New Treatment for Chronic HBV Infection
慢性乙肝的新療法

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UHN

Objectives 學習目標

1. To review current treatment for chronic HBV infection

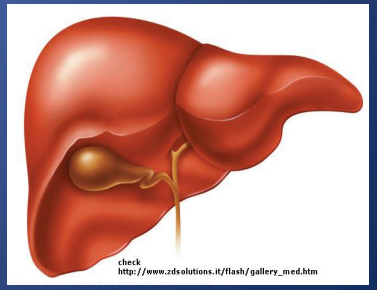
回顧目前對慢性乙肝感染的治療

2. To discuss advantages and disadvantages of current treatment options

討論目前治療的優點缺點

3. To discuss new treatment to cure HBV

討論治療乙肝的新方法



HBV Current Treatment
慢性乙肝當前治療

Advantages of HBV Therapy
HBV療法的優點

- HBV highly treatable in 2025 可高度治療
- All oral therapy 所有口服療法
- Easy to take 容易服用
- Very few side effects 副作用很少
- Long duration (many years)
  持續治療時間長（很多年）
- Cost is much lower now 成本要低得多
- Newer treatment (cure) is coming
  新型治療（治愈）即將到來

Disadvantages of HBV Therapy
HBV療法的缺點

- Long duration (many years) 長期服藥 (多年)
- High cost (many years) 高成本（多年)
- Does not get rid of virus 不能完全消除病毒
- Very rarely cures patients with HBV
  少數的情況下可以治癒乙型肝炎患者
- There is still a small risk of liver cancer
  仍有小風險導致肝癌

