Patient and Nurse Preferences for the Sensoready® Autoinjector Pen Versus Other Autoinjectors in Multiple Sclerosis: Results From a Multicenter Survey

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Disclosures

Amy Perrin Ross has provided consultation to Biogen, Alexion, Genzyme, Genentech, Roche, EMD Serono, Novartis, Viela Bio, Mallinckrodt and Janssen.
Harriet Gaunt has no conflicts of interest.
Noreen Barker consulted for and received support to attend educational meetings from Novartis, Biogen, Merck, Sanofi and Teva.
Christian Besser, **Shubhanvita Naval**, and **Dee Stoneman** are employees of Novartis.

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Background and objective

- B cells play a major role in the pathogenesis of MS[1]
- Ofatumumab 20 mg s.c. is a fully-human anti-CD20 monoclonal antibody[2] approved by the FDA for the treatment of adults with RMS[3]
- In the APLIOS Phase 2 study, PK bioequivalence of ofatumumab 20 mg s.c. was demonstrated between an autoinjector (i.e. Sensoready® pen) and a prefilled syringe when administered in the abdomen[4]
    - Results showed that using a prefilled syringe assembled with an autoinjector (i.e. Sensoready® pen) facilitates convenient self-administration of ofatumumab 20 mg s.c. at home[4]
- The convenience of treatment administration plays an important role in patient satisfaction and, consequently, adherence

Objective	**To investigate patient and nurse preferences for using the autoinjector Sensoready® autoinjector pen for administration of ofatumumab 20 mg s.c. versus other autoinjectors that are used for other DMTs in MS**

DMTs, disease-modifying therapies; FDA, Food and Drug Administration; MS, multiple sclerosis; PK, pharmacokinetic; RMS, relapsing multiple sclerosis; s.c., subcutaneous

1. Dalakas M, et al. Nat Clin Pract Neurol. 2008;4:557–567. 2. Bar-Or A, et al, *Neurology*. 2018;90(20):e1805–e1814. 3. KESIMPTA® (ofatumumab) Prescribing Information. https://www.novartis.us/sites/www.novartis.us/files/kesimpta.pdf
4. Bar-Or A, et al. Presented at the *ACTRIMS*. 2020; PO#LB300.

Sample and methodology

The survey was conducted in two phases — central location pilots (Germany) followed by face-to-face semi-structured in-field interviews across the USA, Germany, France, and Italy

