Measuring patients' preference: Case study of Rituxan Hycela

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Disclaimer

I am an employee of Genentech, a member of the Roche Group

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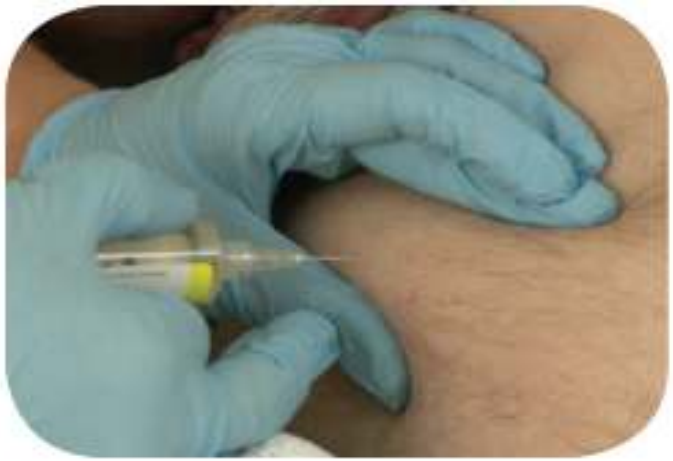
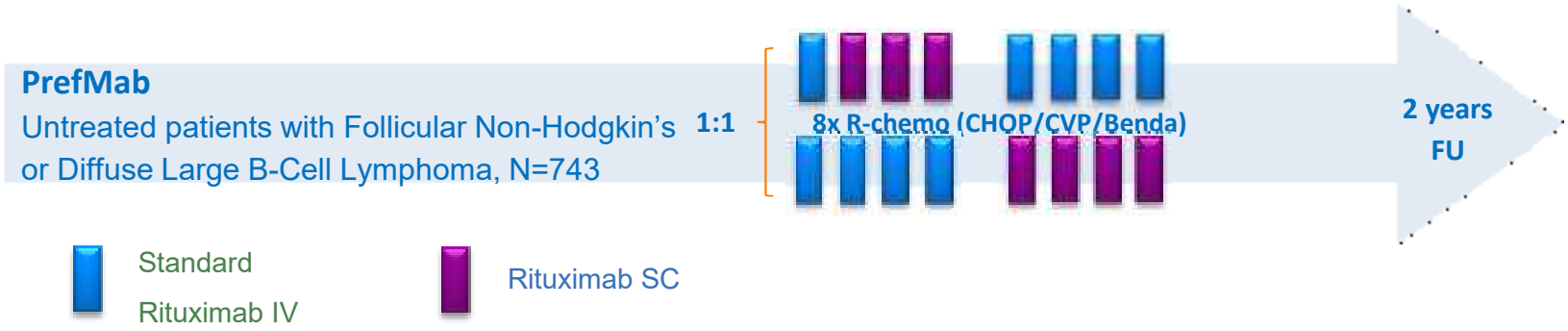
Case Example: Hycela (Rituxan SC)

IV administration*	SC administration*
Patient-specific dosing based on height and weight	Fixed dosing for all patients (no dose calculation required)
Prepare and dilute into IV bag	Ready to use vial
Infusion time: 1.5 to 4 hours	Injection time: 5-7 minutes