目前對乙型肝炎的治療

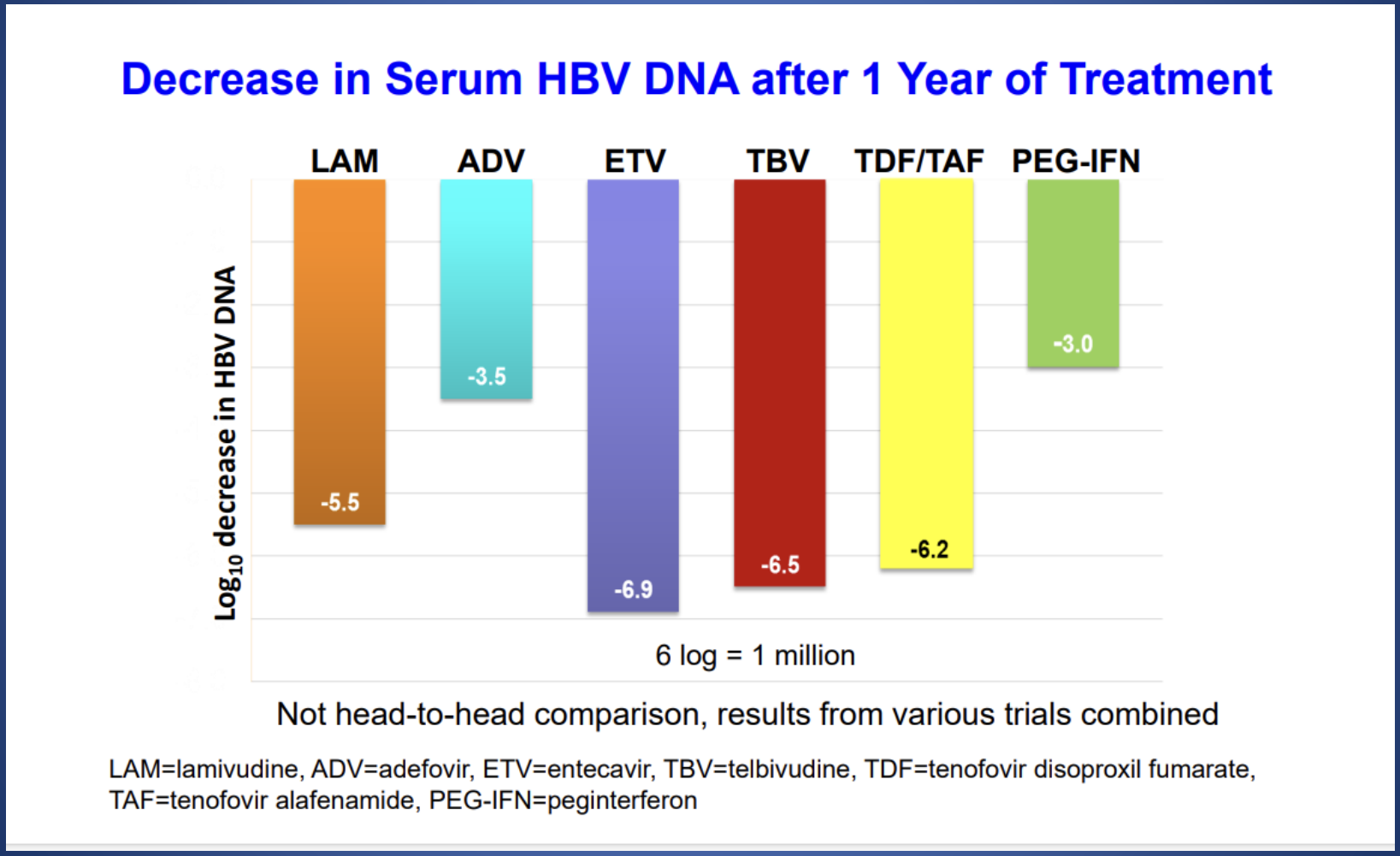
Approved HBV Treatments

- Interferons (IFN)
  - Standard IFN alfa – 1992
  - Pegylated IFN alfa (Peg-IFN) - 2005
- Nucleos(t)ide analogues (NAs)
  - Lamivudine – 1998
  - Adefovir – 2002
  - **Entecavir (ETV) – 2005**
  - Telbivudine – 2006
  - **Tenofovir disoproxil fumarate (TDF) – 2008**
  - **Tenofovir alafenamide (TAF) - 2016**

Current Treatment for Chronic Hepatitis B
慢性乙型肝炎的治療

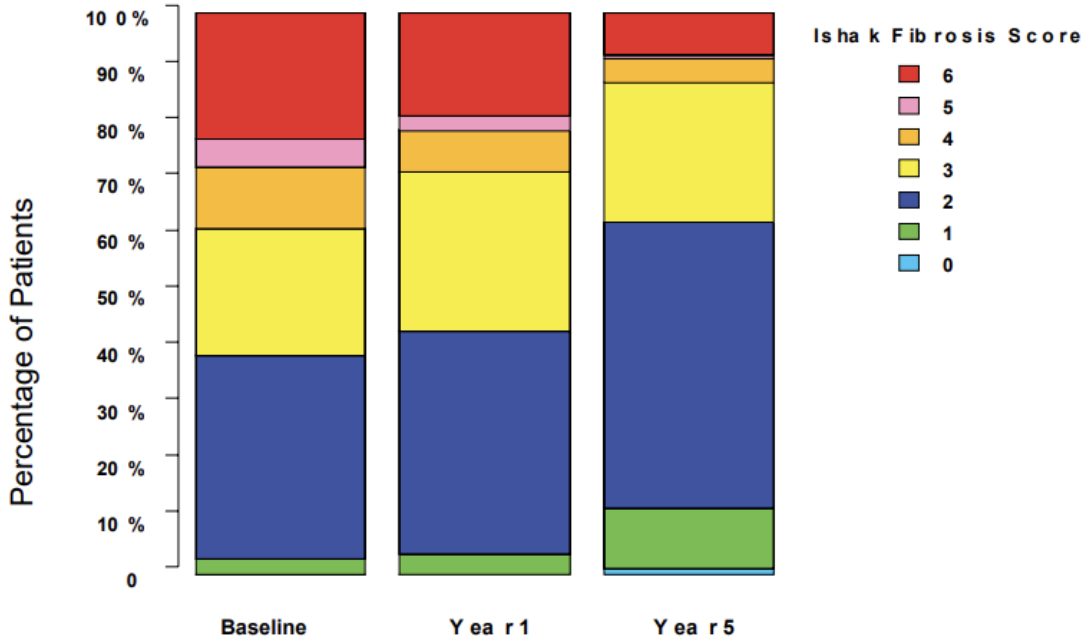
	Interferon	Lamivudine	TAF	Entecavir	Tenofovir
Route	注射	口服	口服	口服	口服
副作用	++	-	-	-	-
價格	++	-	+	-	-
耐藥性	沒有	常見	沒有	非常罕見	沒有
期間	1 年	很多年	很多年	很多年	很多年

