

Carboplatin AUC 10 in Good-Prognosis Metastatic Seminoma

A Portuguese Real-World Experience

Alice Figueiredo, Sara Magno, Fátima Vaz, Catarina Cardoso, João Barata

Instituto Português de Oncologia de Lisboa Francisco Gentil

1 Introduction

High-dose carboplatin has emerged as an alternative to cisplatin-based chemotherapy for good-prognosis metastatic seminoma, aiming to reduce acute and long-term toxicity without compromising efficacy. Phase II and retrospective studies report 3-year PFS>93% and OS>96%, with predominantly haematological toxicity. However, due to limited evidence this strategy is not yet endorsed by most international guidelines and has seen limited adoption outside the United Kingdom.

2 Objectives/Methods

This single-centre retrospective study evaluates the [acute toxicity](#) and [early treatment response](#) of high-dose carboplatin (AUC 10, every 21 days, 3–4 cycles) in a Portuguese cohort of adult patients with metastatic pure seminoma and good prognosis according to IGCCCG classification. Adverse events (AE) were graded per Common Terminology Criteria for Adverse Events. Efficacy was assessed by post-chemotherapy computed tomography (CT).

3 Results

Nine patients were included. All had **primary testicular** tumour with **exclusive retroperitoneal metastasis**, ECOG PS 0 and GFR > 60 mL/min/1.73m².

Patient Characteristics	N=9
Age, years, median (IQR)	34 (31–41)
Tumor Stage, n (%)	
• IIA-IIB	7 (77,8)
• IIC-IIIB	2 (22,2)
Timing of M1	
• Recurrent	5 (55,6)
• At diagnosis	4 (44,4)

Table 1. Patient Characteristics

Acute Toxicity

Most frequent adverse events were **cytopenias**. Non-haematological toxicity was mild (grade 1–2).

No treatment discontinuation, hospitalization or death were reported.

Clinical Impact	Patients, n (%)
Any AE	9 (100)
Grade 3-4 AE	3 (33)
Treatment delay	4 (44)
Dose reduction	3 (33)
Blood transfusion	1 (11)

