## ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT 746569: 8 - NHS Number: 638 703 8561

Lab No

7057/20

Reported

17 Jul 2020

Pathologist DR HALLIN/DR THWAY

Source Sex

Internal Operation Sample Received 15 Jul 2020 **FEMALE** 

Ward Branch WILSON

**FULHAM ROAD** 

Clinical Diagnosis

Age Operation 45 14 Jul 2020

Consultant STRAUSS,MR D C

SITE

SOFT TISSUE AND OTHER CONNECTIVE TISSUE

A (T1X005)

**DIAGNOSIS** 

MYXOID LIPOSARCOMA (Malignant)

(M88523)

MYXOID LIPOSARCOMA (Malignant)

(M88523)

B GLUTEUS MAXIMUS MUSCLE (T14430)

45 YEAR OLD FEMALE. CORE BIOPSY FROM RIGHT BUTTOCK MASS IN APRIL 2020: VARIABLY CELLULAR, FOCALLY MILDLY ATYPICAL TUMOR WITH FOCAL NECROSIS AND UP TO 4 MITOSES THREE HPF, ? MYXOID LIPOSARCOMA WITH FOCAL HIGH-GRADE (ROUND CELL) CHANGE, AND WHICH SHOWED FUS-DDIT3 FUSION TRANSCRIPTS WITH RT-PCR, CONSISTENT WITH MYXOID LIPOSARCOMA (4145/20). THIS SPECIMEN: POST-RADIOTHERAPY EXCISION OF RIGHT GLUTEAL TUMOR (CLINICALLY, THE PATIENT HAD AN EXTREMELY GOOD RESPONSE, AND THE SARCOMA HAS DECREASED IN SIZE SIGNIFICANTLY).

## **MACROSCOPY**

Sarcoma, right buttock: an unorientated ovoid specimen comprising of an ellipse of skin with subcutaneous fatty tissue and underlying deep firm mass which is coated in skeletal muscle. The specimen measures 162x93x134mm. The ellipse of skin is unremarkable and measures 145x17mm. The subcutaneous tissue to a depth of 4 or 5mm. The firm circumscribed tumor mass measures 143x98x97mm. The outer surface is covered in fragments of skeletal muscle and fibrofatty tissue. The specimen has been inked subcutaneous peripheral margins = red/orange and deep resection margin (muscle) = black. The specimen has been serially sliced revealing a well circumscribed heterogeneous irregular tumor mass occupying the entire deep aspect. Tumor measures 140x95x97mm. Tumor abuts surgical resection margin (black). Necrosis is approximately 15%. No other macroscopic pathology is identified. Blocks 1&2) Cruciates of ends. 3-10) Representative sections of tumor. Tissue and tumor remain.

## HISTOLOGY

Sections show skin and subcutis, with skeletal muscle and fibroadipose tissue enclosing an essentially sparsely cellular tumor nodule. Much of this comprises sparsely to sometimes acellular sheets of hyalinized material. Focally there is a prominent myxoid component with apparently viable interspersed, mildly atypical cells, sometimes bi- or multinucleate, with fibrillary cytoplasm, with occasional mildly atypical lipoblasts (eg slide 6), as well as some clusters and sheets of variably mature-appearing adipocytes (eg slide 8), much of the latter in keeping with maturation post-treatment. There are 'pulmonary edema-like' foci, with prominent vascularity in the myxoid component, of medium-sized to large thin-walled curvilinear vessels. Focal hemosiderin deposition is present. Mitotic figures are not prominent, with a mitotic index of <1/10hpf. There is fibrinoid material, with hemorrhage and focal sheets of ghost cells with features in keeping with tumor necrosis (macroscopically described as approximately 15%). No significant pathology is noted in the overlying squamous epithelium.

The features are consistent with viable myxoid liposarcoma, with prominent post-treatment changes. No definite high-grade ('round cell') features are seen. Viable tumor is estimated to account for approximately 30-40% of the tumor area. Non-viable tumor is focally approximately 1mm from the inked peripheral/circumferential margin. Nonviable tumor is approximately 7mm from the nearest longitudinal margin. Viable tumor appears clear of these margins in the material examined.

Dr Magnus Hallin/Dr Khin Thway