# **UK NEQAS**

Immunology, Immunochemistry & Allergy

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# **UK NEQAS for Paraneoplastic Antibodies**

Distribution : 243	June 2024	Participant : 14489

154 out of 188 participants returned data for this distribution. 82% response rate.

#### **Nil Responses**

10691, 10774, 12221, 14411, 14459, 14668, 14805B, 14812, 14847, 90232, 90704, 91754, 94575, 95467, 97846, 97943, 97943A, PMS NZ, PMS AU, SEROBAC, NOKLUS, YVSOLAB, ANAND, INFO2, SC\_GP, QUAL, ORG, BIOG, INFO, CODEX, TVN, SEQC, TVNR, VAR

Sample 243-1 was a sample from a patient with positive PCA-1 (Yo) paraneoplastic antibodies.

Sample 243-2 was a sample from a patient with negative paraneoplastic antibodies but positive homogeneous staining of anti - nuclear antibodies on immunofluorescence.

	Sample	Analyte Designated Response		Your Response	Score
Γ	3-1	Paraneoplastic Antibody	Positive	Positive	0
	Antibody Identification		PCA-1 (Yo)	PCA-1 (Yo)	0

Sample	Analyte	Designated Response	Your Response	Score	OMIS		
243-2	Paraneoplastic Antibody	Negative	Negative	0	0 🤵		
Antibody Identification		NEG	NEG	0	0 🔵		
The current window of analysis comprises the previous six distributions Total MIS							

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#### Comments

#### Sample 243-1:

146/154 laboratories reported sample 243-1 as positive for paraneoplastic antibodies. Sample 243-1 should have produced a typical pattern comprising coarse speckled staining of the purkinje cells cytoplasm (associated with PCA-1 (Yo) antibody) and should have led to confirmation by a secondary testing method. 98 laboratories reported PCA-1 (Yo) antibody positive for sample 243-1 by primary screening testing. 140 participants correctly identified the PCA-1 (Yo) antibody by secondary testing methods.

Sample 243-1 was an identical sample to 241-1.

#### Sample 243-2:

148/154 laboratories reported sample 243-2 as negative for paraneoplastic antibodies. Sample 243-2 contained homogenous anti-nuclear antibodies and stained neuronal nuclei with a lack of cytoplasmic staining in the Purkinje cells together with all the non-neuronal cerebellar nuclei being positive. This would have provided a clue into which direction any further investigation should take. 95 laboratories reported sample 243-2 as negative by primary screening. 143 participants correctly reported the sample as negative by secondary testing methods.

The Total Misclassification scoring **(MIS)** system for the **qualitative** element of the scheme gives an indication of the number of instances where a laboratory's response is at variance with that defined for each specimen in a window of **six** distributions.

A panel of reference laboratories (10690, 10702, 11185, 14477, 14480) were in agreement in providing the target responses.

Laboratories have been given misclassification score (MIS) for each sample where they are at variance with the target response. The overall misclassification score (OMIS) now includes a running window of 12 samples over 12 months.

The categories of performance are:

	Total MIS
\ominus Good	Zero
Adequate	1-2
🛑 Poor	> 2

For further performance criteria information please see our website at http://www.immqas.org.uk.

If laboratories require further assistance please contact the centre.

# Summary Page for Sample 243-1

Analyte	Positive	Negative	Referred
PARANEOPLASTIC ANTIBODIES	146	6	2
	Tota	al Responses	154
	Corre	ect Response	95 %

Antibody Identif	Returns	
NEG		3
ANNA-1 (HU)		3
PCA-1 (Yo)		146
	Total Responses	152
	Correct Response	96 %

Primary Testi		
Analyte	Returns	
Anna-1 (Hu)		1
PCA-1 (Yo)		98
Screen Only		1
NEGATIVE		5
	Total Responses	105

Secondary Tes		
Analyte	Returns	
Anna-1 (Hu)	1	
PCA-1 (Yo)		140
NEGATIVE		4
	Total Responses	145

#### Your Results for Sample 243-1

Analyte	Positive	Negative	Referred
PARANEOPLASTIC ANTIBODIES	True	False	False
ANTIBODY IDENTIFICATION	PCA-1 (Yo)		

### Your Primary Results for Sample 243-1

Analyte	Positive	Negative	Method	Substrate	Manufacturer	Dilution
Anna-1 (Hu)	False	False				
Anna-2 (Ri)	False	False				
PCA-1 (Yo)	False	False				
CRMP5 (CV2)	False	False				
AMPHIPHYSIN	False	False				
Ma-2 (Ta)	False	False				
GAD - Neurological	False	False				
Other	False	False				
Screen Only	False	False				

