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Authors' Response

To the Editor

It is with great enthusiasm that we read the letter written by Nakagawa and Blinderman in response to our study "Pre–Ventricular Assist Device Palliative Care Consultation: A Qualitative Analysis." Our study concluded that one-time palliative care (PC) consultations before implantation of destination-therapy ventricular assist device do not lead to completion of preparedness planning or even general PC assessment at our institution. We suggested a number of potential explanations for this finding, including the short time between PC consultation and surgery, a lack of consensus among the PC and heart failure teams about the purpose of the PC consult and what preparedness planning should entail, and finally a lack of familiarity with left ventricular assist device (LVAD)–related complications among members of the PC team. The letter describes the authors' more positive experience with mandatory PC consultations before LVAD implantation at their institution, which they attribute to their use of a semistructured script for these consultations. We appreciate the opportunity to address select points in their letter, as well as to put forth our own ideas about how to further improve preparedness planning for patients with advanced heart failure.

1. We agree with the authors that integrating PC and advance care planning into the preimplantation process for VAD patients is necessary but challenging. The trajectory of heart disease can be unpredictable, which often leads to last-minute decisions about mechanical circulatory support and thus late involvement of PC and missed opportunities to delineate patient goals and priorities. We should strive to develop innovative ways to assimilate preparedness planning into the care of preVAD patients although it is not always feasible for it to occur early and when patients are stable.
2. A major challenge to implementing "preparedness planning" before VAD is that it is not entirely clear what this type of planning should entail and which members of the VAD care team should perform it. Swetz et al.[1] have outlined four major components of preparedness planning, which are discussions of 1) possible device failure, 2) post-VAD health-related quality of life, 3) device complications, and 4) progressive comorbid conditions. We analyzed our PC notes for documents of these elements of preparedness planning.[2] These may or may not be the most important elements to discuss with patients before VAD. As an example, the letter describes the use of a script for preparedness planning that includes slightly different elements, including a discussion of spiritual needs and what makes the patient's life meaningful but does not discuss device failure.[3] This highlights the fact that there remains a lack of consensus about the purpose of the preVAD evaluation and what it should entail. Furthermore, some may argue that it should not be the role of the PC team to discuss device failure or device-related complications, even if the discussion centers around the contingency plan if these events were to occur, but rather it should be the role of the surgeon or advanced heart failure physician.
3. The authors describe their experience with PC consultation before LVAD implantation using a semistructured interview script.[3] They noted that despite the fact that the consults occurred a median of 3 days before surgery, patients were still able and willing to participate in the interview and could discuss possible complications of LVAD therapy, articulate unacceptable health states, and express what makes their life meaningful. These findings reinforce the vast heterogeneity of centers' experience with PC in the advanced heart failure population.[2] It is possible that standardizing the preVAD intervention leads to greater engagement and comfort on behalf of the PC physicians and gives them a better sense of the purpose of the visit. Patients may also feel more comfortable knowing that this visit is standardized for all, as opposed to a harbinger of possible bad outcomes. Despite not knowing whether this intervention affected short- or long-term outcomes, we are encouraged by the fact that PC consultations in the last month of life significantly increased after the preVAD intervention was implemented at the authors' institution. Furthermore, there was a potential association with fewer life-sustaining treatments in the last week of life.[4] Although ascertaining and documenting patient goals and values before VAD is certainly valuable, another benefit of these consults seems to be that patients and/or the VAD team were more inclined to re-engage PC toward the end of life.
4. Standardizing the preVAD PC visit is one way to improve patient and physician experience. Training VAD team members (including advanced heart failure physicians, nurse practitioners, and coordinators) to complete preparedness planning and discuss advance care planning may also be an

effective method to integrate goals of care discussions more seamlessly into the preVAD process.[5]

5. Finally, while preparedness planning and PC are important components of preVAD care, we should incorporate these elements into the care of VAD patients not only before implant but also after implantation and throughout the entirety of the "VAD lifecycle." Patients with VADs typically experience improved survival and health-related quality of life (HRQOL),[6–8] but adverse events may affect one or both of these important outcomes.[9] Patients and caregivers may benefit from a comprehensive curriculum that incorporates intermittent, perhaps, semiannual discussions focused on quality of life, caregiver distress, and hopes for the future. The development and implementation of such a curriculum will require a multidisciplinary effort and has the potential to help patients live better with VADs.

We would like to thank the authors for sharing their experience with preVAD evaluation and allowing us to expand on some additional points. More research is clearly needed to determine the best way to integrate PC into VAD patient care.

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Response to "Hyoscine Butylbromide for the Management of Death Rattle: Sooner Rather Than Later"

We read with interest the article "Hyoscine Butylbromide for the Management of Death Rattle: Sooner Rather Than Later" by Mercadante et al.,[1] comparing pre-emptive hyoscine butylbromide for the management of noisy upper respiratory tract secretions (RTS) in patients in the last days of life with treatment of RTS when they occurred. Previous studies have administered anticholinergic drugs to treat already formed noisy RTS rather than preventing their formation, but anticholinergic drugs are unable to remove secretions already formed.[2,3]

This exploratory study presents promising effects; however, the data should be interpreted in the context of its methodological limitations. The natural history of RTS is poorly described, so attribution of outcomes is difficult in an unblinded trial. In addition, no power calculations were reported, making it difficult to evaluate the significance of the findings. Importantly,