





17th European Multidisciplinary Congress on Urological Cancers

13-16 November 2025, Prague, Czech Republic



Real-world data on management of muscle-invasive urothelial cancer in Spain in the era of adjuvant immunotherapy: the MINOTAURO study

Lainez N.¹, Martinez-Kareaga M.², Sagastibeltza-Marinalarena N.³, Sánchez M.³, Díaz de Cerio-Echarri A.⁴, Sánchez S.⁻, Calderero V.², Verdún J.A.⁵, Gil-Arnáiz I.¹º, Menéndez M.¹¹, Moreno A.¹², de Ávila L.¹³, Fernández R.¹⁴, Trincado P.¹⁵, Peláez M.¹⁶, Anido U.¹⁷, Climent M.A.¹⁸, Durán I.¹⁹

¹Hospital Universitario de Navarra, Dept. of Medical Oncology, Pamplona, Spain, ²Hospital Universitario de Araba-Txagorritxu, Dept. of Medical Oncology, Vitoria-Gasteiz, Spain, ³UGC Cáncer de Gipuzkoa, Oncología Médica, Donostia, Spain, ⁴Complejo Asistencial de Soria, Dept. of Medical Oncology, Soria, Spain, ⁵Hospital Clínico Universitario de Valladolid, Dept. of Medical Oncology, Valladolid, Spain, ⁶Hospital Universitario de Burgos, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario San Jorge, Dept. of Medical Oncology, Valladolid, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario San Jorge, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, Dept. of Medical Oncology, Santander, Spain, ⁸Hospital Universitario Marqués de Valdecilla, ⁸Hospital Universitario Mar Oncology, Huesca, Spain, 9Hospital de Alcañiz, Dept. of Medical Oncology, Alcañiz, Spain, 10Hospital Reina Sofía de Tudela, Spain, 10Hospital Reina Sofía de Tudela, Spain, 10Hospital Universitario Galdakao-Usansolo, Dept. of Medical Oncology, Tudela, Spain, 10Hospital Reina Sofía de Tudela, 10Hospital Reina Sofía de Tudela, 10Hospital Reina Sofía de Tudela, 10Hos Galdakao, Spain, ¹³Hospital Universitario San Pedro, Dept. of Medical Oncology, La Rioja, Spain, ¹⁴Hospital Universitario Miguel Servet, Dept. of Medical Oncology, Zaragoza, Spain, ¹⁶Universidad Europea del Atlántico, Faculty of Health Sciences, Santander, Spain, ¹⁷Centro Hospitalario Universitario de Santiago, Dept. of Medical Oncology, Santander, Spain, ¹⁸Instituto Valencia, ¹⁸Instituto Valencia

INTRODUCTION

Radical cystectomy combined with neoadjuvant (preferred) or adjuvant chemotherapy (CT) is still the standard treatment for muscle invasive bladder cancer¹.

On February 24th, 2022, EMA approved adjuvant nivolumab for patients with muscle invasive urothelial carcinoma (MIUC) and PD-L1 expression ≥1% and high risk of recurrence².

However, data on perioperative treatment use in Spain are limited.

AIM

This study aimed to characterize the demographics, clinical features, treatment patterns, and real-word outcomes of MIUC patients during the adjuvant immunotherapy era.

METHOD

A multicenter, retrospective, observational study that included patient information from 17 hospitals across the North and East of Spain, diagnosed with T2-T4, N0-N3, M0 MIUC between April 1, 2022, and June 30, 2024.

Data were obtained from medical records, and patients were followed from diagnosis to last contact or death. The study was approved by an institutional review board.

The study data were collected and managed using the REDCap electronic data capture tool hosted on IDIVAL³

RESULTS

A total of 629 patients were included, with a mean age of 71 years of age (41-95); 80% were male and 74% were current/former smokers. Most tumors originated in the bladder (94%), had predominantly urothelial histology (93%) and were stage II (70%). About two thirds (63%) were CDDP eligible, of whom 73% received neoadjuvant CT (NACT) with CDDP + gemcitabine (66%) and ddMVAC (22%) as the most common regimes used. Seventy-eight per cent underwent surgery [95% ileal conduit], 10% completed trimodal therapy and 7% progressed after neoadjuvant CT. The pCR and downstaging rates after NACT were 27% and 33% respectively. The use of adjuvant CT was scarce (11%). Of those eligible for IO-based adjuvant treatment according to EMA criteria (n=207), 77 (37%) received an adjuvant CPI, being nivolumab the most common.

