FibroTest-ActiTest in HBV
Estimating Fibrosis and Activity - Detecting Inactive Carriers
Recognized by EASL-ALEH\(^1\), APASL\(^2\) and WHO\(^{13}\) Guidelines

**Diagnosis**

FibroTest offers the same highly accurate evaluation of both advanced fibrosis and cirrhosis regardless of ethnicity, HBsAg status, viral load, gender or ALT transaminases level.\(^3\)

FibroTest evaluates both fibrosis in the early stages (F0 to F3) as well as cirrhosis (F4).\(^3\) Cirrhosis can be fine-tuned to 3 levels:\(^5\),\(^6\)

- **F4.1** (cut-off 0.74): cirrhosis without complications
- **F4.2** (cut-off 0.85): cirrhosis with oesophageal varices only
- **F4.3** (cut-off 0.95): cirrhosis with severe complications (primary liver cancer, bleeding or decompensation)

**Follow-up**

FibroTest and ActiTest may easily be repeated for the assessment of disease progression.\(^6\),\(^7\)

FibroTest is validated both for the initial diagnosis of fibrosis and for the monitoring of patients, whether treated or untreated.\(^6\),\(^7\)

ActiTest is more accurate than ALT transaminases for the diagnosis of necroinflammatory activity.\(^8\)

**Inactive carriers of HBV**

- Using FibroTest and ActiTest in combination offers a more simple definition of HBV inactive carriers (Figure 1).\(^4\),\(^9\)
- FibroTest has a superior prognostic value compared to both HBV viral load and ALT transaminases\(^4\),\(^9\)

**FibroTest: the best option?**

**vs. Transient Elastography (TE):** FibroTest identifies significant fibrosis with superior accuracy to TE, while identifying cirrhosis with similar accuracy\(^3\) and much superior applicability without failure (98% vs 82%). Repeated FibroTests, unlike TE, do not have activity-related nor operator-related variability.\(^10\),\(^11\)

**vs. APRI and FIB-4:** FibroTest does not include AST nor ALT transaminases, avoiding the risk of confounding features of fibrosis and activity.\(^12\). For both cirrhosis and fibrosis, FibroTest is superior.\(^3\)

**Identifying HBV Inactive Carriers**

<table>
<thead>
<tr>
<th>FibroTest F0</th>
<th>ActiTest A0</th>
<th>Viral Load low/undetectable</th>
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Fig 1: Identifying low-risk patients (HBV inactive carriers)

**References:**

1. EASL-ALEH Guidelines. J Hepatol 2015
2. Shih G et al. Hepatol Int 2009
5. Park MS et al. Liv Int 2015
6. Poynard T et al. Antivir Ther 2010

**Assays (done at local lab.)** - Alpha-2 macroglobulin, Haptoglobin, Apolipoprotein A1, Total bilirubin, GGT, ALT, age, sex - according to BioPredictive precautions of use (biopredictive.com)

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FibroTest estimates liver fibrosis:

- F0: no fibrosis
- F1: minimal fibrosis
- F2: moderate fibrosis
- F3: advanced fibrosis
- F4: severe fibrosis (cirrhosis)

ActiTest estimates necroinflammatory activity:

- A0: no activity
- A1: minimal activity
- A2: moderate activity
- A3: severe activity