ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT 3 - NHS Number: 468 080 5676

DR HALLIN/DR THWAY 6276/20 Reported 30 Jun 2020 **Pathologist** Lab No Sample 23 Jun 2020 Ward Source Referral Received Other Hospital Number Other Hospital **FULHAM ROAD** 75 Branch MALE Age Sex Clinical STRAUSS, MR D C Consultant Operation **Diagnosis**

SITE

DIAGNOSIS

SOFT TISSUE AND OTHER CONNECTIVE

NEOPLASM MALIGNANT / FIBROUS HISTIOCYTOMA MALIGNANT (M80003 / M88303)

A TISSUE (T1X005)

NEOPLASM MALIGNANT / FIBROUS HISTIOCYTOMA

MALIGNANT (M80003 / M88303) B CHEEK (TY0300)

NEOPLASM MALIGNANT / FIBROUS HISTIOCYTOMA

C CHEEK (TY0300)

MALIGNANT (M80003 / M88303)

75 YEAR-OLD MALE. THIS SPECIMEN: REVIEW OF OUTSIDE HISTOLOGY OF EXCISION OF ?SCC LEFT CHEEK, PREVIOUSLY REPORTED BY DR BIRCH IN JUNE 2020: CONSISTENT WITH UNDIFFERENTIATED PLEOMORPHIC SARCOMA.

MACROSCOPY

Received from East Surrey Hospital; 11 blocks ref 8149/20.

Sections show skin and subcutis, with the dermis and subcutis containing extensively ulcerating cellular tumor, composed of sheets or loose fascicles of markedly atypical spindle, ovoid and polygonal cells with vesicular nuclei and clumped chromatin, and moderate amounts of eosinophilic cytoplasm, and including tumor giant cells and large, markedly bizarre forms. There is quite a prominent intermingled chronic inflammatory infiltrate, comprising predominantly small lymphocytes, with smaller numbers of plasma cells and eosinophils (eg slide 6). The mitotic index exceeds 20/10hpf, with numerous atypical forms. No definite tumor necrosis is seen. No morphologic epithelial differentiation is identified. The surrounding dermis shows areas of prominent solar elastosis (eg slide 3). The overlying squamous epithelium shows focal marked atrophy (eg slide 7), with some quite large mitotic figures extending to at least the mid-layer of this very thinned epithelium, along with apparent variable atypia of cells; this is in keeping with focal low-grade dysplasia (slide 7). No junctional activity is seen and no other significant pathology is identified.

Immunohistochemistry from the referring institution is reported to show the tumor to be positive for CD10, focally positive for SMA, h- caldesmon and S100 protein, while negative for CD34, Melan-A, SOX10, HMB45, desmin and AE1/AE3. At RMH, the tumor shows strong multifocal SMA. There is focal strong largely cytoplasmic S100 protein expression, predominantly in the superficial dermis, and largely in likely dendritic cells and some possible histiocytes; conclusive features of staining in tumor are not seen. EMA only shows weak membranous staining in a scanty occasional cell, of uncertain significance. There is only very weak focal non-specific appearing nuclear p63, and this is essentially interpreted as negative. The tumor is negative for SOX10, desmin, myogenin, CD34, STAT6, MUC4, AE1/AE3, MNF-116, CK5/6, CK903 and p40.

This is a high-grade, malignant pleomorphic spindle, ovoid and polygonal cell neoplasm, with features in keeping with

undifferentiated pleomorphic sarcoma, grade 3. The features do not support sarcomatoid carcinoma. The referring report describes the tumor to be 8.3mm from the peripheral edge, and 1.5mm from the deep margin (additional blocks taken from the deep margin confirmed it to be clear) (case also kindly seen by Dr Terlizzo (consultant skin pathologist), who agrees with the findings).

Dr Magnus Hallin/Dr Khin Thway