Both forms have comparable efficacy (PFS, OS), safety and exposure

PrefMab:
A randomized, open-label, multi-center study



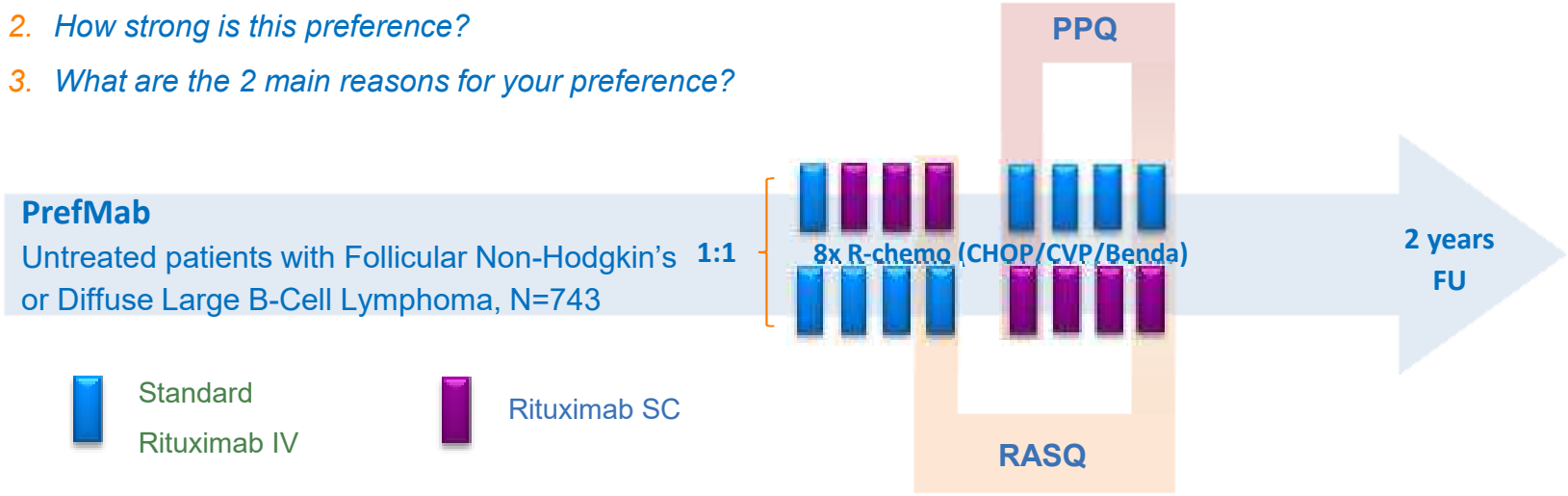
Primary objective: Patient Preference (Patient Preference Questionnaire PPQ)

Secondary objectives: Safety, Administration time, Satisfaction, Immunogenicity, Complete Response, Event-Free Survival, Disease-Free survival, Progression-Free Survival, Overall Survival

PrefMab:
A Patient Preference Study

PPQ: Patient Preference Questionnaire:

1. *Which method of administration did you prefer?*
2. *How strong is this preference?*
3. *What are the 2 main reasons for your preference?*



RASQ: Rituximab Administration Satisfaction Questionnaire

20-item questionnaire capturing 5 factors contributing to patients' satisfaction :

1. *physical impact (administration-related symptoms of pain, swelling and redness)*
2. *psychological impact (emotional distress related to treatment administration or disease progression)*
3. *impact on activities of daily living*
4. *convenience (administration timing)*
5. *Overall satisfaction with the administration of Rituxan*

Questionnaires Validity

- PPQ adapted from PrefHer trial (HER2-positive early breast cancer trial with a cross-over design assessing patient preference for SC vs IV dosing) (Pivot et al., 2013).

- RASQ was developed de-novo and validated according to good measurement principles set forth in the FDA Guidance on PROs for Label Claims (Theodore-Oklota et al., 2016)

Direct feedback from patients regarding items relevance and ease to understanding

Rigorous translation and linguistic adaptation

Validation analyses adapted to the use of the questionnaires (cross sectional vs. longitudinal)

