<table>
<thead>
<tr>
<th>DAT</th>
<th>CAS</th>
<th>Mixed-type AIHA</th>
<th>PCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>IgG only (20%)</td>
<td>C3d only</td>
<td>IgG + C3d</td>
<td>C3d only</td>
</tr>
<tr>
<td>IgG + C3d (67%)</td>
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<tr>
<td>C3d only (13%)*</td>
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</tbody>
</table>

**Immunoglobulin type**
- IgG
- IgM
- IgM, IgG
- IgG

**Eluate**
- IgG antibody: Nonreactive
- IgG antibody: IgM agglutinating with high titer (>256, more frequently >1000). Thermal amplitude >30C
- IgG antibody: IgG IAT reactive antibody plus IgM agglutinating antibody at >30C
- IgG antibody: IgG biphasic hemolysin in Donath-Landsteiner test

**RBC Specificity**
- Broadly reactive. 1/3rd with RhD/CE specificity; others with (Kell, LW, Jk, Fy, Dg)
- Usually anti-I
- Unknown
- Anti-P

**Laboratory Testing**
- In solid-phase or enzyme panels, nearly 90% will show autoantibody. Increases time on pre-transfusion testing. Worry for potential underlying alloantibodies.
- Specimen must be transported at 37C (heal warmer). May interfere with forward/reverse testing. Rare Pr specificity is high risk (does not react to enzyme treated cells).
- Typically all testing methods show reactivity in all phases.
- DL test is time intensive and should only be performed in the appropriate clinical context.

**Transfusion**
- Both native and transfused cells have decreased lifespan. Higher than expected alloimmunization rate. Prophylactic C/E/Kell matching strategy. Transfuse smallest volume possible to balance risk
- Avoidance of cold temperatures. Consider transfusion through validated blood warmer.
- Same as WAIHA

**Comment**
- Rare cases of IgM/IgA WAIHA—poor prognosis
- Idiopathic and Secondary causes (lymphoproliferative disorders)
- 1/3rd of WAIHA have nonpathologic IgM antibodies that agglutinate at 20C—this is NOT mixed
- Pediatric patient following URI. Very rare association with syphilis


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