Mycoplasma Direct Testing and Treatment FAQ

Why test for *Mycoplasma pneumoniae*?

» 40% of all community acquired pneumonia is associated with *Mycoplasma pneumoniae*¹

» An estimated 2 million cases of *Mycoplasma pneumoniae* occur annually in the US²

» IDSA guidelines for community acquired pneumonia recommend immediate antibiotic therapy³
  - Typical antibiotics for respiratory infections including penicillin are ineffective in treating *Mycoplasma pneumoniae* due to the lack of cell wall⁴
  - Chronic *Mycoplasma pneumoniae* infection may be linked to chronic asthma⁴
  - Empiric treatment may lead to antimicrobial resistance⁵

» Research has shown that a *Mycoplasma pneumoniae* infection may precede the onset of asthma⁶

How is *Mycoplasma pneumoniae* treated?

Macrolides are the treatment of choice for *Mycoplasma pneumoniae*.⁵

Tetracyclines and fluoroquinolones are also effective in the treatment of *Mycoplasma pneumoniae* in adults, however, they are not recommended for children under normal circumstances.⁵

What type of sample should be collected?

Polyester, flocked nylon or rayon throat swabs with breakable, plastic shafts (single or double swab).

Collected samples should be stored in non-nutritive transport medium on pledget/sponge – Liquid Aimes (without charcoal) or Liquid Stuart.

<table>
<thead>
<tr>
<th>Positive Agreement</th>
<th>Negative Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>96.0%</td>
<td>97.7%</td>
</tr>
</tbody>
</table>

Why should I switch from traditional methods to molecular testing?

Highly accurate results from illumigene® Mycoplasma Direct can be obtained in less than an hour after specimen collection and can be used as an aid in the diagnosis and management of *Mycoplasma pneumoniae* infections from the first day of symptoms.

What are the drawbacks of X-Rays?

No distinctive X-Ray pattern of *Mycoplasma pneumoniae* has been found and marked differences exist in its radiographic appearance, making it an insufficient diagnostic tool with as low as 29% sensitivity.¹⁰,¹³

What are the drawbacks of culture?

The complex nutritional requirements and slow growth of *M. pneumoniae* on culture media make its identification impractical for most laboratories; additionally, results from culture for *M. pneumoniae* are not available in a clinically relevant time frame.¹⁴

REFERENCES