Comorbidity Burden in Transthyretin Amyloidosis With Cardiomyopathy: Insights From the HELIOS-B Trial

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Conclusions

- The clinical benefits and safety profile of vutrisiran were consistent regardless of the burden of co-existing conditions
- Comorbidity burden alone should not influence treatment considerations for vutrisiran in eligible patients with ATTR with cardiomyopathy

Background

Patients with transthyretin amyloidosis with cardiomyopathy (ATTR-CM) present with multiple comorbidities. Vutrisiran reduced morbidity and mortality in patients with ATTR-CM compared with placebo. The Charlson Comorbidity Index (CCI) is a validated weighted index of 17 comorbidities and age, used to assess comorbidity burden

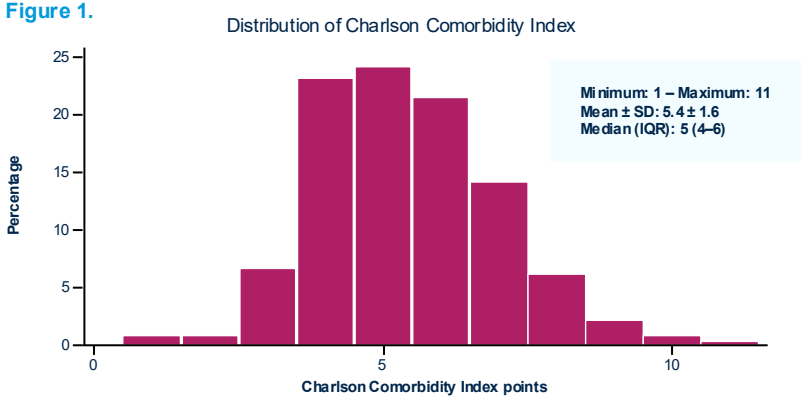
Methods

Patients' demographics, outcomes, treatment effect, and adverse events were assessed in participants with low (CCI 0–5) and high (CCI >5) comorbidity burden and we assessed whether comorbidity burden affects outcomes of patients with ATTR-CM and modified the treatment effect of vutrisiran

Results

- 654 randomized and treated; age: 75 ± 7 years; 8% women
- CCI at baseline: 1–11; mean CCI = 5.6 ± 1.7
- 361 (55.2%) with low comorbidity burden (CCI 0–5)
- 293 (44.8%) with high comorbidity burden (CCI >5)

Figure 1.



Disclosures: HELIOS-B was funded by Alnylam.

Results

Figure 2.

Participants with high comorbidity burden (CCI >5):
- older (78 ± 5 vs. 73 ± 7 years)
- more commonly wild-type ATTR (93 vs. 85%, p<0.001)
- higher NT-proBNP (2095 vs. 1844 ng/L, p=0.003)

