio R; Field J.; Montuenga Luis. High VEGFA pathway expression predicts good prognosis in stage I squamous cell carcinoma of the lung. CANCER RESEARCH. 71 - Supl. 8, 2011. ISSN 0008-5472

DOI: 10.1158/1538-7445.AM2011-2251
Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 8
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 17

Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 7.856
Journal in the top 25%: Yes

Position of publication: 12 **No. of journals in the cat.:** 194

158 Lozano María D; Gurpide Luis Alfonso; Echeveste José Ignacio; Anabel Del Barrio Diaz Aldagalan; Pérez José Luis; Seijo Luis Miguel; Zulueta Javier J; López-Picazo José María; Gil Ignacio; Martín Algarra Salvador. Assessment of epidermal growth factor receptor (EGFR) and K-ras mutation status in cytologic stained smears of non-small cell lung cancer (NSCLC) patients. JOURNAL OF CLINICAL ONCOLOGY. 28 - 15, 2010. ISSN 0732-183X

DOI: 10.1200/jco.2010.28.15_suppl.7560

Type of production: Meeting-Abstracts **Format:** Journal

Position of signature: 1 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI **Category:** Science Edition - ONCOLOGY

Impact index in year of publication: 18.97 **Journal in the top 25%:** Yes

Position of publication: 4 **No. of journals in the cat.:** 184

159 Lozano María D; Zarate Ruth Noemí; Echeveste José Ignacio; Gurpide Luis Alfonso; Seijo Luis Miguel; Idoate Miguel Ángel. Mutational analysis of EGFR in cytological specimens of patients with NSCLC. Usefulness of Papanicolau stained smears as a source of optimal DNA. LABORATORY INVESTIGATION. 89, pp. 89A. 2009. ISSN 0023-6837

Type of production: Meeting-Abstracts **Format:** Journal

Position of signature: 1 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 6

Impact source: ISI **Category:** Science Edition - MEDICINE, RESEARCH & EXPERIMENTAL

Impact index in year of publication: 4.602 **Journal in the top 25%:** Yes

Position of publication: 16 **No. of journals in the cat.:** 92

Impact source: ISI **Category:** Science Edition - PATHOLOGY

Impact index in year of publication: 4.602 **Journal in the top 25%:** Yes

Position of publication: 7 **No. of journals in the cat.:** 71

160 Idoate Miguel Ángel; Zarate Ruth Noemí; Cordoba A.; Ignacio Sánchez-Carpintero Abad; Robles M.; Echeveste José Ignacio; Tunon T.; Jesús Miguel García-Foncillas López; Lozano María D; Ángel Fernando Panizo Santos. The value of skin sebaceous gland tumors in the diagnosis of Muir-Torre syndrome by immunohistochemical and molecular evaluation of MLH1, MSH2 and MSH6 genes. MODERN PATHOLOGY. 21 - Supl. 1, pp. 95A. 2008. ISSN 0893-3952

Type of production: Meeting-Abstracts **Format:** Journal

Position of signature: 9 **Degree of contribution:** Author or co-author of article in journal with external admissions assessment committee

Total no. authors: 10

Impact source: ISI **Category:** Science Edition - PATHOLOGY

Impact index in year of publication: 4.678 **Journal in the top 25%:** Yes

Position of publication: 7 **No. of journals in the cat.:** 68

161 Idoate Miguel Ángel; Agirre X; Echeveste José Ignacio; Lozano María D; Ángel Fernando Panizo Santos; Sola Jesús Javier; Gemma Rosa Toledo Santana; Pardo Francisco Javier. Aberrant methylation of promoter is an infrequent mechanism of inactivation of PTEN in astrocytomas. LABORATORY INVESTIGATION. 87 - 1p. Supl. 1, pp. 298A - 298A. 2007. Available on-line at: <http://ezproxy.si.unav.es:2048/login?url=http://search.ebscohost.com/

login.aspx?direct=true&AuthType=ip,url&db=edswsc&AN=000244935302203&lang=es&site=eds-live>. ISSN 1530-0307

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 4
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 8

162 Pardo Francisco Javier; Torre Wenceslao; Martínez-Peñuela A.; Sola I.; Ángel Fernando Panizo Santos; Idoate Miguel Ángel; Lozano María D; Echeveste José Ignacio; Gemma Rosa Toledo Santana. Pseudomesotheliomatous pneumocytic carcinoma (PPC): a morphologic and phenotypic entity with distinct prognostic significance. MODERN PATHOLOGY. 19 - Supl. 3, pp. 799. 2006. ISSN 0893-3952

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 7
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 9
Impact source: ISI
Category: Science Edition - PATHOLOGY
Impact index in year of publication: 3.753
Journal in the top 25%: Yes
Position of publication: 8
No. of journals in the cat.: 65

163 Chopitea Ana; Ignacio Fernández-Urien Sáinz; Antonio Viudez Berral; Garcia-Velloso Maria Jose; Lozano María D; Pérez José Luis; Gurpide Luis Alfonso; Subtil José Carlos; Jesús Miguel García-Foncillas López; López-Picazo José María. Transesophageal endoscopic ultrasound guided fine-needle aspiration (EUSFNA) and PET for mediastinal staging in lung cancer. JOURNAL OF CLINICAL ONCOLOGY. 23 - 16, pp. 677S. 2005. ISSN 0732-183X

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 5
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 10
Impact source: ISI
Category: Science Edition - ONCOLOGY
Impact index in year of publication: 11.81
Journal in the top 25%: Yes
Position of publication: 6
No. of journals in the cat.: 123

164 Subtil José Carlos; Ignacio Fernández-Urien Sáinz; Betes M T; Herráiz María Teresa; de la Riva Susana Rosa; Eduardo Espinet Coll; Carretero Cristina; Lozano María D; Muñoz Miguel Ángel. Endoscopic ultrasound-guided fine-nedle aspiration cytology (EUS-FNA): Factors predicting diagnosis accuracy and number of passes necessary to obtain adecuate specimens. GASTROINTESTINAL ENDOSCOPY. 59 - 5 Supl., pp. A236. 2004. ISSN 0016-5107

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 8
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 9
Impact source: ISI
Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 3.483
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 46

165 Ignacio Fernández-Urien Sáinz; Subtil José Carlos; Herráiz María Teresa; Betes M T; de la Riva Susana Rosa; Eduardo Espinet Coll; Carretero Cristina; Muñoz Miguel Ángel; Lozano María D. Endoscopic ultrasound-guided fine-needle aspiration cytology of mediastinal lymph nodes: therapeutic impact in patients with pancreatobiliary and gastric neoplasias. GASTROINTESTINAL ENDOSCOPY. 59 - 5 Supl., pp. A234. 2004. Available on-line at: <https://apps.webofknowledge.com/full_record.do?

product=WOS&search_mode=GeneralSearch&qid=47&SID=P22fN6QiOLuQBzHFjJL&page=1&doc=2>. ISSN 0016-5107

Type of production: Meeting-Abstracts
Format: Journal
Position of signature: 9
Degree of contribution: Author or co-author of article in journal with external admissions assessment committee
Total no. authors: 9
Impact source: ISI
Category: Science Edition - GASTROENTEROLOGY & HEPATOLOGY
Impact index in year of publication: 3.483
Journal in the top 25%: Yes
Position of publication: 11
No. of journals in the cat.: 46

Works submitted to national or international conferences

1 **Title of the work:** Biomarcakers in cytological samples
Name of the conference: 2nd EFCS Joint Webinar of lung citology
Type of event: Conference
Geographical area: European Union
Type of participation: Participatory - oral communication
City of event: Pamplona, Spain
Date of event: 17/01/2023
End date: 17/01/2023

2 **Title of the work:** Biomarkers in cytological samples. How far can we go?
Name of the conference: LUNG CITOLOGY
Type of event: Conference
Geographical area: European Union
City of event: JOINT WEBINAR, Germany
Date of event: 17/01/2023
End date: 17/01/2023
Publication in conference proceedings: No

3 **Title of the work:** Inmunotherapy and lung cytology
Name of the conference: XI MOLECULAR CYTOPATHOLOGY
Type of event: Conference
Geographical area: European Union
Type of participation: Participatory - oral communication
City of event: Napoles, Italy
Date of event: 05/12/2022
End date: 06/12/2022
María Dolores Lozano Escario.

4 **Title of the work:** Conferencia Congreso Colombiano
Name of the conference: 43º Congreso Colombiano de Patología
Type of event: Conference
Geographical area: Others
Type of participation: Participatory - oral communication
City of event: Cali, Colombia
Date of event: 12/08/2022
End date: 14/08/2022
María Dolores Lozano Escario.

5 **Title of the work:** Liquid biopsy and biomarkers
Name of the conference: 16Th Aseica International Congress 2018
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Valencia, Spain
Date of event: 06/11/2018
End date: 08/11/2018
Rubén Pio Osés; Teresa Imizcoz Fabra; Elso P.; María Josefa Pajares Villandiego; Maite Martínez Aguillo; Vera R.; Ignacio Gil Bazo; Gorka Alkorta Aranburu; Felipe Luis Prósper Cardoso; María Dolores Lozano Escario; Ana Patiño García; Luis Montuenga Badía.

