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## **Meningiomas: Overview and New Directions in Therapy.**

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The majority of meningiomas, the most common primary brain tumor, are considered to be benign, and characteristic magnetic resonance imaging features allow a preliminary diagnosis. Meningiomas can be classified in the World Health Organization system as grade I, II, or III, depending on various histological features. In many cases, observation is the preferred management option, although this means the absence of a histological diagnosis. If necessary, standard therapy consists of surgery with or without adjuvant radiation, depending on the tumor grade and the degree of resection. To date, systemic therapies are not included in the standard of care. The level of evidence for treatment recommendations is low, and effective treatment regimens, especially for surgery-refractory and radiation-refractory meningiomas, are still very limited. Recent studies have broadened our knowledge of the genetics and pathogenesis of meningiomas and will lead to new therapeutic options. This review summarizes the epidemiology, pathogenesis and genetics, classification, and diagnosis of meningiomas, as well as management principles, including promising new avenues of therapy.

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