Table 2. Clinical impact of adverse events by number of patients

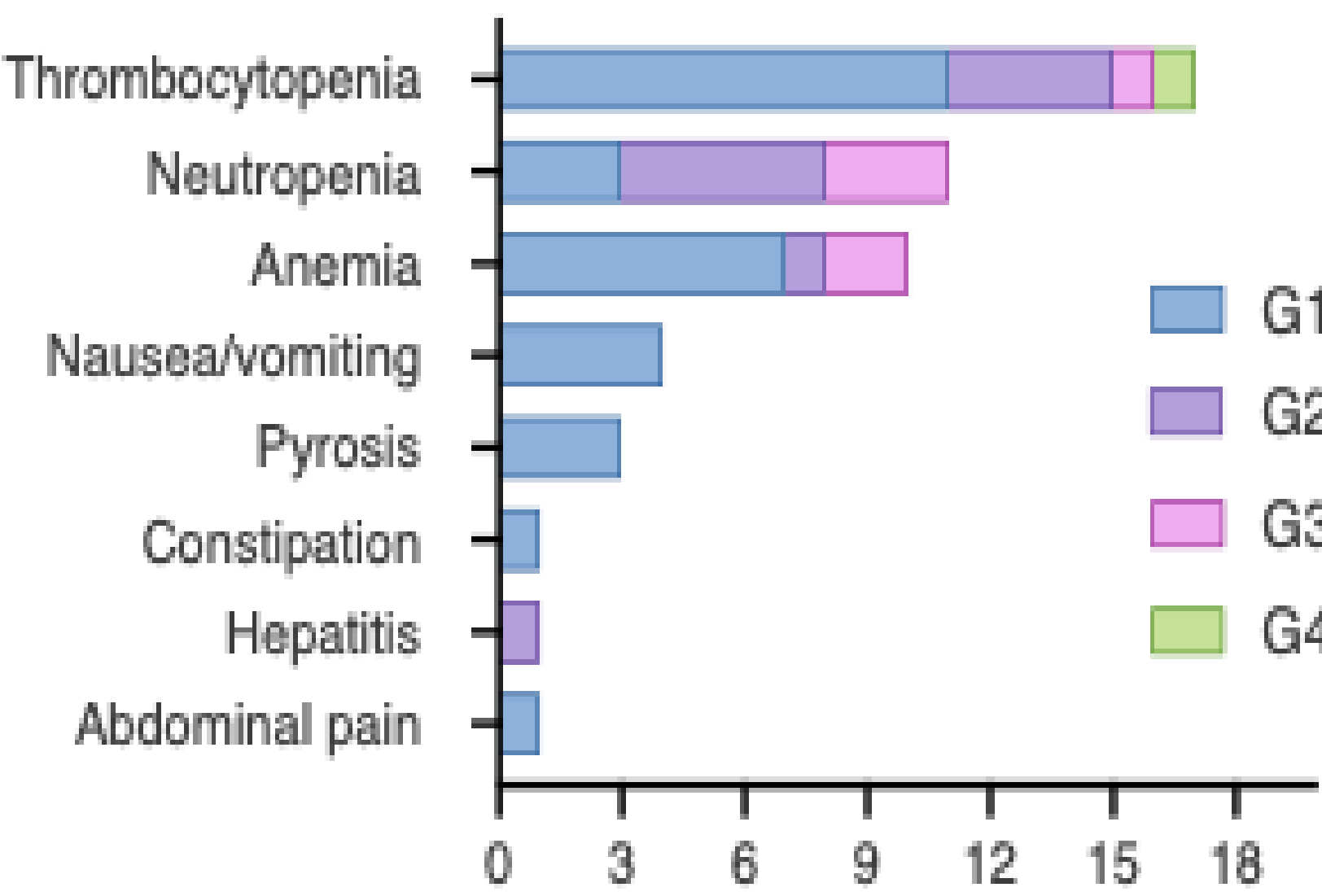


Figure 1. Number of adverse events by grade; G=grade

	C1	C2	C3	C4
Thrombocytopenia	6	8	3	0
Neutropenia	5	2	4	0
Anemia	2	3	4	1
Nausea/vomiting	2	0	2	0
Pyrosis	1	1	1	0
Constipation	1	0	0	0
Hepatitis	1	0	0	0
Abdominal pain	1	0	0	0

Figure 2. Number of adverse events by treatment cycle; C=cycle

Early Treatment response

Seven patients completed treatment, **all in an outpatient-setting**, and two remain on treatment with a planned 4th cycle.

One patient had salvage surgery with only burned-out tumour at resection. With a median follow-up of 23 months (range 15-25), no disease progression was observed.

