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500 Chipeta Way, Salt Lake City, Utah 84108-1221 phone: 801-583-2787, toll free: 800-522-2787 Jonathan R. Genzen, MD, PhD, Chief Medical Officer

# PATIENT REPORT

Patient Age/Sex:

Unknown

Specimen Collected: 18-Dec-23 09:34

-			
Autoimmune Dysautonomia Panel, Serum	Received: 18-Dec-2	23 09:40	Report/Verified: 18-Dec-23 09:53
<b>Procedure</b> Purkinje Cell/Neuronal Nuclear IqG Scrn	Result PCCA Detected *	Units fl il	<b>Reference Interval</b> [None Detected]
CASPR2 Ab IgG CBA-IFA Screen, Serum	Detected * t1 i2		[<1:10]
LGI1 Ab IgG CBA-IFA Screen,Ser CV2 Ab IgG CBA-IFA Screen,Seru DPPX Ab IgG CBA-IFA Screen,Ser Ganglionic Acetylcholine	um Detected * t2 i3 m Detected * t3 i4 um Detected * t4 i5 10.0 H i6	pmol/L	[<1:10] [<1:100] [<1:10] [0.0-8.4]
Receptor Ab		I	
Neuronal Nuclear Ab IgG, Immunoblot, Hu	Received: 18-Dec-2	23 09:40	Report/Verified: 18-Dec-23 09:53
<b>Procedure</b> Neuronal Nuclear Ab (Hu) IgG,I Serum	Result B, Positive * <sup>i7</sup>	Units	<b>Reference Interval</b> [Negative]
Purkinje Cell Ab Titer, IgG	Received: 18-Dec-2	23 09:40	Report/Verified: 18-Dec-23 09:53
<b>Procedure</b> Purkinje Cell Antibody Titer I	<b>Result</b> gG <b>1:40</b> * <sup>18</sup>	Units	<b>Reference Interval</b> [<1:10]
CASPR2 Ab IgG Titer by CBA-IFA, Ser	Received: 18-Dec-2	23 09:40	Report/Verified: 18-Dec-23 09:53
Procedure CASPR2 Ab IgG CBA-IFA Titer, Serum	Result 1:80 * <sup>i9</sup>	Units	<b>Reference Interval</b> [<1:10]
CV2 Ab IgG Titer by CBA-IFA, Ser	Received: 18-Dec-2	23 09:40	Report/Verified: 18-Dec-23 09:53
Procedure CV2 Ab IgG CBA-IFA Titer,Serum	Result 1:1600 * <sup>i10</sup>	Units	<b>Reference Interval</b> [<1:100]
DPPX Ab IgG Titer by CBA-IFA, Ser	Received: 18-Dec-2	23 09:40	Report/Verified: 18-Dec-23 09:53
<b>Procedure</b> DPPX Ab IgG CBA-IFA Titer,Seru	Result m 1:160 * <sup>i11</sup>	Units	<b>Reference Interval</b> [<1:10]
LGI1 Ab IgG Titer by CBA-IFA, Ser	Received: 18-Dec-2	23 09:40	Report/Verified: 18-Dec-23 09:53
<b>Procedure</b> LGI1 Ab IgG CBA-IFA Titer,Seru	<b>Result</b> m <b>1:80</b> * <sup>i12</sup>	Units	<b>Reference Interval</b> [<1:10]
Interpretive Text			
t1: 18-Dec-23 09:34 (CASPR2 Ab IgG CASPR2 Antibody, IgG is t2: 18-Dec-23 09:34 (LGI1 Ab IgG C	CBA-IFA Screen, Seru detected. Titer r BA-IFA Screen, Serum)	m) results to fo	llow.
LGI1 Antibody, IgG is de	tected. Titer res	ults to foll	ow.
t3: 18-Dec-23 09:34 (CV2 Ab IgG CB	A-IFA Screen, Serum)	lta to follo	w Additional charges appl-
t4: 18-Dec-23 09:34 (DPPX Ab IgG C	BA-IFA Screen, Serum)		w. AUTCIONAL CHALVES APPLY.

DPPX Antibody, IgG is detected. Titer results to follow.

\*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

Unless otherwise indicated, testing performed at: ARUP Laboratories 500 Chipeta Way, Salt Lake City, UT 84108 Laboratory Director: Jonathan R. Genzen, MD, PhD 
 ARUP Accession:
 23-352-900111

 Report Request ID:
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Patient Age/Sex:

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### Result Footnote

f1: Purkinje Cell/Neuronal Nuclear IgG Scrn

Antibodies detected, therefore IFA titer and Immunoblot testing to be performed.