# Summary of Results for Sample 243-1 - PRIMARY TESTING

## Indirect Immunofluorescence

Positive Negative							Negotivo				
SUBSTRATE	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ma-2 (Ta)	GAD Abs	Other	Negative	Screen Only	Screen Only
Monkey Cerebellum	1	0	91	0	0	0	0	0	2	1	0
A. Menarini - Zenit EIA	0	0	0	0	0	0	0	0	1	0	0
BioDiagnostics	0	0	1	0	0	0	0	0	0	0	0
Euroimmun (Basic Substrate)	0	0	5	0	0	0	0	0	0	0	0
Euroimmun (Combi Substrate)	0	0	2	0	0	0	0	0	0	0	0
Euroimmun (Mosaic Sub.)	0	0	38	0	0	0	0	0	0	0	0
Inova	1	0	42	0	0	0	0	0	1	1	0
Trinity Biotech (Immco)	0	0	3	0	0	0	0	0	0	0	0
Rat Cerebellum	0	0	1	0	0	0	0	0	0	0	0
In House	0	0	1	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	1	0	0
Other	0	0	0	0	0	0	0	0	1	0	0
Other											
SUBSTRATE	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ma-2 (Ta)	GAD Abs	Other	Negative	Positive Screen Only	Negative Screen Only
Other	0	0	2	0	0	0	0	0	1	0	0
Other	0	0	2	0	0	0	0	0	1	0	0
Immunohistochemistry											
SUBSTRATE	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ма-2 (Та)	GAD Abs	Other	Negative	Positive Screen Only	Negative Screen Only
Rat Cerebellum	0	0	2	0	0	0	0	0	0	0	0
Other	0	0	1	0	0	0	0	0	0	0	0
Vector Laboratories	0	0	1	0	0	0	0	0	0	0	0
Mouse Cerebellum	0	0	1	0	0	0	0	0	0	0	0
In House	0	0	1	0	0	0	0	0	0	0	0

## Your Secondary Results for Sample 243-1

Analyte	Positive	Negative	Method	Substrate	Manufacturer
Anna-1 (Hu)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
Anna-2 (Ri)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
PCA-1 (Yo)	True	False	Immunoblotting	N/A	Euroimmun Euroline Profile 2
CRMP5 (CV2)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
AMPHIPHYSIN	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
Ма-2 (Та)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
GAD - Neurological	False	False			
Other	False	False			

# Summary of Results for Sample 243-1 - SECONDARY TESTING

	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ма-2 (Та)	GAD Abs	Other	Negative
Immunoblotting	1	0	140	0	0	0	0	0	4
Manufacturer									
Euroimmun Euroline 12 Ag	1	0	81	0	0	0	0	0	3
Euroimmun Euroline Profile 2	0	0	17	0	0	0	0	0	0
Euroimmun Euroline Profile Plus RST	0	0	4	0	0	0	0	0	0
In House	0	0	1	0	0	0	0	0	0
Other	0	0	1	0	0	0	0	0	0
RAVO Diagnostika PNS 11 Blot	0	0	4	0	0	0	0	0	0
RAVO Diagnostika PNS 11 Diver	0	0	9	0	0	0	0	0	0
RAVO Diagnostika PNS 14 Blot	0	0	13	0	0	0	0	0	1
RAVO Diagnostika PNS 9 Diver	0	0	5	0	0	0	0	0	0
RAVO Diagnostika PNS Blot	0	0	4	0	0	0	0	0	0
RAVO Diagnostika PNS+2 Blot	0	0	1	0	0	0	0	0	0

# Summary Page for Sample 243-2

Analyte	Positive	Negative	Referred
PARANEOPLASTIC ANTIBODIES	2	148	4
	Tota	al Responses	154
	Corre	96 %	

Antibody Identif	Returns	
NEG		146
ANNA-1 (HU)		2
PCA-1 (Yo)		2
	Total Responses	150
	Correct Response	97 %

Primary Testing	
Analyte	Returns
Anna-1 (Hu)	3
Anna-2 (Ri)	2
PCA-1 (Yo)	1
Screen Only	1
NEGATIVE	95
Total Responses	102

Secondary Testing	
Analyte	Returns
PCA-1 (Yo)	1
NEGATIVE	143
Total Response	es 144

