

Carboplatin–gemcitabine for refractory high-grade meningiomas: A study from the French national OMEGA consortium

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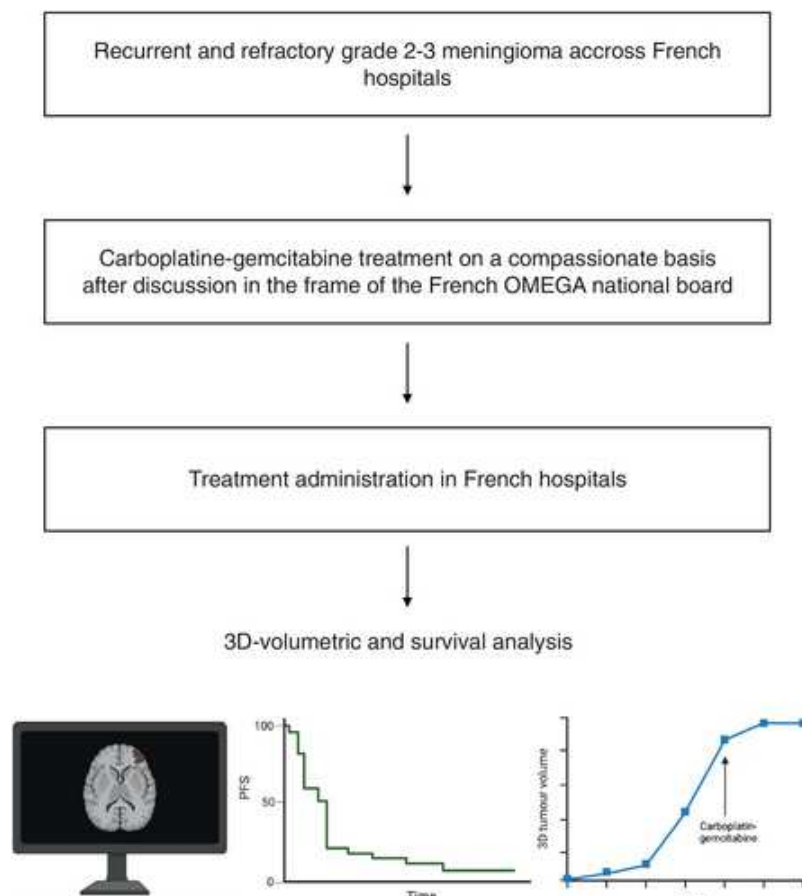
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Abstract

High-grade meningiomas are rare tumours that often relapse and are difficult to treat, and no clearly recommended systemic treatment is available. In this study, we assessed the efficacy of carboplatin–gemcitabine as a systemic chemotherapy regimen administered to patients with high-grade recurrent meningiomas after observing incidental tumour shrinkage in one patient. Carboplatin–gemcitabine was offered on a compassionate basis to French patients with high-grade recurrent meningioma within the framework of the French *Réunion d'orientation thérapeutique des méningiomes de haut grade* (OMEGA) multidisciplinary board, which discusses all meningioma cases nationwide that are not amenable to standard treatment (surgery or radiotherapy). We retrospectively analysed the efficacy of this treatment in French patients from 2019 to 2023. We evaluated the three-dimensional volumetric kinetics of the tumour, progression-free survival (PFS), and safety. Carboplatin–gemcitabine slowed tumour growth for several months in some heavily pretreated patients despite the failure of previous systemic therapies. The 6-month PFS rate for the cohort of six patients was 50% (95% confidence interval, [22.5–100%]). Safety was characterised by asthenia and manageable haematological toxicity. Our results provide encouraging data on the efficacy of carboplatin–gemcitabine for meningiomas and should be validated in a prospective trial. Despite the small number of patients, our study included all French patients treated for a 4-year period and should be considered alongside other previously published studies, which also included few patients due to the rarity of the disease. Our findings highlight the importance of national networks for managing these patients and the need for multicentre trials.

What's New?

Currently, there is no clear recommended pharmacological treatment for recurrent grade 2–3 meningiomas in patients for whom surgical resection or radiation therapy is no longer feasible. This study assessed the efficacy of carboplatin–gemcitabine as a systemic chemotherapy regimen after observing incidental tumour shrinkage in one patient with high-grade recurrent meningiomas. Although the study involved a small number of patients due to the rarity of the disease, the results are promising in terms of efficacy, including in heavily pretreated patients. The findings highlight the importance of national networks for managing these patients and the need for multicentre trials.



CONFLICT OF INTEREST STATEMENT

Ahmed Idbaih: Outside this study travel funding: Carthera, Leo Pharma, Novocure; Research grants: Transgene, Sanofi, Servier, and Nutritheragene; Consulting: Novocure, Novartis, Polytone Laser, Leo Pharma, and Boehringer Ingelheim. Charlotte Bronnimann, Mathieu Larroquette, Morgan Ollivier, Thomas Daubon, Paul Lesueur, Carole Ramirez, Michel Kalamarides, Matthieu Peyre, Julien Engelhardt declare no potential conflict of interest.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on reasonable request from the corresponding author.

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