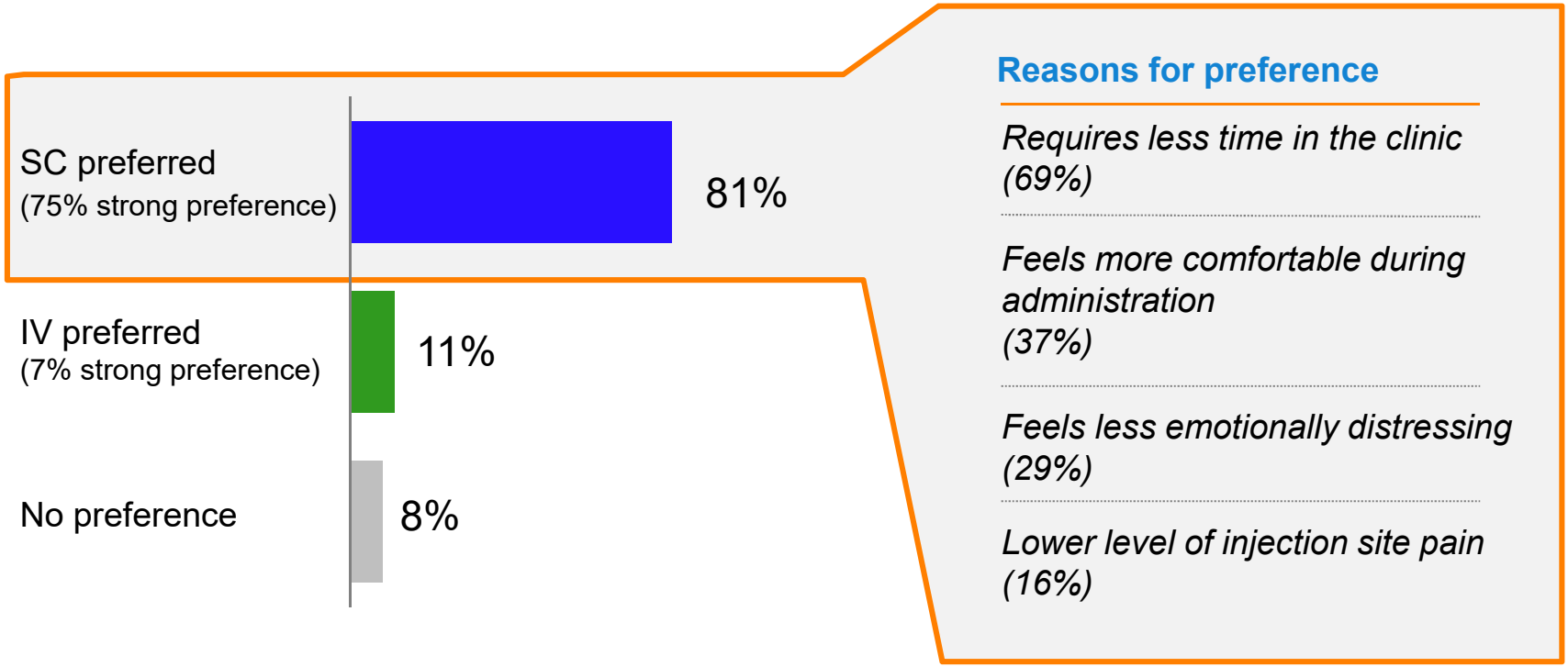
PrefMab Data Completeness

PPQ	Arm A SC>IV	Arm B IV>SC	Total
Cycle 6 ITT	311/372 (84%)	309/371 (83%)	620/743 (83%)
Cycle 8 ITT	293/372 (79%)	298/371 (80%)	591/743 (79%)

RASQ	Arm A SC>IV	Arm B IV>SC	Total
Cycle 4 ITT	328/372 (88%)	334/371 (90%)	662/743 (89%)
Cycle 8 ITT	289/372 (78%)	291/371 (78%)	580/743 (78%)

PrefMab (NHL)

