PATIENT REPORT

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 Age/Sex: Unknown

Specimen Collected: 19-Jun-23 09:02					
Autoimmune Neurologic Disease Reflex CSF	Received: 19-Jun-23 0	9:03 Report/Ve	rified: 19-Jun-23 09:06		
Procedure	Result	Units	Reference Interval		
NMDA Receptor Ab IgG CBA-IFA,CS			[< 1:1]		
Paraneoplastic Abs (PCCA/ANNA) IgG,CSF	ANNA Detected * f2 i2		[None Detected]		
AMPA Receptor Ab IgG CBA-IFA Screen, CSF	Detected * t1 i3		[< 1:1]		
GABA-BR Ab IgG CBA-IFA Screen, CSF	Detected * t2 i4		[< 1:1]		
CASPR2 Ab IgG CBA-IFA Screen,CS	F Detected * t3 i5		[< 1:1]		
LGI1 Ab IgG CBA-IFA Screen,CSF	Detected * t4 i6		[< 1:1]		
CV2.1 Ab IgG CBA-IFA Screen, CSF	Detected * t5 i7		[< 1:1]		
SOX1 Antibody, IgG by Immunoblot CSF	, High Positive * ⁱ⁸		[Negative]		
Amphiphysin Antibody, CSF	Positive * i9		[Negative]		
DPPX Ab IgG CBA-IFA Screen,CSF	Detected * t6 i10		[< 1:1]		
GABA-AR Ab IgG CBA-IFA Screen, CSF	Detected * t7 i11		[< 1:1]		
ITPR1 Ab IgG CBA-IFA Screen, CSF	Detected * t8 i12		[< 1:1]		
IgLON5 Ab IgG CBA-IFA Screen,CS			[< 1:1]		
mGluR1 Ab IgG CBA-IFA Screen,CS			[< 1:1]		
Voltage-Gated Potassium Channel Ab,CSF	10.0 H i15	pmol/L	[0.0-1.1]		
Glutamic Acid Decarboxylase Antibody CSF	55.0 H i16	IU/mL	[0.0-5.0]		
Neuronal Nuclear Abs IgG, IB, CSF Received: 19-Jun-23 09:03 Report/Verified: 19-Jun-23 09:06					
Procedure	Result	Units	Reference Interval		
Neuronal Nuclear Ab (Hu) IgG,IB CSF	, High Positive * i17		[Negative]		
Neuronal Nuclear Ab (Ri) IgG,IB CSF	, Positive * ⁱ¹⁸		[Negative]		
Neuronal Nuclear Ab (Yo) IgG,IB CSF	, Positive * ⁱ¹⁹		[Negative]		
Neuronal Nuclear Ab (TR/DNER) IgG,CSF	High Positive * i20		[Negative]		
Neuronal Nuclear Antibody Titer, Received: 19-Jun-23 09:03 Report/Verified: 19-Jun-23 09:06 IgG CSF					
Procedure	Result	Units	Reference Interval		
Neuronal Nuclear Ab Titer, IgG CSF	1:80 * ⁱ²¹		[< 1:1]		

Unless otherwise indicated, testing performed at:ARUP Accession:23-170-900046ARUP LaboratoriesReport Request ID:17763869500 Chipeta Way, Salt Lake City, UT 84108Printed:19-Jun-23 12:13Laboratory Director: Jonathan R. Genzen, MD, PhDPage 1 of 11

 $^{^* =} Abnormal, \ \# = Corrected, \ C = Critical, \ f = Result \ Footnote, \ H-High, \ i-Test \ Information, \ L-Low, \ t-Interpretive \ Text, \ @ = Performing \ label{eq:label_equation}$

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

Patient Age/Sex:

