

Table 3: Specific diagnostic strategy in testicular or ovarian sex cord stromal tumors (from Schneider et al, 2012)

Procedure	Specific Questions
Clinical assessment:	
Medical history	Gynaecological and pubertal history? Vaginal bleeding, breast development etc.? Thyroid disease? Inherited syndromes (Mb. Ollier, Peutz-Jeghers etc.)?
Phys. examination	Pubertal status, goitre, abdominal pain, virilisation?
Laboratory assessment:	
- AFP, β -HCG	Malignant germ cell tumor with yolk sac tumor (consider age-related reference values) or choriocarcinoma; Usually, in SCST should be negative. Note: some Sertoli-Leydig cell tumors may show AFP levels up to 1000 μ g/L.
- Inhibin B	Serological marker of hormone secreting sex cord stromal tumors
- estrogen, DHEAS, LH, FSH, testosterone	Endocrinological assessment
- clinical chemistry incl. calcium	Calcium may be elevated in ovarian small cell carcinoma (but also in rare germ cell or sex cord stromal tumors)
- creatinine clearance/ cystatin c	Assessment of renal function (in case of chemotherapy)
Radiographic assessment:	
ultrasound	Tumor size and extension in 3 dimensions, anatomical relation to ovary/testis and fallopian tube/spermatic cord, contralateral gonad, lymph node or liver metastases
Abdominal and pelvic MRI	Tumor size and extension in 3 dimensions, anatomical relation to ovary/testis and fallopian tube/spermatic cord, contralateral gonad, lymph node or liver metastases
Chest X-ray	Lung metastases (extremely unlikely)
Note: metastases beyond the abdomen are exceedingly rare. Therefore, extended radiographic assessment is required in case of clinical symptoms only.	
Histologic assessment:	
H&E	Classification and grading according to WHO
Mitotic rate per 10 HPF	Prognostic assessment (in particular juvenile granulose cell tumors)
Inhibin staining	Positive for sex cord stromal tumors
AFP staining	Mainly for Yolk sac tumor, but may also be positive in retiform

SLCTs
