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REPLY: Dr. Kesner’s letter regarding our recent publication (1) raises several useful points. We wholeheartedly agree that data-driven gating is an important innovation. Indeed, the launch of a commercial implementation provides an opportunity for celebration of this success and for reflection on the journey. The many teams involved in both academic institutions and industry should be rightly satisfied by this achievement, and it should spur them and others to continue pushing for further improvements and innovations for the benefit of the many patients whom we humbly serve.

We are grateful to Dr. Kesner for raising awareness about some current and past developments relating to data-driven gating in PET, including his own valuable contributions and those of his coworkers. He has championed this field for many years (2–4). We do, however, note that although commercial developments often take inspiration from academic publications, such developments can also include specific innovations or implementation details that are kept outside the public domain. We hence take this opportunity to also acknowledge the contributions of the many exceptional scientists and developers who rarely publish in the academic literature.

In our recent work, we cited the work of Dr. Kesner in both the introduction and the discussion but made a conscious decision not to include an overview of the general development of data-driven gating techniques. Instead, we provided key references that relate to the specific commercially developed solution that our manuscript concerned. Likewise, and as noted in our discussion, we chose not to include an extensive comparison to different algorithms. Rather, we chose to keep our discussion focused on aspects of the commercial solution and to keep our manuscript

within the journal’s word limit. We considered that the main interest in our work would come from that part of the *JNM* readership who directly use these techniques as health-care professionals. For this subset of the readership, the performance of the clinically available software and the limitations of our testing were considered the most important topics for discussion, and these were prioritized over a comparison of the performance of different algorithms or software that is currently absent from the clinic. Although an extended discussion of the many unapproved data-driven gating algorithms (and their differences) had interest and value, it did not make the final cut. To give some justification, consider the length of the letter from Dr. Kesner, which covers just some of these points: it is one third the word limit for our entire manuscript. We also feel that a comparison of the commercial solution with other algorithms is best achieved via a dedicated study on a common dataset. We hence respectfully disagree with the assertion that we did not “properly” reference his work, or that his works have not been acknowledged. In fact, they are acknowledged through various citations and discussions in each of our recent publications on this topic (1,5,6). We are happy to acknowledge them once again.

Because the translation of this technology into a clinical product is an exciting landmark, we suggest that now may be an appropriate moment for others to provide an objective review of this technology and the potential for further development.

DISCLOSURE

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