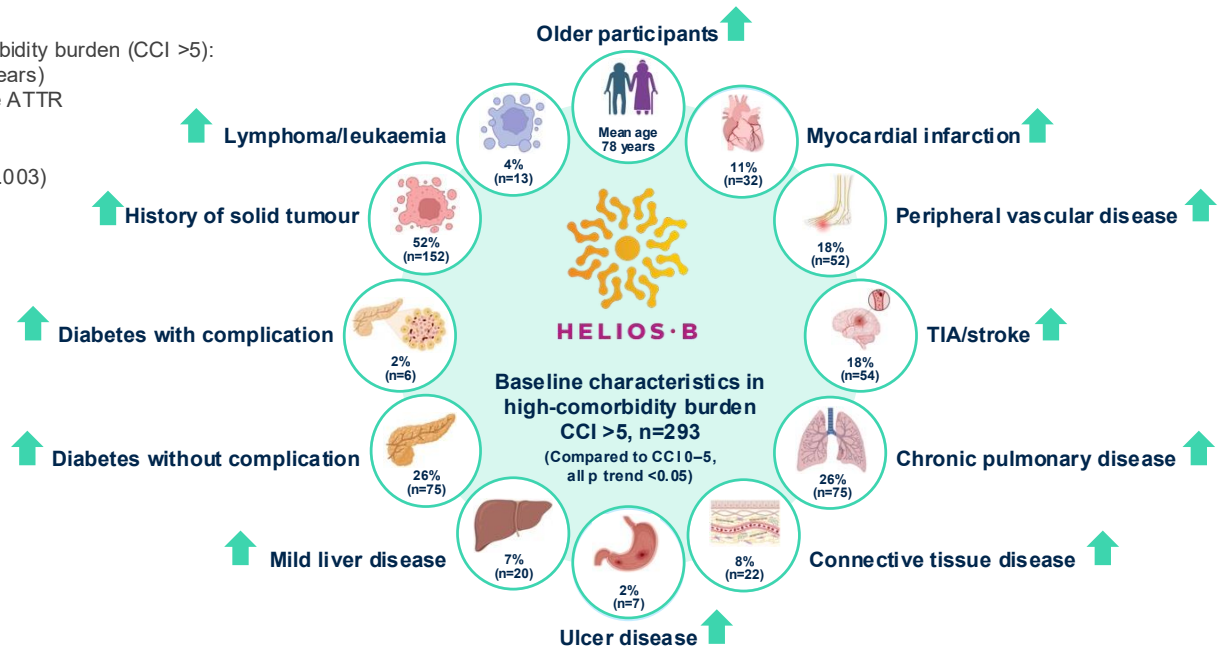
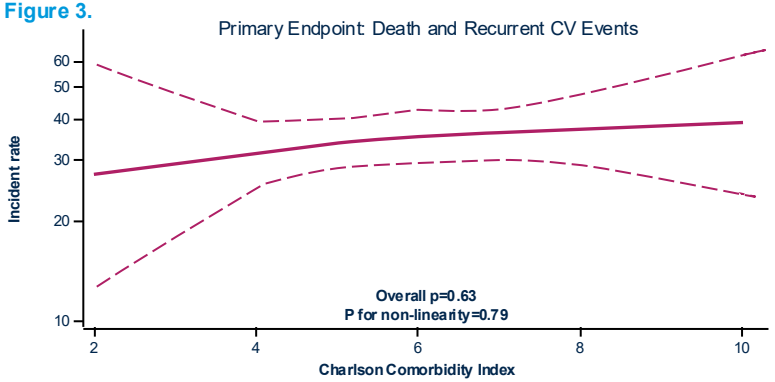
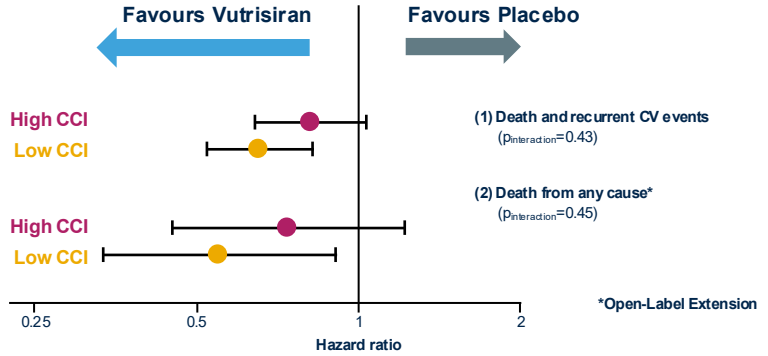


Figure 3.



- Each increment of CCI was associated with a numerical, but non-significant increase in all-cause mortality and recurrent CV events (HR: 1.05, 95% CI, 0.96, 1.16, p=0.27)

Figure 4.



- Vutrisiran consistently improved clinical outcomes across the spectrum of CCI for the primary endpoint and death from any cause alone

Adverse events occurred more frequently in individuals with high comorbidity burden, but less frequently with vutrisiran than with placebo regardless of comorbidity burden