### Correspondence

## Response to Letter Regarding Article, "Hypertrophic Cardiomyopathy Is Predominantly a Disease of Left Ventricular Outflow Tract Obstruction"

We appreciate the comments expressed by Dr Geier and colleagues regarding our recent study on the prevalence and clinical significance of physiologically provocable left ventricular (LV) outflow obstruction in hypertrophic cardiomyopathy (HCM).1 With respect to the influence of patient selection on our data, we agree that the prevalence of outflow obstruction in a community-based cohort of HCM patients may differ from our findings. Therefore, due to the unavoidable patient selection bias present in tertiary referral centers, we were (and are) cautious in extrapolating our data to the general HCM population. In fact, this important point was underscored in the conclusions of this paper, emphasizing that our results were in fact derived from a hospital-based cohort. Nevertheless, whether our reported prevalence of obstruction is somewhat higher (or lower) than in the general HCM population does not lessen the important implications of these data, ie, that a substantial number of HCM patients have LV outflow gradients detectable only with exercise echocardiography and that recognition of such exercise-induced gradients may broaden management options for patients who otherwise may not be identified as potential candidates for surgical septal myectomy (or, alternatively, alcohol ablation).

In our study, virtually all patients were unrelated. In fact, it was the intent of this investigation to prospectively define the prevalence of outflow obstruction in a consecutive cohort of HCM patients who came to medical attention with the fully expressed disease phenotype that is typical of those customarily encountered in clinical practice. We agree that it would also be instructive to characterize the prevalence of LV obstruction within an even broader spectrum of this disease, including family members with HCM. However, that particular assessment was well beyond the scope of our study design. Nevertheless, we did demonstrate that >50% of patients without obstruction at rest who developed an exercise-induced gradient were asymptomatic

at that time. In this regard, we have no reason to assume that by including asymptomatic family members with HCM, the prevalence of obstruction would necessarily have differed significantly from that reported in our series.

#### **Disclosures**

None.

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 Maron MS, Olivotto I, Zenovich AG, Link MS, Pandian NG, Kuvin JT, Nistri S, Cecchi F, Udelson JE, Maron BJ. Hypertrophic cardiomyopathy is predominantly a disease of left ventricular outflow tract obstruction. *Circulation*. 2006;114:2232–2239.

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