Bulevirtide for decompensated cirrhosis

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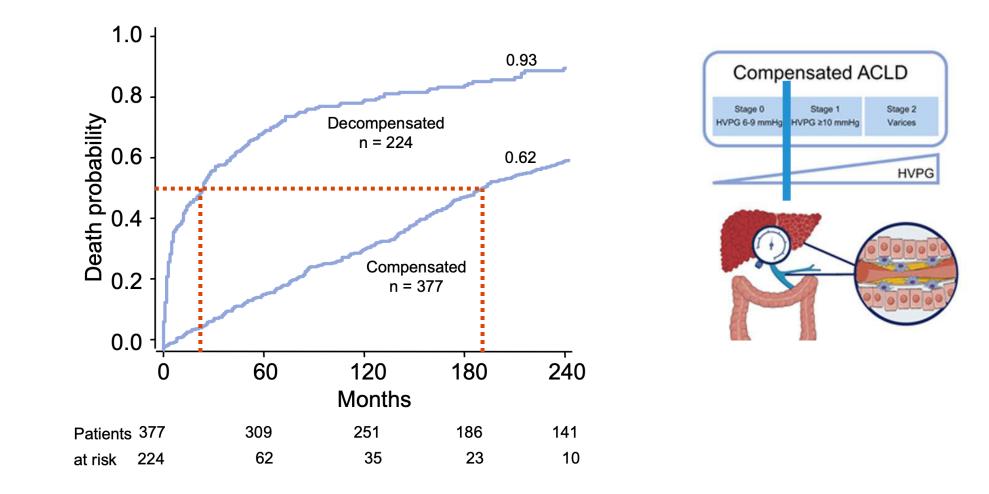


Conflicts of Interest

• M.J. served as speaker and/or consultant for Gilead Sciences, Inc.



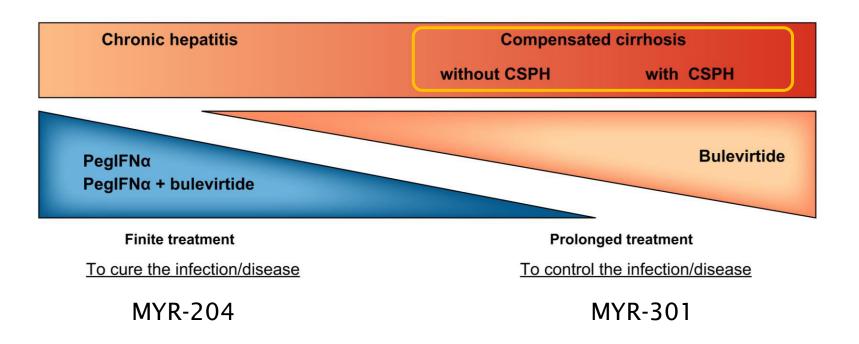
Natural history of advanced chronic liver disease





Modified from: D'Amico et al. J Hepatol 2018 & Costa et al. J Hepatol 2020.

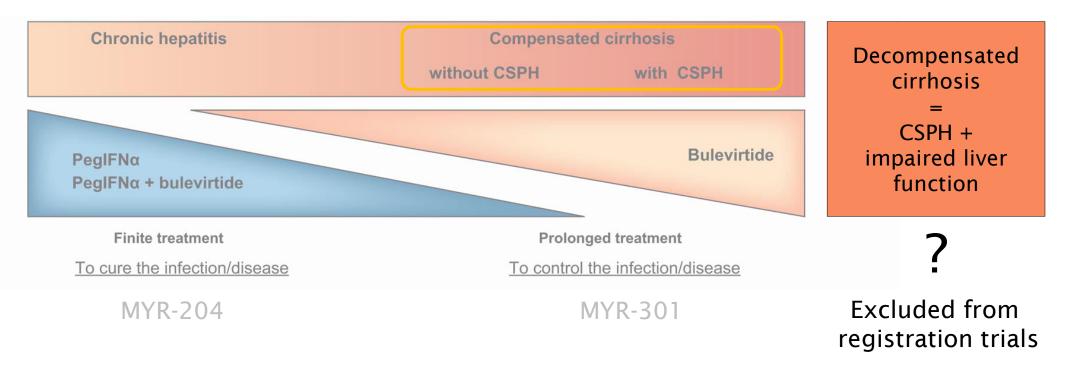
Which HDV-targeted Rx may we offer our patients?





EASL CPG HDV. J Hepatol 2023.

Which HDV-targeted Rx may we offer our patients?

