New diagnostic test method for infectious diseases.

**Background:**
Viral infections are common causes of fever without an apparent source (FWS) in young children. Despite absence of bacterial infection, many febrile children are treated with antibiotics. Virus and bacteria interact with different pattern recognition receptors in circulating blood leukocytes, triggering specific host transcriptional programs mediating immune response. Therefore, unique transcriptional signatures may be defined that discriminate viral from bacterial causes of FWS.

**Technology Description:**
The test was designed and extensively evaluated by Dr. Gregory Storch, an accomplished pediatric infectious disease doctor and researcher, and his research team at the Washington University School of Medicine. The molecular diagnostic test is a transcriptional signature profile assessment that accurately distinguishes between viral and bacterial pathogens in febrile children with no apparent source. This is a remarkable advantage over the current gold standard test, the white blood cell count (WBC), which does not indicate source of infection.

**Indications:** Diagnostic test

**Key Advantages:**
- **Accuracy:** Distinguishes between Viral and Bacterial infections
- **Superiority:** Transcriptional profile test is superior to WBC in indentifying cause of infection.
- **Validated:** Pathogen-specific gene set is up to 95% accurate

**Publications:**

**Patent/Patent Application:** Patent Pending Priority Application Number: 61/881,508

**Lead Inventor:**
Gregory A. Storch, MD., Director, Division of Pediatric Laboratory Medicine, Ruth L. Siteman Professor of Pediatrics, Professor of Medicine and Molecular Microbiology

---

<table>
<thead>
<tr>
<th>Licensing Contact</th>
<th>Application Space</th>
<th>WUSTL Case#</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Silva, Ph.D</td>
<td>Diagnostic, clinical testing</td>
<td>013735</td>
</tr>
<tr>
<td>dsilva.wustl.edu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>314.747.0923</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>