Abstract 22 Table 1 Clinical characteristics and clinical outcomes

	Nuclear BAP1 IHC positive (n=11)	Nuclear BAP1 IHC negative (n=66)	p-value
Gender (M=male)	M: 100%	M: 91%	0.30
Median age at diagnosis (years)	69.5	66.0	0.94
Histology			0.57
Epithelioid	82%	89%	
Biphasic	18%	9%	
Sarcomatoid	0%	3%	
Median overall survival from diagnosis (months)			
All	21.0	23.3	0.22
Active symptom control (ASC)	24.3	25.0	0.62
ASC+vinorelbine	12.8	22.8	0.11
ASC+mitomycin, vinblastine, cisplatin	15.7	19.4	0.69

S23 EVALUATION OF PHOSPHORYLATED PROTEIN KINASE B (AKT) AND MAMMALIAN TARGET OF RAPAMYCIN (MTOR) EXPRESSION IN MALIGNANT PLEURAL MESOTHELIOMA (MPM) AND THEIR ASSOCIATION WITH PATIENT SURVIVAL-A RETROSPECTIVE COHORT STUDY

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Background Dysregulation of the PI3K/AKT/mTOR pathway has been observed in various cancers and has also been suggested to be involved in mesothelioma. In some cancers, a significant association has been found between the expression of these proteins and patient survival. In this study, we aimed to investigate the expression of phosphorylated AKT/mTOR in our archival MPM tissue samples and evaluate their relationship with patient survival.

Methods Immunohistochemistry was performed on 82 archival MPM tissue samples to examine the expression of phosphorylated AKT/mTOR. Histopathological and clinical data of relevant patients were obtained from Hull Royal Infirmary. Mesothelioma tissues with >25% staining were grouped as positive while tissues with <25% staining were grouped as negative. Colorectal cancer tissues were used as positive and negative controls. Univariate analysis for protein expression and histological subtypes was performed using Kaplan Meier survival curves with log rank analysis. Multivariate Cox regression analysis taking histological subtypes into account was performed, to assess the effect of phosphorylated AKT/mTOR expression on patient survival.

Results Our data set included 44 epithelioid, 24 biphasic and 14 sarcomatoid tissue samples. Of the MPM tissues samples, 63.41% demonstrated positive expression for phosphorylated mTOR protein while 61.73% showed positive phosphorylated AKT expression. We did not observe a significant difference in expression of phosphorylated AKT/mTOR between the histological subtypes of MPM ($p>0.05$). Positive expression of phosphorylated AKT/mTOR proteins was not associated with survival in Kaplan Meier survival curve analysis ($p>0.05$). When histological subtypes were taken into account, multivariate Cox regression analysis demonstrated that neither phosphorylated mTOR nor phosphorylated AKT expression were independent prognostic factors for survival ($p>0.05$).

Conclusion Our data suggest that phosphorylated AKT/mTOR are expressed in a significant proportion of MPM samples. However, no statistically significant association was found between phosphorylated AKT/mTOR/expression and patient prognosis.

REFERENCE

1. Li S, Wang Z, Huang J, Cheng S, Du H, Che G, Peng Y. Clinicopathological and prognostic significance of mTOR and phosphorylated mTOR expression in patients with esophageal squamous cell carcinoma: A systematic review and meta-analysis. *BMC Cancer* 2016;16(1):877.

S24 A PHASE I FEASIBILITY STUDY IN ESTABLISHING THE ROLE OF ULTRASOUND-GUIDED PLEURAL BIOPSIES IN PLEURAL INFECTION (THE AUDIO STUDY)

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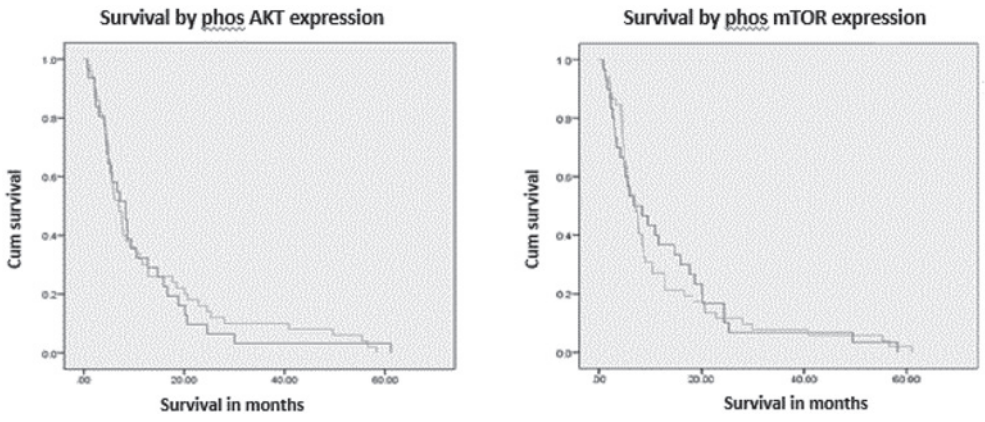

Abstract 23 Figure 1 (A) Survival by phos AKT expression and (B) Survival by phos mTOR expression.