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Letter to the Editor Response

Response to Letter to the Editor From Chatelain et al: "Weekly Somapacitan Is Effective and Well Tolerated in Children With GH Deficiency: The Randomized Phase 3 REAL4 Trial"

Bradley S. Miller,[1] Joanne C. Blair,[2] Michael Højby Rasmussen,[3] Aristides Maniatis,[4] Rasmus Juul Kildemoes,[3] Jun Mori,[5] Michel Polak,[6] Rikke Beck Bang,[7] Volker Böttcher,[8] Stefano Stagi,[9] and Reiko Horikawa[10]

[1]Division of Pediatric Endocrinology, University of Minnesota Masonic Children's Hospital, Minneapolis, MN 55454, USA
[2]Department of Endocrinology, Alder Hey Children's NHS Foundation Trust, Liverpool L14 5AB, UK
[3]Novo Nordisk A/S, Søborg 2860, Denmark
[4]Rocky Mountain Pediatric Endocrinology, Centennial, CO 80112, USA
[5]Division of Pediatric Endocrinology and Metabolism, Children's Medical Center, Osaka City General Hospital, Osaka 534-0021, Japan
[6]Service d'Endocrinologie, Gynécologie et Diabétologie Pédiatriques, Hôpital Universitaire Necker Enfants Malades Paris, Assistance Publique-Hôpitaux de Paris, Paris 75015, France
[7]Novo Nordisk A/S, Aalborg 9220, Denmark
[8]Division of Pediatric Endocrinology and Metabolism, MVZ Endokrinologikum Frankfurt am Main, Frankfurt 60596, Germany
[9]Department of Health Sciences, University of Florence, Anna Meyer Children's University Hospital, Florence 50139, Italy
[10]Division of Endocrinology and Metabolism, National Center for Child Health and Development, Tokyo 157-0074, Japan

Correspondence: Bradley S. Miller, MD, PhD, Division of Pediatric Endocrinology, University of Minnesota Masonic Children's Hospital, 2450 Riverside Ave, 201 Academic Office Bldg, Minneapolis, MN 55454, USA. email: mille685@umn.edu.

Abbreviations: GH, growth hormone; IGF-I, insulin-like growth factor-I; LAGH, long-acting growth hormone.

We thank Dr Chatelain et al for their comments (1) on our recent publication (2).

We agree that cross-trial comparisons should be discussed carefully. It is important to clearly acknowledge that differences, for example injection-site tolerability, can even be observed between randomized controlled trials when comparing the same pegylated long-acting GH (LAGH) lonapegsomatropin and daily GH (3, 4). We note that our discussion mentioned only observed injection-site tolerability for different LAGHs (somapacitan, lonapegsomatropin, and somatrogon) from different randomized controlled trials and did not refer to the respective daily GH comparators for any of these studies (2).

In their letter, Chatelain et al proceed to state that insulin-like growth factor-I (IGF-I) SDS levels were higher in the somapacitan arm in the phase 3 REAL4 study (2). However, IGF-I SDS levels were similar between once-weekly somapacitan and daily GH treatment arms, with no statistically significant difference observed (2). This contrasts with another recent LAGH publication of the phase 3 heiGHt study by Thornton et al (4), in which higher IGF-I SDS levels for once-weekly lonapegsomatropin were statistically significant when compared to daily GH.

Furthermore, Chatelain et al reference that the phase 3 REAL4 study (2) shows that LAGH may be able to improve adherence to therapy. As expected in randomized controlled trials, the data from the study showed very high adherence both in once-weekly somapacitan and daily GH treatment arms (2). However, the observed reduction in treatment burden reported with once-weekly somapacitan may lead to improved adherence to therapy and treatment outcomes in the real world, while potentially also decreasing the barrier to initiating and/or maintaining replacement therapy (2).

Finally, we believe it is of high clinical relevance to educate physicians on the different protraction technologies applied for LAGH molecules. The somapacitan mechanism of action used to prolong GH exposure has already been well established in other molecules, such as insulin detemir (5) and liraglutide (6), currently used in pediatric endocrinology. We appreciate these robust discussions as the field is navigating new therapeutics in pediatric GH deficiency.

Disclosures

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