Non-Small cell lung cancer intracranial metastases outcome

The number of brain metastases does not impact outcomes in the EGFR/ALK+ Non-Small-cell lung cancer patients, implying that targeted therapy along with surgery and/or radiation may improve OS irrespective of the number of BM. The number of BM, extracranial metastases (ECM), and KPS independently affected OS/PFS in WT NSCLC BM, which was consistent with the known literature [1].

Most patients with BM have a limited life expectancy, measured in months. Selected patients may experience a very long progression free survival, for example, patients with a targetable driver mutation.

The prognosis is poor for untreated patients, with median overall survival (OS) 1–2 months [2] [3] [4].

The combination of neurosurgery with stereotactic radiosurgery (SRS) and/or whole-brain radiotherapy (WBRT) can increase the OS up to 3–6 months, and in selected cases over 12 months [5] [6] [7] [8] [9] [10] [11].

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see Non-Small cell lung cancer intracranial metastases treatment.

see Non-Small cell lung cancer intracranial metastases recurrence.

The series of Lind et al. of Non Small-cell lung cancer intracranial metastases patients receiving surgery or radiosurgery to the brain and aggressive management of their extracranial disease reported a median overall survival (OS) of 12.1 months [12].

Those receiving Gamma Knife surgery (GK) or gefitinib demonstrated extended survival. The improved survival seen with GK and gefitinib suggests a survival benefit in selected patients receiving the combined treatment. Further Phase II study should be conducted to assessment these influence [13].

Many patients with brain metastases from non-Small-cell lung cancer have limited survival, while others survive for several years, depending on patterns of spread, EGFR and ALK alterations, among others.

Lung-molGPA

Parameter	Lung-molGPA	DS-GPA
Metastatic spread to extracranial sides	0	0
Brain metastases only	1	1
Age ≥70 years	0	0 if >60 years
Age <70 years	0.5	0.5 if 50–60 years, 1 if <50 years
Karnofsky performance status ≤70	0	0 if <70
Karnofsky performance status 80	0.5	0.5 if 70–80
Karnofsky performance status 90–100	1	1
Number of brain metastases >4	0	0 if >3
Number of brain metastases 1–4	0.5	0.5 if 2–3, 1 if 1
EGFR or ALK positive	1	not part of the assessment

DS-GPA: Diagnosis Specific Graded Prognostic Assessment.

EGFR Non Small-cell lung cancer intracranial metastases

see EGFR Non Small-cell lung cancer intracranial metastases.

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