### Your Results for Sample 243-2

Analyte	Positive	Negative	Referred
PARANEOPLASTIC ANTIBODIES	False	True	False
ANTIBODY IDENTIFICATION	NEG		

### Your Primary Results for Sample 243-2

Analyte	Positive	Negative	Method	Substrate	Manufacturer	Dilution
Anna-1 (Hu)	False	False				
Anna-2 (Ri)	False	False				
PCA-1 (Yo)	False	False				
CRMP5 (CV2)	False	False				
AMPHIPHYSIN	False	False				
Ma-2 (Ta)	False	False				
GAD - Neurological	False	False				
Other	False	False				
Screen Only	False	False				

# Summary of Results for Sample 243-2 - PRIMARY TESTING

## Indirect Immunofluorescence

SUBSTRATE	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ma-2 (Ta)	GAD Abs	Other	Negative	Positive Screen Only	Negative Screen Only
Monkey Cerebellum	3	2	0	0	0	0	0	0	88	1	0
A. Menarini - Zenit EIA	0	0	0	0	0	0	0	0	1	0	0
BioDiagnostics	0	0	0	0	0	0	0	0	1	0	0
Euroimmun (Basic Substrate)	0	0	0	0	0	0	0	0	5	0	0
Euroimmun (Combi Substrate)	0	0	0	0	0	0	0	0	4	0	0
Euroimmun (Mosaic Sub.)	1	1	0	0	0	0	0	0	35	0	0
Inova	2	1	0	0	0	0	0	0	39	1	0
Trinity Biotech (Immco)	0	0	0	0	0	0	0	0	3	0	0
Rat Cerebellum	0	0	0	0	0	0	0	0	1	0	0
In House	0	0	0	0	0	0	0	0	1	0	0
Other	0	0	0	0	0	0	0	0	1	0	0
Other	0	0	0	0	0	0	0	0	1	0	0
Other											
SUBSTRATE	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ма-2 (Та)	GAD Abs	Other	Negative	Positive Screen Only	Negative Screen Only
Other	0	0	0	0	0	0	0	0	3	0	0
Other	0	0	0	0	0	0	0	0	3	0	0
Immunohistochemistry											
SUBSTRATE	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ma-2 (Ta)	GAD Abs	Other	Negative	Positive Screen Only	Negative Screen Only
Rat Cerebellum	0	0	0	0	0	0	0	0	2	0	0
Other	0	0	0	0	0	0	0	0	1	0	0
Vector Laboratories	0	0	0	0	0	0	0	0	1	0	0
Mouse Cerebellum	0	0	0	0	0	0	0	0	1	0	0
In House	0	0	0	0	0	0	0	0	1	0	0

## Your Secondary Results for Sample 243-2

Analyte	Positive	Negative	Method	Substrate	Manufacturer
Anna-1 (Hu)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
Anna-2 (Ri)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
PCA-1 (Yo)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
CRMP5 (CV2)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
AMPHIPHYSIN	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
Ma-2 (Ta)	False	True	Immunoblotting	N/A	Euroimmun Euroline Profile 2
GAD - Neurological	False	False			
Other	False	False			

# Summary of Results for Sample 243-2 - SECONDARY TESTING

	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ma-2 (Ta)	GAD Abs	Other	Negative
Immunoblotting	0	0	1	0	0	0	0	0	149
Manufacturer									
Euroimmun Euroline 12 Ag	0	0	1	0	0	0	0	0	84
Euroimmun Euroline Profile 2	0	0	0	0	0	0	0	0	19
Euroimmun Euroline Profile Plus RST	0	0	0	0	0	0	0	0	4
In House	0	0	0	0	0	0	0	0	1
Other	0	0	0	0	0	0	0	0	1
RAVO Diagnostika PNS 11 Blot	0	0	0	0	0	0	0	0	8
RAVO Diagnostika PNS 11 Diver	0	0	0	0	0	0	0	0	8
RAVO Diagnostika PNS 14 Blot	0	0	0	0	0	0	0	0	14
RAVO Diagnostika PNS 9 Diver	0	0	0	0	0	0	0	0	5
RAVO Diagnostika PNS Blot	0	0	0	0	0	0	0	0	4
RAVO Diagnostika PNS+2 Blot	0	0	0	0	0	0	0	0	1
	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ма-2 (Та)	GAD Abs	Other	Negative
Other	0	0	0	0	0	0	0	0	2
Manufacturer									
Other	0	0	0	0	0	0	0	0	2