一年内HBV DNA的减少



纖維化和肝硬化的逆轉

Reversal of Fibrosis and Cirrhosis
Tenofovir Phase III trial: biopsies at Year 0, 1 & 5

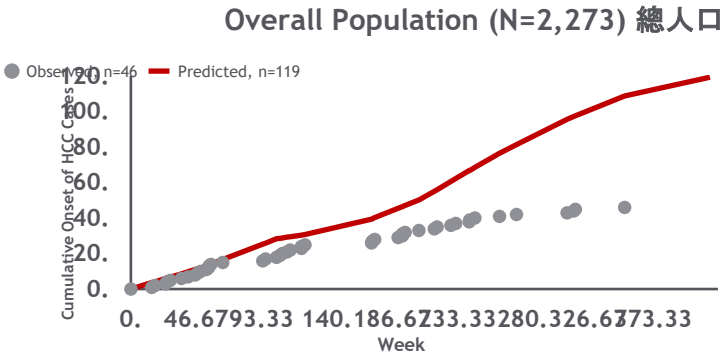


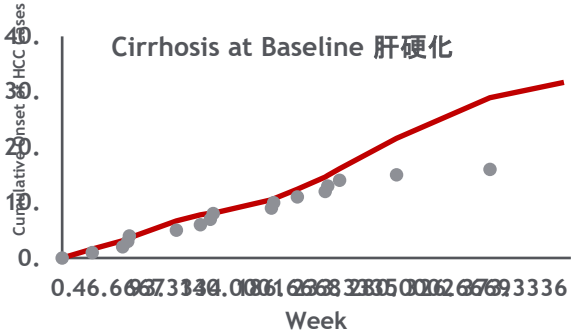
- 348/641 (54%) had liver biopsy at baseline and Year 5
- 71/96 (74%) with cirrhosis (Ishak Score ≥5) at baseline no longer had cirrhosis at Year 5