6 **Title of the work:** Protocolo de imagen tardía en la exploración 18F-FDG PET/TC para la caracterización del Nódulo Pulmonar Solitario con captación baja
Name of the conference: 37º Congreso de la Sociedad Española de Medicina Nuclear (SEMNIM)
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Oviedo, Spain
Date of event: 20/06/2018
End date: 22/03/2019
Publication in conference proceedings: Yes
Fabiana Lucrecia Grisanti Vollbracht; Berta García García; María Isabel Morales Lozano; Juan José Rosales Castillo; Lidia Sancho Rodriguez; Edgar Fernando Guillén Valderrama; Maria Laura Acosta; María Dolores Lozano Escario; María José García Velloso. En: Revista Española de Medicina Nuclear e Imagen Molecular. 37 - Supl 1, pp. 87. Elsevier, 2018. Available on-line at: <http://www.elsevier.es/es-revista-revista-espanola-medicina-nuclear-e-125-congresos-37-congreso-sociedad-espanola-medicina-75-sesion-oncologia-pet-4260-comunicacion-protocolo-de-imagen-tardia-en-50759>.

7 **Title of the work:** Utilidad de la use-paaf en el diagnóstico y en la planificación terapéutica de metástasis pancreáticas. Experiencia en nuestro centro
Name of the conference: Congreso Nacional de la Sociedad Española de Patología Digestiva
Type of event: Conference **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Santiago de Compostela, Spain
Date of event: 17/06/2016
End date: 20/06/2016
Santiago González Vázquez; Laura García Albarrán; Maria Teresa Alonso Sierra; Lorena Mora Moriana; María Dolores Lozano Escario; José Carlos Subtil Íñigo; María Teresa Betes Ibáñez.

8 **Title of the work:** Metástasis pancreáticas diagnosticadas por USE-PAFF
Name of the conference: XXXVIII Reunión Vasco-Navarra de Patología Digestiva
Type of event: Conference **Geographical area:** Regional
Type of participation: Participatory - oral communication
City of event: San Sebastián, Spain
Date of event: 20/11/2015
End date: 21/11/2015
Santiago González Vázquez; Laura García Albarrán; Maria Teresa Alonso Sierra; Lorena Mora Moriana; María Dolores Lozano Escario; José Carlos Subtil Íñigo; María Teresa Betes Ibáñez.

9 **Title of the work:** Metástasis pancreáticas diagnosticadas por EUS-PAAF. Experiencia en nuestro centro
Name of the conference: XXXVIII Reunión Vasco-Navarra de Patología Digestiva
Type of event: Conference **Geographical area:** Regional
Type of participation: Participatory - oral communication

City of event: San Sebastián, Spain
Date of event: 20/11/2015
End date: 21/11/2015
Laura García Albarrán; Lorena Mora Moriana; María Dolores Lozano Escario; José Carlos Subtil Íñigo; María Teresa Betes Ibáñez.

10 **Title of the work:** Contribution of FDG PET/CT for the prediction of EGFR, KRAS Mutation and ALK Rearrangement in Patients with Non-Small Cell Lung Cancer(NSCLC).
Name of the conference: Society of Nuclear Medicine and Molecular Imaging (SNMMI) Annual Congress.
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Baltimore, United States of America
Date of event: 06/06/2015
End date: 10/06/2015
Edgar Fernando Guillén Valderrama; María José García Velloso.

11 **Title of the work:** Asociación del subtipo molecular con la captación de 18F-FDG PET/CT en pacientes con cáncer de pulmon
Name of the conference: 35º Congreso SEMNIM
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Burgos, Spain
Date of event: 17/05/2015
End date: 19/05/2015
Publication in conference proceedings: Yes
Edgar Fernando Guillén Valderrama. En: 35.º Congreso de la Sociedad Española de Medicina Nuclear e Imagen Molecular. 34 - Extraordinario I, Ed. Elsevier., 2015.

12 **Title of the work:** Inflammatory Pseudotumors: the reality beyond the mist
Name of the conference: European Congress of Radiology 2013
Type of event: Conference **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Viena, Austria
Date of event: 07/03/2013
End date: 11/03/2013
Jon Etxano Cantera; David Cano Rafart; Pedro Jose Slon Roblero; Caraias R; Isabel Vivas Pérez; María Páramo Alfaro; María Dolores Lozano Escario; Maite Millor Muruzábal; Paula María García Barquín.

13 **Title of the work:** Diagnostic Value of FDG PET/CT in a Low Dose CT Lung Cancer Screening Program
Name of the conference: Annual Congress of the European Association of Nuclear Medicine
Type of event: Conference **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Milán, Italy
Date of event: 27/10/2012
End date: 31/10/2012
Publication in conference proceedings: Yes
María José García Velloso; Gorka Bastarrika Alemañ; Javier Joseph Zulueta Francés; María Dolores Lozano Escario; Carlos Javier Caicedo Zamudio; Josep María Martí Climent; Usua Montes Ona; José Ángel Richter Echevarría.

14 **Title of the work:** Utilidad de la USE-PAFF por vía digestiva baja para el diagnóstico de lesiones ocupantes de espacio en pelvis y retroperitoneo inferior.
Name of the conference: XIX Curso de Postgrado SEPD/AGA. Semana de las enfermedades digestivas
Type of event: Comunicación en curso **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Bilbao, Spain
Date of event: 02/06/2012
End date: 05/06/2012
F Zaya; C Marra-López; I Rodriguez; M Fernández; Ignacio Fernández-Urien Sáinz; Alejandra Pilar Alzina Pérez; María Dolores Lozano Escario; Cristina Carretero Ribón; María Teresa Betes Ibáñez; José Carlos Subtil Íñigo; Miguel Ángel Muñoz Navas.

15 **Title of the work:** Feasibility of mutational analysis of EGFR and K-ras in cytological samples of NSCLC patients: Correlation with clinical outcomes
Name of the conference: 14th World Conference on Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Amsterdam, Holland
Date of event: 03/07/2011
End date: 07/07/2011
María Dolores Lozano Escario; Tania Labiano Miravalles; José Ignacio Echeveste; Luis Alfonso Gúrpide Ayarra; Luis Miguel Seijo Maceiras; Javier Joseph Zulueta Francés; Anabel Del Barrio Diaz Aldagalan; Salvador Martín Algarra; Rubén Pio Osés; José Luis Pérez Gracia.

16 **Title of the work:** Inhibitor of differentiation-1 is a novel prognostic factor among NSCLC patients with adenocarcinoma histology and contributes to therapy resistance
Name of the conference: 102nd Meeting of the American Association for Cancer Research (AACR)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, Spain
Date of event: 02/04/2011
End date: 06/04/2011
Mariano Ponz Sarvisé; Paul Alain Nguewa Kamsu; María Josefa Pajares Villandiego; Jackeline Agorreta Arrazubi; María Dolores Lozano Escario; Miriam Redrado Jordán; Rubén Pio Osés; Carmen Behrens; Ignacio Wistuba; Jesús Miguel García-Foncillas López; Luis Montuenga Badía; Alfonso Calvo González; Ignacio Gil Bazo.

17 **Title of the work:** High VEGFA pathway expression predicts good prognosis in stage I squamous cell carcinoma of the lun
Name of the conference: 102 Annual Meeting of the American Association for Cancer Research
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Orlando, Florida, United States of America
Date of event: 02/04/2011
End date: 06/04/2011
Jackeline Agorreta Arrazubi; María Josefa Pajares Villandiego; Marta Larráyoz Ilundáin; A. Vesin; Teresa Ezponda Itoiz; María Isabel Zudaire Ripa; Wenceslao Torre Buxalleu; María Dolores Lozano Escario; Luis Alfonso Gúrpide Ayarra; Rubén Pio Osés; E Brambilla; C Brambilla; II Wistuba; C Behrens; JF Timsit; Luis Montuenga Badía.

18 **Title of the work:** Integration of molecular citology profiling into the cancer clinic
Name of the conference: 21 International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, China
Date of event: 24/10/2010
End date: 25/10/2010
María Dolores Lozano Escario.

19 **Title of the work:** Assessment of epidermal growth factor receptor (EGFR) and k-ras mutation status in cytological stained smears of non-small cell lung cancer (NSCLC) patients
Name of the conference: ASCO Annual Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, United States of America
Date of event: 04/06/2010
End date: 08/06/2010
María Dolores Lozano Escario; Salvador Martín Algarra; Luis Alfonso Gúrpide Ayarra; José Ignacio Echeveste; Anabel Del Barrio Diaz Aldagalan; José Luis Pérez Gracia; Luis Miguel Seijo Maceiras; Javier Joseph Zulueta Francés; José María López-Picazo González; Ignacio Gil Bazo.

20 **Title of the work:** Inhibitor of differentiation-1 (Id1): A novel prognostic and predictive factor in lung adenocarcinoma (AC)
Name of the conference: ASCO Annual 10 Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Sin dato, Spain
Date of event: 04/06/2010
End date: 08/06/2010
Ignacio Gil Bazo; Alfonso Calvo González; Mariano Ponz Sarvisé; María Josefa Pajares Villandiego; María Dolores Lozano Escario; Jackeline Agorreta Arrazubi; Jesús Miguel García-Foncillas López; C Behrens; Il Wistuba; Luis Montuenga Badía.

21 **Title of the work:** Echobrush versus standar EUS-Guided FNA of cystic lesiones of the pancreas. Preliminary experience
Name of the conference: 99 Annual Meeting of the Unitd States &Canadian Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Washignton DC, United States of America
Date of event: 20/03/2010
End date: 26/03/2010
Publication in conference proceedings: No
María Dolores Lozano Escario; José Carlos Subtil Íñigo; José Ignacio Echeveste; María Teresa Betes Ibáñez; Francisco Javier Álvarez-Cienfuegos Suárez; N. Gómez; Miguel Ángel Idoate Gastearena.

22 **Title of the work:** Comparative study of the Nestin expression in the invasier border of glioblastoma an in reactive glial tissue
Name of the conference: 99 Anual Meeting of the United States & Canadian Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, United States of America
Date of event: 20/03/2010

End date: 26/03/2010
Miguel Ángel Idoate Gastearena; Ricardo Díez Valle; José Ignacio Echeveste; María Dolores Lozano Escario; Tania Labiano Miravalles; Ángel Fernando Panizo Santos.