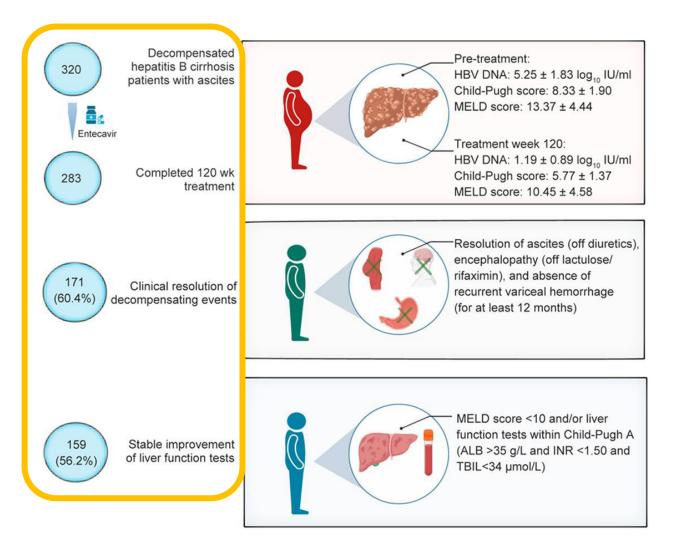


Evaluate all for transplantation?



EASL CPG HDV. J Hepatol 2023.

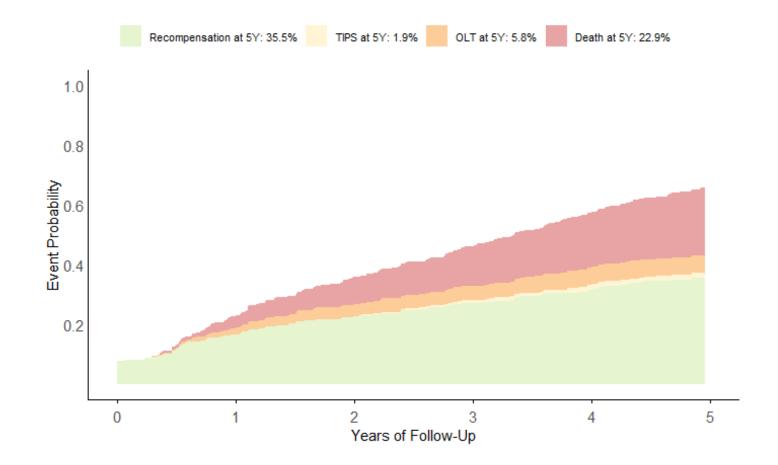
Recompensation as desirable endpoint in HBV





Wang et al. J Hepatol 2022.

Recompensation as desirable endpoint in HCV





Semmler and Lens et al. unpublished.

Rationale for applying BLV in decompensated patients

- NTCP blockade induces increase in bile acid levels
 - No safety signs recorded in clinical trials nor in real-world cohorts
- NTCP blockade may protect hepatocytes from bile acid toxicity by reducing intracellular bile salt accumulation in cholestatic mice (Slijepcevic et al Hepatology 2018)
- Some decompensated patients have received BLV in real-life settings



Our real-life cohort

- 19 German, Italian and Austrian patients
 - 10 female, 9 male patients
 - All had decompensated Child-Pugh B cirrhosis
 - Median MELD: 12 (9-17) points
 - Varices: 74%, (current) ascites: 63%, HCC: 2 patients
 - ALT > ULN: 95%
- Patients were closely monitored upon off-label BLV 2mg s.c. qD initiation
 - Observed for a median of 41 weeks
 - HDV-RNA was quantified applying the locally available assay(s)



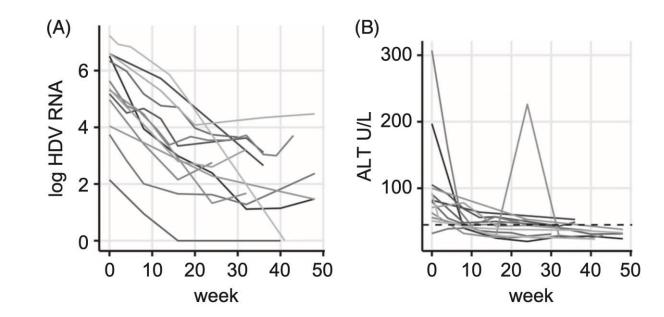
Safety

- No AE related to bile acid increases
- Progression of natural history
 - 3 developed ascites
 - 3 underwent liver transplantation
- 2 developed self-limited ALT flares
- 1 underwent surgery due to an incarcerated hernia
- 1 died (non-liver-related)
- All recorded adverse events were considered unrelated to the BLV treatment



