Tumor Type	Benign/Malignant	Common Location	Key Features	Genetic Mutation	Treatment
Joint Tumors	Mostly benign	Wrist (ganglion cyst), knee (Baker's cyst)	Ganglion cyst: not a true cyst, no synovial communication; Baker's cyst: true synovial cyst	No specific mutation	Surgical removal
Tenosynovial Giant Cell Tumor	Benign	Large joints, small hand tendons	Diffuse (PVNS) or localized	t(1;2)(p13q;37) (Type VI collagen α-3)	Surgical excision
Soft Tissue Sarcomas	Malignant	Extremities (thigh), deep soft tissues	Hematogenous metastasis, mostly sporadic, aggressive	NF1, Gardner syndrome, Li-Fraumeni syndrome, Osler-Weber-Rendu syndrome	Surgery, chemotherapy (CT), radiation therapy (RT)
Lipoma	Benign	Subcutaneous tissue	Well-encapsulated, mature fat cells	No specific mutation	Excision
Liposarcoma	Malignant	Extremities, retroperitoneum	Three subtypes: WD (less aggressive), myxoid, pleomorphic (most aggressive)	WD: MDM2 gene (chr 12), Myxoid: t(12;16)	Surgery, CT
Nodular Fasciitis	Benign	Subcutaneous soft tissues	Rapid growth, often mistaken for malignancy	t(17;22) MYH9-USP6 fusion gene	Self-limiting, excision if needed
Fibromas	Benign	Skin, subcutaneous tissue	Common, fibroblastic proliferation	No specific mutation	None required
Fibrosarcoma	Malignant	Soft tissues	Cellular, storiform pattern, high mitotic rate	No specific mutation	Surgery, CT
Superficial Fibromatoses	Benign	Palmar fascia, plantar fascia, penile region	Infiltrative, may impact function	No specific mutation	Surgery if needed
Deep Fibromatosis (Desmoid Tumor)	Locally aggressive	Abdominal wall, mesentery, limbs	Doesn't metastasize but recurs, infiltrative	CTNNB1 (β-catenin), APC (FAP syndrome)	Surgery, recurrence common
Rhabdomyoma	Benign	Associated with tuberous sclerosis	Rare	No specific mutation	None required
Rhabdomyosarcoma	Malignant	Children, skeletal muscle	Three types: embryonal, alveolar, pleomorphic	Specific mutations (not specified)	Surgery, CT, RT
Leiomyoma	Benign	Uterus (fibroids), skin, soft tissue	Well-circumscribed, hormonally responsive	Some cases: Fumarate hydratase (1q42.3)	Surgery if symptomatic
Leiomyosarcoma	Malignant	Extremities, deep soft tissue, retroperitoneum, great vessels	Hemorrhage, necrosis, high mitotic rate	Complex genotypes	Surgery, CT
Synovial Sarcoma	Malignant	Deep soft tissues, extremities	Monophasic (spindle cells) or biphasic (spindle + glands)	t(X;18)(p11;q11) SS18 fusion gene	Surgery + CT
Undifferentiated Pleomorphic Sarcoma (UPS)	Malignant	Deep soft tissue, extremities	Highly pleomorphic, aggressive, formerly MFH	Complex genetic abnormalities	Surgery, CT, poor prognosis

Tumor Type	Correlated Mutation
Tenosynovial Giant Cell Tumor	t(1;2)(p13q;37) (Type VI collagen α-3)
Liposarcoma (Well-Differentiated)	MDM2 gene (chr 12)
Liposarcoma (Myxoid Type)	t(12;16)
Nodular Fasciitis	t(17;22) MYH9-USP6 fusion gene
Deep Fibromatosis (Desmoid Tumor)	CTNNB1 (β-catenin) or APC gene (FAP syndrome)
Leiomyoma (Subset Cases)	Fumarate hydratase (1q42.3)
Synovial Sarcoma	t(X;18)(p11;q11) SS18 fusion gene
Soft Tissue Sarcomas (Some Cases)	NF1, Gardner syndrome, Li-Fraumeni syndrome, Osler-Weber-Rendu syndrome
Undifferentiated Pleomorphic Sarcoma (UPS)	Complex genetic abnormalities