Unknown

AMPA Rptr Ab IgG Titer by CBA-IFA, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure AMPA Receptor Ab IgG CBA-IFA Titer,CSF	Result 1:80 * ⁱ²²	Units	<pre>Reference Interval [< 1:1]</pre>		
CASPR2 Ab IgG Titer by CBA-IFA, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure CASPR2 Ab IgG CBA-IFA Titer,CS	Result SF 1:40 * i23	Units	Reference Interval [< 1:1]		
CV2.1 Ab IgG Titer by CBA-IFA, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure CV2.1 Ab IgG CBA-IFA Titer,CSI	Result 1:160 * 124	Units	Reference Interval [<1.1]		
DPPX Ab IgG Titer by CBA-IFA, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure DPPX Ab IgG CBA-IFA Titer,CSF	Result 1:40 * ⁱ²⁵	Units	Reference Interval [< 1:1]		
GABA-A Receptor IgG CBA-IFA Titer, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure GABA-AR Ab IgG CBA-IFA Titer,	Result CSF 1:40 * ⁱ²⁶	Units	Reference Interval [< 1:1]		
GABA-B Rptr Ab IgG Titer by CBA-IFA, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure GABA-BR Ab IgG CBA-IFA Titer,	Result CSF 1:80 * ⁱ²⁷	Units	Reference Interval [< 1:1]		
ITPR1 Ab IgG CBA-IFA Titer, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure ITPR1 Ab IgG CBA-IFA Titer,CSI	Result 1:160 * 128	Units	Reference Interval [< 1:1]		
IgLON5 Ab IgG CBA-IFA Titer, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure IgLON5 Ab IgG CBA-IFA Titer,CS	Result SF 1:80 * 129	Units	Reference Interval [< 1:1]		
LGI1 Ab IgG Titer by CBA-IFA, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure	Result	Units	Reference Interval		
LGI1 Ab IgG CBA-IFA Titer,CSF	1:160 * i30		[< 1:1]		
mGluR1 Ab IgG CBA-IFA Titer, CSF	Received: 19	-Jun-23 09:03	Report/Verified: 19-Jun-23 09:06		
Procedure	Result	Units	Reference Interval		
mGluR1 Ab IgG CBA-IFA Titer,CS	SF 1:40 * ¹³¹		[< 1:1]		
<u>Interpretive Text</u>					
t1: 19-Jun-23 09:02 (AMPA Receptor Ab IgG CBA-IFA Screen, CSF)					
AMPAR Antibody, IgG is detected. Titer results to follow. t2: 19-Jun-23 09:02 (GABA-BR Ab IgG CBA-IFA Screen, CSF)					
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GABA-BR Antibody, IgG is detected. Titer results to follow.

CASPR2 Antibody, IgG is detected. Titer results to follow.

LGI1 Antibody, IgG is detected. Titer results to follow.

19-Jun-23 09:02 (CASPR2 Ab IgG CBA-IFA Screen, CSF)

19-Jun-23 09:02 (LGI1 Ab IgG CBA-IFA Screen, CSF)

Unless otherwise indicated, testing performed at:

ARUP Laboratories

t3:

t4:

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

ARUP Accession:

23-170-900046 Report Request ID: 17763869

Printed:

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

Patient Age/Sex:

<u>Interpretive Text</u>

t5: 19-Jun-23 09:02 (CV2.1 Ab IgG CBA-IFA Screen, CSF)

CV2.1 Antibody, IgG is detected. Titer results to follow. Additional charges apply.

t6: 19-Jun-23 09:02 (DPPX Ab IgG CBA-IFA Screen, CSF)

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

t7: 19-Jun-23 09:02 (GABA-AR Ab IgG CBA-IFA Screen, CSF)

GABA-AR Antibody, IgG is detected. Titer results to follow.

t8: 19-Jun-23 09:02 (ITPR1 Ab IgG CBA-IFA Screen, CSF)

ITPR1 Antibody, IgG is detected. Titer results to follow.

t9: 19-Jun-23 09:02 (IgLON5 Ab IgG CBA-IFA Screen, CSF)

IgLON5 Antibody, IgG is detected. Titer results to follow.

t10: 19-Jun-23 09:02 (mGluR1 Ab IgG CBA-IFA Screen, CSF)
mGluR1 Antibody, IgG is detected. Titer results to follow.

Result Footnote

f1: NMDA Receptor Ab IgG CBA-IFA, CSF

Antibodies to NMDA were detected; titer was performed at an additional charge.

Clinical trials for anti-NMDA receptor encephalitis are currently underway (clinicaltrials.gov).

f2: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

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

Test Information

il: NMDA Receptor Ab IgG CBA-IFA, CSF

INTERPRETIVE INFORMATION: NMDA Receptor Ab IgG CBA-IFA, CSF

NMDA receptor antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response. In addition, positive results have been reported in patients with non-autoimmune phenotypes. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes full-length GluN1 transfected cell lines for the detection and semiquantification of NMDA receptor 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.

i2: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF
INTERPRETIVE INFORMATION: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

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

Patient Age/Sex:

Unknown

Test Information

i2: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i3: AMPA Receptor Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: AMPA Receptor Ab IgG CBA-IFA

