## ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT 742763: 19 (20) S 1 (

Lab No

0800/20 Reported

29 Jan 2020

**Pathologist** 

DR HALLIN/DR

THWAY

Source

Sex

Sample Referral Received

17 Jan 2020

78

Ward

Other Hospital

Other Hospital

Number

**FULHAM ROAD** 

Clinical

FEMALE Age

Branch

Diagnosis

Operation

Consultant

MIAH, DR A B

SITE

A SOFT TISSUE AND OTHER CONNECTIVE TISSUE (T1X005)

B PELVIS (TY6000)

**DIAGNOSIS** 

NEOPLASM MALIGNANT (M80003)

NEOPLASM MALIGNANT (M80003)

76 YEAR OLD FEMALE. WITH RIGHT PELVIC MASS ?METASTASIS, ?PRIMARY ?SARCOMA. THIS SPECIMEN: CT-GUIDED CORE BIOPSY OF RIGHT OVARIAN MASS FROM JAN 2020, PREVIOUSLY REPORTED BY DR KAZAL/ DR NORTON, AND ALSO SENT FOR REVIEW TO STH; MALIGNANT SPINDLE CELL TUMOUR STRONGLY FAVOURING LEIOMYOSARCOMA

**MACROSCOPY** 

Received from St Thomas' Hospital (GSTT); 1 block 11 s/s ref 843/20.

## HISTOLOGY

Cores of fibrous tissue with cellular tumour, composed of loose fascicles of moderately to markedly atypical cells with ovoid to elongated nuclei and moderate amounts of eosinophilic fibrillary cytoplasm in collagenous stroma, with possible infiltration of skeletal muscle. No ovarian tissue or other normal structures are seen. Occasional osteoclast -like giant cells are intermingled. No morphologic epithelial differentiation or heterologous elements are noted. Mitotic figures do not appear especially prominent, with an index of up to 2-3/10hpf. There is fibrinoid material but no definite necrosis is identified. Some detached adipose tissue with likely fat necrosis and skeletal muscle are also present.

Immunohistochemistry from the referring institution shows the tumour to be strongly multifocally positive for SMA and essentially diffusely positive for CD10, with focal strong desmin. The tumour is negative for MNF116, CK7, CK5/6, p63 and S100 protein. At RMH, the tumour is strongly positive for h-caldesmon in most cells, with strong expression of cyclinD1 in many cells, and negative for myogenin, HMB45, MelanA, CD117, DOG1, SOX10, CD34, STAT6, ER and PgR. The proliferation fraction by MIB1 is moderate to focally relatively high.

This is a malignant spindle cell neoplasm, with immunohistochemical evidence of smooth muscle differentiation, as well as CD10 expression. Although the morphology is not typical, the features would be in keeping with leiomyosarcoma, grade 1-2. The features are essentially not supportive of high- (or low-) grade endometrial stromal sarcoma, but molecular investigations to assess for fusion transcripts of these entities are awaited, with a further report to follow.

Dr Magnus Hallin/Dr Khin Thway

SUPPLEMENTARY REPORT 29.01.20

Further to discussion at the Sarcoma MDT on 24.01.20, the possibility of dedifferentiated liposarcoma was raised on imaging. FISH for MDM2 amplification status has therefore also been requested, with a supplementary report to follow.

Dr Magnus Hallin/Dr Khin Thway