

PROMOTING GLOBAL COLLABORATION IN HBV CURE RESEARCH

#### **Update to the HBV Forum 6**

7 November 2019
Boston
Massimo Levrero

- Publication of the Global Scientific Strategy to Cure CHB in Lancet GH and media launch (April)
- EASL & ICE-HBV Think Tank on HBV Cure in Vienna (April)
- Launch of ICE-HBV open access research protocols database on ICE-HBV.org (April) and collaboration with NIH to set-up the HBV reagents repository (ongoing)
- Final results of the ICE-HBV concerted harmonization efforts for HBV cccDNA quantification presente at the HBV meeting in Melbourne (October)
- HBV Cure 101 Presentations in Cairo and Melbourne (Sept-Oct)
- *in-vivo* models for HBV cure workshop in Melbourne (October)
- Serum Biomarkers group set-up (October)
- Collaboration with the HBV meeting for the 2019 Public Forum and Cure Symposium in Melbourne (October)
- Global Fund to Fight AIDS, TB and Malaria Replenishment Conference, Side event on Viral Hepatitis in Lyon (October)



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 Publication of the Global Scientific Strategy to Cure CHB in Lancet GH and media launch (April)

Lancet Gastroenterol Hepatol 2019

Published Online April 10, 2019 http://dx.doi.org/10.1016/ S2468-1253(19)30119-0

Health Policy

#### A global scientific strategy to cure hepatitis B



Peter A Revill, Francis V Chisari, Joan M Block, Maura Dandri, Adam J Gehring, Haitao Guo, Jianming Hu, Anna Kramvis, Pietro Lampertico, Harry L A Janssen, Massimo Levrero, Wenhui Li, T Jake Liang, Seng-Gee Lim, Fengmin Lu, M Capucine Penicaud, John E Tavis, Robert Thimme, Members of the ICE-HBV Working Groups\*, ICE-HBV Stakeholders Group Chairs\*, ICE-HBV Senior Advisors\*, Fabien Zoulim

A comprehensive shared scientific roadmap to HBV cure



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#### Final results of the concerted harmonization efforts for HBV cccDNA quantification









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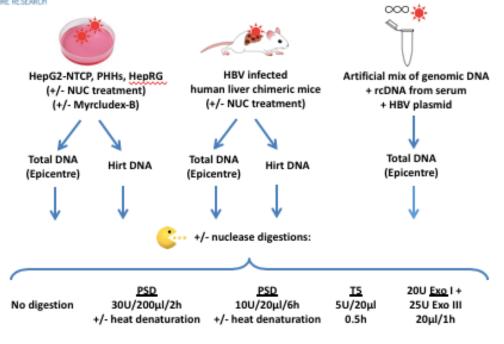


#### Study design

DNA was extracted with 2 methods and distributed to the

labs

4 different nuclease digestions were compared to reduce rcDNA amounts



#### Analysis by gPCR & Southern blotting:

Column-purification & qPCR for cccDNA (tagman primer/probe Malmström et al.) total HBV DNA, beta globin (cellular marker), ND2 (mitochondrial marker)



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# Universal Health Coverage and HIV. The Potential Impact of Collaborative Innovations with Viral Hepatitis Elimination

Where: H7, 70 Quai Perrache, 69002 Lyon When: 8 October, 1pm to 2:30pm

4,000 people die from viral hepatitis every day. Many of them are co-infected with HIV or tuberculosis (TB). Through improved integration between the viral hepatitis response and existing HIV, TB and malaria programmes, we have an opportunity to strengthen health systems and save more lives.

Join us for a session that will explore how a more collaborative approach can help us better utilize health resources and achieve optimal health outcomes.



#### Global Fund Conference Session Partners







































## Collaborative Biomedical Innovations for Viral Hepatitis Elimination

Prof. Massimo Levrero

Board member, International Coalition to Eliminate HBV

Treats: in a global perspective the need for scaling up diagnosis and treatment

costs are more evenly split between diagnostics and medicines



Opportunities: shared manpower / platforms / initiatives (with HIV)

Research or can we do better?

one shot / one pill for cure vaccine

Global Fund Replenishment Conference Lyon – Oct-8, 2019



## Summary: We have the will, the tools, and examples of how to address this public health emergency right now

Global health programmes are more effective with a people-centered approach than with a diseases-centered/vertical approach

- The global mortality from viral hepatitis exceeds that of HIV, TB or malaria and would exceed the toll from the 3 diseases combined by 2040 under status quo
- Testing and treatment for hepatitis is affordable and high impact: +1% in UHC price tag for +10% additional healthy life years
- Hepatitis elimination meets all criteria for inclusion in Universal Health Coverage
- Access to combined prevention and treatment services for people who use drugs is key to reducing HIV and HCV incidence and to achieving HCV elimination
- Pricing for diagnostics and treatment commodities fell dramatically for most LMICs and could fall much further with forecasting, increased volumes, and pooled procurement
- Meaningful partnerships with civil society and the affected communities enhances the impact of the response



## Next steps: How can the Global Fund catalyze viral hepatitis elimination within the UHC approach?

- Review of the Global Fund Co-Infection (COIM) policy.
- Involve viral hepatitis stakeholders in Global Fund processes, including CCMs and partnership meetings. Standard integration of HCV and HBV into GF-sponsored data systems and GF-sponsored professional trainings
- Commit to reaching elimination goals for HCV and HBV among people with TB and people living with HIV.
- Make sure that GF-funded services to key populations provide integrate prevention and treatment services for all relevant diseases (e.g., integrated prevention and treatment for HIV, TB and HCV for PWIDs).
- Widely offer procurement support for TDF, TAF, Entecavir, DAAs and diagnostics for HBV and HCV to ensure optimized forecasting and procurement to reduce commodity prices
- Use coinfection as a way to catalyse hepatitis plans, particularly on the optimized procurement of commodities



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- \_ntecavir, DAAs and diagnostics Wide commo
- Use coin rent of commodities optimized



#### **ICE-HBV Next Activities**

- *In-vivo* models consensus statement (2019)
- Messaging briefing finalization (2019)
- POC diagnostics group kick-off (2019)
- Serum biomarkers review (2020) and symposium at APASL
- Global health donors follow-up note (2020)
- EASL & ICE HBV Think Tank on HBV Cure in London (2020)



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