

**Supplementary Table S1** Imaging recommendations for pediatric renal tumors

Timing of Imaging	Imaging modality	Treatment
At baseline	1. MRI abdomen* + chest CT OR 2. CECT chest + abdomen+ pelvis**	<ul style="list-style-type: none"> <li>• Upfront surgery if feasible (based on customized approach)</li> <li>- Chemotherapy: based on histology Wilms tumor: <ul style="list-style-type: none"> <li>- Localized tumor: 2 drug × 4 weeks</li> <li>- Metastatic: 3 drug × 6 weeks</li> <li>- Bilateral Wilms tumor: 3 drug × 6 weeks</li> </ul> </li> <li>• Followed by response assessment</li> </ul>
Post neoadjuvant chemotherapy:	1 MRI abdomen* OR 2. CECT abdomen** CT chest/pelvis scan if metastatic at baseline imaging or progression at primary site	Surgery
For sarcomas: - Ewing's sarcoma - Synovial sarcoma	PET-CT (alone) or bone scan in additional to CECT of chest + abdomen + pelvis in case of Ewing's sarcoma and CECT chest + abdomen + pelvis in cases of synovial sarcoma.	<ul style="list-style-type: none"> <li>• Chemotherapy as per institutional preference</li> <li>• Neoadjuvant chemotherapy 3 to 4 cycles followed by response assessment, surgery and adjuvant chemotherapy</li> <li>• Radiotherapy</li> </ul>

\*MRI abdomen/pelvis, general MRI abdomen/pelvis protocol (► **Table 1**).

\*\* CECT scan for abdomen/pelvis imaging, protocol (► **Table 2**).

**Supplementary Table S2** Follow-up recommendations for Wilm's tumour

Follow-up	Imaging modality	Frequency and duration after therapy completion
a. Treated Wilm's b. Bilateral Wilm's/partial nephrectomy	a. USG abdomen and chest radiograph b. USG abdomen and chest radiograph	a. 3 monthly for 2 years 6 monthly for the 3rd year Yearly henceforth for 4 <sup>th</sup> and 5 <sup>th</sup> year b. Continue yearly follow up to 10 years
Patients with syndromes treated for Wilm's tumor and patients of nephrogenic rests	USG abdomen	3 monthly up to 5 years (up to 8 years of age for kids with Beckwith–Wiedemann syndrome)

**Supplementary Table S3** Imaging recommendations for pediatric extra-cranial germ cell tumors

Timing of scan	Imaging modality	Treatment
Baseline scan	- USG for scrotum - MRI* for local site and plain CT thorax (CECT** for local site if MRI not available)	- Upfront surgery (if feasible) If stage I, only close observation with tumor markers ± imaging All other stages, chemotherapy based on risk stratification or - Neoadjuvant chemotherapy
Post neoadjuvant chemotherapy	- Local site imaging re-evaluation (MRI/CT) and - Plain CT chest if metastasis at baseline	- Surgery + address metastasis and completion of chemotherapy
Follow-up	3 monthly tumor markers for 1 year and 4–6 monthly tumor markers for the next 2 years (can be followed up with USG local site and chest X-ray if initial tumor markers were normal)	

\*MRI for abdomen/pelvis, general MRI abdomen/pelvis protocol (► **Table 1**).

\*\*CECT scan for abdomen/pelvis imaging, follow the single-contrast phase protocol (► **Table 2**).

**Supplementary Table S4** Imaging recommendations for neuroblastoma (adapted from ICMR guidelines)

Imaging modality	Timing of imaging	Treatment
At baseline (*, ** and ***)	MIBG scan* and whole body FDG PET-CT/bone scan*** and MRI (essential for paraspinal tumors and preferred for other sites) or CECT of local part*(not needed if baseline FDG PETCT is performed)	Upfront surgery if resectable (low risk and intermediate risk) or Neoadjuvant chemotherapy (unresectable intermediate risk and high risk)
Post neoadjuvant chemotherapy: a. For response evaluation b. For primary site evaluation for surgery	a. MIBG scan/whole body FDG PET-CT b. CECT/MRI	a. Surgery, followed by adjuvant chemotherapy (intermediate risk) b. Surgery followed by autologous stem cell transplant and radiotherapy to primary in high-risk cases, and differentiation therapy ± immunotherapy

Abbreviations: CECT, contrast-enhanced CT scan; FDG PET-CT, fluoro-deoxy glucose PET-CT scan; MIBG, metaiodobenzylguanidine scan.