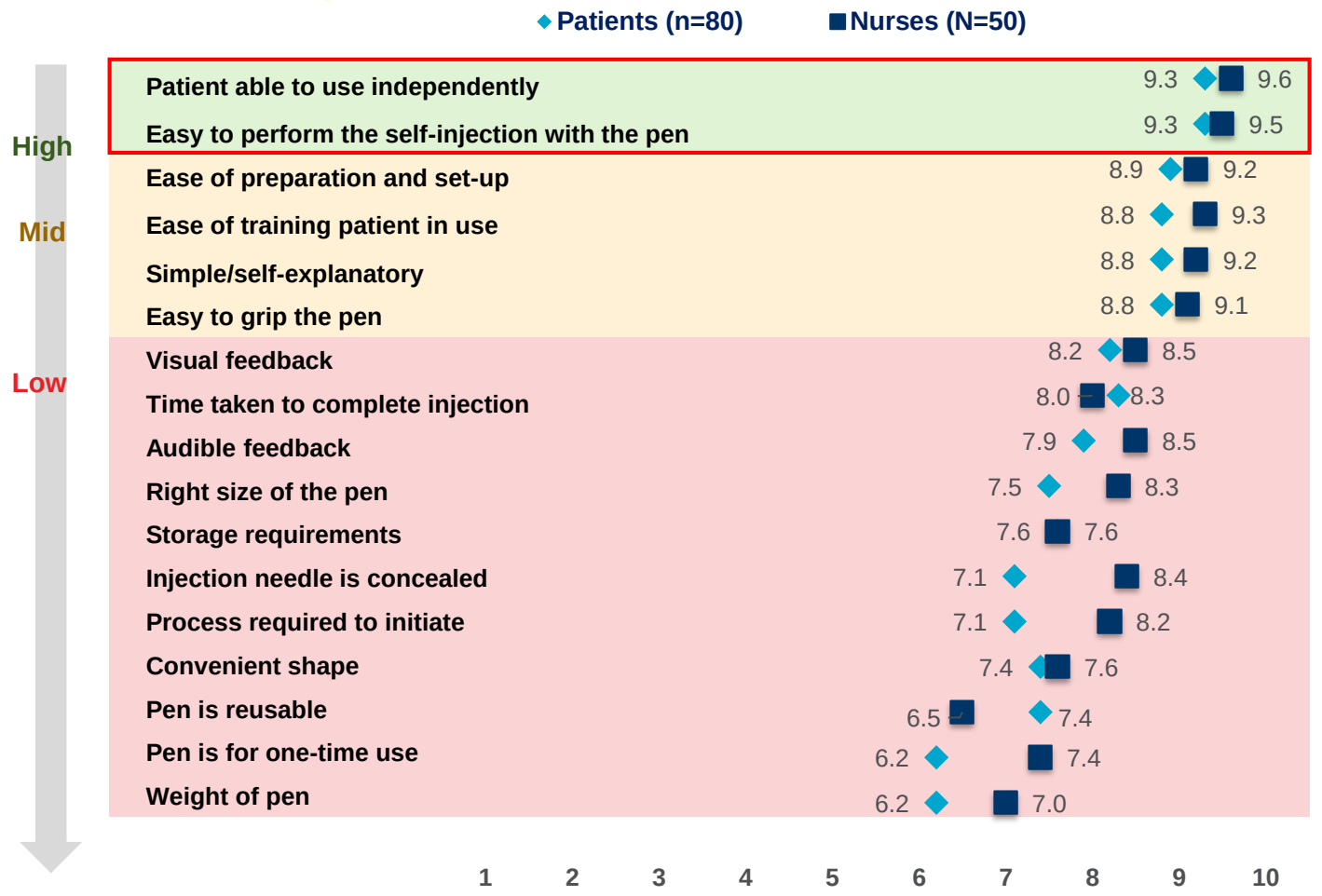
Sample	• 80 MS patients (average age of 43 years and 7 years of disease duration) and 50 MS nurses (average practice: 15 years [range 4–34]) were recruited at office-based or hospital-based practices and specialist MS centers
Recruitment criteria	• Relapsing-remitting MS patients who received a DMT through a s.c./i.m. injection via autoinjector for ≥2 months were included • Specialist MS nurses who had ≥3 years of practice and ≥80% time spent in clinical practice, and who were experienced in training patients on ≥2–6 MS autoinjector devices (Rebidose/Rebismart [Rebif], Avonex pen [Avonex], Autoject/YpsoMate [Copaxone], and the Plegridy pen [Plegridy]) were recruited
Questionnaires	• Respondents were interviewed for 45 minutes with qualitative open-ended and quantitative close-ended questions (31 for patients; 41 for nurses) to rate the importance of predefined attributes for the Sensoready® autoinjector pen versus other autoinjectors on a Likert scale from 1 (not at all important) to 10 (extremely important)
Statistical analysis	• A paired T-test checked for significant differences between performance scores and an independent T-test helped to check for significant differences between scores given by patients and nurses • A Chi-Square test determined if the proportions of respondents answering “ofatumumab performs better than existing devices” and “proportion of respondents who chose ofatumumab as their preferred device” was significant

DMT, disease-modifying therapy; i.m., intramuscular; MS, multiple sclerosis; s.c., subcutaneous

Importance of attributes for an autoinjector

- **Attributes that were ranked highest by both patients and nurses for autoinjectors were:**
  - **“Patient able to use independently”**
  - **“Easy to perform the self-injection with the pen”**

