


# NAFLD

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# Background

- ▶ Common cause of chronic liver disease
- ▶ Affects up to 20% of population in UK
- ▶ NAFLD is an umbrella term for: steatosis  
NASH
- ▶ 20% NAFLD progresses to NASH
- ▶ 20% NASH progresses to cirrhosis


# Epidemiology and aetiology

- ▶ Part of metabolic syndrome
  - ▶ Associated with: obesity
  - ▶                      dyslipidaemia
  - ▶                      diabetes
  - ▶                      hypertension
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# Presentation

- ▶ Abnormal LFTs – ALT/AST/GGT (may be normal)
- ▶ “Fatty liver” on USS
- ▶ Features of cirrhosis: jaundice
- ▶ ascites
- ▶ variceal bleed
- ▶ encephalopathy


# Diagnosis

- ▶ History – alcohol use, drugs
  - ▶ Virology (HBV, HCV)
  - ▶ Liver autoantibodies/Immunoglobulins
  - ▶ Iron studies
  - ▶ Copper studies (under 40s)
  - ▶ Coeliac screen
  - ▶ HbA1c/fasting lipids
  - ▶ USS
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# General Management

- ▶ Weight loss – 7–10%
  - ▶ Exercise
  - ▶ Control dyslipidaemia (statins help)
  - ▶ Treat diabetes
  - ▶ Treat hypertension
  - ▶ Cirrhotic– OGD (?varices), 6-monthly USS/AFP
  - ▶ Transplant
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# Risk Stratification

- ▶ FIB-4, NAFLD fibrosis score – high negative predictive value
  - ▶ ELF, FibroTest
  - ▶ Elastography (?Obese patients)
  - ▶ MRI
  - ▶ (Liver Biopsy)
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# FIB-4


- ▶ Age
  - ▶ AST
  - ▶ ALT
  - ▶ Platelets
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# NAFLD Fibrosis Score

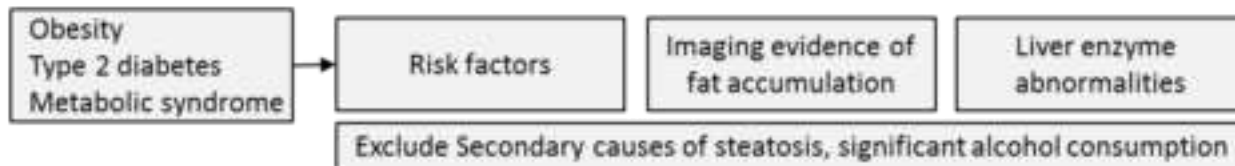
- ▶ Age
- ▶ BMI
- ▶ AST
- ▶ ALT
- ▶ Albumin
- ▶ Platelets
- ▶ ?Diabetes

# ELF/FibroTest

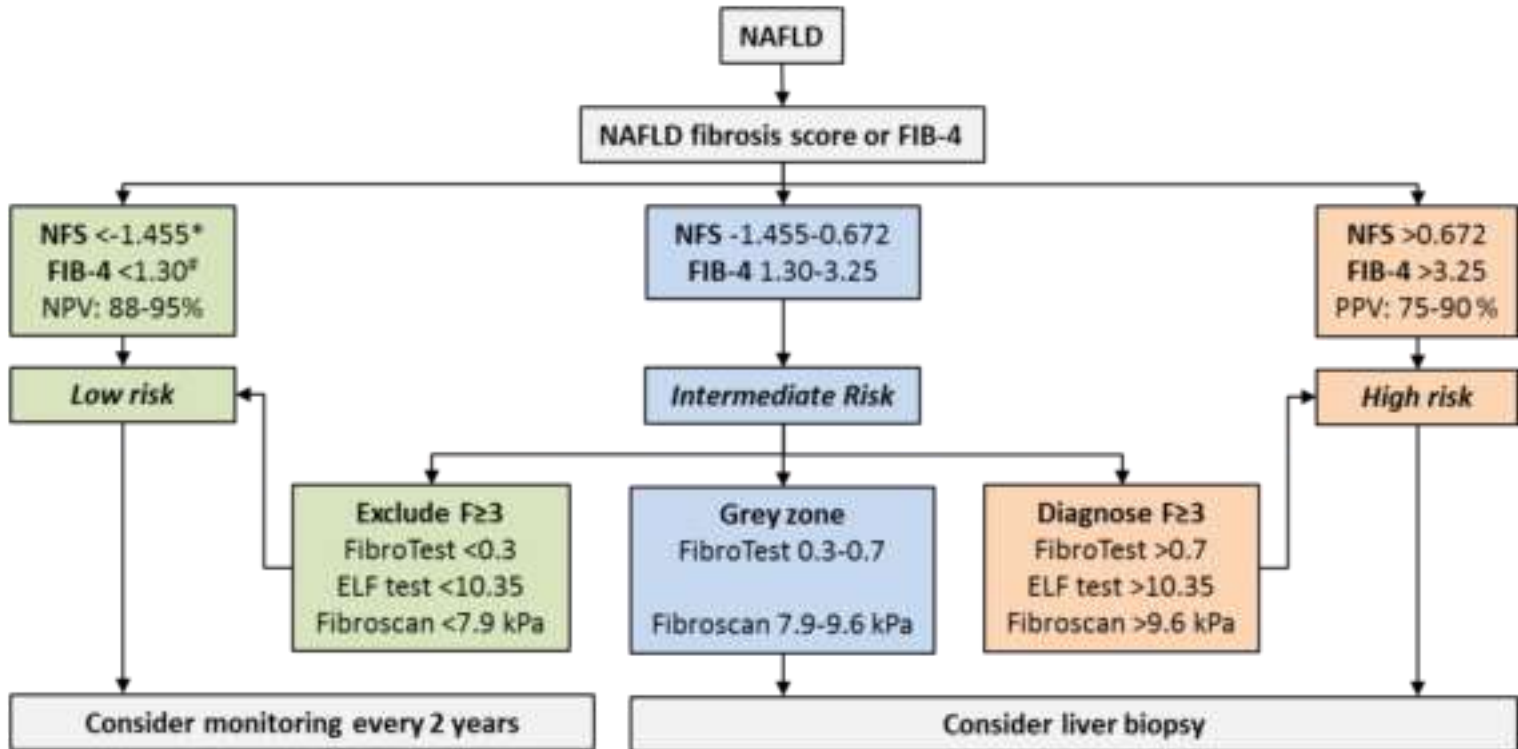
- ▶ More accurate than “simple” biomarkers
  - ▶ Measure metalloproteinases/hyaluronic acid
  - ▶ Less readily available
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# Management Algorithm

NAFLD DIAGNOSIS



NON-INVASIVE FIBROSIS ASSESSMENT



# Specific Treatment

- ▶ No licensed drugs
  - ▶ Pioglitazone
  - ▶ Vitamin E
  - ▶ Obeticholic acid
  - ▶ (cilofexor, firsocosat)
  - ▶ Liraglutide
  - ▶ SGLT2 inhibitors
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