

Dabrafenib with trametinib for treating BRAFV600E mutation-positive glioma in children and young people aged 1 year and over

Resource impact summary report

NICE has recommended dabrafenib with trametinib, within its marketing authorisation, as an option for treating:

- low-grade glioma (LGG) with a BRAF V600E mutation in children and young people aged 1 year and over who need systemic treatment
- high-grade glioma (HGG) with a BRAF V600E mutation in children and young people aged 1 year and over after at least 1 radiation or chemotherapy treatment.

Dabrafenib with trametinib is only recommended if the company provides it according to the commercial arrangement for each medicine.

The estimated eligible population for this recommendation is around 40 people with LGG increasing to around 50 people by 2028/29 with expected population change and incidence. The estimated eligible population is around 20 people throughout the 5-year period for people with HGG.

It is estimated that people with LGG will have an average treatment duration with dabrafenib with trametinib of 3.5 years while people with HGG will have treatment for an average of 12 years. Only 5 years usage is modelled in the [resource impact template](#).

The current treatment for the LGG population is chemotherapy with carboplatin plus vincristine which is given for 1.5 years. The HGG population has no alternative therapy other than temozolomide which most people are expected to have already received and so the comparator is best supportive care only.

Dabrafenib with trametinib is a regimen of 2 oral treatments and so in the LGG population there will be a saving in administrations as both carboplatin and vincristine are given intravenously.

The number of people treated with dabrafenib with trametinib each year is expected to be around 30 per year and uptake reaching 60% as shown in table 1.

Table 1 Uptake of dabrafenib with trametinib by year

| | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 |
|---|----------------|----------------|----------------|----------------|----------------|
| Eligible population LGG | 43 | 7 | 7 | 7 | 7 |
| Prevalent population LGG | 36 | 0 | 0 | 0 | 0 |
| Incident population LGG | 7 | 7 | 7 | 7 | 7 |
| Eligible population HGG | 19 | 2 | 2 | 2 | 2 |
| Prevalent population HGG | 18 | 0 | 0 | 0 | 0 |
| Incident population HGG | 1 | 1 | 1 | 1 | 1 |
| Total eligible population | 62 | 9 | 9 | 9 | 9 |
| | | | | | |
| Uptake (%) | 40 | 45 | 50 | 55 | 60 |
| People commencing treatment with dabrafenib with trametinib | 25 | 4 | 4 | 5 | 5 |
| People continuing treatment from previous years | 0 | 25 | 29 | 33 | 21 |
| Total treated with dabrafenib with trametinib | 25 | 29 | 33 | 38 | 26 |

Some values rounded.

Services for children and young people with glioma are commissioned by NHS England. Providers are NHS hospital trusts.