

 #ECPUPDATES

Iniciativa científica de:

A stylized, light blue icon of a pair of lungs with a white trachea in the center.

LUNG CANCER UPDATES

ECP HIGHLIGHTS

7-11 DE SEPTIEMBRE 2019



Con la colaboración de:

 **Bristol-Myers Squibb**

illumina *Lilly*



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Resultados de la EQA de los biomarcadores en NSCLC

Cristina Teixidó

Con la colaboración de:



External Quality Assessment (EQA) Programs for Biomarker Testing in NSCLC

The European Society of Pathology (ESP) has established world-wide EQA programs for biomarker testing in colorectal cancer (CRC) and in non-small-cell lung cancer (NSCLC).

ESP Lung EQA Scheme: overview

<http://lung.eqascheme.org>

The screenshot shows the website for the ESP Lung External Quality Assessment Scheme. The header includes the EQA logo and navigation links like HOME, PARTICIPANTS, and CONTACT. A sidebar on the left contains links for participant area, process, frequently asked questions, and previous schemes. The main content area is titled 'ESP Lung External Quality Assessment Scheme' and includes an 'Information for Participants' section with links to introduction, registration, and data analysis. Below this is an 'Introduction' section explaining the scheme's purpose and accreditation.

ESP EQA Scheme	ESP EQA Subscheme	Lung 2012 a		Lung 2012 b		Lung 2014		Lung 2015		Lung 2016		Lung 2017		Lung 2018		Lung 2019**	
		n	% success	n	% success	n	% success	n	% success	n	% success	n	% success	n	% success	n	% success
ALK	ALK FISH	54	72.00%	104	68.00%	116	69.00%	111	79.00%	113	82.30%	116	79.00%	103	91.20%	109	
	ALK FISH Optic	67	82.00%	106	74.00%	81	educ	*	*	*	*	*	*	*	*	*	
	ALK IHC	29	52.00%	58	64.00%	96	70.00%	95	92.00%	102	88.20%	109	82.00%	99	89.90%	105	
	ALK technical	-	-	-	-	-	-	73	Avg score: 3.8/5	92	85.00%	96	87.00%	93	95.70%		
ROS	ALK RT-PCR	-	-	8	edu	6	educ	13	-	-	-	-	-	-	-	-	
	ROS1 FISH	-	-	-	-	56	64.00%	68	78.00%	71	70.40%	85	82.00%	98	94.20%	101	
	ROS1 IHC	-	-	-	-	31	90.00%	31	45.00%	36	94.40%	53	94.00%	66	86.20%	82	
PDL1	ROS technical	-	-	-	-	-	-	-	-	31	31.00%	52	90.00%	54	98.10%		
	PDL1 IHC	-	-	-	-	-	-	-	-	-	-	78	70.50%	85	84.70%	104	
MOL	PDL1 technical	-	-	-	-	-	-	-	-	-	-	75	edu	74	95.90%		
	EGFR	-	-	107	edu	144	61.00%	114	52.00%	97	71.10%	101	71.30%	104	81.60%	95	
	KRAS	-	-	92	edu	-	-	-	-	-	-	51	98.00%	56	91.10%	70	
MET	BRAF	-	-	-	-	-	-	-	-	-	-	47	97.90%	55	96.40%	73	
	Edu	-	-	-	-	-	-	-	-	36	NA	19	NA	-	-		
MET	-	-	-	-	-	-	-	-	-	-	-	-	-	49	Avg. score: 9.0/10	47	

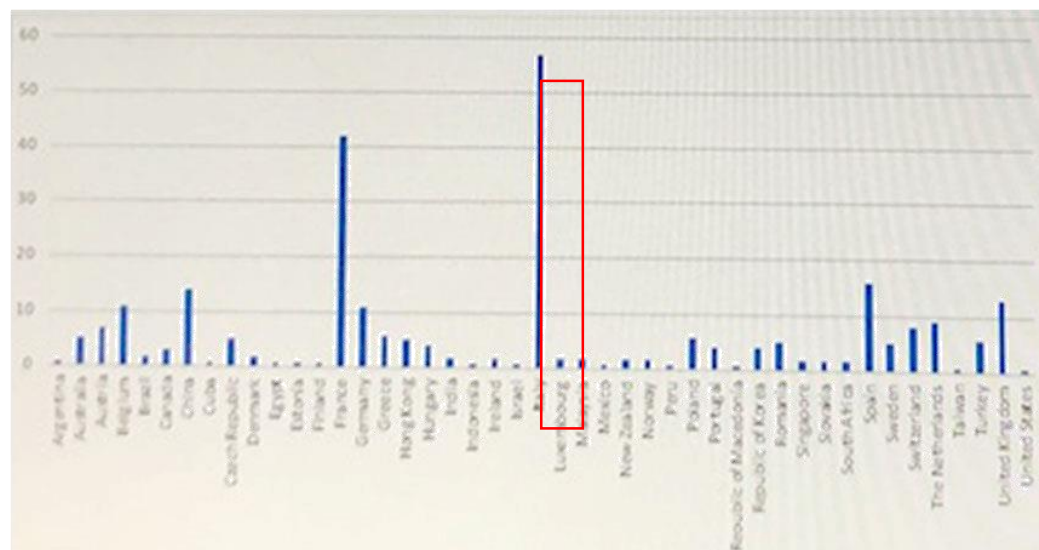
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Global delivery of external quality assessment for EGFR lung cancer liquid biopsy

