SYSTEMIC TREATMENT FOR SOFT TISSUE SARCOMA: WHAT IS STANDARD, WHAT IS NEW

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Soft tissue sarcoma (STS) is a biologically heterogeneous malignancy with over 50 subtypes. This solid tumor is one of the most challenging diseases to treat for the medical oncologist. STS often forms in the body's muscles, joints, fat, nerves, deep skin tissues, and blood vessels. The natural history of high-grade STS is characterized by a strong tendency toward local recurrence and metastatic spreading, despite optimal initial strategies. The lung is the most common site of metastases, with poor prognosis.
We present the current international guidelines for the adjuvant treatment and systemic treatment for advanced STS and the new discoveries.
Many new molecular targeting drugs have been tried in the last ten years, and some were approved for soft tissue sarcoma. The first approved was Imatinib, as a treatment for gastrointestinal stromal tumors (GISTs). Following Imatinib, other tyrosine kinase inhibitors (TKIs) received the approval for GISTs such as Sunitinib and Regorafenib, and Pazopanib for non-GIST soft tissue sarcomas. In 2016, FDA approved the first monoclonal antibody that targets platelet-derived growth factor receptor (PDGFR)-α, Olaratumab. The new treatment demonstrates an overall survival advantage. In this review, we aimed to summarize the results from the most recent studies on adjuvant treatment for high-grade STS and systemic strategies for advanced STS.
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