23 **Title of the work:** Loss of heterozigosity on 10q23 (PTEN Region) is a relevant predictor of survival in high grade astrocytomas
Name of the conference: 99 Anual Meeting of the Unites States & Canadian Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Washington, United States of America
Date of event: 20/03/2010
End date: 26/03/2010
Miguel Ángel Idoate Gastearena; José Ignacio Echeveste; Ricardo Díez Valle; María Dolores Lozano Escario; Bartolomé Bejarano Herruzo.

24 **Title of the work:** Lung cancer mutations screening vs. No screening
Name of the conference: International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, United States of America
Date of event: 19/03/2010
End date: 21/03/2010
María Dolores Lozano Escario.

25 **Title of the work:** Endoscopic ultrasonography-guided fine needle aspiration of pelvic and perirrectal masses.
Name of the conference: United European Gastroenterology Week
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Londres, United Kingdom
Date of event: 21/11/2009
End date: 25/11/2009
Publication in conference proceedings: No
Carlos Javier Marra-López Valenciano; José Carlos Subtil Íñigo; Ignacio Fernández-Urien Sáinz; María Dolores Lozano Escario; María Teresa Betes Ibáñez; Miguel Ángel Muñoz Navas.

26 **Title of the work:** Integration of molecular cytology profiling into the cancer clinic
Name of the conference: 21 st International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Zhuhai, China
Date of event: 24/10/2009
End date: 25/10/2009
María Dolores Lozano Escario.

27 **Title of the work:** Role of immunomolecular determinatios: pathological approach.
Name of the conference: 3rd European Meeting of EGEUS and EUS Cytopathology Group
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 17/09/2009

End date: 18/09/2009
María Dolores Lozano Escario.

28 **Title of the work:** Role of inmunomolecular determination pathological approach
Name of the conference: 3º European Meeting of EGEUS and EUS Cytopathology Group
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 17/09/2009
End date: 18/09/2009
María Dolores Lozano Escario.

29 **Title of the work:** Variables influencing the diagnostic yield of electromagnetic navigation bronchoscopy
Name of the conference: ERS 2009
Type of event: Conference **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Viena, Austria
Date of event: 09/09/2009
End date: 10/09/2009
Luis Miguel Seijo Maceiras; Juan Pablo De Torres Tajes; Gorka Bastarrika Alemañ; María Dolores Lozano Escario; Ana Belén Alcaide Ocaña; Aránzazu Campo Ezquibela; Javier Joseph Zulueta Francés.

30 **Title of the work:** Detection of plasma proteins in bronchoalveolar lavages from lung cancer patients
Name of the conference: 13th World Conference on Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: San Francisco, United States of America
Date of event: 01/07/2009
End date: 01/07/2009
Rubén Pio Osés; Guillermo García del Barrio; Daniel Ajona Martínez-Polo; Leticia Corrales Pecino; María Josefa Pajares Villandiego; C Witt; Luis Miguel Seijo Maceiras; B Schmidt; M Fleischhacker; Javier Joseph Zulueta Francés; María Dolores Lozano Escario; Luis Montuenga Badía. En: Detection of plasma proteins in bronchoalveolar lavages from lung cancer patients.

31 **Title of the work:** Carcinoma renal papilar oncocítico del adulto: una variante morfológica poco frecuente del carcinoma papilar. Estudio de 18 casos.
Name of the conference: XXIV Congreso de la Sociedad Española de Anatomía Patológica
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Sevilla, Spain
Date of event: 20/05/2009
End date: 23/05/2009
Ángel Fernando Panizo Santos; Jesús Javier Sola Gallego; Tania Labiano Miravalles; María Dolores Lozano Escario; Francisco Javier Pardo Mindán.

32 **Title of the work:** Patología hepatobiliopancreática
Name of the conference: XXIV Congreso de la Sociedad Española de Aantomía Patológica
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Sevilla, Spain
Date of event: 20/05/2009

End date: 23/05/2009
María Dolores Lozano Escario.

33 **Title of the work:** Reunión del Club de Patología Pulmonar
Name of the conference: XXIV Congreso de la Sociedad Española de Anatomía Patológica
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Sevilla, Spain
Date of event: 20/05/2009
End date: 23/05/2009
María Dolores Lozano Escario.

34 **Title of the work:** Mutational analysis of EGFR in cytological speciments in patients with NSCLC. Usefulness of papanicolaou stained smears as a source of optimal DNA.
Name of the conference: USCAP Annual Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Boston, United States of America
Date of event: 07/03/2009
End date: 13/03/2009
José Ignacio Echeveste; Ruth Noemí Zarate Romero; Luis Miguel Seijo Maceiras; María Dolores Lozano Escario; Miguel Ángel Idoate Gastearena; Luis Alfonso Gúrpide Ayarra.

35 **Title of the work:** Large cell carcinoma: a revised concept.
Name of the conference: 98th Annual Meeting of the United States and Canadian Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Boston, United States of America
Date of event: 07/03/2009
End date: 13/03/2009
Francisco Javier Pardo Mindán; Jesús Javier Sola Gallego; Ana Martinez-Peñuela Marco; Ángel Fernando Panizo Santos; Gregorio Aisa Rivera; J.M. Martinez-Peñuela; María Dolores Lozano Escario.

36 **Title of the work:** The pathology of the border of glioblstoma evaluated by 5-aminolevulinic fluorescence-guided resection.
Name of the conference: 98th Annual Meeting of the United States and Canadian Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Boston, United States of America
Date of event: 07/03/2009
End date: 13/03/2009
Miguel Ángel Idoate Gastearena; Ricardo Díez Valle; José Ignacio Echeveste; María Dolores Lozano Escario; Ángel Fernando Panizo Santos; Jesús Javier Sola Gallego.

37 **Title of the work:** VEGF-A loop in stage I NSCLC cells predicts a good outcome
Name of the conference: 1 St International Lung Cancer Confrerence
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Sin dato, Spain
Date of event: 01/07/2008
End date: 01/07/2008

Jackeline Agorreta Arrazubi; María Josefa Pajares Villandiego; A Vesin; Marta Larráyoz Ilundáin; Teresa Ezponda Itoiz; María Isabel Zudaire Ripa; Rubén Pio Osés; Javier Joseph Zulueta Francés; María Dolores Lozano Escario; I Gil-Bazo; E Brambilla; C Brambilla; JF Timsit; JC Soria; EU-ELC Consortium; Luis Montuenga Badía. En: VEGF-A loop in stage I NSCLC cells predicts a good outcome.

38 **Title of the work:** Citología aspirativa de lesiones pancreáticas dirigida por ecoendoscopia.
Name of the conference: XVIII Congreso de la Sociedad Espñola de Anatomía Patológica
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Badajoz, Spain
Date of event: 12/05/2008
End date: 16/05/2008
María Dolores Lozano Escario.

39 **Title of the work:** PAAF de pulmón mediante las distintas vías de abordaje (TAV¿C, broncoscopia, endoscopia). Ventajas e inconvenientes.
Name of the conference: XVIII Congreso de la Sociedad Española de Anatomía Patológica
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Badajoz, Spain
Date of event: 12/05/2008
End date: 16/05/2008
María Dolores Lozano Escario.

40 **Title of the work:** La metilación aberrante del promotor es un mecanismo infrecuente de inactivación del gen PTEN en los astrocitomas.
Name of the conference: Sin especificar
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 23/11/2007
End date: 24/11/2007
Miguel Ángel Idoate Gastearena; José Ignacio Echeveste; Xabier Aguirre Ena; María Dolores Lozano Escario; Jesús Javier Sola Gallego; Ángel Fernando Panizo Santos.

41 **Title of the work:** Aberrant methylation of promoter is an infrequent mechanism of inactivation of PTEN in astrocytomas
Name of the conference: Sin especificar
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 20/11/2007
End date: 24/11/2007
Miguel Ángel Idoate Gastearena; José Ignacio Echeveste; Xabier Aguirre Ena; María Dolores Lozano Escario; Ángel Fernando Panizo Santos; Jesús Javier Sola Gallego; Gregorio Aisa Rivera.

42 **Title of the work:** Hiperplasia siringolinfoide cutánea asociada a trasplante renal
Name of the conference: XXXIII Reunión Nacional del Grupo Español de Dermatopatología
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 09/11/2007

End date: 10/11/2007
Ignacio Sánchez-Carpintero Abad; Miguel Ángel Idoate Gastearena; José Ignacio Echeveste; Agustín España Alonso; Jesús Javier Sola Gallego; Miren Marquina Iñarrairaegui; María Dolores Lozano Escario.

43 **Title of the work:** Endoscopic ultrasound-guided fine needle aspiration of pancreatic lesions.
Name of the conference: XXXIII European Congress of Cytology
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Madrid, Spain
Date of event: 14/10/2007
End date: 17/10/2007
María Dolores Lozano Escario.

44 **Title of the work:** Virtual Seminar. Case history
Name of the conference: XXXIII European Congress of Cytology
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Madrid, Spain
Date of event: 14/10/2007
End date: 17/10/2007
María Dolores Lozano Escario.

45 **Title of the work:** Spherical arterial embolization particles: are ther all the same?
Name of the conference: Annual Meeting and Postgraduate Course CIRSE
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Athenas, Greece
Date of event: 08/10/2007
End date: 12/10/2007
Antonio Martínez de la Cuesta; José Ignacio Bilbao Jaureguízar; María Dolores Lozano Escario; Esther de Luis Pastor.

