# **UK NEQAS** Immunology, Immunochemistry & Allergy

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lation Trust

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# **UK NEQAS for Paraneoplastic Antibodies**

Distribution : 186November 2018Participant : 94317
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125 out of 152 participants returned data for this distribution. 82% response rate.

#### **Nil Responses**

10258, 12143, 14228C, 14318, 14398, 14485B, 14513, 14513A, 14545, 14607, 14888, 90856, 92836, 93149, 94107, 94748, NOKLUS, YVSOLAB, ORG\_G, ORG\_A, ORG, BIOG, INFO, CODEX, TVN, SEQC, VAR

Sample 186-1 was a serum from a patient with negative paraneoplastic antibodies but positive homogenous staining of anti - nuclear antibodies on immunofluorescence.

Sample 186-2 was a serum from a patient with negative paraneoplastic antibodies but positive mitochondrial staining of anti - nuclear antibodies on immunofluorescence.

Samp	ole	Analyte	Designated Response	Your Response	Score
6-1		Paraneoplastic Antibody Negative		Negative	0
18(	Antibody Identification		NEG	NEG	0

Sample	Analyte	Designated Response	Your Response	Score	OMIS		
186-2	Paraneoplastic Antibody	Negative	Negative	0	0 🔴		
18(	Antibody Identification	NEG	NEG	0	0 🔴		
The current wind	The current window of analysis comprises the previous six distributions Total MIS						

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#### Comments

#### Sample 186-1:

117/125 laboratories reported sample 186-1 as negative for paraneoplastic antibodies. This sample contained homogenous anti-nuclear antibodies and stained neuronal nuclei with a lack of cytoplasmic staining in the Purkinje cells together with all the non-neurional cerebellar nuclei being positive. This would have provided a clue into which direction any further investigation should take. 108 laboratories performed an immunoblot and found that sample 186-1 was negative for neuronal antibodies.

Conclusion: Sample 186-1 was negative for paraneoplastic neurological antibodies.

## Sample 186-2:

116/125 laboratories reported sample 186-2 as negative for paraneoplastic antibodies. This sample should have produced intense staining across the cerebellum and prompted further investigation to check for any masked paraneoplastic reactivities. Sample 186-2 contained mitochondrial (M2 type) antibodies. Immunoblot was performed by 108 participants and all of these laboratories confirmed this sample as negative.

**Distribution : 186** 

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 (10656, 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
😑 Good	Zero
Adequate	1-3
🔴 Poor	> 3

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 186-1

Analyte	Positive	Negative	Referred
PARANEOPLASTIC ANTIBODIES	3	117	5
	Tota	al Responses	125
	Corre	ect Response	94 %

Antibody Identifi	Returns	
NEG		116
ANNA-1 (HU)		2
PCA-1 (Yo)		1
GAD - Neurological		1
	Total Responses	120
	Correct Response	97 %

Primary Testi		
Analyte	Returns	
Anna-1 (Hu)		8
GAD - Neurological		1
Other		4
Screen Only		2
NEGATIVE		75
	Total Responses	90

Secondary Testing	
Analyte	Returns
GAD - Neurological	1
NEGATIVE	108
Total Responses	109

## Your Results for Sample 186-1

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

#### Your Primary Results for Sample 186-1

Analyte	Positive	Negative	Method	Substrate	Manufacturer	Dilution
Anna-1 (Hu)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
Anna-2 (Ri) False False		False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
PCA-1 (Yo)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
CRMP5 (CV2)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
AMPHIPHYSIN	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
Ma-2 (Ta)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
GAD - Neurological	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
Other	False	False				
Screen Only	False	False				

# Summary of Results for Sample 186-1 - PRIMARY TESTING

## Indirect Immunofluorescence

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
Monkey Cerebellum	8	0	0	0	0	0	1	3	64	2	0
Euroimmun	1	0	0	0	0	0	0	1	30	0	0
Trinity Biotech (Immco)	0	0	0	0	0	0	0	0	6	0	0
Instrumentation Lab	0	0	0	0	0	0	0	0	2	0	0
Inova	7	0	0	0	0	0	1	2	26	2	0
Rat Cerebellum	0	0	0	0	0	0	0	0	3	0	0
In House	0	0	0	0	0	0	0	0	2	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		( )	<b>x</b> = <b>y</b>	· · /		( - )				Only	Olliy
	0	0	٥	0	0	٥	٥	1	4	0	0
	0	0	0	0	0	0	<b>0</b>	<b>1</b>	<b>4</b>	0	<b>0</b>
Other	0	<b>0</b> 0	<b>0</b> 0	<b>0</b> 0	<b>0</b> 0	<b>0</b> 0	<b>0</b> 0	<b>1</b> 1	<b>4</b> 4	<b>0</b> 0	<b>0</b> 0
	0		-	-	•			-	-	0	0
Other	0 istry ANNA-1	0 ANNA-2	-	0 CRMP 5	•		0 GAD	-	-	-	-
Other	o istry	0	0	0	0	0	0	1	4	0 Positive	0 Negative
Other Immunohistochem	0 istry ANNA-1	0 ANNA-2	0 PCA-1	0 CRMP 5	0 Amphip	0 <b>Ma-2</b>	0 GAD	1	4	0 Positive Screen	0 Negative Screen
Other Immunohistochem SUBSTRATE	0 istry ANNA-1 (Hu)	0 ANNA-2 (Ri)	0 PCA-1 (Yo)	0 CRMP 5 (CV2)	0 Amphip hysin	0 Ma-2 (Ta)	0 GAD Abs	1 Other	4 Negative	0 Positive Screen Only	0 Negative Screen Only