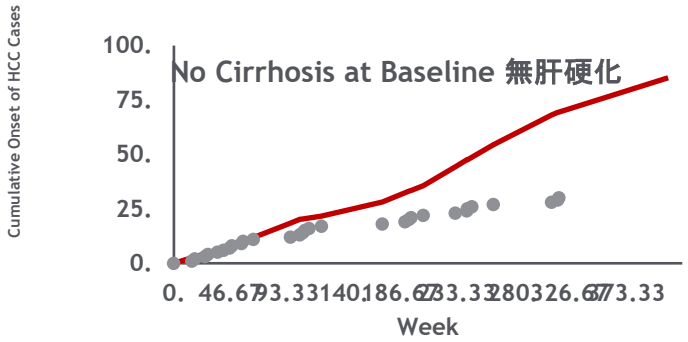
Marcellin, P, Lancet 2013; 381: 468

Tenofovir-based treatment reduced HCC incidence
替諾福韋的治療降低了肝癌的發病率

Observed vs. Predicted* HCC Cases 觀察與預測的肝癌病例

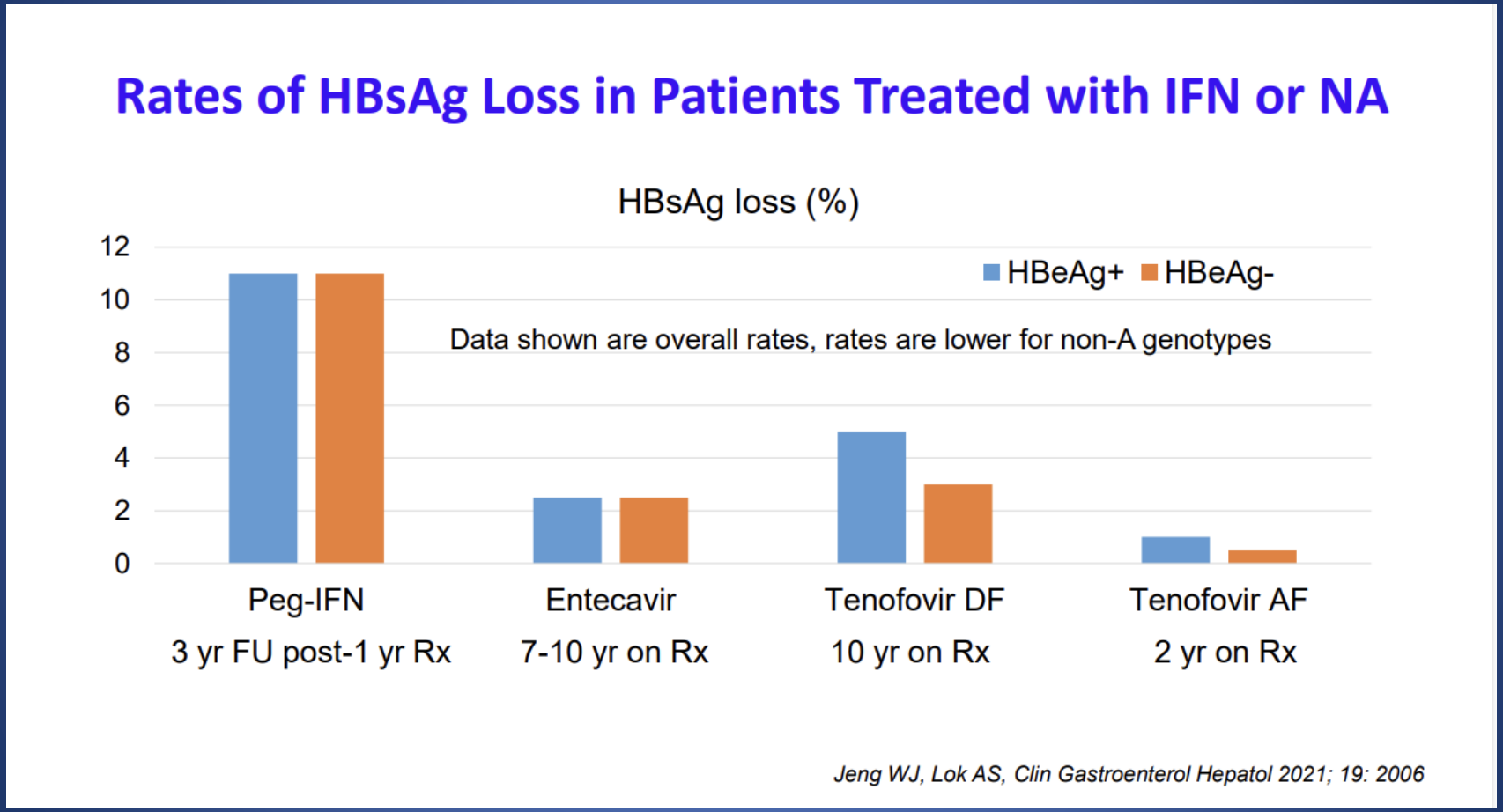




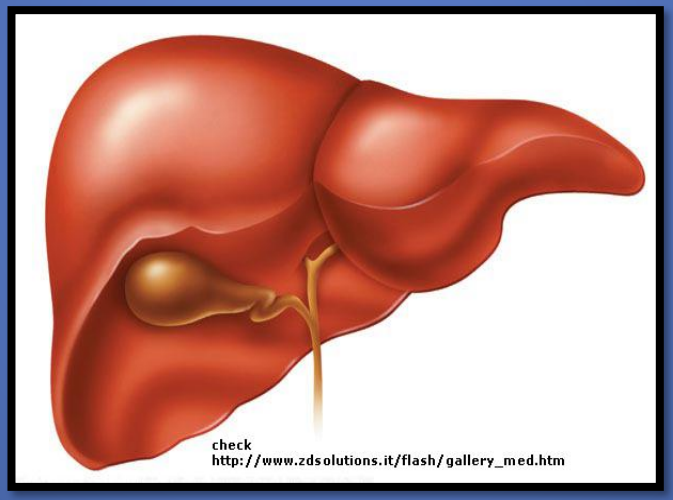


抗病毒治療降低肝癌風險

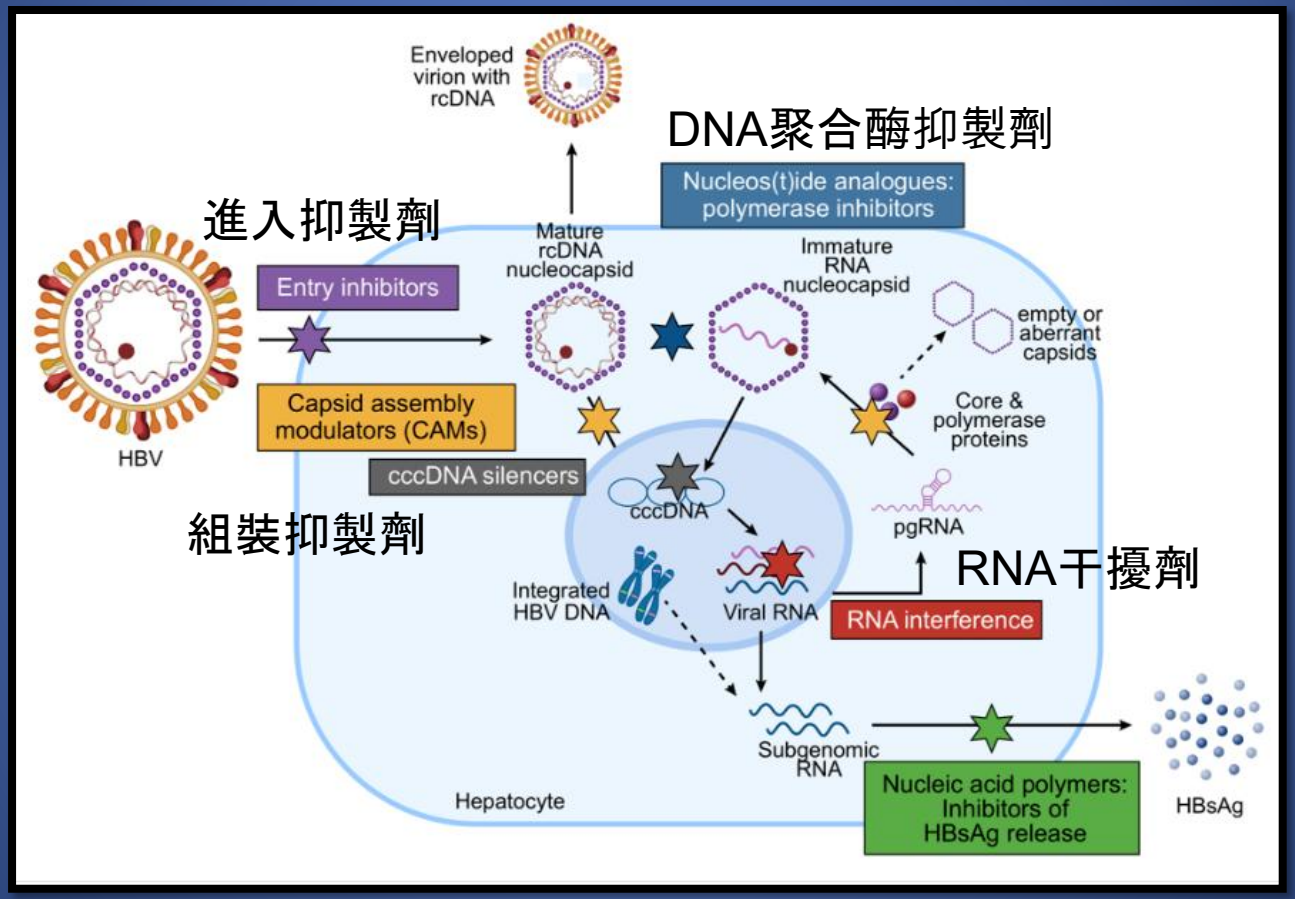
治療中的HBsAg血清陰性轉變率



HBV Cure?
乙型肝炎可以治癒嗎?

