Reasons driving choice and clinical course of patients with CNS WHO grade 3 IDH mutant glioma receiving vorasidenib after surgery: a pilot experience

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Aims and scope

Submit manuscript

Angelo Dipasquale, Pasqualina Giordano, Alberto Bosio, Maarten M. J. Wijnenga, Laura Giordano, Agnese Losurdo, Pasquale Persico, Marta Padovan, Angela Viggiano, Giuseppe Catapano, Marjolein Geurts, Federico Pessina, Armando Santoro, Giuseppe Lombardi & Matteo Simonelli

Abstract

Purpose

According to most of international guidelines, patients with newly diagnosed IDH mutant (IDHm) gliomas should receive maximal safe resection followed by a wait-and-see strategy, the IDH mutation inhibitor vorasidenib or sequential radio-chemotherapy (RT/CT) based on risk factors of progression such as extent of resection, neurological symptoms and WHO grading. However, it is not clear how the historical risk factors of progression should drive decision-making in molecular era. It is still unknown whether IDH inhibition may be appropriate in patients with WHO grade 3 IDHm gliomas, particularly when expected tumour growth rate is slow and delaying RT/CT is not a concern.

Methods

We retrospectively reviewed the clinical data of patients with WHO G3 IDHm gliomas in 4 reference neuro-oncological centres. The patients were treated only with surgery and were considered eligible for vorasidenib at the dose of 40 mg daily within the drug early access programme.

Results

A total of 10 patients were included (6 astrocytoma, 4 oligodendroglioma). Good Karnofsky performance status (90-100%), no neurological focal signs/symptoms and no need of corticosteroid guided the choice of vorasidenib in all cases (10/10). The 6 month and 12 month-PFS were 90% and 77.1%, respectively. In one case (10%) there was a grade 3 elevation in liver function tests, necessitating dose reduction.

Conclusions

Preserved clinical conditions guided the choice of IDH mutation inhibitor in all cases, with preliminary efficacy and safety data consistent with those of the INDIGO trial. Future studies should address the most appropriate role of vorasidenib in this setting.