ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT 728569: MCGILL.MR ERNEST - NHS Number: 402 042 5701

3459/20 18 Mar 2020 Pathologist DR THWAY Reported Lab No Internal Operation Sample Received 12 Mar 2020 Ward Source 93 Branch **FULHAM ROAD** MALE Sex Age Consultant STRAUSS,MR D C Operation 11 Mar 2020 Clinical Diagnosis

SITE DIAGNOSIS

A SOFT TISSUE AND OTHER CONNECTIVE TISSUE (T1X005)
B SCALP (TY0160)

SARCOMA (Malignant) (M88003) SARCOMA (Malignant) (M88003)

93 YEAR OLD MALE, WHO PRESENTS WITH HISTORY OF RECURRENT PLEOMORPHIC DERMAL SARCOMA IN VERTEX OF RIGHT OCCIPITAL SCALP, INITIALLY EXCISED ELSEWHERE IN APRIL 2019, WITH CLEAR MARGINS. THE SARCOMA THEN RECURRED IN THE RIGHT MASTOID, AND INCISIONAL BIOPSY LAST MONTH (FEB 2020) (NOT SEEN HERE BUT REPORTED BY DR MEHTA AT LEWISHAM): FEATURES CONSISTENT WITH RECURRENT PLEOMORPHIC DERMAL SARCOMA. SINCE THEN, THERE HAS BEEN FURTHER ENLARGEMENT WITH BLEEDING. PMH INCLUDES CARDIAC STENT INSERTED 15 YEARS AGO, TYPE 2 DIABETES AND BLADDER CANCER. THIS SPECIMEN: EXCISION OF ULCERATING, BLEEDING SCALP (RIGHT POST-AURICULAR) SARCOMA. NO PREVIOUS RMH HISTOLOGY.

MACROSCOPY

Sarcoma scalp:

a disc of skin measuring 39x40mm with subcutaneous tissue to a depth of 15mm. Located centrally within the skin is a crusting lesion measuring 26mm in maximum diameter and lying 6mm from the closest peripheral margin. The surgical resection margins have been inked peripheral red, deep black. Specimen is serially sliced revealing an irregular cream necrotic heterogeneous tumor nodule measuring 23x23x14mm. The tumor nodule abuts the deep margin and lies 3mm from closest peripheral margin. Necrosis approximately 25%. Blocks 1&2) Cruciates of ends. 3-6) Representative sections of tumor. Tissue and tumor remain.

HISTOLOGY

Sections show skin and subcutis, with skeletal muscle deeply. The dermis and subcutis contain extensively ulcerating cellular tumor, composed of sheets of markedly atypical ovoid or rounded cells with ovoid vesicular nuclei, frequently prominent nucleoli and moderate amounts of amphophilic cytoplasm. Bizarre and multinucleated tumor cells are prominent. The mitotic index exceeds 20/10hpf with numerous atypical forms; some likely necrosis is seen away from the ulceration. The tumor focally has an exophytic component and is ill defined, with nodules extending relatively deeply into the deeper dermis and subcutis. Skeletal muscle invasion is present in areas. The dermis shows moderate solar elastosis and edema, and there is focal moderate to relatively marked mixed chronic inflammatory infiltrate, including plasma cells and eosinophils. No dysplasia, junctional activity or other significant pathology is noted within the overlying squamous epithelium. The referring report for the previous incisional biopsy from February 2020 describes the tumor to be strongly positive for CD10, with weak CD99, and to be negative for MNF116 and SOX10.

This is a high-grade malignant pleomorphic neoplasm consistent with pleomorphic dermal sarcoma, grade 3. The tumor extends to one longitudinal resection margin and focally extends to the deep margin (slide 6); in other areas, the tumor is focally approximately <0.5mm-1mm from the deep margin, being separated from it by fibroadipose tissue and skeletal muscle. The tumor is approximately 5mm from the nearest lateral/ peripheral margin.

Dr Khin Thway