46 **Title of the work:** Spherical arterial embolization particles: are they all the same.
Name of the conference: Annual Meeting and Postgraduate Course of the Cardiovascular and Interventional Radiological Society of Europe (CIRSE) Radiology
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Atenas, Greece
Date of event: 08/09/2007
End date: 12/09/2007
Esther de Luis Pastor; María Dolores Lozano Escario; A. Garcia de Jalón; Antonio Martínez de la Cuesta; José Ignacio Bilbao Jaureguízar. En: Cardiovascular and Interventional Radiology. 2007.

47 **Title of the work:** Expresión de VEGF-A en cáncer de pulmón
Name of the conference: XII Congreso SEBC (Sociedad Española de Biología Celular)
Type of event: Conference **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Pamplona, Spain
Date of event: 02/07/2007
End date: 05/07/2007

María Josefa Pajares Villandiego; Jackeline Agorreta Arrazubi; María José Larráyoz Ilundáin; Javier Joseph Zulueta Francés; Natalia Rodríguez-Spiteri Sagredo; María Dolores Lozano Escario; Rubén Pio Osés; Consorcio de Investigadores EU-ELC; Luis Montuenga Badía.

48 **Title of the work:** PAAF de médula ósea: comparación de citología convencional y medio líquido (ThinPrep) en la evaluación de enfermedad metastásica.
Name of the conference: XXIII Congreso de la SEAP
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Tarragona, Spain
Date of event: 16/05/2007
End date: 19/05/2007
María Dolores Lozano Escario; José Ignacio Echeveste; Miguel Ángel Idoate Gastearena; Gregorio Aisa Rivera; Francisco Javier Pardo Mindán.

49 **Title of the work:** Valor de la PAAF guiada con ultrasonografía endoscópica (USE) en el diagnóstico y manejo de lesiones pélvicas.
Name of the conference: XXIII Congreso de la SEAP
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Tarragona, Spain
Date of event: 16/05/2007
End date: 19/05/2007
María Dolores Lozano Escario; Ignacio Fernández-Urien Sáinz; José Carlos Subtil Íñigo; Miguel Ángel Idoate Gastearena; Francisco Javier Pardo Mindán.

50 **Title of the work:** ¿Son todas las partículas embolizantes iguales?
Name of the conference: X Congreso Nacional de a SERVEI
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Oviedo, Spain
Date of event: 09/05/2007
End date: 12/05/2007
José Ignacio Bilbao Jaureguízar; Esther de Luis Pastor; Antonio Martínez de la Cuesta; A de Martino; Alberto Alonso Burgos; María Dolores Lozano Escario; J.A. García de Jalon.

51 **Title of the work:** X Curso de Ginecología Oncológica
Name of the conference: X Curso de Ginecología Oncológica
Type of event: Seminar **Geographical area:** National
Type of participation: Participatory - others
City of event: Pamplona, Spain
Date of event: 23/03/2007
End date: 23/03/2007
María Dolores Lozano Escario.

52 **Title of the work:** III Congreso Internacional de Oncología para estudiantes
Name of the conference: III Congreso Internacional de Oncología para estudiantes
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - others
City of event: Pamplona, Spain
Date of event: 22/03/2007
End date: 24/03/2007

María Dolores Lozano Escario.

53 **Title of the work:** Epithelial cell adhesion molecule (EPCAM) expresion in renal cell carcinoma (RCC). A tissue microarray study.
Name of the conference: 22nd Annual Congress of the European Association of Urology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Berlín, Germany
Date of event: 21/03/2007
End date: 24/03/2007
Jorge Pedro Rioja Zuazu; Ángel Fernando Panizo Santos; Jesús Javier Sola Gallego; Javier Brugarolas Rosselló; Abel Sáiz Sansi; José Ignacio Echeveste; María Dolores Lozano Escario; José Enrique Robles García; Juan Javier Zudaire Bergera; José María Berián Polo; Francisco Javier Pardo Mindán.

54 **Title of the work:** Spherical arterial embolization particles: Are they all the same?
Name of the conference: European Congress of Radiology
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Viena, Austria
Date of event: 09/03/2007
End date: 13/03/2007
Esther de Luis Pastor; María de Lourdes Díaz Dorronsoro; José Ignacio Bilbao Jaureguízar; Antonio Martínez de la Cuesta; J. García Jalón; Beatriz Zudaire Díaz-Tejeiro; María Dolores Lozano Escario.

55 **Title of the work:** Study of skin sebaceous gland tumors by immunohistochemical analysis of MLH1, MSH2 and MSH6
Name of the conference: XXVII Symposium of the International Society of Dermatopathology, IV Meeting of the Iberian and Latin American Society of Dermatopathology, and XXXII Annual Meeting of the Spanis Dermatopathology Group
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Málaga, Spain
Date of event: 09/11/2006
End date: 11/11/2006
Miguel Ángel Idoate Gastearena; Ignacio Sánchez-Carpintero Abad; José Ignacio Echeveste; María Dolores Lozano Escario; Miren Marquina Iñarrairaegui; Francisco Javier Pardo Mindán.

56 **Title of the work:** Pseudomesotheliomatous pneumocytic carcinoma (Ppc): a morphologic and phenotypic entity with distinct prognostic significance.
Name of the conference: XXVI International Congress of the International Academy of Pathology (IAP)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Montreal, Canada
Date of event: 16/09/2006
End date: 21/09/2006
Francisco Javier Pardo Mindán; Jesús Javier Sola Gallego; Ángel Fernando Panizo Santos; Miguel Ángel Idoate Gastearena; María Dolores Lozano Escario; Gemma Rosa Toledo Santana; José Ignacio Echeveste.

57 **Title of the work:** Utilidad de la PAAF intraoperatoria en el diagnóstico de nódulos pulmonares sin filiar
Name of the conference: XXXIX Congreso Nacional SEPAR
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication

City of event: Sevilla, Spain
Date of event: 03/06/2006
End date: 05/06/2006
Publication in conference proceedings: Yes
Natalia Rodríguez-Spiteri Sagredo; María Dolores Lozano Escario; Wenceslao Torre Buxalleu; José Ignacio Echeveste; Gorka Bastarrika Alemañ; Aránzazu Campo Ezquibela. En: Archivos de Bronconeumología. 42, pp. 125. 2006.

58 **Title of the work:** Detección precoz de cáncer de pulmón con baja dosis de radiación y PET-FDG: prevalencia en 1095 sujetos asintomáticos
Name of the conference: XXVIII Congreso Nacional de la SERAM
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Zaragoza, Spain
Date of event: 26/05/2006
End date: 29/05/2006
Gorka Bastarrika Alemañ; Alberto Alonso Burgos; Ignacio González Crespo; Isabel Vivas Pérez; María Dolores Lozano Escario; Javier Joseph Zulueta Francés. En: XXVIII Congreso Nacional de la SERAM.

59 **Title of the work:** Estudio experimental comparativo de cuatro agentes embolizantes esféricos
Name of the conference: XXVIII Congreso Nacional de la SERAM
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Zaragoza, Spain
Date of event: 26/05/2006
End date: 29/05/2006
Esther de Luis Pastor; José Ignacio Bilbao Jaureguízar; Antonio Martínez de la Cuesta; María Dolores Lozano Escario; A. García Rodríguez; J. Guillen.

60 **Title of the work:** Estudio histológico tras embolización arterial hepática con Hepasphere en un modelo animal
Name of the conference: XXVIII Congreso Nacional de la SERAM
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Zaragoza, Spain
Date of event: 26/05/2006
End date: 29/05/2006
Esther de Luis Pastor; José Ignacio Bilbao Jaureguízar; Antonio Martínez de la Cuesta; María Dolores Lozano Escario; JA García Jalón de Ciércoles; Octavio Cosin Sales.

61 **Title of the work:** Comparison of two limbal stem cell culture systems as corneal regeneration treatment.
Name of the conference: ARVO 2006 Annual Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Fort Lauderdale, United States of America
Date of event: 30/04/2006
End date: 04/05/2006
Javier Moreno Montañés; Ana María Fernández Hortelano; María del Rosario García Guzmán; José Ignacio Echeveste; María Dolores Lozano Escario; Felipe Luis Prósper Cardoso.

62 **Title of the work:** Estudio experimental en un modelo animal del comportamiento de una nueva partícula embolizante: Hepasphere
Name of the conference: XII Curso de Actualidades y Reunión Anual del Servicio de Radiología
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Zaragoza, Spain
Date of event: 20/04/2006
End date: 21/04/2006
Esther de Luis Pastor; JA García Jalón de Ciércoles; María Dolores Lozano Escario; María José Pons Renedo; Ignacio González Crespo; Jesús Ciro Pueyo Villoslada; José Ignacio Bilbao Jaureguízar.

63 **Title of the work:** A comparative study of Spherical Embolization Particles: Our Results in an Animal Model.
Name of the conference: 31th Annual Scientific Meeting of the Society of Interventional Radiology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Toronto, Canada
Date of event: 30/03/2006
End date: 04/04/2006
Esther de Luis Pastor; María Dolores Lozano Escario; Juan Francisco Espinosa Parrilla; J.A. Garcia Jalon; Antonio Martínez de la Cuesta; Octavio Cosin Sales; José Ignacio Bilbao Jaureguízar.

64 **Title of the work:** Modification of an US-FNAB technique of the thyroid gland and material processing with Thin Prep diminishes the proportion of inadequate smears
Name of the conference: 22th European Congress of Radiology.
Type of event: Conference **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Viena, Austria
Date of event: 09/03/2006
End date: 13/03/2006
María de Lourdes Díaz Dorronsoro; Alberto Alonso Burgos; Alberto José Villanueva Marcos; Javier Carlos Larrache Latasa; María Dolores Lozano Escario; Gorka Bastarrika Alemañ.

