Gastrointestinal Stromal Tumors (GIST) and Their Management

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GIST is the most common form of sarcoma, and can vary in size and clinical outcome from an incidental finding at operation to life-threatening metastatic disease. Surgery is the standard of care for primary disease, and the oral drug imatinib is the standard of care for metastatic disease. Sunitinib was approved in the United States in early 2006 for GIST refractory to imatinib. The pathology of GIST, surgical options for primary and metastatic disease and findings leading to the use of imatinib and sunitinib for GIST will be reviewed, with attention to the mutation status of c-kit and platelet derived growth factor (PDGF) receptor that lead to imatinib sensitivity or resistance.