



Global Hepatitis Community



MELDcenters

Hepatitis C Testing

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Testing with Continuum of Care

Who to test?

How to test?

How to confirm
current/viraemic
infection?

Monitoring
treatment
response

Who to test

How to test
(anti-HCV
antibody)

Confirmation
of viraemic HCV
infection (HCV
RNA or cAg)

Assessment
of HCV treatment
response
(test of cure)

Who to Test?

Who to test?

- ✓ Blood donors
- ✓ Individuals with history of high-risk behaviors (PWIDs, FSW, etc.)
- ✓ Inmates
- ✓ Hemophilia, thalassemia and leprosy
- ✓ HIV infection
- ✓ etc.

Who to test



Who to Test?

Populations most affected by HCV



General Population



Who to test?

Who to test

WHO Recommendation:

In settings with a $\geq 2\%$ seroprevalence of HCVAb, it is recommended that all adults have routine access to and be offered testing.

How to Test?

How to test?

- HCVAb for screening of HCV infection.

- Methods

- Laboratory-based immunoassay
- Rapid diagnostic test

How to test
(anti-HCV
antibody)

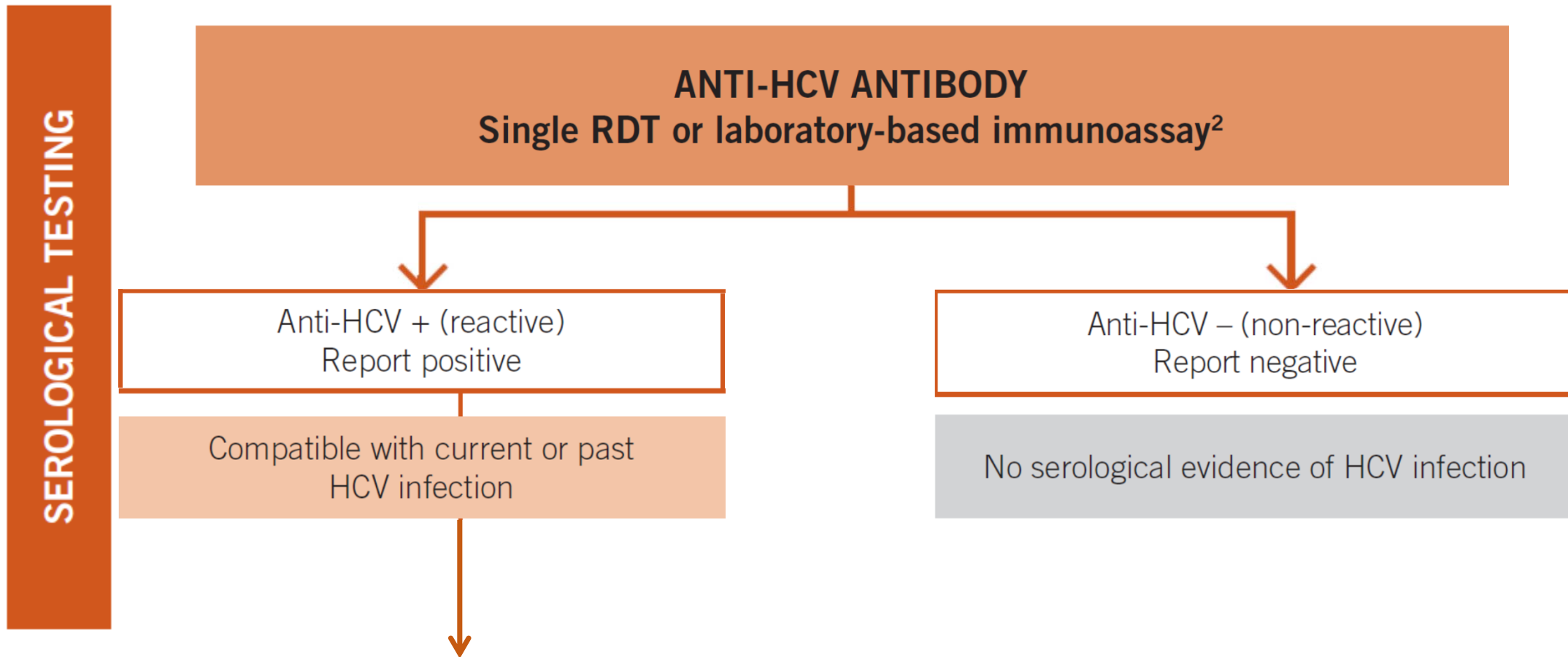


Rapid Diagnostic Test (RDT)

- Can be used at the site of patient care
 - Prison
 - DIC, MMT, VCT
 - Rural areas
- Can use original specimen matrices in addition to serum and plasma
 - Oral fluid
 - Fingertick whole blood



Algorithm for Diagnosis and Monitoring



Need Confirmation of HCV Ab-reactive Results?