65 **Title of the work:** Fine needle aspiration of the thyroid gland: A retrospective analysis of the safety and efficacy of 1468 consecutive ultrasonography (UD) guided procedures.
Name of the conference: Congreso Europeo de Radiología
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Viena, Austria
Date of event: 03/03/2006
End date: 08/03/2006
Pablo Daniel Domínguez Echávarri; Alberto Alonso Burgos; José Juan Noguera Tajadura; Esther de Luis Pastor; Alberto José Villanueva Marcos; Alberto Benito Boillos; Javier Carlos Larrache Latasa; María Dolores Lozano Escario.

66 **Title of the work:** What happens with the arterial wall after embolization with Hepasphere?
Name of the conference: Congreso Europeo de Radiologia
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Viena, Austria
Date of event: 03/03/2006
End date: 08/03/2006

Esther de Luis Pastor; José Juan Noguera Tajadura; A. Garcia-Rodriguez; María Dolores Lozano Escario; Antonio Martínez de la Cuesta; José Ignacio Bilbao Jaureguízar.

67 **Title of the work:** Early detection of lung cancer with spiral low-dose CT adn FDF-PET: Baseline results in 1095 asymptomatic smokers.
Name of the conference: Congreso Europeo de Radiología
Type of event: Conference **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Viena, Austria
Date of event: 03/03/2006
End date: 08/03/2006
Gorka Bastarrika Alemañ; José Juan Noguera Tajadura; María Dolores Lozano Escario; Isabel Vivas Pérez; Luis Montuenga Badía; Javier Joseph Zulueta Francés.

68 **Title of the work:** Fine needle aspiration of thyroid gland: a retrospective analysis of the safety and efficacy of 1468 consecutive ultrasonography (UD) guided procedures
Name of the conference: ECR Congreso Europeo de Radiologia
Type of event: Conference **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Viena, Austria
Date of event: 03/03/2006
End date: 08/03/2006
Pablo Daniel Domínguez Echávarri; Alberto Alonso Burgos; José Juan Noguera Tajadura; Esther de Luis Pastor; Alberto José Villanueva Marcos; Alberto Benito Boillos; Javier Carlos Larrache Latasa; María Dolores Lozano Escario.

69 **Title of the work:** Feasability of intraoperative fine needle aspiration as an alternative to frozen section analysis of pulmonary nodules: A retrospective pilot study.
Name of the conference: 95th Annual Meeting United States and Canadian Academy of Pathology (USCAP)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Atlanta, United States of America
Date of event: 11/02/2006
End date: 17/02/2006
María Dolores Lozano Escario; NR Spiteri; José Ignacio Echeveste; Luis Miguel Seijo Maceiras; Gemma Rosa Toledo Santana; Miguel Ángel Idoate Gastearena; Wenceslao Torre; Ángel Fernando Panizo Santos; Javier Joseph Zulueta Francés.

70 **Title of the work:** Immunocharacterization and Molecular Evaluation in the Diagnosis of Cutaneous Lymphoid Hyperplasia.
Name of the conference: 95th Annual Meeting United States and Canadian Academy of Pathology (USCAP)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Atlanta, United States of America
Date of event: 11/02/2006
End date: 17/02/2006
Miguel Ángel Idoate Gastearena; Pedro Isidro Lloret Luna; María Dolores Lozano Escario; Gemma Rosa Toledo Santana; Ángel Fernando Panizo Santos; Francisco Javier Pardo Mindán; Ana Martinez-Peñuela Marco.

71 **Title of the work:** The basophil specific antibody 2D7 is expressed by local mastocytosis but not by the systemic one.
Name of the conference: 95th Annual Meeting United States and Canadian Academy of Pathology (USCAP)
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Atlanta, United States of America
Date of event: 11/02/2006
End date: 17/02/2006
Miguel Ángel Idoate Gastearena; Marta Ferrer Puga; María Pilar Gil Sánchez; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; Ángel Fernando Panizo Santos; Francisco Javier Pardo Mindán.

72 **Title of the work:** Aplicaciones en muestras citológicas
Name of the conference: Realidad actual de las aplicaciones de la Patología Molecular. Fundacion MM
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Madrid, Spain
Date of event: 01/12/2005
End date: 02/12/2005
María Dolores Lozano Escario.

73 **Title of the work:** Feasability of intraoperative fine needle aspiration as an alternative to frozen section analysis of pulmonary nodules: A retrospective pilot study
Name of the conference: 13 th International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, United States of America
Date of event: 21/10/2005
End date: 23/10/2005
María Dolores Lozano Escario; J Seijo; W Torre; N Spiteri; Gorka Bastarrika Alemañ; Aránzazu Campo Ezquibela; Ana Belén Alcaide Ocaña; Javier Joseph Zulueta Francés.

74 **Title of the work:** Biological profiling of three different cohorts of small peripheral lung tumors based on the molecular analysis of fine needle aspiration cytology
Name of the conference: 13th International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: New York, United States of America
Date of event: 21/10/2005
End date: 23/10/2005
María Dolores Lozano Escario; María Isabel Zudaire Ripa; M. Vazquez; María Josefa Pajares Villandiego; Rubén Pio Osés; Jackeline Agorreta Arrazubi; José Ignacio Echeveste; Javier Joseph Zulueta Francés; Luis Montuenga Badía; D. Yankelevich; Beatriz del Río Aróstegui; C. Henschke.

75 **Title of the work:** Diagnosis of early lung cancer detected by screening CT scan. Development of biomarkers for cytological samples
Name of the conference: XXV Congress of the International Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, Australia
Date of event: 10/10/2005
End date: 15/10/2005

María Dolores Lozano Escario.

76 **Title of the work:** Comparación de dos métodos de cultivo de células madre limbocorneales como estrategia de regeneración corneal
Name of the conference: 81 Congreso Nacional de la Sociedad Española de Oftalmología
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Sin dato, Spain
Date of event: 21/09/2005
End date: 24/09/2005
Ana María Fernández Hortelano; Javier Moreno Montañés; Felipe Luis Prósper Cardoso; María Dolores Lozano Escario; M Guzman.

77 **Title of the work:** Epithelial cell adhesion molecule (EpCAM) expresion in renal cell carcinomas (RCC). A tissue microarray (TMA) study".
Name of the conference: 20th European Congress of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, France
Date of event: 03/09/2005
End date: 08/09/2005
Ángel Fernando Panizo Santos; Gemma Rosa Toledo Santana; Francisco Javier Pardo Mindán; María Dolores Lozano Escario; Miguel Ángel Idoate Gastearena; Jesús Javier Sola Gallego.

78 **Title of the work:** Epithelial cell adhesion molecule (EpCam) expression in renal cell carcinomas (RCC). A tissue microarray study
Name of the conference: 20 th European Congress of Pathology
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Paris, France
Date of event: 03/09/2005
End date: 08/09/2005
Ángel Fernando Panizo Santos; Jesús Javier Sola Gallego; Gemma Rosa Toledo Santana; Miguel Ángel Idoate Gastearena; María Dolores Lozano Escario; Francisco Javier Pardo Mindán.

79 **Title of the work:** Granulomatous reaction in primary adult renal neoplasms: A clinicopathological and molecular study of 17 cases.
Name of the conference: 20 th European Congress of Pathology.
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Paris, France
Date of event: 03/09/2005
End date: 08/09/2005
Ángel Fernando Panizo Santos; Francisco Javier Pardo Mindán; María Dolores Lozano Escario; Miguel Ángel Idoate Gastearena; Jesús Javier Sola Gallego.

80 **Title of the work:** Positron emission tomography with F-18 FDG PET in an early lung cancer detection protocol
Name of the conference: 52nd Annual Meeting Society of Nuclear Medicine
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Toronto, Canada

Date of event: 01/09/2005
End date: 01/09/2005
María José García Velloso; Marta Valero Camps; Gorka Bastarrika Alemañ; Javier Joseph Zulueta Francés; Patricia Serra Arbeloa; Josep María Martí Climent; María Dolores Lozano Escario; U Montes; W Torre; José Ángel Richter Echevarría. En: J Nucl Med.

81 **Title of the work:** Molecular profiling of lung nodules in a spiral CT-screening protocol shows multiple malignant features
Name of the conference: 11th Conference on Lung Cancer
Type of event: Conference **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Barcelona, Spain
Date of event: 03/07/2005
End date: 06/07/2005
María Josefa Pajares Villandiego; María Isabel Zudaire Ripa; Jackeline Agorreta Arrazubi; María Dolores Lozano Escario; Gorka Bastarrika Alemañ; W. Torre; A. Remírez; Rubén Pio Osés; Javier Joseph Zulueta Francés; Luis Montuenga Badía.

82 **Title of the work:** Estadificación mediastínica mínimamente invasiva del cáncer de pulmón mediante PAAF guiada con ecoendoscopia transesofágica y PET
Name of the conference: XXII Congreso de la Sociedad Española de Anatomía Patológica.
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Palma de Mallorca, Spain
Date of event: 26/05/2005
End date: 26/05/2005
José Ignacio Echeveste; José Carlos Subtil Íñigo; Ignacio Fernández-Urien Sáinz; Ana Martínez-Peñuela Marco; Miguel Ángel Idoate Gastearena; María Dolores Lozano Escario.

83 **Title of the work:** Factores relacionados con la efectividad diagnóstica de la USE-PAAF
Name of the conference: XXII Congreso de la Sociedad Española de Anatomía Patológica.
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Palma de Mallorca, Spain
Date of event: 26/05/2005
End date: 26/05/2005
José Ignacio Echeveste; José Carlos Subtil Íñigo; Ignacio Fernández-Urien Sáinz; Ana Martínez-Peñuela Marco; Miguel Ángel Idoate Gastearena; María Dolores Lozano Escario.