Screen, CSF

Alpha-amino-3-hydroxy-5-methyl-4-isoxazoleproprionic acid receptor (AMPAR) antibody is found in a subset of patients with autoimmune limbic encephalitis and 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 encephalitis. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes AMPAR transfected cell lines for detection and semiquantification of AMPAR 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: GABA-BR Ab IgG CBA-IFA Screen, CSF INTERPRETIVE INFORMATION: GABA-BR Ab IgG CBA-IFA Screen, CSF

Gamma-amino butyric acid receptor, type B (GABA-BR) antibody is found in a subset of patients with autoimmune epilepsy and other autoimmune neurologic phenotypes; 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 GABA-BR transfected cell lines for the detection and semiquantification of GABA-BR 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: CASPR2 Ab IgG CBA-IFA Screen, CSF INTERPRETIVE INFORMATION: CASPR2 Ab IgG CBA-IFA Screen, CSF

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

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PATIENT REPORT

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

Patient Age/Sex:

Unknown

Test Information

CASPR2 Ab IgG CBA-IFA Screen, CSF

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.

i6: LGI1 Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: LGI1 Ab IgG CBA-IFA Screen, CSF

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.

This indirect fluorescent antibody assay utilizes LGI1 transfected cell lines for the detection and semi-quantification 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.

i7: CV2.1 Ab IgG CBA-IFA Screen, CSF INTERPRETIVE INFORMATION: CV2.1 Ab IgG CBA-IFA Screen, CSF

CV2.1 antibodies aid in discriminating between chronic paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-CV2.1 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.

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Patient Age/Sex:

Unknown

Test Information

i7: CV2.1 Ab IgG CBA-IFA Screen, CSF

This indirect fluorescent antibody assay utilizes CV2.1 transfected cell lines for the detection and semiquantification of the CV2.1 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.

i8: SOX1 Antibody, IgG by Immunoblot, CSF

INTERPRETIVE INFORMATION: SOX1 Antibody, IgG by Immunoblot,

CSF

SOX1 antibody is detected in patients with Lambert-Eaton myasthenic syndrome (LEMS) and in patients with paraneoplastic cerebellar degeneration (PCD), paraneoplastic and nonparaneoplastic neuropathy. SOX1 antibody is associated with small cell lung cancer. A negative test result does not rule out a diagnosis of LEMS or other causes of paraneoplastic neurological syndrome.

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.

i9: Amphiphysin Antibody, CSF

INTERPRETIVE INFORMATION: Amphiphysin Antibody IgG, CSF

Amphiphysin antibody is present in about 5 percent of patients with stiff-person syndrome and is found variably in other causes of paraneoplastic neurological syndrome (PNS). Amphiphysin antibody is mainly associated with small-cell lung cancer and breast tumors.

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.

i10: DPPX Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: DPPX Ab IgG CBA-IFA Screen, CSF

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.

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Patient Age/Sex:

Unknown

Test Information

i10: DPPX Ab IgG CBA-IFA Screen, CSF

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.

ill: GABA-AR Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: GABA-AR Ab IgG CBA-IFA Screen, CSF

Gamma-aminobutyric acid receptor, type A (GABA-AR) antibody is found in a subset of patients with autoimmune encephalitis or autoimmune epilepsy, and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis or autoimmune epilepsy. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes GABA-AR transfected cell lines for detection and semi-quantification of GABA-AR 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.

il2: ITPR1 Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: ITPR1 Ab IqG CBA-IFA Screen, CSF

Inositol 1, 4, 5-trisphosphate receptor type 1 (ITPR1) antibody is found in a subset of patients with autoimmune cerebellar ataxia, encephalitis, neuropathy, or myelopathy and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune cerebellar ataxia or related autoimmune neurologic disorders. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes ITPR1 transfected cell lines for detection and semi-quantification of ITPR1 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.

i13: IgLON5 Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: IgLON5 Ab IgG CBA-IFA Screen, CSF

IgLON Family Member 5 (IgLON5) antibody is found in a subset of patients with autoimmune encephalitis or other autoimmune neurologic/neurodegenerative disorders and may occur with or without associated tumor. A negative test result does not rule

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Patient Age/Sex:

Unknown

Test Information

i13: IgLON5 Ab IgG CBA-IFA Screen, CSF

out a diagnosis of an autoimmune neurologic disorder. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes IgLON5 transfected cell lines for detection and semi-quantification of IgLON5 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.

