Adalimumab Activity and Neutralizing Antibody

Patient: ARUPTEST, ADA NAB 2
DOB: N/A Age: 263 Gender: F
Patient Identifiers: 419458

Visit Number (FIN): 437254

Client: ARUP Physician Services
321 TESTING ANSR EXTRACT
Salt Lake City, NY 84108

Physician: ARUP ARUP

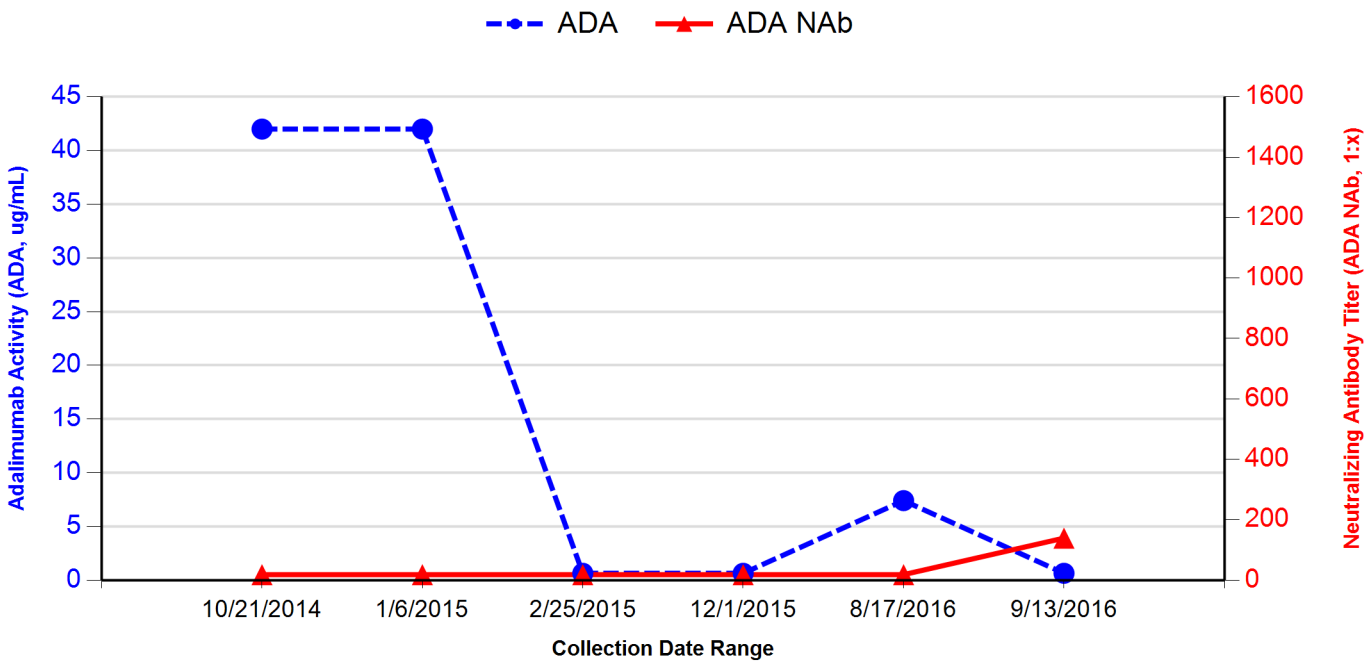
ARUP Test Code: 2011248

Collection Date: 09/13/2016
Received in lab: 09/13/2016
Completion Date: 09/13/2016

Patient History *

Collection Date	Adalimumab Activity (ADA) ug/mL	Neutralizing Antibody (ADA NAb) Titer	Accession Number
9/13/2016	Not Detected	1:139	16-257-106319
8/17/2016	7.40	Not Detected	16-230-114904
12/1/2015	Not Detected	Not Detected	15-335-114411
2/25/2015	Not Detected	Not Detected	15-056-102228
1/6/2015	>40.00	Not Detected	15-006-107263
10/21/2014	>40.00	Not Detected	14-294-101390

Adalimumab Activity versus Neutralizing Antibody Titer



Cutoff values are 0.65 ug/mL for adalimumab and 1:20 for antidrug antibody (NAb).

*Consecutive test results are displayed on this chart; however, this result set may be incomplete due to variations in the demographic information submitted for prior tests. If the information on this chart appears incomplete, please consult this patient's prior charts.

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JULIO C. DELGADO, MD, MS | Director of Laboratories

Chart continues on following page(s)

Patient: ARUPTEST, ADA NAB 2 | **Date of Birth:** Not Provided | **Gender:** F | **Physician:** ARUP ARUP
Patient Identifiers: 419458 **| Visit Number (FIN):** 437254

Interpretive Comments

Interpretive Data: This test measures the capacity of adalimumab to neutralize TNF-alpha activity. Additionally, adalimumab neutralizing antibodies (NAb) are titered (reporting the highest dilution of patient sera in which NAb activity is detected).

This test is used to evaluate secondary response failures to adalimumab therapy. Secondary response failure is defined as loss of clinical response after initial improvement of clinical signs and symptoms. Therapeutic decision should rest on both the clinical response and the knowledge of the fate of the drug including the emergence of immunogenicity in individual patients.

Circulating adalimumab levels have been shown to vary considerably between patients. These differences relate to route and frequency of administration and patient-related features such as age, gender, weight, drug metabolism, and concomitant medications such as methotrexate and other immunosuppressants.

IF Adalimumab Activity is...	AND Adalimumab Neutralizing Antibody Titer is...	THEN...
Not Detected	Not Detected	A higher dosage of adalimumab or shortening the dosing interval may be appropriate.
Not Detected	1:20 or greater	A change to another anti-TNF-alpha drug may be appropriate.
0.65 ug/mL or greater	Not Detected	A change to another type of therapy (not targeting TNF-alpha) may be appropriate.
0.65 ug/mL or greater	1:20 or greater	Repeat testing is suggested to rule out decreasing adalimumab activity and/or increasing adalimumab neutralizing antibodies.

METHODOLOGIES USED: Cell Culture, Cell function assay involving cell stimulation, Quantitative Chemiluminescent Immunoassay, Semi-Quantitative Chemiluminescent Immunoassay

See Compliance Statement B: www.aruplab.com/CS

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END OF CHART