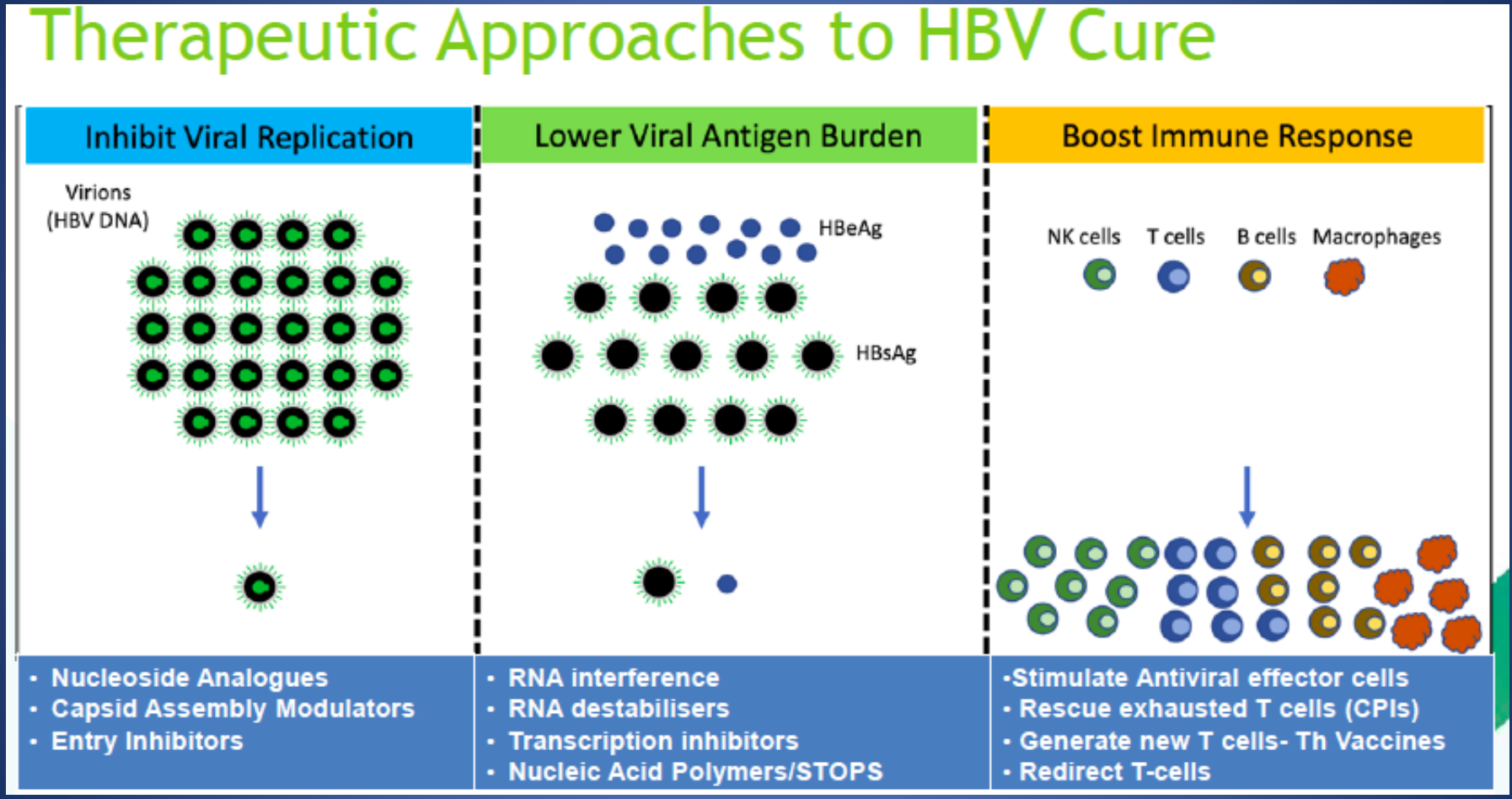


HBV Viral Targets
乙型肝炎病毒酶



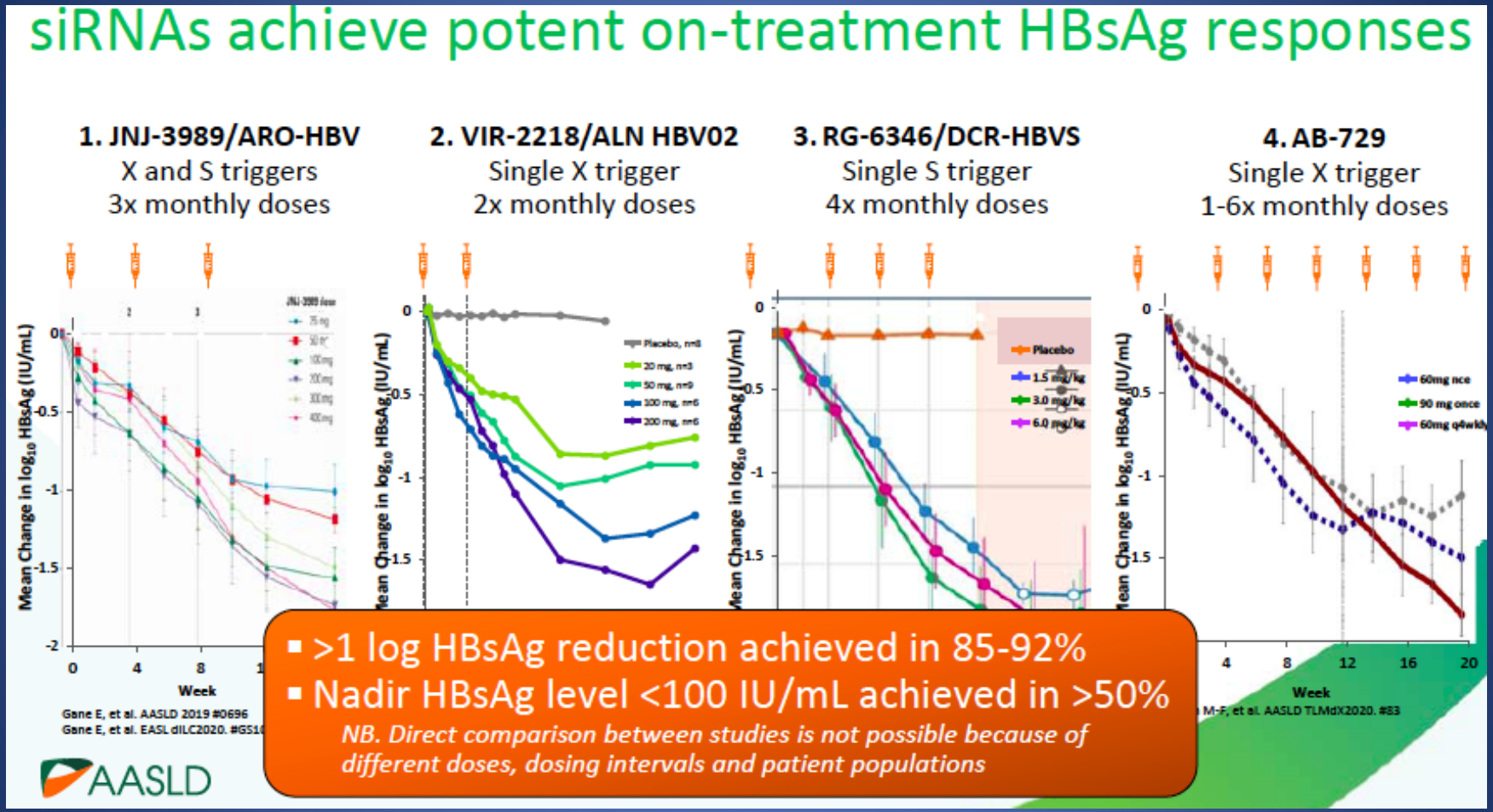
Fung et al, Hepatol 2022

新療法



抑制病毒複製　　降低病毒抗原水準　　增強免疫系統

RNA干擾非常有效

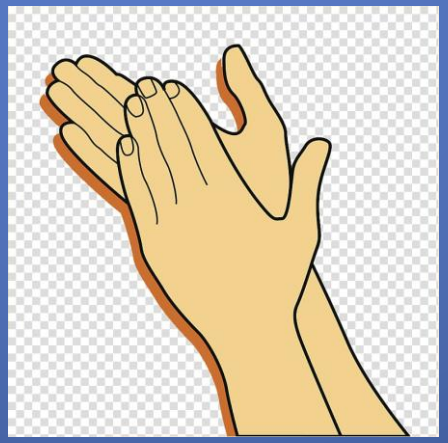


大多數患者的乙肝表面抗原水準大幅降低

數量有限的患者可以治癒

感謝您的光臨!

Thank You for
Your Attention!



有問題嗎？

Questions?