Real-world comparison of pembrolizumab dosing schedules (q3w vs q6w) in early TNBC: Insights from the PETRHA cohort

A. Aranda-Gutierrez[1], Vazquez-Juarez[2,3], Y. Chavarri-Guerra[1], F. Petracci[4], O. Peña-Curiel[2,3], F. Acevedo[5], E. Zamudio Lozoya[6], L. Gonzalez Gonzalez[6], W. Mantilla[7], S. Franco[7], M. Bravo[6], C. Arce Salinas[8], K. Centelles López[8], H. Gomez[9], P. Carreon[9], E. Aguirre Alvarez[10], A. Lopez-Galindo[11], B. Martinez-Cannon[3], P. Herrera-Ríos[3], M. Garcia Garces[12], E. Korbenfeld[13], A. Benitez-Cruz[13], E. Willars[14], M. Lema[15], C. Lema[15], M. Cordova-Garza[2], J Minera-Villagran[2] and C. Villarreal-Garza[2]

1. Departamento de Hemato-Oncología, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, MEXICO, 2. Breast Cancer Center, Hospital Zambrano Hellion TecSalud, Tecnologico de Monterrey, San Pedro Garza Garcia, MEXICO, 3. UNEME-DEDICAM, Secretaria de Salud de Nuevo León, Guadalupe, MEXICO, 4. Departamento de Oncología Clínica, Instituto Alexander Fleming, Buenos Aires, ARGENTINA, 5. Hematology and Oncology, Pontificia Universidad Católica de Chile, Santiago, CHILE, 6. Unidad de Cancer de Mama, Centro Estatal de Cancerologia de Chihuahua, Chihuahua, MEXICO, 7. Breast Cancer, Luis Carlos Sarmiento Angulo Center for Research and Cancer Treatment, Bogota, COLOMBIA, 8. Unidad funcional de Cancer de mama, Instituto Nacional de Cancerología, Tlalpan, MEXICO, 9. Oncology, Oncosalud-AUNA, Lima, PERU, 10. Breast Cancer Unit, SOHEC – Sociedad de Oncología y Hematología del Cesar, Valledupar, COLOMBIA, 11. Oncology, Doctors Hospital-AUNA, Monterrey, MEXICO, 12. Oncology, ISSEMYM Hospital Regional de Toluca, Toluca, MEXICO, 13. Oncology, Hospital Británico Buenos Aires, Buenos Aires, ARGENTINA, 14. Oncology, Centro Oncológico Lic. Salvador Chavarría Delgado, Saltillo, MEXICO, 15, Oncology, Clínica de Oncología Astorga, Medellin, COLOMBIA

Background

- Pembrolizumab q3w with neoadjuvant chemotherapy is the standard of care in early TNBC (KEYNOTE-522).
- A q6w schedule was later approved based on pharmacokinetic equivalence, despite no prospective neoadjuvant trial data.
- Adoption of q6w has increased in real-world settings, especially where logistic constraints exist.
- Direct comparative clinical data between q3w and q6w dosing remain limited.

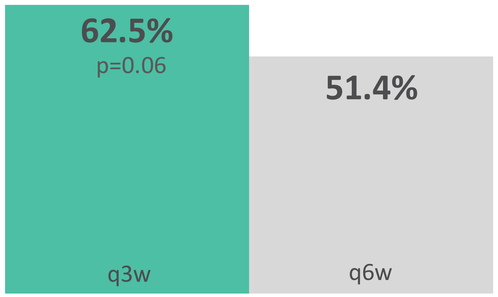
Methods

Early TNBC patients from the PETRHA cohort receiving neoadjuvant chemotherapy + pembrolizumab were included.

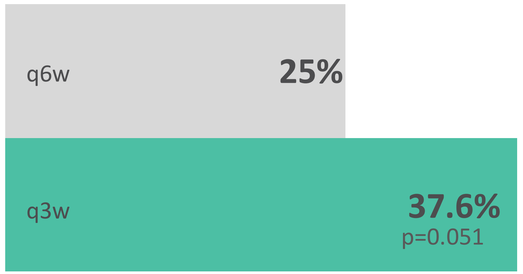
Patients were treated with either 200 mg q3w or 400 mg q6w dosing schedules. Main outcomes:
- Treatment completion
- Immune-related adverse events (irAEs)
- Pathologic complete response (pCR, ypT0/is ypN0)

Baseline characteristics summarized descriptively. Categorical variables analyzed using chi-square or Fisher's exact tests (significance $p < 0.05$).

No statistically significant differences in pCR or irAEs between q3w and q6w



pCR rates by pembrolizumab dosing schedule (q3w vs q6w)



irAE rates by pembrolizumab schedule (q3w vs q6w)

No significant difference in grade ≥3 events (12.8% vs 0%, p=0.205)

This work was conducted on behalf of the TecSalud and Latin American Breast Cancer Association (LABCA)

Results

- Among 304 patients, 232 (76.3%) received q3w and 72 (23.7%) received q6w dosing-
- Clinical stage distribution was similar.
- Use of q6w was strongly associated with public healthcare settings (51.1% vs 0.6%, p<0.001).
- Treatment completion was comparable (75.7% q3w vs 76.4% q6w; p=0.60).

Conclusion

In this real-world Hispano-American cohort, q6w neoadjuvant pembrolizumab showed similar treatment completion and a non-significantly lower pCR rate compared with q3w. The numerically lower incidence of irAEs suggests a potentially more favorable toxicity profile. These findings support the feasibility of q6w dosing in routine clinical practice.

This presentation is the intellectual property of the author/presenter. Contact them at cynthia.villarreal@tecsalud.mx for permission to reprint and/or distribute.