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The author attests they are in compliance with human studies committees and animal welfare regulations of the author's institution and Food and Drug Administration guidelines, including patient consent where appropriate. For more information, visit the [Author Center](#).

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REPLY: Bio-Profiling of Transthyretin Amyloid Cardiomyopathy



We thank Dr Mehmood for his thoughtful comments and suggestions. We expect to be able to share further information on transthyretin serum concentrations (1) in the ATTR-ACT (Tafamidis in Transthyretin Cardiomyopathy Clinical Trial) at an upcoming congress and in a publication.

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Mitral Regurgitation in Heart Failure



Prognostic Significance and Impact on Evaluation of Left Ventricular Function

We read with interest the study by Arora et al. (1) published in *JACC: Heart Failure*. By investigating the importance of mitral regurgitation (MR) in patients with acute decompensated heart failure (ADHF), the study provides important knowledge for a better evaluation of the prognostic implications of MR in the ADHF population.

Hemodynamically relevant MR is a major risk factor for cardiac mortality, but there are still controversies regarding the proper therapeutic management of patients with relevant MR, particularly of those with secondary MR who remain symptomatic despite maximum medical therapy (2-4). The finding that moderate or severe MR was independently associated with post-hospitalization 1-year mortality only in patients with ADHF with a left ventricular ejection fraction (LVEF) <50%, but not in those with LVEFs ≥50%, was considered by Arora et al. (1) as evidence against a significant prognostic role of MR in patients with ADHF with an LVEF ≥50%. However, even if for patients with ADHF with an LVEF ≥50%, this can usually be the case; a significant impact of MR cannot be excluded in individual patients. Besides the fact that etiologic information to dissect causes of MR was not available and that both moderate and severe MR were analyzed as a single variable (1), the impact of relevant MR on the LVEF measurements might have influenced the conclusions of the research.

It is well known that MR reduces the validity of LVEF because the difference between end-diastolic and end-systolic volumes will not be the forward stroke volume (SV_f) anymore but will become the sum of SV_f and regurgitant volume (5). Therefore, MR can increase the LVEF correspondingly to the increased blood volume leaving the LV in systole, which leads to an overestimation of LV contractile function. Such overestimation of LV systolic function carries a risk for certain patients to be referred too late for correction of MR, because the potential benefit of such therapy diminishes with the progression of ventricular remodeling, which becomes less