



Title: Maintenance Therapy in Rhabdomyosarcoma: An Overview

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Summary:

Rhabdomyosarcoma (RMS) is the most common soft tissue sarcoma in children and adolescents. Despite advances in multimodal therapy, including surgery, chemotherapy, and radiotherapy, high-risk patients remain prone to relapse. Maintenance therapy has emerged as a promising strategy to prolong remission and improve overall survival in selected RMS patients.

Recent clinical trials, such as the European EpSSG RMS 2005 study, have demonstrated that low-dose maintenance chemotherapy—typically using agents like vinorelbine and cyclophosphamide—can significantly reduce relapse rates and enhance event-free survival in patients who achieved complete remission after standard treatment. The rationale for maintenance therapy is to eradicate minimal residual disease, thereby preventing recurrence.

While maintenance therapy is not yet standard globally, accumulating evidence supports its integration into treatment protocols for high-risk and metastatic RMS cases. Ongoing research aims to optimize the duration, drug combinations, and patient selection to maximize benefits while minimizing toxicity.