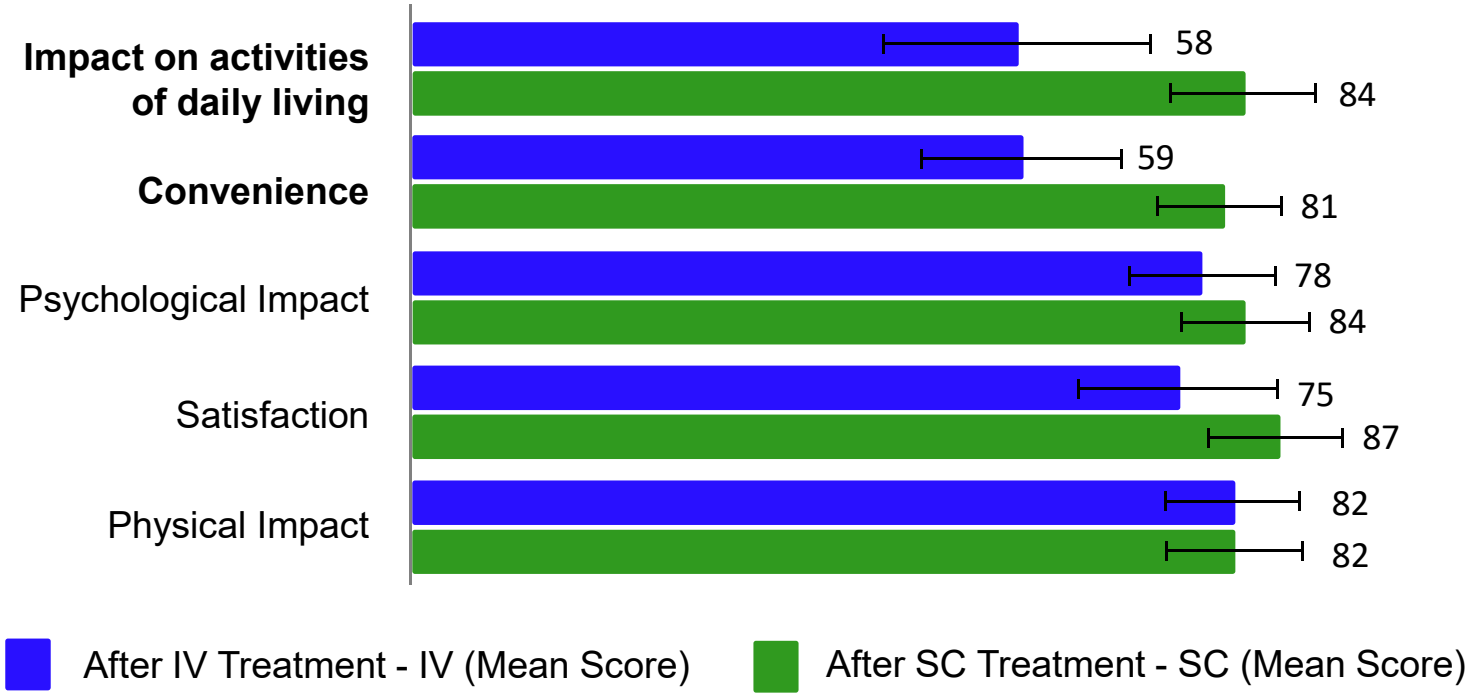
Results of the Patient Preference Questionnaire (PPQ) at Cycle 8



