



# Response to letter to the editor from Professor Jean-François Bonneville

Lisa B. Nachtigall<sup>1</sup> · Maria Fleseriu<sup>2</sup>

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We read the thoughtful letter to the editor from Professor Jean-François Bonneville in response to our recently submitted manuscript, “Physicians’ awareness of gadolinium retention and MRI timing practices in the longitudinal management of pituitary tumors: a “Pituitary Society” survey, and we thank him for his interest [1]. The manuscript was written collaboratively by members of the Education Committee of the Pituitary Society. While the main purpose of the survey described in the manuscript focused on assessment of current awareness of possible gadolinium-based contrast agent (GBCA) retention and strategies for timing of pituitary MRIs following pituitary surgery for adenomas, it was our hope to inspire multidisciplinary dialogue around the controversial issue of long-term brain retention of GBCAs. Professor Bonneville’s letter indeed contributes to such a dialogue. The expertise of pituitary neuroradiologists in this regard is highly valued and much appreciated.

Unfortunately, no neuroradiologists attended the Pituitary Society or The Pituitary Neurosurgeons’ meetings, the forums at which the survey was distributed to all attendees. A survey of neuroradiologists was not within the scope of the manuscript, and the survey distributed served to assess knowledge about possible gadolinium retention and MRI timing among clinicians who request MRIs, typically,

pituitary experts, including neurosurgeons and endocrinologists. As such, the survey served as an initial step in exploring current strategies regarding MRI frequency in the follow-up of a variety of types of pituitary adenomas after surgery and/or radiation therapy. Indeed clinicians order MRIs, and radiologists review and report results. Radiologists are best equipped to identify the most effective and safest imaging techniques and strategies; thus, neuroradiologists’ opinions are extremely useful in determining best practices. The consideration of avoiding GBCAs in pituitary imaging, unless a contrast agent is definitively required, is an important point, and one that we are pleased was brought to light. A multidisciplinary approach including collaboration among endocrinologists, neurosurgeons, radiation oncologists, and neuroradiologists is critical in the management of pituitary tumor patients. We look forward to further collaboration in the context of Pituitary Centers of Excellence discussion [2].

## References

1. Nachtigall LB, Karavitaki N, Kiseljak-Vassiliades K, Ghalib L, Fukuoka H, Syro LV et al (2018) Physicians’ awareness of gadolinium retention and MRI timing practices in the longitudinal management of pituitary tumors: a “Pituitary Society” survey. *Pituitary*. <https://doi.org/10.1007/s11102-018-0924-0>
2. Casanueva FF, Barkan AL, Buchfelder M, Klibanski A, Laws ER, Loeffler JS et al (2017) Criteria for the definition of Pituitary Tumor Centers of Excellence (PTCOE): a Pituitary Society Statement. *Pituitary* 20(5):489–498

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The manuscript was written collaboratively by members of the Education Committee of the Pituitary Society and the reply, on behalf of all authors.

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✉ Maria Fleseriu  
fleseriu@ohsu.edu

<sup>1</sup> Neuroendocrine Unit, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA

<sup>2</sup> Departments of Medicine and Neurological Surgery, Northwest Pituitary Center, Oregon Health & Science University, Mail Code: CH8N, 3303 SW Bond Ave., Portland, OR 97239, USA