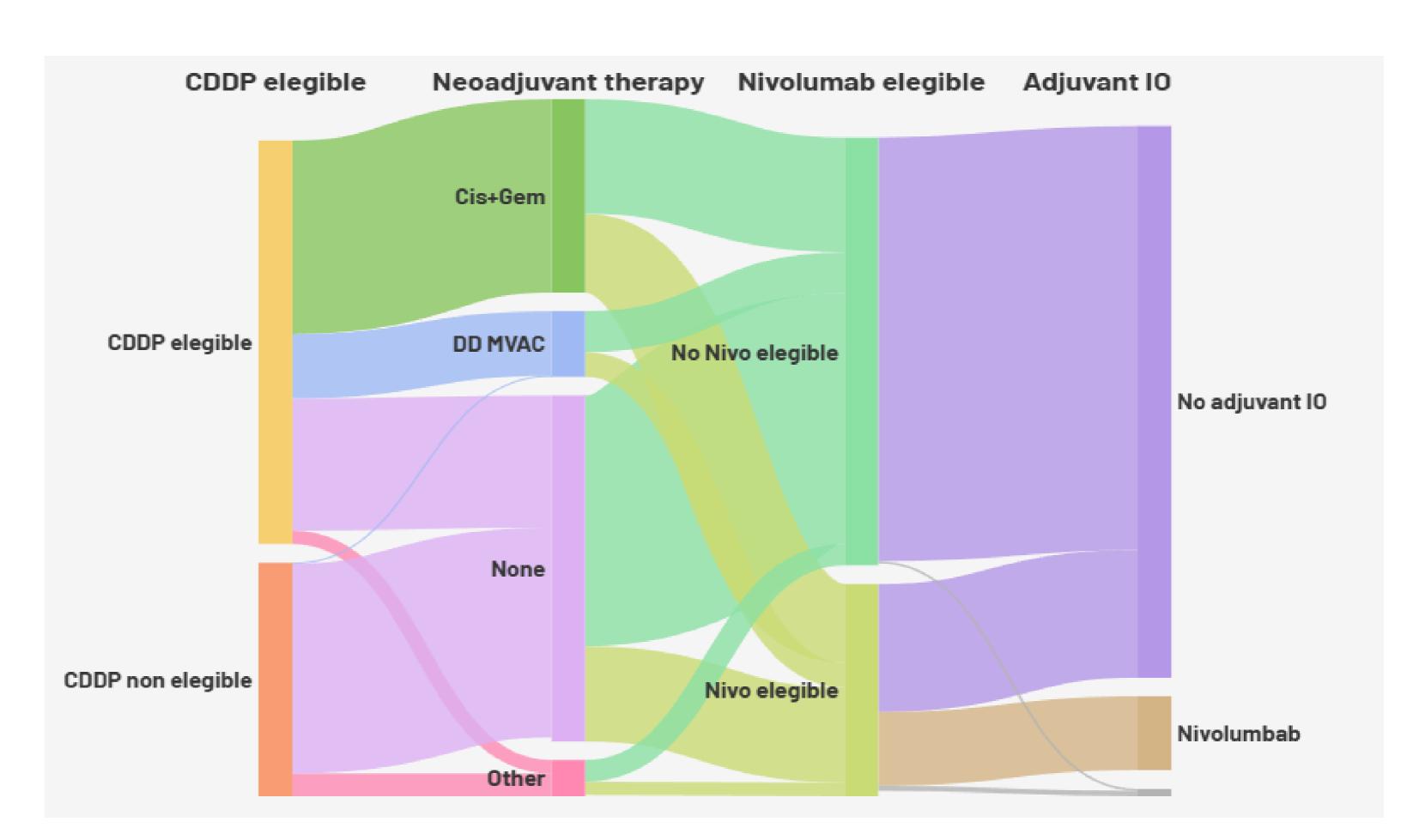


Fig. 1 Sankey diagram of the use of neoadjuvant chemotherapy and adjuvant immunotherapy

CONCLUSIONS

In this contemporary Spanish cohort of patients with MIUC, NACT followed by cystectomy remains the preferred treatment, with very few patients considered for trimodal therapy. Notably, NACT use is higher than in historical series, while adjuvant chemotherapy and in particular adjuvant immunotherapy seem to remain underutilized. pCR rates are aligned with outcomes from other large NACT series.

REFERENCES

- 1. Advanced Bladder Cancer (ABC) Meta-analysis Collaborators Group. Adjuvant Chemotherapy for Muscleinvasive Bladder Cancer: A Systematic Review and Metaanalysis of Individual Participant Data from Randomised Controlled Trials. *Eur Urol*. 2022;81(1):50-61.
- 2. Bajorin DF et al. Adjuvant Nivolumab versus Placebo in Muscle-Invasive Urothelial Carcinoma. New Eng J Med 2021;384 (22): 2102-2114. 2.
- 3. Harris PA, et al. Research electronic data capture (REDCap) A metadata-driven methodology and workflow process for providing translational research informatics support, J Biomed Inform 2009; 42(2):377-81

ACKNOWLEDGEMENT

The authors would like to thank Dr. Pedro Muñoz Cacho (IDIVAL, Santander) for his assistance in the statistical analysis.

CONTACT INFORMATION



rsancheze@saludcastillayleon.es

investigacion@gonorteoncologia.com