i14: mGluR1 Ab IgG CBA-IFA Screen, CSF

INTERPRETIVE INFORMATION: mGluR1 Ab IgG CBA-IFA Screen, CSF

Metabotropic glutamate receptor 1 (mGluR1) antibody is found in a subset of patients with autoimmune cerebellar ataxia or autoimmune encephalitis and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune cerebellar ataxia or limbic encephalitis. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes mGluR1 transfected cell lines for detection and semi-quantification of mGluR1 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.

i15: Voltage-Gated Potassium Channel Ab, CSF

INTERPRETIVE INFORMATION: Voltage-Gated Potassium Channel (VGKC) Antibody, CSF

Voltage-Gated Potassium Channel (VGKC) antibodies are associated with neuromuscular weakness as found in neuromyotonia (also known as Issacs syndrome) and Morvan syndrome. VGKC antibodies are also associated with paraneoplastic neurological syndromes and limbic encephalitis; however, VGKC antibody-associated limbic encephalitis may be associated with antibodies to leucine-rich, glioma-inactivated 1 protein (LGI1) or contactin-associated protein-2 (CASPR2) instead of potassium channel antigens. A substantial number of VGKC-antibody positive cases are negative for LGI1 and CASPR2 IgG autoantibodies, not all VGKC complex antigens are known. The clinical significance of this test can only be determined in conjunction with the patient's clinical history and related laboratory testing.

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Unknown

Test Information

i16: Glutamic Acid Decarboxylase Antibody CSF

INTERPRETIVE INFORMATION: Glutamic Acid Decarboxylase

Antibody, CSF

A value greater than 5.0 IU/mL is considered positive for glutamic acid decarboxylase antibody (GAD AB CSF).

This assay is intended for the semi-quantitative determination of the GAD Ab in human CSF. Results should be interpreted within the context of clinical symptoms.

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i17: Neuronal Nuclear Ab (Hu) IgG, IB, CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Hu)

IqG, IB, CSF

This test detects IgG antineuronal antibodies to Hu, Ri, and Yo and Tr (DNER) 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. Anti-Ri (antineuronal nuclear antibody, type II) is associated with neuroblastoma in children and with fallopian tube and breast cancer in adults. Anti-Yo (anti-Purkinje cell cytoplasmic antibody) is associated with ovarian and breast cancer. Anti-Tr(DNER) is associated with Hodgkin's lymphoma.

The presence of one or more of these antineuronal antibodies supports a clinical diagnosis of PND and should lead to a focused search for the underlying neoplasm.

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 (Ri) IgG, IB, CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Ri) IgG, IB,

CSF

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 (Yo) IgG, IB, CSF i19:

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Yo) IgG, IB,

CSF

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

Patient Age/Sex:

Unknown

Test Information

i19: Neuronal Nuclear Ab (Yo) IgG, IB, CSF

> 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.

i20: Neuronal Nuclear Ab (TR/DNER) IgG, CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (TR/DNER)

IqG, CSF

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.

i21: Neuronal Nuclear Ab Titer, IgG CSF

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab Titer, IGG CSF

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.

i22: AMPA Receptor Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: AMPA Receptor Ab IgG CBA-IFA

Titer, CSF

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.

i23: CASPR2 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: CASPR2 Ab IgG CBA-IFA Titer, CSF

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.

i24: CV2.1 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: CV2.1 Ab IgG CBA-IFA Titer, CSF

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.

i 25: DPPX Ab IgG CBA-IFA Titer, CSF

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

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

*=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:

23-170-900046

Report Request ID: 17763869

Printed:

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PATIENT REPORT

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 Age/Sex:

Unknown

Test Information

i25: DPPX Ab IgG CBA-IFA Titer, CSF

Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i26: GABA-AR Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: GABA-AR Ab IgG CBA-IFA Titer, CSF

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.

i27: GABA-BR Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: GABA-BR Ab IgG CBA-IFA Titer, CSF

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.

i28: ITPR1 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: ITPR1 Ab IgG CBA-IFA Titer, CSF

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.

i29: IgLON5 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: IgLON5 Ab IgG CBA-IFA Titer, CSF

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.

i30: LGI1 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: LGI1 Ab IgG CBA-IFA Titer, CSF

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.

i31: mGluR1 Ab IgG CBA-IFA Titer, CSF

INTERPRETIVE INFORMATION: mGlur1 Ab IgG CBA-IFA Titer, CSF

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.

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