#### Test Information

i1: Purkinje Cell/Neuronal Nuclear IgG Scrn INTERPRETIVE INFORMATION: Purkinje Cell/Neuronal Nuclear IgG Scrn

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i2: CASPR2 Ab IgG CBA-IFA Screen, Serum INTERPRETIVE INFORMATION: CASPR2 Ab IgG CBA-IFA Screen, Serum

Contactin-associated protein-2 (CASPR2) IgG antibody may occur as part of the voltage-gated potassium channel (VGKC) complex antibodies.

The presence of CASPR2 IgG antibody is associated with a wide spectrum of clinical manifestations, including acquired neuromyotonia, limbic encephalitis, painful neuropathy, and Morvan syndrome. Tumors such as thymoma, small cell lung cancer, and other rarer tumors may occur. The full-spectrum of clinical disorders and tumors associated with the CASPR2 IgG antibody continues to be defined. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes CASPR2 transfected cell lines for the detection and semiquantification of the CASPR2 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i3: LGI1 Ab IgG CBA-IFA Screen, Serum INTERPRETIVE INFORMATION: LGI1 Ab IgG CBA-IFA Screen, Serum

Leucine-rich, glioma-inactivated 1 protein (LGI1) IgG antibody may occur as part of the voltage-gated potassium channel (VGKC) complex antibodies.

The presence of LGI1 IgG antibody is mainly associated with limbic encephalitis, hyponatremia, and myoclonic movements. LGI1 IgG antibody is rarely associated with tumors but may occur infrequently in Morvan syndrome, neuromyotonia, and idiopathic epilepsy. The full-spectrum of clinical disorders associated with the LGI1 IgG antibody continues to be defined. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

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Jonathan R. Genzen, MD, PhD, Chief Medical Officer

Patient Age/Sex:

Unknown

### Test Information

i3: LGI1 Ab IgG CBA-IFA Screen, Serum This indirect fluorescent antibody assay utilizes LGI1 transfected cell lines for the detection and semiquantification of the LGI1 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i4: CV2 Ab IgG CBA-IFA Screen, Serum INTERPRETIVE INFORMATION: CV2 Ab IgG CBA-IFA Screen, Serum

CV2 antibodies aid in discriminating between chronic paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-CV2 is associated with small-cell lung cancer and thymoma. A negative test result does not rule out a diagnosis of autoimmune neurologic disease. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes CV2 transfected cell lines for the detection and semiquantification of the CV2 IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i5: DPPX Ab IgG CBA-IFA Screen, Serum INTERPRETIVE INFORMATION: DPPX Ab IgG CBA-IFA Screen, Serum

DPPX antibody is found in a subset of patients with autoimmune encephalitis, and is often associated with prodromal gastrointestinal symptoms and unintentional weight loss. It may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response. A negative test result does not rule out a diagnosis of autoimmune neurologic disease. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes DPPX transfected cells for the detection and semiquantification of the DPPX IgG antibody.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i6:

Ganglionic Acetylcholine Receptor Ab REFERENCE INTERVAL: Ganglionic Acetylcholine Receptor Ab

Negative . . . . . . . 0.0-8.4 pmol/L

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Unknown

### Test Information

i6:	Ganglionic Acetylcholine Receptor Ab Indeterminate 8.5-11.6 pmol/L
	Positive 11.7 pmol/L or greater
i7:	This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes. Neuronal Nuclear Ab (Hu) IgG, IB, Serum INTERPRETIVE INFORMATION: Neuronal Nuclear Ab IgG, Immunoblot, Hu
	This test detects igg antineuronal antibodies to nu antigens.
	Antineuronal antibodies serve as markers that aid in discriminating between a true paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-Hu (antineuronal nuclear antibody, type I) is associated with small-cell lung cancer.
	The presence of these antineuronal antibodies supports a clinical diagnosis of PND and should lead to a focused search for the underlying neoplasm.
i8:	This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes. Purkinje Cell Antibody Titer IgG INTERPRETIVE INFORMATION: Purkinje Cell Ab Titer, IgG
i9:	This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes. CASPR2 Ab IgG CBA-IFA Titer, Serum INTERPRETIVE INFORMATION: CASPR2 Ab IgG CBA-IFA Titer, Serum
i10:	This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes. CV2 Ab IgG CBA-IFA Titer, Serum INTERPRETIVE INFORMATION: CV2 Ab IgG CBA-IFA Titer, Serum
	This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug

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Unknown

### Test Information

 i10: CV2 Ab IgG CBA-IFA Titer, Serum Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.
 i11: DPPX Ab IgG CBA-IFA Titer, Serum

INTERPRETIVE INFORMATION: DPPX Ab IgG CBA-IFA Titer, Serum

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i12: LGI1 Ab IgG CBA-IFA Titer, Serum INTERPRETIVE INFORMATION: LGI1 Ab IgG CBA-IFA Titer, Serum

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