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

Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB	Unknown
Gender:	Unknown
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Acetylcholine Receptor Antibodies and Striated Muscle Antibodies Reflexive Panels, and Titin Antibody

ARUP test code 2005639

Striated Muscle Antibodies, IgG Screen	Detected *	(Ref Interval: <1:40)

Striated Muscle Antibodies, IgG detected. Titer results to follow.

INTERPRETIVE DATA: Striated Muscle Antibodies, IgG Screen

In the presence of acetylcholine receptor (AChR) antibody, striated muscle antibodies, which bind in a cross-striational pattern to skeletal and heart muscle tissue sections, are associated with late-onset myasthenia gravis (MG). Striated muscle antibodies recognize epitopes on three major muscle proteins, including: titin, ryanodine receptor (RyR) and Kv1.4 (an alpha subunit of voltage-gated potassium channel [VGKC]). Isolated cases of striated muscle antibodies may be seen in patients with certain autoimmune diseases, rheumatic fever, myocardial infarction, and following some cardiotomy procedures.

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.

Acetylcholine Binding Antibody	50.0 nmol/L H	(Ref Interval: 0.0-0.4)

Acetylcholine receptor binding antibody result is positive. Sample will reflex to modulating antibody testing.

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: Acetylcholine Binding Ab

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  Negative ....... 0.0 - 0.4 nmol/L
  Positive ....... 0.5 nmol/L or greater
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Approximately 85-90 percent of patients with myasthenia gravis (MG) express antibodies to the acetylcholine receptor (AChR), which can be divided into binding, blocking, and modulating antibodies. Binding antibody can activate complement and lead to loss of AChR. Blocking antibody may impair binding of acetylcholine to the receptor, leading to poor muscle contraction. Modulating antibody causes receptor endocytosis resulting in loss of AChR expression, which correlates most closely with clinical severity of disease. Approximately 10-15 percent of individuals with confirmed myasthenia gravis have no measurable binding, blocking, or modulating antibodies.

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Acetylcholine Blocking Antibody

49 % H **(Ref Interval: 0-26)**

INTERPRETIVE INFORMATION: Acetylcholine Blocking Ab

```
  Negative .............  0-26 percent blocking
  Indeterminate ....... 27-41 percent blocking
  Positive ............. 42 percent or greater blocking
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Titin Antibody

1.50 IV H **(Ref Interval: 0.00-0.45)**

INTERPRETIVE INFORMATION: Titin Antibody

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  Negative ........ 0.00 - 0.45 IV
  Indeterminate ... 0.46 - 0.71 IV
  Positive ........ 0.72 IV  or greater
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The presence of titin antibody is associated with late onset of myasthenia gravis (MG) and a variable risk for thymoma. Titin antibody may be detected in 20-40 percent of all patients with MG; higher frequency in older population as a whole.

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Striated Muscle Antibodies, IgG Titer (Reflex for 0050746 STM R - Do NOT give this test code to clients - Panel Component ONLY.)

ARUP test code 2012516

Striated Muscle Antibodies, IgG Titer	1:160 *	(Ref Interval: <1:40)

INTREPRETIVE INFORMATION: Striated Muscle Abs, IgG Titer

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Acetylcholine Receptor Modulating Antibody

ARUP test code 0099521

Acetylcholine Modulating Antibody	55 % H	(Ref Interval: <=45)

INTERPRETIVE INFORMATION: Acetylcholine Modulating Ab

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  Negative ..........  0-45 percent modulating
  Positive ..........  46 percent or greater modulating
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VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Striated Muscle Antibodies, IgG Screen	24-072-110115	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Striated Muscle Antibodies, IgG Titer	24-072-110115	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Acetylcholine Binding Antibody	24-072-110115	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Acetylcholine Blocking Antibody	24-072-110115	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Acetylcholine Modulating Antibody	24-072-110115	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Titin Antibody	24-072-110115	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical