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Resmetirom Therapy of MASH-Associated Child Pugh A Cirrhosis Reduces Estimated Risk for Clinical Outcome Based on HepQuant RISK ACE Model

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Background & Aims

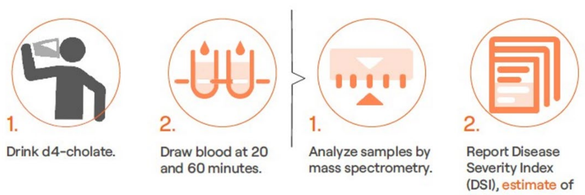
In the MAESTRO-NAFLD-1 (NCT04197479) study of resmetirom in Child Pugh A (CPA) cirrhosis, we used HepQuant DuO to quantify changes in liver function and portal-systemic shunting and estimate risk for adverse clinical event (RISK ACE).

Methods

Study Design

23 subjects with compensated MASH cirrhosis, treated with resmetirom, underwent DuO tests at baseline, week 28, and week 48.

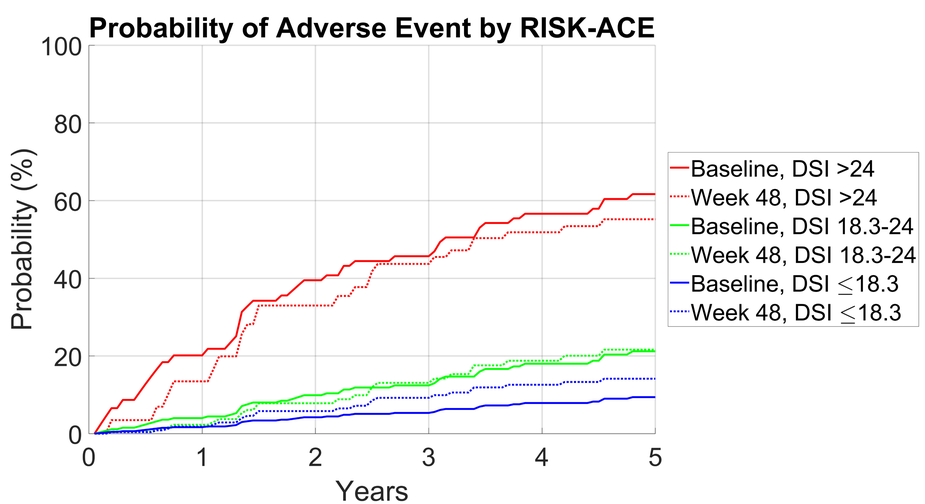
HepQuant DuO Test[1-3]



Results

- At week 48 of resmetirom, 39% of subjects showed improvement from baseline (DSI reduction >2; Chi-square relative to 13% at week 28, p=0.046), 44% had stable hepatic function (ΔDSI within ±2), and 17% showed worsening (DSI increase >2).

- The 1-year risk of adverse clinical events decreased at week 48 with resmetirom treatment in 19 of 23 subjects, with a significant reduction in average risk from baseline (−8.1%, p=0.0474).



Conclusions

Hepatic improvement in MASH cirrhosis during resmetirom treatment, as measured within 48 weeks by HepQuant DuO and RISK ACE, could translate into long-term clinical benefit.

References

[1] McRae et al. Clin Transl Sci 2024. doi: 10.1111/cts.13786
[2] McRae et al. Basic Clin Pharmacol Toxicol 2024. doi: 10.1111/bcpt.13980
[3] Hassanein et al. Aliment Pharmacol Ther 2024. doi: 10.1111/apt.18054

Disclosures

MPM is a paid consultant for HepQuant, LLC. GTE is an employee and equity member of HepQuant, LLC. RT is an employee of Madrigal Pharmaceuticals, Inc. MPM and GTE have patents pending. HepQuant DuO is a Laboratory Developed Test (LDT) and is not FDA approved. Test results should be used together with other clinical or laboratory information or results to inform the provider's decisions regarding procedures, treatments, or interventions.

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