**Test Results**

<table>
<thead>
<tr>
<th>TESTS</th>
<th>RESULT</th>
<th>FLAG</th>
<th>UNITS</th>
<th>REFERENCE INTERVAL</th>
<th>LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatoid Arthritis HLA Assoc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRB1</td>
<td>DRB1*01:01:01G</td>
<td>01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRB1</td>
<td>DRB1*04:01:01G</td>
<td>01</td>
<td></td>
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</tr>
</tbody>
</table>

One or more of the HLA-DRB1 alleles that are associated with susceptibility to anti-citrullinated protein antibody positive (ACPA+) Rheumatoid Arthritis (RA) is PRESENT.

The following DRB1 alleles have been found to be the predominant risk factor for RA: DRB1*04:01,*04:04, *04:05, *04:08, *01:01, *01:02, *09:01, *10:01 and *14:02 alleles, most of which possess a shared epitope (SE). These alleles increase the risk of RA in all populations, but the degree of predisposition may vary with different populations. Not all RA patients carry one of these alleles and not all individuals who carry these alleles will have RA disease.

The following alleles could not be ruled out:
- DRB1* 04:01:01:04:01:01:02:04:01:01:03
- DRB1* 01:01:01:01:50:01:67:01:77:01:82

HLA allele interpretation for all loci based on IMGT/HLA database version 3.31.0

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

HLA Lab CLIA ID Number 34D0954530

**HLA NGS Methodology**

HLA results were obtained using "Next Generation Sequencing". Supplemental procedures based on sequence based typing (SBT), sequence specific oligonucleotide probes (SSOP), and/or sequence specific primers (SSP) may be used as needed to obtain the required resolution. Please contact HLA Customer Service at 1-800-533-1037 if you have any questions.

Director of HLA Laboratory
Dr George C Maha, PhD
Patient Details
DOB: 01/10/1980
Age(y/m/d): 039/00/19
Gender: F
SSN:
Patient ID:

Specimen Details
Date collected: 01/29/2019 0000 Local
Date received: 01/30/2019
Date entered: 01/30/2019
Date reported: 02/01/2019 0000 ET

Ordered Items
Rheumatoid Arthritis HLA Assoc

<table>
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<tbody>
<tr>
<td>DRB1</td>
<td>DRB1*13:02:01G</td>
<td>01</td>
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</tr>
<tr>
<td>DRB1</td>
<td>DRB1*16:01:01</td>
<td>01</td>
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</tbody>
</table>

The HLA-DRB1 alleles associated with susceptibility to ACPA+ Rheumatoid Arthritis (RA) are ABSENT. A negative result for the RA associated DRB1 alleles does not preclude a diagnosis of RA in the individual tested. The following alleles could not be ruled out:
DRB1* 13:02:01:01/13:02:01:02/13:02:01:03/13:208/13:236/13:239

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Director of HLA Laboratory
Dr George C Maha, PhD

01 2Q LabCorp Burlington DNA
1440 York Court, Burlington, NC 27215-3361
Dir: George Maha, PhD

For inquiries, the physician may contact Branch: 800-222-7566 Lab: 800-762-4344