#### Your Secondary Results for Sample 186-1

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

# Summary of Results for Sample 186-1 - SECONDARY TESTING

	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ма-2 (Та)	GAD Abs	Other	Negative
Immunoblotting	0	0	0	0	0	0	0	0	109
Manufacturer									
Euroimmun	0	0	0	0	0	0	0	0	68
In House	0	0	0	0	0	0	0	0	1
RAVO Diagnostika	0	0	0	0	0	0	0	0	25
RAVO Diagnostika PNS Blot	0	0	0	0	0	0	0	0	2
RAVO Diagnostika PNS 11 Blot	0	0	0	0	0	0	0	0	3
Euroimmun Euroline 12 Ag	0	0	0	0	0	0	0	0	10
	ANNA-1 (Hu)	ANNA-2 (Ri)	PCA-1 (Yo)	CRMP 5 (CV2)	Amphip hysin	Ma-2 (Ta)	GAD Abs	Other	Negative
Other	0	0	0	0	0	0	1	0	1
Manufacturer Other	0	0	0	0	0	0	1	0	1

# Summary Page for Sample 186-2

Analyte	Positive	Negative	Referred	
PARANEOPLASTIC ANTIBODIES	1	116	8	
	Tota	al Responses	125	
	Corre	ect Response	93 %	

Antibody Identifi	cation	Returns
NEG		117
	Total Responses	117
	Correct Response	100 %

Primary Test		
Analyte	Returns	
Anna-1 (Hu)		1
AMPHIPHYSIN		1
GAD - Neurological		2
Other		5
Screen Only		2
NEGATIVE		78
	Total Responses	89

Secondary Tes		
Analyte		Returns
NEGATIVE		108
	Total Responses	108

## Your Results for Sample 186-2

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

#### Your Primary Results for Sample 186-2

Analyte	Positive	Negative	Method	Substrate	Manufacturer	Dilution
Anna-1 (Hu)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
Anna-2 (Ri)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
PCA-1 (Yo)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
CRMP5 (CV2)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
AMPHIPHYSIN	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
Ma-2 (Ta)	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
GAD - Neurological	False	False	Indirect Immunofluorescence	Monkey Cerebellum	A. Menarini - Zenit EIA	
Other	False	False				
Screen Only	False	False				

# Summary of Results for Sample 186-2 - 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	1	0	0	0	1	0	2	4	66	2	0
Euroimmun	0	0	0	0	0	0	1	1	30	0	0
Trinity Biotech (Immco)	0	0	0	0	0	0	0	0	6	0	0
Instrumentation Lab	0	0	0	0	0	0	0	0	2	0	0
Inova	1	0	0	0	1	0	1	3	28	2	0
Rat Cerebellum	0	0	0	0	0	0	0	0	3	0	0
In House	0	0	0	0	0	0	0	0	2	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	5	0	0
Other	0	0	0	0	0	0	0	0	5	0	0
Immunohistochem	istry										
			<b>DO</b> 4	0040	A			011	News	Positive	Negative

	ANNA-1	ANNA-2	PCA-1	CRMP 5	Amphip	Ma-2	GAD	Other	Negative	Screen	Screen
SUBSTRATE	(Hu)	(Ri)	(Yo)	(CV2)	hysin	(Ta)	Abs			Only	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

## Your Secondary Results for Sample 186-2

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

# Summary of Results for Sample 186-2 - 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	0	0	0	0	0	0	109
Manufacturer									
Euroimmun	0	0	0	0	0	0	0	0	67
In House	0	0	0	0	0	0	0	0	1
RAVO Diagnostika	0	0	0	0	0	0	0	0	26
RAVO Diagnostika PNS Blot	0	0	0	0	0	0	0	0	2
RAVO Diagnostika PNS 11 Blot	0	0	0	0	0	0	0	0	3
Euroimmun Euroline 12 Ag	0	0	0	0	0	0	0	0	10
	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