Overview

Useful For
Evaluation of patients suspected of having hypersensitivity pneumonitis induced by exposure to *Aspergillus fumigatus*, *Thermoactinomyces vulgaris,* or *Micropolyspora faeni*

Profile Information

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Reporting Name</th>
<th>Available Separately</th>
<th>Always Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPSF</td>
<td>Micropolyspora faeni, IgG Ab, S</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>SASP</td>
<td>Aspergillus fumigatus, IgG Ab, S</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>TAMV</td>
<td>Thermoactinomyces vulgaris, IgG Ab</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Method Name
Fluorescence Enzyme Immunoassay (FEIA)

NY State Available
Yes

Specimen

Specimen Type
Serum

Specimen Required

Container/Tube:

Preferred: Serum gel

Acceptable: Red top

Specimen Volume: 0.5 mL

Collection Information: Centrifuge and aliquot serum.

Specimen Minimum Volume
0.3 mL

Reject Due To

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross hemolysis</td>
<td>OK</td>
</tr>
<tr>
<td>Gross lipemia</td>
<td>OK</td>
</tr>
</tbody>
</table>
Specimen Stability Information

<table>
<thead>
<tr>
<th>Specimen Type</th>
<th>Temperature</th>
<th>Time</th>
<th>Special Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum</td>
<td>Refrigerated (preferred)</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Frozen</td>
<td>21 days</td>
<td></td>
</tr>
</tbody>
</table>

Clinical and Interpretive

Clinical Information

Hypersensitivity pneumonitis (HP) is a heterogeneous disease caused by exposure to organic dust antigens, animal proteins, chemicals, medications, or microorganisms (eg, *Thermoactinomyces vulgaris*, *Micropolyspora faeni*, *Aspergillus fumigatus*). The immunopathogenesis of disease is not known; but, several immunologic mechanisms may play a role in producing alveolitis, including cellular immunity mediated by CD4 and CD8 T lymphocytes, immune-complex mediated inflammation, complement activation, or activation of alveolar macrophages.(1)

HP is suspected clinically in patients who present with intermittent or progressive pulmonary symptoms and interstitial lung disease. The diagnosis is established by compatible clinical and radiographic findings, pulmonary function tests, and demonstration of specific antibodies to organic antigens known to cause the disease.

Reference Values

*Aspergillus fumigatus*, IgG ANTIBODIES

<4 years: not established

> or =4 years: < or =102 mg/L

*Micropolyspora faeni*, IgG ANTIBODIES

0-12 years: < or =4.9 mg/L

13-18 years: < or =9.1 mg/L

>18 years: < or =13.2 mg/L

*Thermoactinomyces vulgaris*, IgG ANTIBODIES

0-12 years: < or =6.6 mg/L

13-18 years: < or =11.0 mg/L

>18 years: < or =23.9 mg/L

Interpretation

Elevated concentrations of IgG antibodies to *Aspergillus fumigatus*, *Thermoactinomyces vulgaris*, or *Micropolyspora faeni* in patients with signs and symptoms of hypersensitivity pneumonitis may be consistent with disease caused by exposure to one or more of these organic antigens.
Cautions
IgG antibodies to *Aspergillus fumigatus, Thermoactinomyces vulgaris, or Micropolyspora faeni* may be found in sera from healthy individuals; the presence of these specific antibodies is not sufficient to establish the diagnosis of hypersensitivity pneumonitis (HP).

Elevated concentration of antibodies to *Aspergillus fumigatus* may be also found in patients with invasive aspergillosis and cavitary lung disease. (2)

The concentrations of antibodies to these antigens may decrease following treatment, although elevated concentrations may persist in treated patients.

Clinical Reference

Performance

Method Description
The Phadia ImmunoCAP System-specific IgG-fluorescence enzyme immunoassay (FEIA) provides an in vitro method for measuring the levels of circulating specific IgG antibodies in human blood samples. Specific IgG from the patient's serum reacts with the antigen of interest, which is covalently coupled to an ImmunoCAP. After washing away nonspecific IgG, enzyme-labeled anti-IgG antibodies are added to form a complex. After incubation, unbound enzyme anti-IgG is washed away and the bound complex is then incubated with a developing agent. After stopping the reaction, the fluorescence of the eluate is measured. The fluorescence is proportional to the amount of specific IgG that is present in the patient's sample (ie, the higher the fluorescence value, the more specific IgG antibody is present). (Package insert: Phadia AB, Uppsala, Sweden 2009)

PDF Report
No

Day(s) and Time(s) Test Performed
Monday through Friday

Analytic Time
Same day/1 day

Maximum Laboratory Time
3 days

Specimen Retention Time
14 days

Performing Laboratory Location
Rochester
Test Definition: HYPS
Hypersensitivity Pneum Panel, IgG,S

Fees and Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact Customer Service.

Test Classification
See Individual Test IDs

CPT Code Information
86606
86609 x 2

LOINC® Information

<table>
<thead>
<tr>
<th>Test ID</th>
<th>Test Order Name</th>
<th>Order LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYPS</td>
<td>Hypersensitivity Pneum Panel, IgG,S</td>
<td>87553-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result ID</th>
<th>Test Result Name</th>
<th>Result LOINC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPSF</td>
<td>Micropolyspora faeni, IgG Ab, S</td>
<td>26948-0</td>
</tr>
<tr>
<td>SASP</td>
<td>Aspergillus fumigatus, IgG Ab, S</td>
<td>26954-8</td>
</tr>
<tr>
<td>TAMV</td>
<td>Thermoactinomyces vulgaris, IgG Ab</td>
<td>34190-9</td>
</tr>
</tbody>
</table>