84 **Title of the work:** Expresión de la molécula de adhesión epitelial (EpCam) en el carcinoma renal. Estudio mediante microarrays de tejido.
Name of the conference: XXII Congreso de la Sociedad Española de Anatomía Patológica
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Palma de Mallorca, Spain
Date of event: 25/05/2005
End date: 28/05/2005
Ángel Fernando Panizo Santos; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; Miguel Ángel Idoate Gastearena; Jesús Javier Sola Gallego; Francisco Javier Pardo Mindán.

85 **Title of the work:** Patología Molecular y Citología. Aplicaciones del FISH en la citología no ginecológica
Name of the conference: XXII Congreso Nacional de la Sociedad Española de Anatomía Patológica
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Palma de Mallorca, Spain
Date of event: 25/05/2005
End date: 28/05/2005
María Dolores Lozano Escario.

86 **Title of the work:** Transesophageal endoscopic ultrasound guided fine-needle aspiration (EUS-FNA) and PET for mediastinal staging in lung cancer
Name of the conference: American Society of Clinical Oncology.
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, Spain
Date of event: 03/05/2005
End date: 03/05/2005
Ana Chopitea Ortega; Ignacio Fernández-Urien Sáinz; Antonio Viudez Berral; María José García Velloso; María Dolores Lozano Escario; José Luis Pérez Gracia; Luis Alfonso Gúrpide Ayarra; José Carlos Subtil Íñigo; Jesús Miguel García-Foncillas López; José María López-Picazo González.

87 **Title of the work:** Molecular profiling of CT-screen detected lung tumors based the analysis of FNA-cytology
Name of the conference: 12th International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Nara, Japan
Date of event: 08/04/2005
End date: 10/04/2005
María Dolores Lozano Escario; Vázquez M. F.; María Isabel Zudaire Ripa; María Josefa Pajares Villandiego; Javier Joseph Zulueta Francés; Yankelevitch D.; Henschke C. I.; Luis Montuenga Badía.

88 **Title of the work:** Correlation between Real Time RT-PCR Expression of PTEN and Tumoral Grade in Astrocytomas
Name of the conference: United States and Canadian Academy of Pathology (USCAP) 94nd Annual Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, United States of America
Date of event: 26/02/2005
End date: 05/03/2005
Antonio Joaquín Idoate García; E Andion; Jesús Miguel García-Foncillas López; Ángel Fernando Panizo Santos; María Dolores Lozano Escario; Gemma Rosa Toledo Santana; Francisco Javier Pardo Mindán; Jesús Javier Sola Gallego.

89 **Title of the work:** Búsqueda de marcadores moleculares para la detección precoz del cáncer de pulmón
Name of the conference: Curso ESO de Cáncer de Pulmón. Centro Nacional de Investigaciones Oncológicas (CNIO)
Type of event: Workshop **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Madrid, Spain
Date of event: 17/02/2005
End date: 18/02/2005

Luis Montuenga Badía; María Josefa Pajares Villandiego; María Dolores Lozano Escario; María Isabel Zudaire Ripa; Jackeline Agorreta Arrazubi; María Collantes Martínez; Silvestre Vicent Cambra; Gorka Bastarrika Alemañ; Rubén Pio Osés; Javier Joseph Zulueta Francés.

90 **Title of the work:** Molecular profiling of spiral-CT detected and resected nodules shows multiple malignant features
Name of the conference: 11th International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Roma, Italy
Date of event: 15/10/2004
End date: 17/10/2004
Luis Montuenga Badía; María Josefa Pajares Villandiego; María Dolores Lozano Escario; J. Zudaire; Jackeline Agorreta Arrazubi; Gorka Bastarrika Alemañ; Wenceslao Torre Buxalleu; José María López-Picazo González; Rubén Pio Osés; Javier Joseph Zulueta Francés.

91 **Title of the work:** The use of positron emission tomography with F-18 FDG (FDG PET) in an early lung cancer detection protocol
Name of the conference: 11th International Conference on Screening for Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Sin dato, Italy
Date of event: 15/10/2004
End date: 17/10/2004
María José García Velloso; Patricia Serra Arbeloa; Gorka Bastarrika Alemañ; María Dolores Lozano Escario; Aránzazu Campo Ezquibela; U. Montes; W. Torre; Luis Montuenga Badía; José Ángel Richter Echevarría; Javier Joseph Zulueta Francés.

92 **Title of the work:** Molecular profiling of spiral-CT detected and resected nodules shows multiple malignant features
Name of the conference: 11th International Conference on Screening for Lung Cancer.
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Roma, Italy
Date of event: 15/10/2004
End date: 17/10/2004
Luis Montuenga Badía; María Josefa Pajares Villandiego; M. Zudaire; María Dolores Lozano Escario; Jackeline Agorreta Arrazubi; Gorka Bastarrika Alemañ; Rubén Pio Osés; W. Torre; J.M. López Picazo; Javier Joseph Zulueta Francés.

93 **Title of the work:** FICTION as a new tool to early lung cancer diagnosis
Name of the conference: First Marie Curie Conferences and Training Courses on array CGH and Molecular Cytogenetics.
Type of event: Conference **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Cambridge, United Kingdom
Date of event: 01/10/2004
End date: 01/10/2004
María Isabel Zudaire Ripa; María Josefa Pajares Villandiego; J. García; María Dolores Lozano Escario; M. Varella; J. Martín; J. Zulueta; María José Calasanz Abinzano; María Dolores Odero de Dios; Luis Montuenga Badía.

94 **Title of the work:** Comparación de diversos modelos experimentales de insuficiencia límbica corneal completa
Name of the conference: 80 Congreso de la Sociedad Española de Oftalmología
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Córdoba, Spain
Date of event: 29/09/2004
End date: 02/10/2004
Ana María Fernández Hortelano; Felipe Luis Prósper Cardoso; Javier Moreno Montañés; María Dolores Lozano Escario; Gloria Abizanda.

95 **Title of the work:** Cultivo y caracterización de las células madre limbocorneales de donante como estrategia de regeneración corneal
Name of the conference: 80 Congreso de la Sociedad Española de Oftalmología
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Sin dato, Spain
Date of event: 29/09/2004
End date: 02/10/2004
Javier Moreno Montañés; Ana María Fernández Hortelano; Felipe Luis Prósper Cardoso; María Dolores Lozano Escario; M Guzman.

96 **Title of the work:** Utilidad de la citología líquida monocapa (Thinprep) en la citología de impresión ocular
Name of the conference: 80 Congreso de la Sociedad Española de Oftalmología
Type of event: Conference **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Córdoba, Spain
Date of event: 29/09/2004
End date: 02/10/2004
Ana María Fernández Hortelano; María Dolores Lozano Escario.

97 **Title of the work:** Biopsias con aguja gruesa versus punción aspiración con aguja fina (PAAF) en la obtención de material diagnóstico de lesiones músculo-esqueléticas
Name of the conference: XXVII Congreso Nacional de la SERAM
Type of event: Conference **Geographical area:** National
Type of participation: 'Participatory - poster
City of event: Bilbao, Spain
Date of event: 28/05/2004
End date: 31/05/2004
María José Pons Renedo; Jesús Dámaso Aquerreta Beola; María Dolores Lozano Escario; Mariana Elorz Carlón; David Cano Rafart; Loreto García del Barrio.

98 **Title of the work:** Endoscopic ultrasoud-guided fine-needle aspiration cytology (EUS-FNA): factors predicting diagnosis accuracy and number of passes necessary to obtain adequate specimens
Name of the conference: Digestive Disease Week
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Orlando-Florida, United States of America
Date of event: 18/05/2004
End date: 21/05/2004

José Carlos Subtil Íñigo; Ignacio Fernández-Urien Sáinz; María Teresa Betes Ibáñez; María Teresa Herráiz Bayod; Susana Rosa de la Riva Onandía; Eduardo Espinet Coll; Cristina Carretero Ribón; Miguel Ángel Muñoz Navas; María Dolores Lozano Escario. 59, pp. 234.

99 **Title of the work:** Endoscopic ultrasound guided fine needle aspiration cytology (EUS-FNA) of mediastinal lymph nodes. Clinical impact in the management of patients with pancreatobiliary and gastric neoplasias
Name of the conference: 93nd Annual Meeting of United States and Canadian Academy of Pathology.
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Vancouver, Canada
Date of event: 02/04/2004
End date: 02/04/2004
María Dolores Lozano Escario; Ignacio Fernández-Urien Sáinz; José Carlos Subtil Íñigo; Miguel Ángel Idoate Gastearena; Gemma Rosa Toledo Santana; Jesús Javier Sola Gallego; María Teresa Herráiz Bayod; José Ignacio Echeveste; Francisco Javier Pardo Mindán.

100 **Title of the work:** Estadificación mediastínica mínimamente invasiva del cáncer de pulmón mediante ecoendoscopia transesofágica y PET
Name of the conference: V Congreso Nacional de la FESEO
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Valencia, Spain
Date of event: 01/03/2004
End date: 01/03/2004
Ana Chopitea Ortega; Ignacio Fernández-Urien Sáinz; Susana de la Cruz Sánchez; María Dolores Lozano Escario; Jaime Espinós Jiménez; J.L Pérez García; Luis Alfonso Gúrpide Ayarra; Jesús Miguel García-Foncillas López; José María López-Picazo González.