- The accuracy of HCV Ab kits are mostly **reasonable**
- Most of patients with HCV Ab+ results have/had **known risk factor**
- HCV RNA detection by **RT-PCR** can act as a **reliable** confirmatory/supplementary test
- In individuals with HCV Ab+/HCV RNA- result and with no risk factor, RIBA can help the confirmation of HCV Ab results however add no value for further clinical management

How to Confirm Active Infection?

– to guide who to treat or not treat

How to confirm current/viraemic infection?

Confirmation of viraemic HCV infection (HCV RNA or cAg)

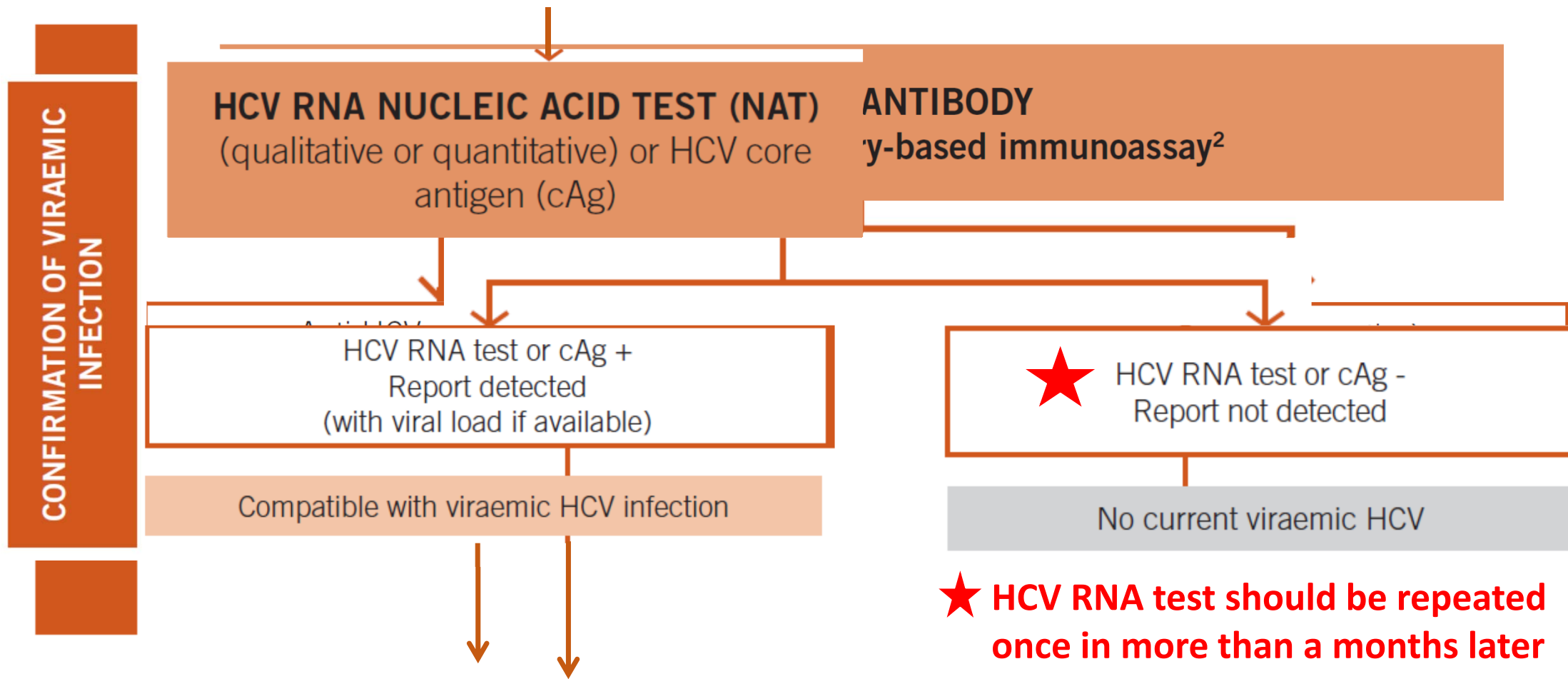
✓ Tests needed:
• HCV RNA by RT-PCR

- HCV genotyping
- ALT/AST
- CBC

✓ To Diagnose:
• HCV current infection

- HCV genotype
- Cirrhosis (by FibroScan, APRI or FIB-4)

Algorithm for Diagnosis and Monitoring



HCV Viral Load or Qualitative RT-PCR?