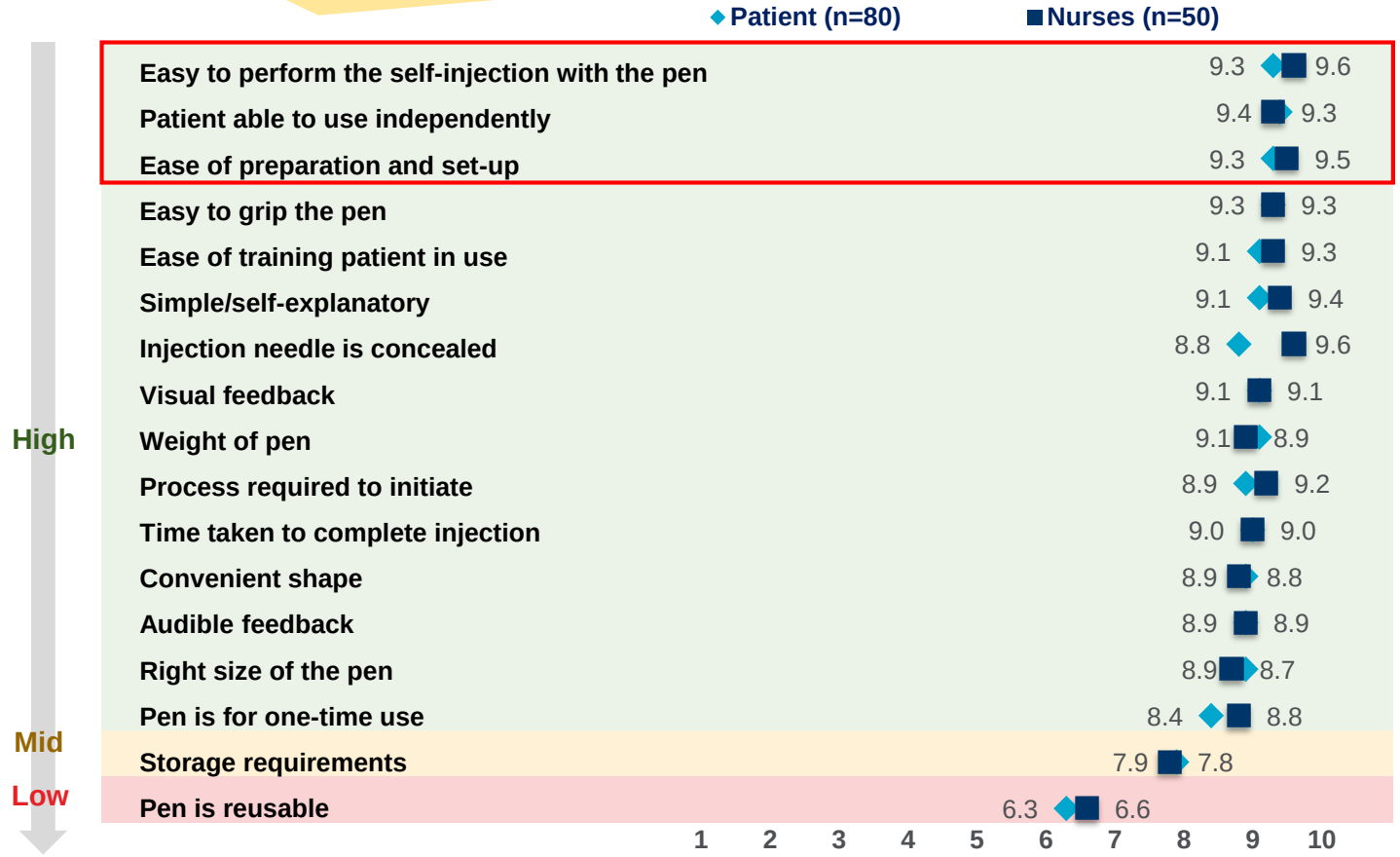
Q: *Please rate the importance of each feature in an injector device using a scale of 1–10 where 1 is not at all important and 10 is extremely important. Please look at this list of features I have for you to consider. These are a list of features of any injection device in terms of functionality, usability etc.*



Comparison of the Sensoready® autoinjector pen with other autoinjectors

- **The Sensoready® autoinjector pen scored highly across the majority of attributes (>8.0 out of a possible 10) versus other autoinjectors and was similarly rated by both nurses and patients**
- **Attributes ranked highest (p<0.05):**
  - **"Easy to perform the self-injection with the pen"**
  - **"Patient able to use independently"**
  - **"Ease of preparation and set-up"**
- **An attribute that ranked significantly (p<0.05) lower versus others was "pen is reusable"**

Q: *Please rate the 2 / 3 injector devices using a scale of 1–10, where 1 is not at all well and 10 is extremely well, for how well the device performs on each attribute.*
Please feel free to add any features you feel are important yet missing from the list