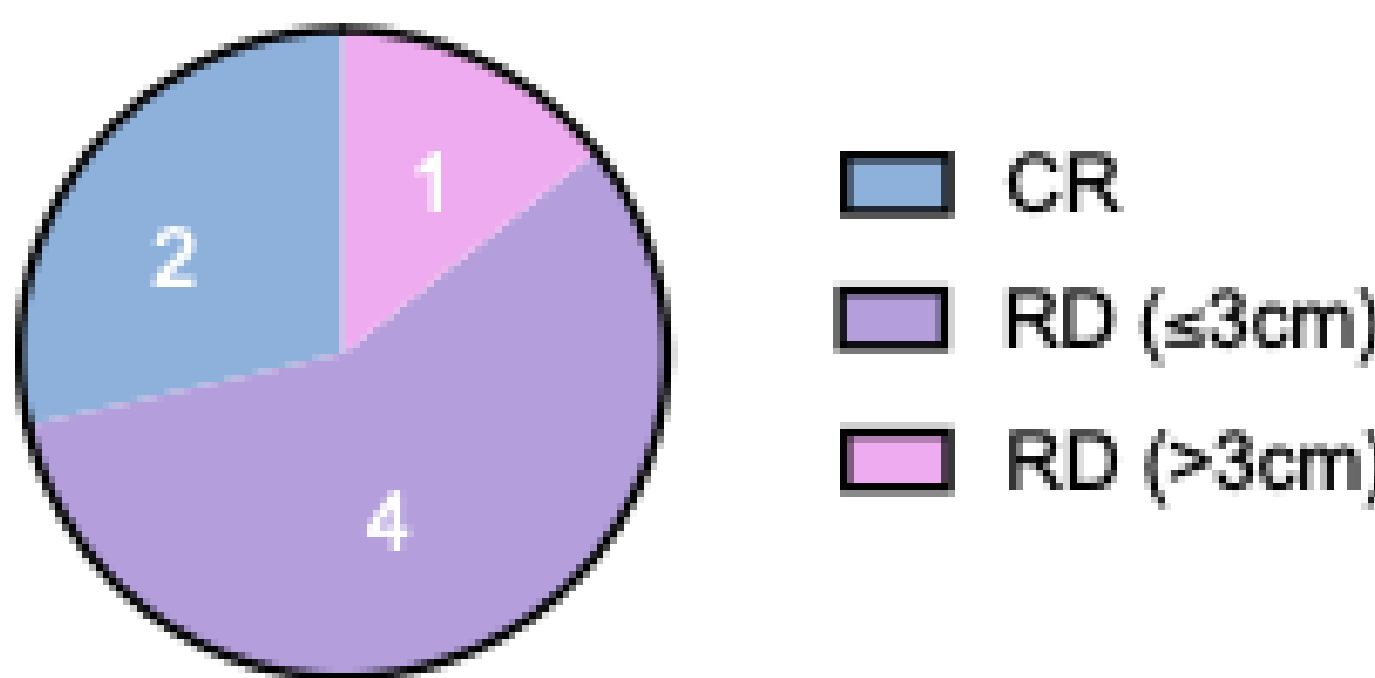


Figure 3. Treatment response – evaluated by post-treatment CT (median 50 days, range 39-110). CR=complete response; RD=residual disease

4 Conclusion/Discussion

Despite its small sample size and short follow-up, this study provides [real-world evidence supporting the safety and favourable early response of high-dose carboplatin AUC 10 in good-prognosis metastatic seminoma](#). These findings are consistent with published data and contribute to the growing body of evidence suggesting that a less toxic alternative to cisplatin-based regimens may be within reach.

5 References

- Alifrangis, C., Sharma, A., Chowdhury, S., Duncan, S., Milic, M., Gogbashian, A., Agarwal, S., Sahdev, A., Wilson, P., Harland, S., Stoneham, S., Lockley, M., Rustin, G., Oliver, T., Berney, D., & Shamash, J. (2022). Single-agent carboplatin AUC10 in metastatic seminoma: A multi-centre UK study of 216 patients. *European journal of cancer* (Oxford, England : 1990), 164, 105–113. <https://doi.org/10.1016/j.ejca.2020.08.03>
- Tookman, L., Rashid, S., Matakidou, A., Phillips, M., Wilson, P., Ansell, W., Jamal-Hanjani, M., Chowdhury, S., Harland, S., Sarwar, N., Oliver, T., Powles, T., & Shamash, J. (2013). Carboplatin AUC 10 for IGCCCG good prognosis metastatic seminoma. *Acta oncologica* (Stockholm, Sweden), 52(5), 987–993. <https://doi.org/10.3109/0284186X.2012.714078>
- Motzer, R. J., Jonasch, E., Agarwal, N., Beard, C., Bhayani, S., Bolger, G. B., Chang, S. S., Choueiri, T. K., Costello, B. A., Derweesh, I. H., Gupta, S., Hancock, S. L., Kim, J. J., Kuzel, T. M., Lam, E. T., Lau, C., Levine, E. G., Lin, D. W., Michaelson, M. D., Olencki, T., ... Kumar, R. (2015). Testicular Cancer, Version 2.2015. *Journal of the National Comprehensive Cancer Network : JNCCN*, 13(6), 772–799. <https://doi.org/10.6004/jnccn.2015.0092>