101 **Title of the work:** Increased expression of matrix metalloproteinases 1,2,7 and 9 and tissue inhibitors of metalloproteinases 1 and 2 in bronchioloalveolar carcinoma
Name of the conference: 93th Annual Meeting United States and Canadian Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Vancouver, Canada
Date of event: 01/03/2004
End date: 01/03/2004
Ana Martínez-Peñuela Marco; Ángel Fernando Panizo Santos; María Dolores Lozano Escario; Jesús Javier Sola Gallego; Miguel Ángel Idoate Gastearena; Francisco Javier Pardo Mindán.

102 **Title of the work:** Mitogen-activated protein kinase (MAPK) phosphatase-1 (CL100/MKP-1) overexpression and MAPKs activation in non small cell lung cancer (NSCLC)
Name of the conference: 95 Annual Meeting AACR
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Orlando, Florida, United States of America
Date of event: 01/03/2004
End date: 01/03/2004
Silvestre Vicent Cambra; María Mercedes Garayoa Berrueta; José María López-Picazo González; María Dolores Lozano Escario; Gemma Rosa Toledo Santana; F.B Thunnissen; R G-Manzano; Luis Montuenga Badía.

103 **Title of the work:** Renal cell carcinoma with rhabdoid phenotype: clinicopathologic, inmunohistochemical and flow cytometry study
Name of the conference: United States and Canadian Academy of Pathology (USCAP) 93th Annual Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Vancouver, United States of America
Date of event: 01/03/2004
End date: 01/03/2004
Ángel Fernando Panizo Santos; Jesús Javier Sola Gallego; Miguel Ángel Idoate Gastearena; María Dolores Lozano Escario; Gemma Rosa Toledo Santana; Francisco Javier Pardo Mindán.

104 **Title of the work:** Tomografía por emisión de Positrones con 18 F-FDG en un programa de detección precoz de cáncer de pulmón
Name of the conference: XXV Congreso Nacional de la SEMN
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 01/03/2004
End date: 01/03/2004
Patricia Serra Arbeloa; María José García Velloso; Gorka Bastarrika Alemañ; Javier Joseph Zulueta Francés; I Fernández; María Dolores Lozano Escario; W Torre; José Ángel Richter Echevarría.

105 **Title of the work:** Vascular endothelial growth factor is an unfavorable prognostic factor in 1.5 to 3.00 mm Breslow depth melanomas
Name of the conference: Annual Meeting de la Academia Norteamericana y Candiense de Patología
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Vancouver, Canada
Date of event: 01/03/2004
End date: 01/03/2004
Miguel Ángel Idoate Gastearena; Pedro Redondo Bellón; María Dolores Lozano Escario; Ángel Fernando Panizo Santos; José Ignacio Echeveste; Francisco Javier Pardo Mindán.

106 **Title of the work:** The RNA binding protein AlphaCP-4 coded by a putative tumor suppressor gene at 3p21, is abnormally expressed in lung cancer
Name of the conference: II Conferencia Atlántica del Cáncer, I Reunión de la Red de Centros de Cáncer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Tenerife, Spain
Date of event: 12/02/2004
End date: 14/02/2004
Zafira Castaño Corsino; Rubén Pio Osés; María Isabel Zudaire Ripa; Irene Pino de la Huerga; Natalia Zabalegui Merino; Iñaki Martín-Subero; Fermín García Amigot; Gemma Rosa Toledo Santana; Jesús Miguel García-Foncillas López; María Dolores Lozano Escario; María Dolores Odero de Dios; María José Calasanz Abinzano; Luis Montuenga Badía.

107 **Title of the work:** Activation of the extracellular signal regulated kinase (ERK1/2) is a frequent event in non-small cell lung cancer (NSCLC) cell lines and correlates with advanced tumors
Name of the conference: V Jornadas canarias de Oncología. II Conferencia Atlántica del Cáncer
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication

City of event: Santa Cruz de Tenerife, Spain
Date of event: 01/02/2004
End date: 01/02/2004
Silvestre Vicent Cambra; José María López-Picazo González; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; W Torre; María Carmen García Corchón; C Quero; Salvador Martín Algarra; R.G Manzano; Luis Montuenga Badía.

108 **Title of the work:** Activation of the mitogen-activated protein kinase (MAP-K) is a frequent evant in non-small cell lung cancer (NSCLC) cell lines and is associated with aggressive tumors in NSCLC patients
Name of the conference: Signal Transduction Meeting
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Luxemburg, Luxembourg
Date of event: 24/01/2004
End date: 26/01/2004
Silvestre Vicent Cambra; José María López-Picazo González; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; W Torre; María Carmen García Corchón; C Quero; Salvador Martín Algarra; Luis Montuenga Badía; R Manzano.

109 **Title of the work:** Linfoma no Hodgkin asociado a cavitación de ganglios linfáticos mesentéricos en enfermedad celíaca. A propósito de 2 casos
Name of the conference: XLV Reunión de la Asociación Española de Hematología y Hemoterapia y XIX Congreso de la Sociedad Española de Trombosis y Hemostasia
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Santiago de Compostela, Spain
Date of event: 01/12/2003
End date: 01/12/2003
M Pérez Salazar; Carlos Manuel Panizo Santos; María Piva Sánchez Antón; María Dolores Lozano Escario; Ramón Lecumberri Villamediana; Jesús Feliu Sánchez; Braulia Cuesta Palomero; Eduardo Rocha Hernando.

110 **Title of the work:** Early lung cancer detection with dose spiral computed tomography and positron emission tomography
Name of the conference: Congreso ELCAP
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Miami, United States of America
Date of event: 01/11/2003
End date: 01/11/2003
Javier Joseph Zulueta Francés; Gorka Bastarrika Alemañ; María José García Velloso; María Dolores Lozano Escario; W Torre; Jesús Ciro Pueyo Villoslada; U Montes; Luis Alfonso Gúrpide Ayarra; Aránzazu Campo Ezquibela; José Javier García López; José Ángel Richter Echevarría; Luis Montuenga Badía.

111 **Title of the work:** Histopathological and molecular characterization of lung tumors detected in the context of spiral CT-based lung cancer screening
Name of the conference: Congreso ELCAP
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Miami, United States of America
Date of event: 01/11/2003
End date: 01/11/2003

María Dolores Lozano Escario; María Josefa Pajares Villandiego; María Isabel Zudaire Ripa; Rubén Pio Osés; Jesús Ciro Pueyo Villoslada; Gorka Bastarrika Alemañ; W Torre; María Dolores Odero de Dios; Javier Joseph Zulueta Francés; Luis Montuenga Badía.

112 **Title of the work:** The RNA binding protein AlphaCP-4 coded by a putative tumor suppresor gene at 3p21, is abnormally expressed in lung cancer
Name of the conference: II Conferencia Atlántica del Cancer, I Reunión de la Red de Centros de Cáncer
Type of event: Conference **Geographical area:** National
Type of participation: Participatory - oral communication
City of event: Santa Cruz de Tenerife, Spain
Date of event: 01/11/2003
End date: 01/11/2003
Zafira Castaño Corsino; Rubén Pio Osés; María Isabel Zudaire Ripa; I Pino; Natalia Zabalegui Merino; J.I Martín-Subero; F García-Amigot; Gemma Rosa Toledo Santana; Jesús Miguel García-Foncillas López; María Dolores Lozano Escario; María Dolores Odero de Dios; María José Calasanz Abinzano; Luis Montuenga Badía.

113 **Title of the work:** Altered expression of alphaCP-4, a putative tumor supressor gene at 3p21, and its alternatively spliced variant alphaCP-4a in lung cancer
Name of the conference: 10th World Conference on Lung Cancer
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Vancouver, Canada
Date of event: 10/08/2003
End date: 14/08/2003
Rubén Pio Osés; I Pino; Zafira Castaño Corsino; María Isabel Zudaire Ripa; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; María Dolores Odero de Dios; María José Calasanz Abinzano; Luis Montuenga Badía.

114 **Title of the work:** The RNA Binding Protein alphaCP-4, Coded by a Putative Tumor Suppressor Gene at 3p21.3, is Abnormally Expressed in Lung Cancer
Name of the conference: 94th Annual Meeting of the American Association for Cancer Research.
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: Washington DC, United States of America
Date of event: 11/07/2003
End date: 14/07/2003
Rubén Pio Osés; María Isabel Zudaire Ripa; Irene Pino de la Huerga; Natalia Zabalegui Merino; I. Martín-Subero; Fermín García Amigot; Juan Bautista Toledo Atucha; Jesús Miguel García-Foncillas López; María Dolores Lozano Escario; María Dolores Odero de Dios; María José Calasanz Abinzano; Luis Montuenga Badía.

115 **Title of the work:** Activation of the mitogen-activated protein kinase (MAP-K) is a frequent evant in non-small cell lung cancer (NSCLC) cell lines and is associated with aggressive tumors in NSCLC patients
Name of the conference: AACR 2003
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Washington, United States of America
Date of event: 01/07/2003
End date: 01/07/2003
Silvestre Vicent Cambra; José María López-Picazo González; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; W Torre; María Carmen García Corchón; C Quero; Salvador Martín Algarra; Luis Montuenga Badía; R G Manzano.

116 **Title of the work:** EGFR, COX-2, and VEGF in thyroid lesions: upregulation in papillary carcinoma as a marker of aggressive phenotype
Name of the conference: 92th Annual Meeting United States and Canadian Academy of Patology
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Washington, D. C., United States of America
Date of event: 01/07/2003
End date: 01/07/2003
Ángel Fernando Panizo Santos; Jesús Javier Sola Gallego; E De Álava Casado; María Dolores Lozano Escario; Miguel Ángel Idoate Gastearena; Javier Rodríguez Rodríguez; Francisco Javier Pardo Mindán.