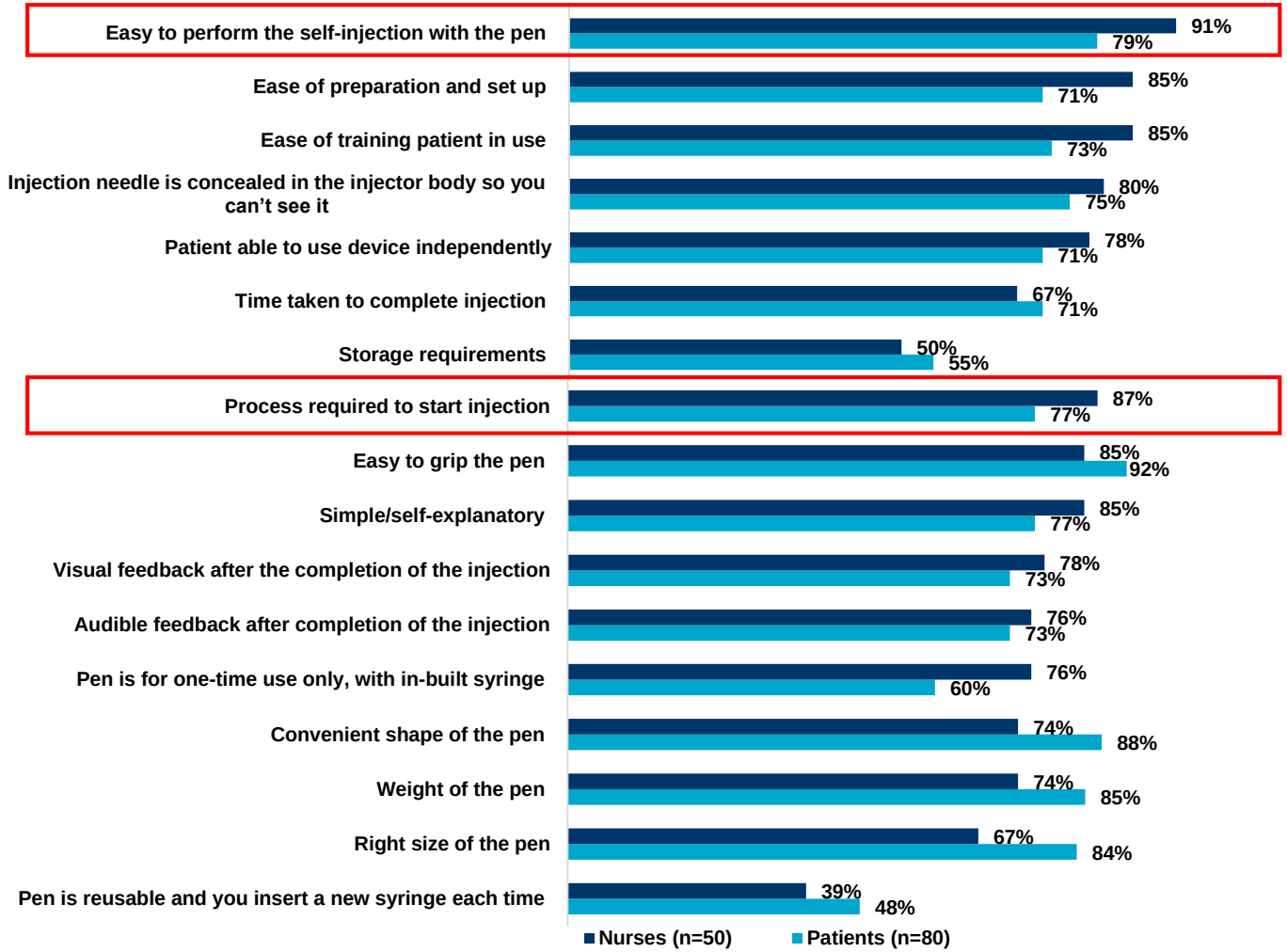


Ofatumumab, n=50; Rebif (Rebidose), n=16*; Avonex (Avonex Pen), n=27*; Copaxone (Autoject), n=34; Copaxone (Ypsomate), n=5*; Rebif (Rebismart) n=8*; Plegridy (Plegridy Pen), n=9*
*Caution, Low base size

Preferred attributes of the Sensoready® autoinjector pen

Q: Thinking of the two injector devices in front of you, I now have some questions about your preference. For each feature below, please indicate which injector performs best.
Please provide your answer for each attribute. You may only select one answer per attribute