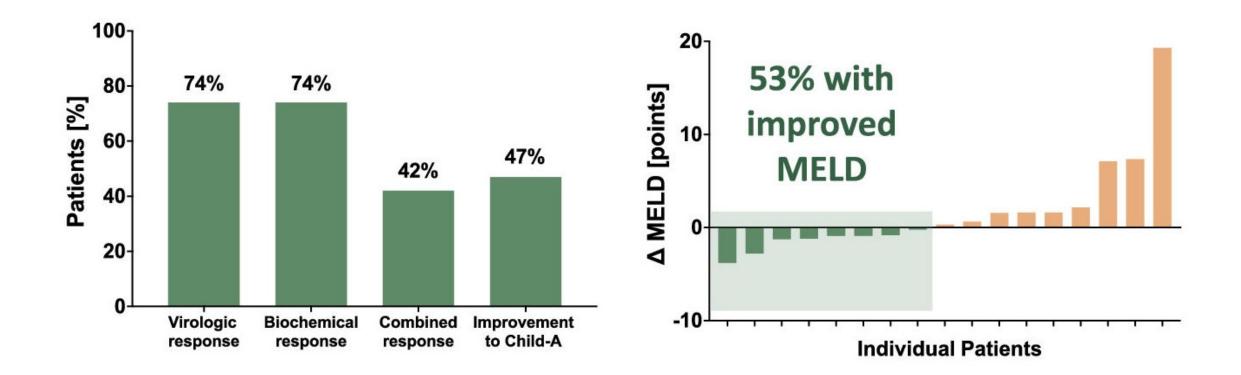
Efficacy – Week 24

TABLE 3	Endpoint analysis	at week 24 (n $=$ 11)
End point		Achieved at week 24 (range weeks 22–26), n (%)
Virologic response ^a		7 (64)
Biochemical response ^b		5 (46)
Combined response ^c		4 (36)
Improved Child-Pugh stage ^d		3 (27)



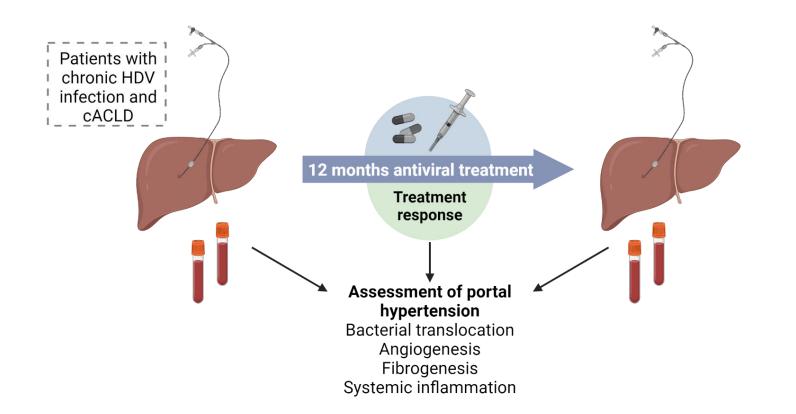


Results – Last available follow-up visit





Teaser: BLV impacts natural history in advanced cirrhosis

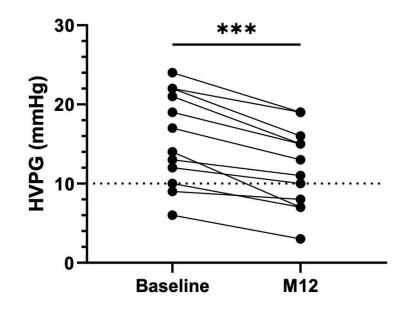




Sandmann and Jachs et al. Unpublished.

Teaser: BLV impacts natural history in advanced cirrhosis

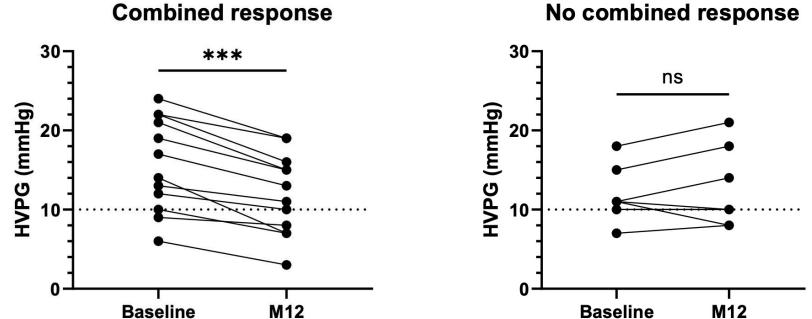
Combined response





Sandmann and Jachs et al. Unpublished.

Teaser: BLV impacts natural history in advanced cirrhosis



No combined response



Sandmann and Jachs et al. Unpublished.

BLV in decompensated cirrhosis: Take-home messages

- Don't be afraid No worrisome safety sign observed
- Know what you can expect Similar response rates as observed in registration trials
- Monitor your patients closely Predictors of response need to be identified
- Trust your gut feeling treatment indication / endpoints in decompensated disease may evolve over time

A clinical study is needed !



Thank you for your attention!

Thanks to all collaborators!

