ROYAL MARSDEN NHS FOUNDATION TRUST - HISTOPATHOLOGY REPORT
H14404: [redacted] - NHS Number: unknown

Lab No	1444/20	**Reported**	2 Jul 2020	**Pathologist**	DR HALLIN/DR THWAY
Source	Second Opinion	**Sample Received**	31 Jan 2020	**Ward**	
Other Hospital				**Other Hospital Number**	327/20
Sex	MALE	**Age**	58	**Branch**	FULHAM ROAD
Clinical Diagnosis		**Operation**		**Consultant**	KT

SITE	DIAGNOSIS
A SOFT TISSUE AND OTHER CONNECTIVE TISSUE (T1X005)	NEOPLASM UNCERTAIN WHETHER BENIGN OR MALIGNANT / MYOFIBROBLASTOMA (Benign) (M80001 / M88250)
B URINARY BLADDER (T74000)	NEOPLASM UNCERTAIN WHETHER BENIGN OR MALIGNANT / MYOFIBROBLASTOMA (Benign) (M80001 / M88250)

59 YEAR OLD MALE, WITH PAST HISTORY OF MULTIPLE SPINDLE CELL LIPOMAS OF LEFT SHOULDER AND RIGHT NECK (PROF CYRIL FISHER SECOND OPINIONS IN 1997 AND 2001, 4275/97 AND 4352/01). THIS SPECIMEN: TURBT, PREVIOUSLY REPORTED BY DR LLOYD AND DR ASAKRA: FEATURES IN KEEPING WITH BENIGN SPINDLE CELL LESION, POSITIVE FOR DESMIN WITH PATCHY CD34 AND DESCRIBED POSITIVITY FOR MYOD1; IN VIEW OF THE MYOD1, RHABDO DIFFERENTIATION WAS POSTULATED AND FURTHER OPINION WAS SOUGHT. CLINICAL DETAILS ON REFERRING REPORT: 'TURBT. TUMOR INTRAMURAL ON MRI. PREVIOUS LEIOMYOMAS RESECTED AT RFH. ?LEIOMYOMA. ? MALIGNANT PATHOLOGY.'

MACROSCOPY
The macroscopic description from the referring hospital was as follows: bladder tumor: multiple tan and brown tissue 2.2g. 1-2) AE.

HISTOLOGY
The features are as previously described by Dr Lloyd and Dr Asakra, and show bladder wall expanded by extensive, relatively cellular tumor, composed of loose fascicles and streams of essentially uniform cells with ovoid or elongated nuclei with even chromatin and fibrillary cytoplasm, in moderately collagenous stroma. The cells are plump, but no definite atypia is seen. There is prominent vascularity, comprising well-formed, rounded, predominantly relatively small to medium-sized thin-walled vessels. Occasional mast cells are interspersed. No definite mitotic figures are seen in 20 hpf, and no tumor necrosis is noted. Small numbers of lymphocytes are also intermingled. No definite atypia is noted in the overlying transitional epithelium. The lesion is seen to focally be close to the smooth muscle bundles of the muscularis propria, but conclusive features of muscle infiltration are not identified.

Immunohistochemistry from the referring institution shows the tumor to be diffusely and strongly positive for desmin. There is strong multifocal expression of CD34, with diffuse expression in defined clusters. MyoD1 shows diffuse weak background staining, without definite crisp nuclear expression, and is interpreted as negative, with no convincing focal expression seen. The tumor is negative for SMA, broad-spectrum cytokeratin, S100 protein and ALK. The proliferation fraction by MIB1 is low. At RMH, the tumor is diffusely and strongly positive for h-caldesmon, although this marker is often aberrantly overexpressed in this laboratory. There is variable (predominantly moderate, with weak and also strong) PgR expression in approximately at least 60% of tumor nuclei. There is diffuse weak CDK4 expression, of uncertain significance. The tumor is negative for p16, myogenin, MyoD1, SOX10, MUC4, STAT6, ERG, CD117 and DOG1.

The features suggest mammary-type myofibroblastoma; no atypical features are noted in this material, and no features of frank sarcoma are seen. Cellular angiofibroma is not supported overall. The h- caldesmon expression is noted, but this might be aberrant. However, the site is unusual for mammary-type myofibroblastoma, and expert opinion will be sought from Prof Cyril Fisher of UHB/ the ROH Birmingham, with a further report to follow.

Report to Dr Asakra

Dr Magnus Hallin/Dr Khin Thway