ENHANCED LIVER FIBROSIS (ELF) PANEL, SERUM (CLIA)

Hyaluronic Acid (HA) ng/mL
Amino-Terminal Propeptide Type III Collagen (PIIINP) ng/mL
Tissue Inhibitor Metalloproteinase 1 (TIMP-1) ng/mL
ELF Score

Interpretation

<table>
<thead>
<tr>
<th>ELF SCORE</th>
<th>REMARKS</th>
<th>ISHAK STAGING</th>
<th>MODIFIED ISHAK/ KLEINER / METAVIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 7.7</td>
<td>Minimal / No Fibrosis</td>
<td>Stage 0, 1 &amp; 2</td>
<td>Stage 0 &amp; 1</td>
</tr>
<tr>
<td>&gt;7.7 – 9.8</td>
<td>Moderate Fibrosis. Additional investigations required</td>
<td>Stage 3 &amp; 4</td>
<td>Stage 2 &amp; 3</td>
</tr>
<tr>
<td>&gt;9.8</td>
<td>Severe fibrosis</td>
<td>Stage 5 &amp; 6</td>
<td>Stage 4</td>
</tr>
</tbody>
</table>

Note
1. Extra hepatic causes of fibrosis may impact the ELF score
2. Results should be interpreted in conjunction with clinical history and other laboratory investigations

Comment

The ELF score, derived from an algorithm that combines the individual results for HA, PIIINP, and TIMP-1, may be useful to assess the status of liver fibrosis in patients who have been diagnosed with Chronic liver disease. The ELF score may be useful as a baseline determination of liver fibrosis; for monitoring changes in fibrosis over time (natural history); before, during, and after therapy or life-style modification; and as an aid in determining prognosis. PIIINP is a marker of early fibrogenesis and inflammation, TIMP-1 is the circulating inhibitor of MMP enzymes that can enhance fibrogenesis, and
HA is a glycosaminoglycan that is produced by hepatic stellate cells. Together, these assays measure qualitative and quantitative changes in the extracellular matrix (ECM).