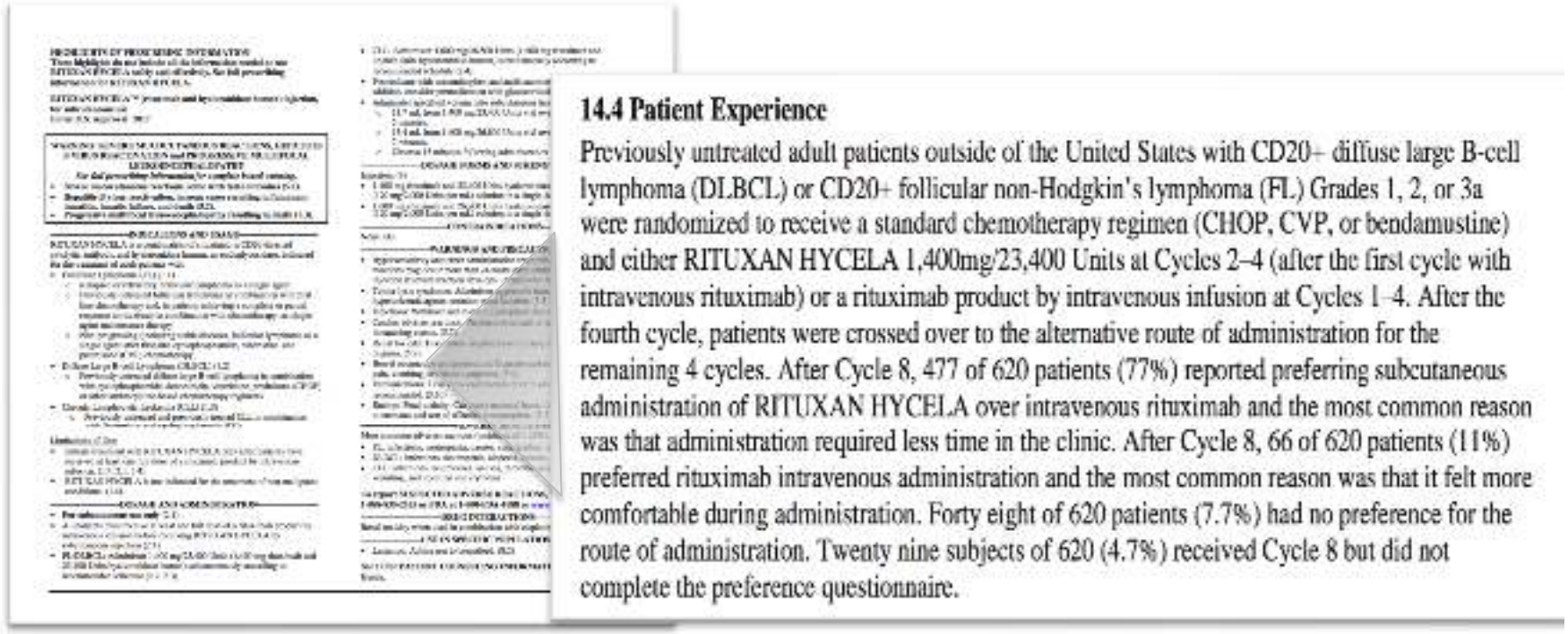
PrefMab (NHL)

RASQ results (combined Cycle 6 and Cycle 8)

Scale from 0-100, a higher score indicates a higher satisfaction



Patient Experience Section in US Label



14.4 Patient Experience

Previously untreated adult patients outside of the United States with CD20+ diffuse large B-cell lymphoma (DLBCL) or CD20+ follicular non-Hodgkin's lymphoma (FL) Grades 1, 2, or 3a were randomized to receive a standard chemotherapy regimen (CHOP, CVP, or bendamustine) and either RITUXAN HYCELA 1,400mg/23,400 Units at Cycles 2–4 (after the first cycle with intravenous rituximab) or a rituximab product by intravenous infusion at Cycles 1–4. After the fourth cycle, patients were crossed over to the alternative route of administration for the remaining 4 cycles. After Cycle 8, 477 of 620 patients (77%) reported preferring subcutaneous administration of RITUXAN HYCELA over intravenous rituximab and the most common reason was that administration required less time in the clinic. After Cycle 8, 66 of 620 patients (11%) preferred rituximab intravenous administration and the most common reason was that it felt more comfortable during administration. Forty eight of 620 patients (7.7%) had no preference for the route of administration. Twenty nine subjects of 620 (4.7%) received Cycle 8 but did not complete the preference questionnaire.

Conclusion

- Rigorous and reliable assessment of the direct patient experience of treatment is doable and should be included in patient facing materials to inform treatment decision-making
- Setting expectations regarding the measurement of preference using this case study might not be relevant (large study, primary endpoint, cross-over)
- Preference is only one concept capturing patients' experience with the treatment; others as relevant include, impact of the treatment on HRQoL, on disease constitutional symptoms, ability to function on the daily basis and treatment tolerability
- This is key to empower patients and to enable their treatment choice based on patient-interpretable empirical evidence

Doing now what patients need next