ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT
741422: [redacted] NHS Number: 604 572 4607

Lab No	6843/20	**Reported**	10 Jul 2020	**Pathologist**	DR HALLIN/DR THWAY
Source	Internal Operation	**Sample Received**	9 Jul 2020	**Ward**	CRITICAL CARE UNIT (CHELSEA)
Sex	MALE	**Age**	86	**Branch**	FULHAM ROAD
Clinical Diagnosis		**Operation**	8 Jul 2020	**Consultant**	STRAUSS,MR D C

SITE	DIAGNOSIS
SOFT TISSUE AND OTHER CONNECTIVE TISSUE A (T1X005)	DEDIFFERENTIATED LIPOSARCOMA (Malignant) (M88583)
B THIGH (TY9100)	DEDIFFERENTIATED LIPOSARCOMA (Malignant) (M88583)

86 YEAR OLD MALE. CORE BIOPSY IN FEB 2020 OF RIGHT MEDIAL THIGH MASS: SPINDLE CELL SARCOMA (GRADE 2) WITH CELLS SUGGESTIVE OF LIPOBLASTS, AND SHOWING MDM2 AMPLIFICATION WITH FISH (2506/20)(IN KEEPING WITH DEDIFFERENTIATED LIPOSARCOMA WITH HOMOLOGOUS LIPOBLASTIC DIFFERENTIATION). THIS SPECIMEN: EXCISION OF SARCOMA OF THE RIGHT THIGH (PRE-OPERATIVE RADIOTHERAPY).

MACROSCOPY
Sarcoma right thigh

: a large unorientated ovoid specimen measuring 284x187x146mm. On one surface area there is an unremarkable ellipse of skin measuring 130x42mm. The deep surface is covered in fragments of skeletal muscle and fatty tissue. The surgical resection margins have been inked black. specimen has been serially sliced revealing a large circumscribed heterogeneous cream/necrotic tumor mass occupying the entire specimen. The tumor abuts all surgical resection margins however it appears to be entirely excised macroscopically. Necrosis is approximately 60%. Blocks 1%2) Cruciates of ends. 3) Representative section of skin to tumor. 4-9) Representative sections of tumor. Tissue and tumor remain.

HISTOLOGY

Sections show fibroadipose tissue and skeletal muscle enclosing extensively viable, infiltrative cellular tumor, focally seen to invade skeletal muscle, with features similar to those previously described (2506/20), and composed of loose fascicles of moderately to markedly atypical spindle cells with ovoid or elongated nuclei and moderate amounts of fibrillary cytoplasm, in variably collagenous stroma. Moderate numbers of variably sized and pleomorphic lipoblasts are interspersed in areas (eg slide 1). There are some areas of hyalinization, with focal mineralization/ calcification (eg slide 2), and very focally (slide 9) there is a small area of largely necrotic bone, which is of moderate cellularity, with the occasional viable cells present in the lacunae showing no discernible atypia; this appears to represent metaplastic-type rather than neoplastic bone, and no definite tumoral osteoid is noted. The mitotic index is up to 3/10hpf. There is focal prominent tumor-type necrosis (described macroscopically as constituting approximately 60% of the tumor volume). No significant pathology is noted in the overlying squamous epithelium.

The features are consistent with viable spindle cell sarcoma (in keeping with dedifferentiated liposarcoma with homologous lipoblastic differentiation), grade 3. There appears to be minimal response to the pre-operative radiotherapy; there is only scattered focal hemosiderin deposition, but prominent features of treatment change such as marked fibrosis/ hyalinization, and fibrinoid and myxoid foci, are absent. Although the extensive necrosis is noted, this appears to represent coagulative-type tumor necrosis, and extensive necrosis was noted in the previous biopsy. Viable tumor is estimated to account for approximately at least 25-30% of the tumor area, with most of the rest of the tumor area comprising necrosis. Viable tumor is focally approximately 1.8mm from one longitudinal margin and at least 6.5mm from the other longitudinal margin. Viable tumor is focally approximately 2mm from the nearest peripheral/
circumferential margin.

Dr Magnus Hallin/Dr Khin Thway