Table 1. Differential diagnostic characteristics

Features	Ewing's sarcoma/PNET	Embryonic Rhabdomyosarcoma	Lymphoblastic Lymphoma	Small Cell Desmoplastic Tumor	Mesenchymal Chondrosarcoma	Neuroblastoma
Location	Femur, tibia, humerus	Soft tissues, orbit, nasopharynx, oral cavity	Distal femur	Intra-abdominal	Craniofacial (mandible)	Retroperitoneal (Suprarenal marrow. Zuckerkandl organ)
Age	Under 20	Under 15 years. Half under 5 years	Over 30 years	Young patients	20-30 years	18-21 months
Sex	M: F: 1.4:1	M: F: 1.5:1	Same	Higher in men	Same	Higher in men
Clinical	Pain/mass. Constitutional Symptoms	Infiltrating mass	Soft tissue mass	Intra-abdominal mass	Pain and edema	Mass, fever, anemia, diarrhea, increased urinary catecholamines
Rx	Onion bulb-like image	Radiodense mass with poorly defined edges	Soft tissue mass and bone rarefaction	Solid intra-abdominal mass	Lithic and sclerotic image	Mass with calcification
Macroscopy	Dark grey	Non-circumscribed fleshy mass	Fishmeal mass	Grey mass and satellite nodules	Firm to soft mass	Yellow nodular or multilobular mass
Microscopy	Round, small, blue cell	Primitive cell	Multilobed, indented cell (Chicken cell lymphoma)	Small cell nests separated by desmoplasia	Round, small, blue cell. Cartilage and hemangiopericitoide vessels	Small round cell nests (Homer-Wright rosettes) and fibrillary matrix
Immunohistochemistry	CD99, FLI1, CK	MyoD1, Myogenin	CD45, TDT, CD43, CD79A	WT1, CK, NSE, Desmin	CD99, SOX9, PS100, ERG, FL1 (-)	NB84, NSE, Chromogranin, Synaptophysin, CD56
Molecular pathology	EWSR1-ETS (Fusion)	Chromosomal gains (2, 8, 11, 12, 13, 20)	EWSR1 T-cell receptor gene	EWSR1-WT1 Fusion	HEY1-NCOA2 fusion	Amplified MYCN
Treatment	Multimodal	Surgical, multimodal, and radiation therapy	Chemotherapy and radiation therapy	Surgical and Multimodal	Surgical	Surgical and Multimodal
Prognosis	Survival 65% to 5 years	Survival 92% to 5 years	Survival 95% to 5 years	Poor survival	Very aggressive	Depends on the degree of differentiation

Source: by the authors