Curing Hepatitis B and Delta — what are the different types of cure and why do we need them?



## Declaration

Conflicts of interest - None

Honoraria and sponsorship - None

## Background

- Chronic Hepatitis B (CHB) affects 290 million individuals worldwide, and approximately 10% of those are aware of the diagnosis
- HDV affects approximately 5% of those infected with CHB
- Significant challenges to improving diagnosis rates, and equal access to monitoring + treatment
- Nucleoside Analogues are the mainstay of treatment and whilst effective at viral suppression, non-curative
- Annual HCC risk in untreated CHB 0.3–0.6% in non-cirrhotic patients, and 2.2–3.7% compensated cirrhosis





## EASL 2017 Clinical Practice Guidelines on the management of hepatitis B virus infection<sup>☆</sup>

European Association for the Study of the Liver\*

- Confirmed HBsAg loss, with or without anti-HBs seroconversion
- Non-cirrhotic HBeAg positive CHB patients who achieve stable HBeAg seroconversion and undetectable HBV DNA + > 12 months of consolidation therapy.
- Selected non-cirrhotic HBeAg-negative patients who have achieved long term (>3 years) virological suppression under NA(s) may be considered if close post-NA monitoring can be guaranteed





## PRACTICE GUIDELINE

## **AASLD Guidelines for Treatment of Chronic Hepatitis B**

Norah A. Terrault,<sup>1</sup> Natalie H. Bzowej,<sup>2</sup> Kyong-Mi Chang,<sup>3</sup> Jessica P. Hwang,<sup>4</sup> Maureen M. Jonas,<sup>5</sup> and M. Hassan Murad<sup>6</sup>

- Indefinite therapy for HBeAg negative without cirrhosis, although may consider stopping NA if HBsAg loss
- Indefinite therapy for patients with cirrhosis who convert from HBeAg +ve – anti-Hbe on therapy
- HBeAg-positive adults without cirrhosis who seroconvert to anti-HBe on therapy can discontinue NAs after a period of treatment consolidation.



# GUIDELINES FOR THE PREVENTION, CARE AND TREATMENT OF PERSONS WITH CHRONIC HEPATITIS B INFECTION

**MARCH 2015** 

#### Non-cirrhotics:

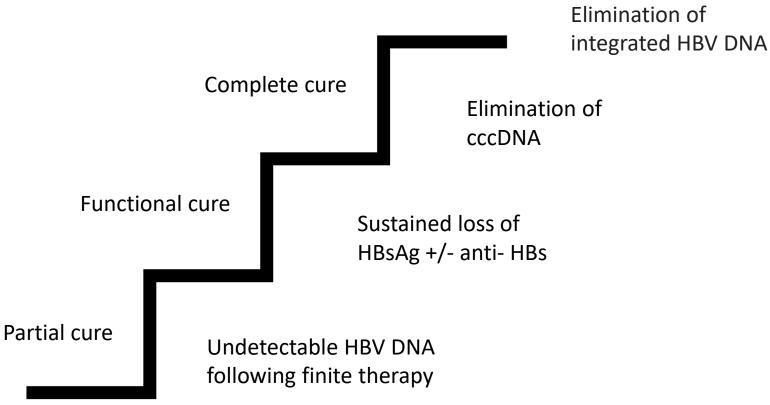
HBeAg loss + seroconversion to anti-HBe+ >1 yr of consolidation treatment

+ persistently normal ALT levels and undetectable HBV DNA levels

# Where HBV DNA testing is not available:

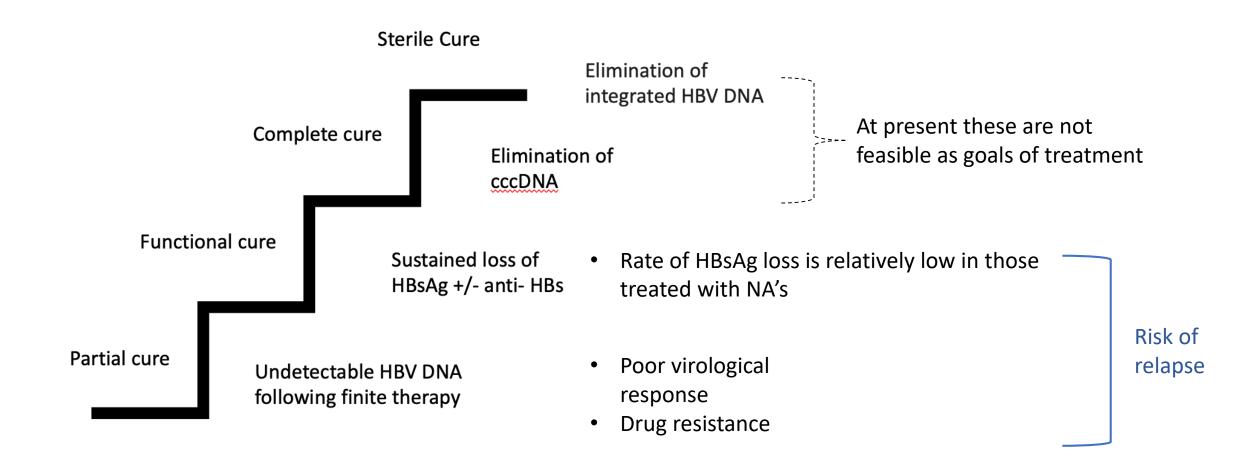
May be considered if evidence of persistent HBsAg loss and after >1 year of consolidation treatment

What are the different types of cure?



Sterile Cure

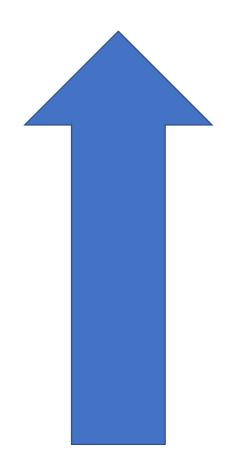
## Challenges to achieving cure



## The wider context

- A relative minority of patients on long term therapy
- Current guidance/thresholds
- Disparities in access to services & treatment between geographical regions
- Cost of treatment in some regions/ reimbursement tariffs
- Concerns about side effects among patients
- Pursuit of alternative therapies/lifestyle measures

## What is needed?



- Expansion of eligibility for treatment
- Increased testing and improved diagnosis rates
- Collaboration with patients on acceptability of new regimes
- Improved awareness of treatment amongst patients and healthcare providers

### Conclusions

- CHB and delta infection remain significant global public health burden and leading cause of liver cancer
- Functional cure is the current goal of therapy, but only achieved in a minority of patients
- There is significant scope to increase number of patients achieving functional cure, and reducing cancer risk