External Quality Assessment (EQA)

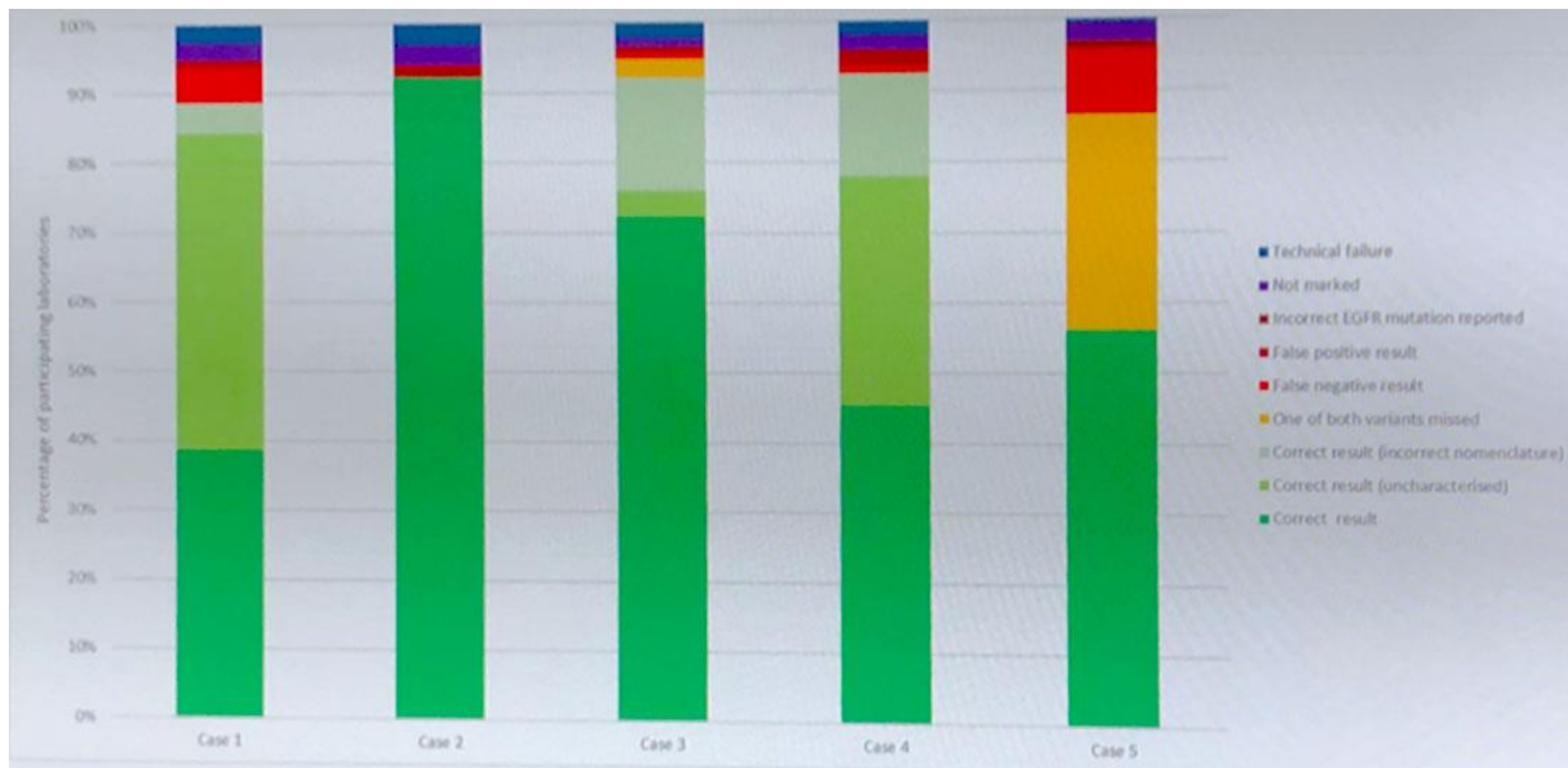
Laboratory participation

- 304 laboratories registered
- 264 submitted results
- 45 countries worldwide



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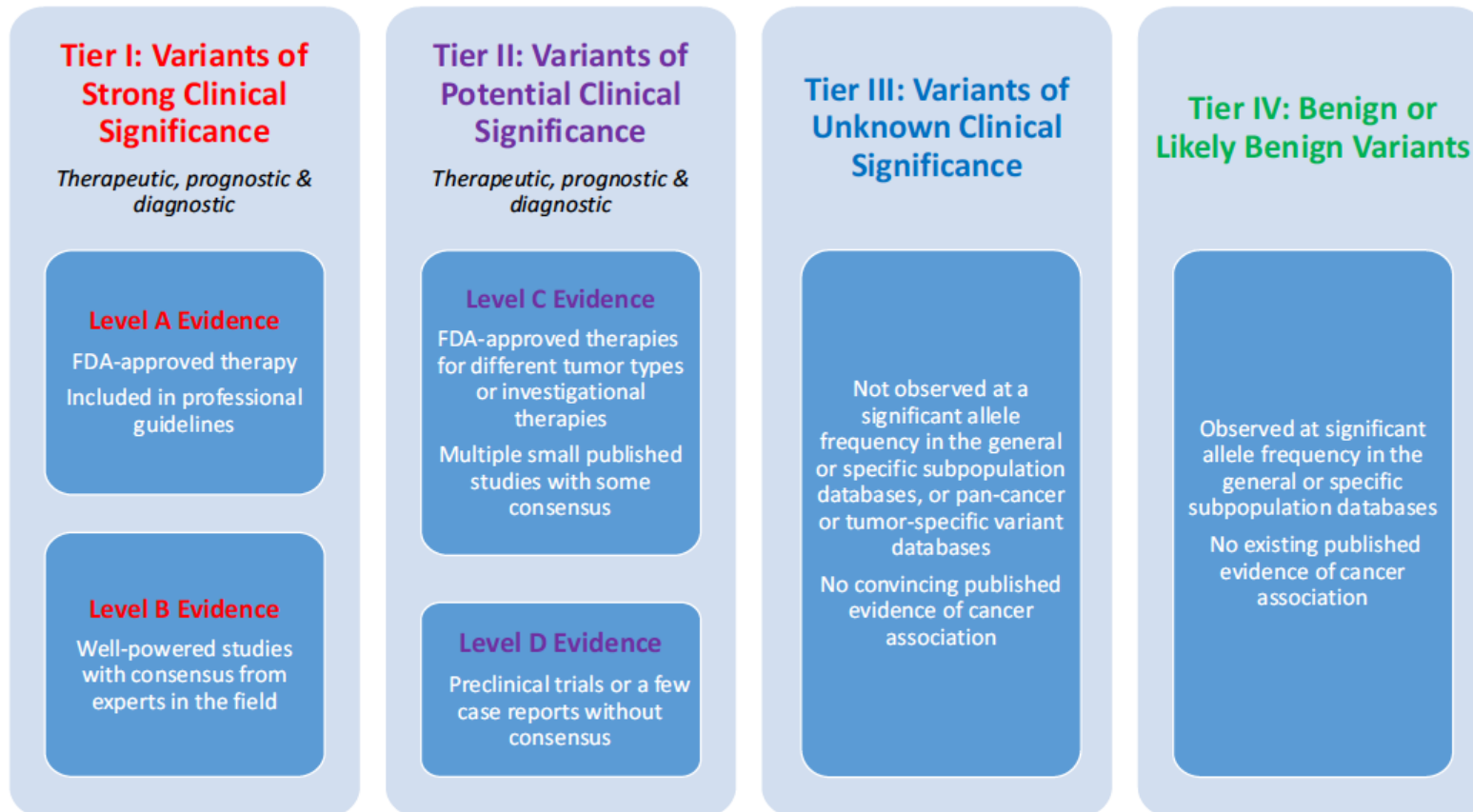
Breakdown of the Genotyping Scores



Case 1: exon 19 del, 1% VAF; Case 2 WT; Case 3 L858R & T790M, 5% VAF; Case 4 exon 19 del, 5% VAF; Case 5: L858R & T790M 0.5% VAF

Standards and Guidelines for the Interpretation and Reporting of Sequence Variants in Cancer AMP /ASCO / CAP

Evidence-based Categorization



Variant Nomenclature

All detected genetic alterations should be annotated and reported as designated by the HUGO Gene Nomenclature Committee

- Gene name – official gene symbol, may include colloquial gene name in the interpretation (*KMT2A/MLL*)
- Transcript ID – transcript accession and version number (e.g. NM_004006.2)
- Nucleotide change – c.123G>A
- Amino acid change – p.Lys76Asn
- Variant allele frequency
- Genomic coordinates – at the discretion of laboratory director
- Exon number, protein domain, pathway involved - at the discretion of laboratory director