117 **Title of the work:** Loss of FHIT protein expression is related to high proliferation, low apoptosis and worst prognosis in non-small-cell lung carcinomas
Name of the conference: 92th Annual Meeting United States and Canadian Academy of Patology
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Washington, D.C., United States of America
Date of event: 01/07/2003
End date: 01/07/2003
Gemma Rosa Toledo Santana; I Sola; Elena Soria Saldise; María Dolores Lozano Escario; Ana Martínez-Peñuela Marco; Francisco Javier Pardo Mindán.

118 **Title of the work:** Poor correlation between IHC abd RT-PCR detection of tyrosinase in tumors derived from perivascular epothellioid cells (PEC tumors)
Name of the conference: 92th Annual Meeting United States and Canadian Academy of Patology
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Washington, D. C., United States of America
Date of event: 01/07/2003
End date: 01/07/2003
Jesús Javier Sola Gallego; J Gómez-Román; Ángel Fernando Panizo Santos; Miguel Ángel Idoate Gastearena; María Dolores Lozano Escario; J.F Valbernal; Francisco Javier Pardo Mindán.

119 **Title of the work:** Mucosa-associated lymphoid tissue (MALT) lymphoma of the stomach. Evaluation of the accompanyng morphological alterations of the gastric mucosa
Name of the conference: 92th Annual Meeting United States and Canadian Academy of Patology
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Washington, D. C., United States of America
Date of event: 01/04/2003
End date: 01/04/2003
J Baena; Jesús Javier Sola Gallego; Gemma Rosa Toledo Santana; F Vega; E De Álava Casado; María Dolores Lozano Escario; Miguel Ángel Idoate Gastearena; Francisco Javier Pardo Mindán.

120 **Title of the work:** Utilidad Clínica del diagnóstico citológico de masas pancreáticas. Experiencia de la Clínica Universitaria de Navarra en una serie no seleccionada de 382 casos
Name of the conference: VIII Congreso de la Sociedad Española de Oncología Médica (SEOM)
Type of event: Conference **Geographical area:** Others
Type of participation: Participatory - oral communication
City of event: Santa Cruz de Tenerife, Spain
Date of event: 01/04/2003

End date: 01/04/2003
María Dolores Lozano Escario; José Ignacio Echeveste; Javier Rodríguez Rodríguez; José Javier Aristu Mendioroz; F Pardo; Salvador Martín Algarra.

121 **Title of the work:** Activation of the mitogen-activated protein kinase (MAPK) is a frequent event in non-small cell lung cancer (NSCLC) cell lines and is associated with aggressive tumors in NSCLC patients
Name of the conference: AACR
Type of event: Conference **Geographical area:** Others
Type of participation: 'Participatory - poster
City of event: Sin dato, Spain
Date of event: 01/04/2003
End date: 01/04/2003
S Vincent; José María López-Picazo González; G Toledo; María Dolores Lozano Escario; W Torre; C García-Corchón; C Quero Blanco; Salvador Martín Algarra; Luis Montuenga Badía; R González Manzano.

122 **Title of the work:** Molecular cytogenetic analysis of the 3p21 region in paraffin-embedded lung cancer tissues to search for new tumor suppressor genes
Name of the conference: 8th European Workshop on Cytogenetics and molecular Genetics of human solid tumours
Type of event: Poster en taller de trabajo **Geographical area:** European Union
Type of participation: 'Participatory - poster
City of event: Barcelona, Spain
Date of event: 12/09/2002
End date: 15/09/2002
María Isabel Zudaire Ripa; Irene Pino de la Huerga; Rubén Pio Osés; Wenceslao Torre Buxalleu; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; María Dolores Odero de Dios; María José Calasanz Abinzano; Luis Montuenga Badía.

123 **Title of the work:** Evaluation of the role of CL100/MKP-1 in lung cancer
Name of the conference: 93th AACR Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: San Francisco, Spain
Date of event: 06/04/2002
End date: 10/04/2002
Silvestre Vicent Cambra; María Mercedes Garayoa Berrueta; José María López-Picazo González; María Dolores Lozano Escario; Gemma Rosa Toledo Santana; Ramón González Manzano; Luis Montuenga Badía.

124 **Title of the work:** Expression of members of the heterogeneous nuclear ribonucleoprotein (hnRNP) family in lung cancer
Name of the conference: 93th AACR Meeting
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: San Francisco, United States of America
Date of event: 06/04/2002
End date: 10/04/2002
Pino I; Gemma Rosa Toledo Santana; Zabalegui N; Eva María Bandres Elizalde; Silvestre Vicent Cambra; Javier Joseph Zulueta Francés; María Dolores Lozano Escario; Wenceslao Torre Buxalleu; Alejandro Salvador Sierra Martínez; Jesús Miguel García-Foncillas López; Luis Montuenga Badía.

125 **Title of the work:** Preliminary evaluation of the role of alpha-CP4 in early stages of lung cancer
Name of the conference: International Workshop on Cellular and Molecular Carcinogenesis
Type of event: Conference **Geographical area:** Non EU International
Type of participation: Participatory - oral communication
City of event: Pamplona, Spain
Date of event: 21/06/2001
End date: 23/06/2001
Jesús Manuel Honorato Pérez; Rubén Pio Osés; Natalia Zabalegui Merino; Eva María Bandres Elizalde; Irene Pino de la Huerga; Gemma Rosa Toledo Santana; María Dolores Lozano Escario; Fermín García Amigot; Victoria Catalán Goñi; Salvador Martín Algarra; Luis Montuenga Badía; Jesús Miguel García-Foncillas López.

126 **Title of the work:** Differential expression of MAPkinase phosphatase-1/(CL100) in NSCLC and SCLC
Name of the conference: 7th IASLC Meeting
Type of event: Conference **Geographical area:** European Union
Type of participation: Participatory - oral communication
City of event: Barcelona, Spain
Date of event: 30/04/2001
End date: 03/05/2001
Silvestre Vicent Cambra; María Mercedes Garayoa Berrueta; Ramón González Manzano; Rey N; Pino I; Toledo G; María Dolores Lozano Escario; Wenceslao Torre Buxalleu; Alejandro Salvador Sierra Martínez; Garcia-Foncillas J; Luis Montuenga Badía.

127 **Title of the work:** Chromosomal aberrations of malignant gastrointestinal stromal tumors (GIST) detected by CGH
Name of the conference: 2000 Annual Meeting United States and Canadian Academy of Pathology
Type of event: Conference **Geographical area:** Non EU International
Type of participation: 'Participatory - poster
City of event: New Orleans, United States of America
Date of event: 25/03/2001
End date: 31/03/2001
Publication in conference proceedings: No
I. Sola; Ángel Fernando Panizo Santos; María Isabel Zudaire Ripa; María José Calasanz Abinzano; María Dolores Lozano Escario; Francisco Javier Pardo Mindán; Miguel Ángel Idoate Gastearena; Enrique de Álava Casado.

Other dissemination activities

1 **Title of the work:** Biomarcadores Citopatología Cáncer Pulmonar
Name of the event: Asociación Colombiana de Patología
Type of event: Conferences given **Geographical area:** Non EU International
City of event: Cartagena de Indias, Colombia
Date of event: 12/08/2022
Publication in conference proceedings: No

2 **Title of the work:** Citopatología Pulmonar
Name of the event: Asociación Colombiana de Patología
Type of event: Conferences given **Geographical area:** Non EU International
City of event: Cartagena de Indias, Colombia
Date of event: 12/08/2022
Publication in conference proceedings: No

R&D management and participation in scientific committees

Organization of R&D activities

1 **Title of the activity:** ¿Cual es tu interpretación citológica?
Type of activity: Curso **Geographical area:** National
City of event: Pamplona, Spain
Convening entity: Sociedad Española de Ctiología **Type of entity:** Associations and Groups
Type of participation: Otros
Start-End date: 02/01/2022 - 31/01/2022

2 **Title of the activity:** III Curso de Secuenciación Masiva en Patología Oncológica Asistencial
Type of activity: Curso **Geographical area:** National
City of event: Santander, Spain
Convening entity: Hospital Universitario Marqués de Valdecilla **Type of entity:** Healthcare Institutions
Type of participation: Otros
Start-End date: 21/09/2020 - 22/09/2020

3 **Title of the activity:** Actualización en Técnicas de Anatomía Patológica (1ª Edición Curso de Formación en Citopatología Clínica:PAAF Pulmón y Páncreas
Type of activity: Curso **Geographical area:** National
City of event: Madrid, Spain
Convening entity: Springer Healthcare Ibérica SLU **Type of entity:** Body, others
Type of participation: Otros
Start-End date: 26/10/2019 - 26/10/2019

4 **Title of the activity:** Curso de ecoendoscopia básica
Type of activity: Curso **Geographical area:** National
City of event: Pamplona, Spain
Convening entity: Clínica Universidad de Navarra **Type of entity:** Healthcare Institutions
Type of participation: Otros
Start-End date: 15/01/2019 - 15/01/2019

Other achievements

Editorial councils

1 **Name of the editorial council:** Group de Cytopathology de la Sociedad Europea de Patología
City: Belgium
Affiliation entity: European Society of Pathology (ESP) **Type of entity:** Associations and Groups
Tasks carried out: Miembro del Editorial board de "Cytopathology"
Professional category: Miembro del cómite científico
Geographical area: European Union
Start date: 27/11/2020

2 **Name of the editorial council:** AME Publishing Company
City: China
Type of entity: Business
Tasks carried out: Miembro de Editores. Editorial Board Member of Precision Cancer Medicine
Professional category: Participante
Geographical area: Non EU International
Start date: 01/04/2020 **Duration:** 1 year - 11 months - 30 days