\*Essential – imaging suggested in the table at baseline is essential along with Biopsy of primary tumor, MYCN status and B/L bone marrow biopsy.

\*\*Optimal – urinary VMA, Segmental chromosomal anomalies. \*\*\*Optional – Bone scan.

**Supplementary Table S5** Image defined risk factors for neuroblastoma

Anatomic site	Description
Multiple body compartments	Ipsilateral tumor extension within two body compartments, e.g., neck and chest, chest and abdomen, abdomen, and pelvis
Neck	Tumor encasing carotid artery, vertebral artery and or internal jugular vein Tumor compressing the trachea Tumor extending to skull base
Cervico-thoracic junction	Tumor encasing the brachial plexus roots Tumor encasing the subclavian vessels, vertebral artery and/or carotid artery Tumor compressing Trachea
Thorax	Tumor encasing aorta and/or its major branches Tumor compressing trachea and/or its principle bronchi Tumor in lower mediastinal level infiltrating the costovertebral junction at T9-T 12 vertebra (risk of injury to anterior spinal artery)
Thoraco-abdominal	Tumor encasing aorta and/or inferior vena cava
Abdomen and pelvis	Tumor infiltrating porta hepatis and or Hepatoduodenal ligament Tumor encasing superior mesenteric artery branches at root of mesentery Tumor encasing origin or celiac artery and/or origin of superior mesenteric artery Tumor invading one or both renal pedicles Tumor encasing aorta and/or inferior vena cava Tumor encasing iliac vessels Pelvic Tumor crossing sciatic notch
Intraspinal extension	At any location where, more than one-third of the spinal canal involved on Axial images, abnormal signal intensity noted and loss of perimedullary leptomeningeal space
Infiltration of adjacent organ or structure	Pericardium, diaphragm, kidneys, liver, hepatoduodenal block, and mesentery

**Supplementary Table S6** INRGSS staging system for neuroblastoma

Stage	Description
L1	Localized tumor, confined to one body compartment and not infiltrating/involving the vital structures as defined by the list of IDRF's
L2	Loco regional tumor, having one or more IDRFs
M	Distant Metastatic disease involvement (except MS)
MS	Metastatic disease in children younger than 547 days and metastases confined to skin, liver, and/or marrow (< 10% of total nucleated cells on smear or biopsy)

**Supplementary Table S7** Imaging recommendations for pediatric rhabdomyosarcoma

	Induction therapy Cycles 1–9			Maintenance therapy HR: 6 or 12 cycles VHR: 12 or 24 cycles
	Staging	During	End of induction	
Imaging of the tumor site*	After cycles 3, 9 (after 6 in case of distant metastatic disease – very high-risk group) #MRI before and after RT			HR: After cycles 6, 12 VHR: After cycles 6, 12, 18, 24
Chest CT**	If positive after 3 cycles, repeat after cycle 6		If positive at staging, repeat at end of induction treatment	As clinically indicated
FDG PET/CT or PET/MRI***	As per local practice After cycle 3 for HR/VHR patients in FDG PET sub study Recommended to repeat in case of FDG PET-positive lymph nodes or FDG PET-positive distant metastases at diagnosis until negative			

Abbreviations: FDG PET [F-18]2, fluoro-2-deoxyglucose positron emission tomography; HR, high-risk; VHR, very high-risk.

\*MRI is recommended for all anatomical regions. \*\*Follow-up chest CT is suggested only if there is pulmonary metastasis at baseline. \*\*\*FDG PET/CT or PET/MRI is the investigation of choice for mapping loco-regional lymph nodes, usually in combination with MRI. Children with FDG-PET-positive lymph nodes or FDG-PET-positive distant metastases at diagnosis are recommended to have repeat FDG PET scans until negative.

# for localized disease, MRI to be performed before starting and at the completion of radiotherapy.

Note: Adapted from EpSSG/ESPR oncology taskforce/CWS recommendations).<sup>9</sup> The induction therapy in the newer EpSSG trial protocol consists of 9 three weekly cycles of chemotherapy with radiotherapy and/or surgery after cycle 4 (localized disease) or cycle 6 (metastatic disease).