

	PROS	CONS	Teaching point	Sensitivity	Sensitivity in combination
<b>SPEP</b>	<ul style="list-style-type: none"> <li>Quantitative assay.</li> <li>Useful for screening and follow up.</li> <li>Inexpensive.</li> </ul>	<ul style="list-style-type: none"> <li>It doesn't confirm monoclonality.</li> <li>Low sensitivity.</li> <li>Its interpretation is not straightforward.</li> </ul>	<ul style="list-style-type: none"> <li>Is least useful in conditions with low burden of M-proteins like MGRS.</li> </ul>	<ul style="list-style-type: none"> <li>Overall: 79%</li> <li>MM: 87.6%</li> <li>AL amyloidosis: 65.9%</li> <li>MGUS: 81.9%</li> <li>LCDD: 55.6%</li> </ul>	<ul style="list-style-type: none"> <li><b>+ FLC</b></li> <li>Overall: 94.3%</li> <li>MM: 100%</li> <li>AL amyloidosis: 96.2%</li> <li>MGUS: 88.7%</li> <li>LCDD: 77.8%</li> </ul>
<b>IFE</b>	<ul style="list-style-type: none"> <li>Confirms monoclonality.</li> <li>Identifies M-protein subtype.</li> <li>Great sensitivity.</li> <li>Easy to interpret.</li> </ul>	<ul style="list-style-type: none"> <li>Qualitative assay.</li> <li>Not useful for follow up.</li> <li>Expensive.</li> </ul>	<ul style="list-style-type: none"> <li>It is needed for the confirmation of total remission.</li> </ul>	<ul style="list-style-type: none"> <li>Overall: 87%</li> <li>MM: 94.4%</li> <li>AL amyloidosis: 73.8%</li> <li>MGUS: 92.8%</li> <li>LCDD: 55.6%</li> </ul>	<ul style="list-style-type: none"> <li><b>+ SPEP + FLC</b></li> <li>Overall: 97.4%</li> <li>MM: 100%</li> <li>AL amyloidosis: 97.1%</li> <li>MGUS: 97.1%</li> <li>LCDD: 77.8%</li> </ul>
<b>FLC</b>	<ul style="list-style-type: none"> <li>Quantitative assay.</li> <li>Only test that measures FLC.</li> <li>Useful for screening and follow up.</li> <li>Relatively easy to interpret.</li> </ul>	<ul style="list-style-type: none"> <li>It doesn't confirm monoclonality.</li> <li>Its interpretation is not straightforward (<math>\kappa/\lambda</math> ratio).</li> <li>Expensive.</li> </ul>	<ul style="list-style-type: none"> <li>The <math>\kappa/\lambda</math> ratio must be adjusted in renal impairment.</li> </ul>	<ul style="list-style-type: none"> <li>Overall: 74.3%</li> <li>MM: 96.8%</li> <li>AL amyloidosis: 88.3%</li> <li>MGUS: 42.4%</li> <li>LCDD: 77.8%</li> </ul>	<ul style="list-style-type: none"> <li><b>+ SPEP/IFE + UPEP/IFE:</b></li> <li>Overall: 98.6%</li> <li>MM: 100%</li> <li>AL amyloidosis: 98.1%</li> <li>MGUS: 100%</li> <li>LCDD 83.3%</li> </ul>
<b>UPEP/IFE</b>	<ul style="list-style-type: none"> <li>Quantitative assay (UPEP).</li> <li>Differentiate the type of proteins in the urine.</li> <li>Useful for follow up.</li> <li>Confirms monoclonality (IFE).</li> </ul>	<ul style="list-style-type: none"> <li>Lowest sensitivity of all.</li> <li>It has fallen out of favor after the introduction of FLC.</li> <li>Cumbersome to perform (24hr urine is needed).</li> </ul>	<ul style="list-style-type: none"> <li>It is most useful for detecting diseases with low burden of M-proteins like MGRS.</li> </ul>	<ul style="list-style-type: none"> <li>Overall: 37%</li> </ul>	<ul style="list-style-type: none"> <li><b>+ SPEP + IFE:</b></li> <li>Overall: 97%</li> <li>MM: 98.7%</li> <li>AL amyloidosis: 94.2%</li> <li>MGUS: 100%</li> <li>LCDD 77.8%</li> </ul>