DIAGNOSIS OF NASH
LIVER BIOPSY
THE NATURAL HISTORY OF NAFLD

STEATOSIS (NAFL)

STEATOHEPATITIS
(NASH)

FIBROSIS

CIRRHOSIS

HCC
UNDER THE LENS: THE 3 HISTOLOGICAL COMPONENTS OF NAFLD ARE INTERMINGLED

FLIP consortium, Hepatology 2012, Hepatology 2014
LIVER BIOPSY IS THE ONLY TOOL THAT GIVES YOU, IN ONE SHOT, A FULL EVALUATION OF THE VARIOUS FEATURES (S_A_F) WITH SEMIQUANTITATIVE EVALUATION
EASY TO ARGUE AGAINST LIVER BIOPSY

• Biopsy is not a safe procedure
• Patient may refuse liver biopsy
• There is a risk of sampling error
• There is a risk variability in assessment between pathologists
• Non invasive biomarkers to replace liver biopsy
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Liver biopsy in the post-transplant setting

- Our local experience:
  - Between 2006 – 2016
  - > 1500 transplantations in Beaujon hospital
  - 3 biopsies / per patient / per 10 years (1 – 12)
  - No reluctance from hepatologist → full acceptance from patients

Motivation of the hepatologist is the key; serious disease, treatments available, no non invasive alternative
WHY TO KEEP LIVER BIOPSY IN NAFLD

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The FLIP algorithm

The definition of NASH by an association of 3 features and a clear definition of each of them make the diagnosis of NASH strongly reproducible.
Laurent should argue:

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Non invasive biomarkers in NAFLD
WHY TO KEEP LIVER BIOPSY IN NAFLD

• Biopsy is not a safe procedure
• Patient refuse liver biopsy
• There is risk of sampling error
• There is risk variability between pathologists
• Non invasive biomarkers to replace liver biopsy: still an unmet need
Why a liver biopsy?

- NAFLD subgroups are defined by liver tissue damages
- NAFLD: complex disease with association of various pathophysiological features
- Each feature has a clinical relevance
MANY VARIATIONS OF NAFLD

ACTIVITY

FIBROSIS

A0F1

A3F1

A0F4

A3F4
Relevance for choosing customized treatment

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WHY TO KEEP LIVER BIOPSY IN NAFLD

- Biopsy is not a safe procedure
- Patient refuse liver biopsy
- There is risk of sampling error
- There is risk variability between pathologists
- Non invasive biomarkers to replace liver biopsy still an unmet need

The reality is:
- NAFLD is a pandemia
- Most of the patients have a benign disease
- No treatment available

→ Biopsy should be considered only for selected
When to biopsy?

• Clinical trial

• Comorbidity

• Possibly serious disease
NON INVASIVE TOOL AND LIVER BIOPSY

A POWERFUL ASSOCIATION
TAKE-HOME MESSAGES

• Liver biopsy is still the gold standard

• Non invasive test still an unmet need but strongly needed NOT TO replace liver biopsy BUT TO select the subgroup of patients who will benefit from a liver biopsy

• Liver biopsy will stay in the armamentarium of hepatologist in NAFLD