

## Overall and disease-free survival greater than 12 years in metastatic non-small cell lung cancer after linear accelerator-based stereotactic radiosurgery for solitary brain metastasis

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### ABSTRACT

The best treatment approach for solitary brain metastasis is not well defined and there is no consensus on this issue. It is still being debated whether patients with isolated brain metastasis should undergo surgical resection or stereotactic radiosurgery, and which patients should receive adjuvant whole brain radiotherapy. The median survival in patients with single or multiple metastatic lesions who underwent only stereotactic radiosurgery improved from two-three months to nine months. To the best of our knowledge this is the first report on patients treated with linear accelerator-based stereotactic radiosurgery alone where an overall survival of more than 12 years was obtained, maintaining good quality of life in three cases of solitary brain metastasis from non-small cell lung cancer. In addition to the case reports, we present a brief literature review on this topic.

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**Key words:** radiosurgery, non-small cell lung cancer, single brain metastasis, overall survival, disease-free survival.

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