HCV Viral load in era of
IFN-based Regimens



An important virologic marker
for shortening, elongation and
termination of treatment

HCV Viral load in era of
DAA-based Regimens



Has no role in clinical
decision making

HCV RNA Assessment

- HCV RNA detection (qualitative) should be tested **before initiation** of treatment and **12 or 24 weeks after treatment** completion. SVR12 and SVR24 are **99%** concordance.
- HCV RNA detection should be made by a reliable **sensitive assay**.

HCV Genotyping; Yes or No?

HCV genotyping in era of
IFN-based Regimens



Used for determination of
treatment duration.

HCV genotyping in era of
DAA-based Regimens



Used for determination of the
treatment combination (the regimen ± RBV) and treatment duration.

Algorithm for Diagnosis and Monitoring

MONITORING

ASSESSMENT OF STAGE OF LIVER DISEASE (using clinical criteria³ and non-invasive tests (NITs) i.e. APRI)

ASSESSMENT OF CURE (sustained virological response (SVR) at 12 weeks (i.e. SVR12) after the end of treatment)

HCV RNA NAT (qualitative or quantitative)

FOR TREATMENT (e.g. comorbidities,

DETECTION OF HCC in persons with cirrhosis (every 6 months)

Ultrasound and AFP

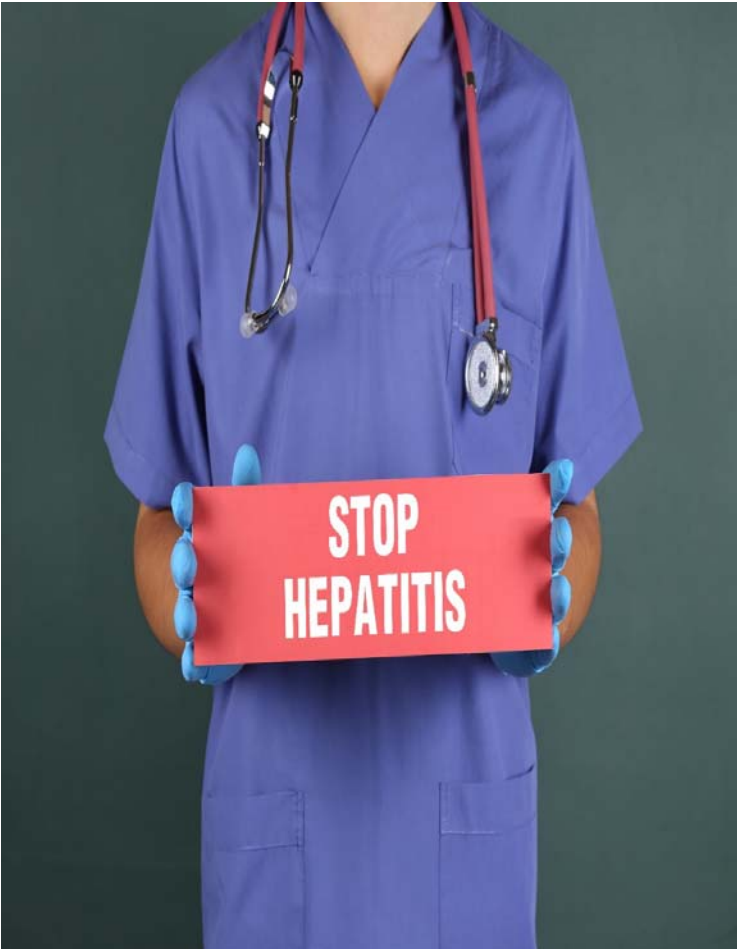
SELECT DIRECT-ACTING ANTIVIRAL (DAA) REGIMEN^{1,6}

Daclatasvir/sofosbuvir or ledipasvir/sofosbuvir ± ribavirin for 12 or 24 weeks (depending on genotype and presence of cirrhosis)

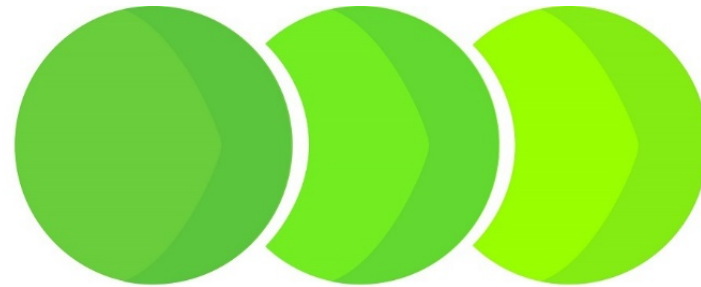


GUIDELINES ON HEPATITIS B AND C TESTING

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**Thank You
Very Much**



NOhep