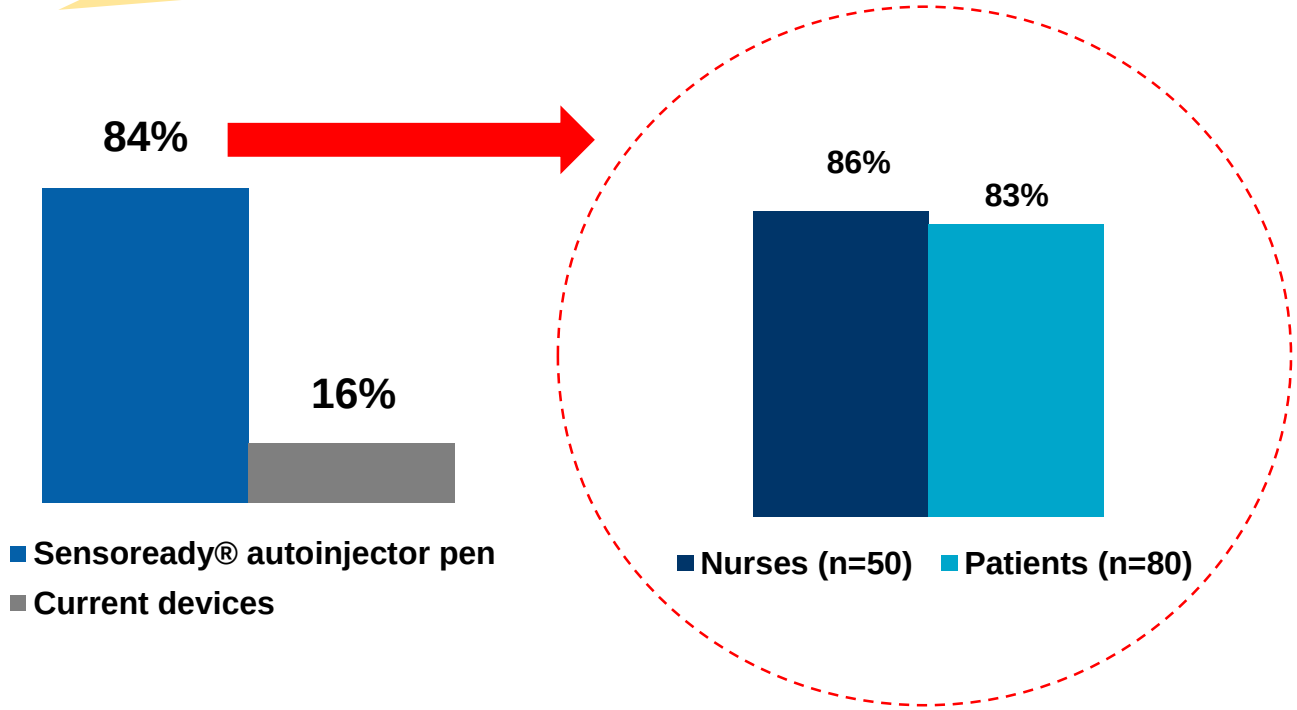
- **The preference rates for the Sensoready® attributes ranged from 39% to 91% with the highest rates recorded for**
  - **"Easy to perform self-injection with the pen" (91%)**
  - **"Process required to start injection" (87%)**



Overall device preference

- **The majority of participants preferred Sensoready® to their current device (84% vs. 16%; p<0.05), and the response was similar for both nurses (86%) and patients (83%)**
  - **9/10 nurses and 8/10 patients preferred the Sensoready® autoinjector pen to their current device(s)***
  - **More than 80% of patients and nurses rated the overall satisfaction with the Sensoready® autoinjector pen as 'Very Good' or 'Excellent'**

Q: Overall, if you were to choose a treatment based on device alone, which device would you prefer to use for your injections?



*If they had to choose a treatment based on device alone

Conclusion

- Results from this multicenter survey show that both MS nurses and patients prefer the Sensoready® autoinjector pen for ofatumumab 20 mg s.c. administration over other autoinjectors for their current treatment(s) mainly because of “ease to perform self-injection with the pen” and “patient able to use independently”

Thank you

MS, multiple sclerosis; s.c., subcutaneous