

**P027** SAME-deficient tumor hepatocyte cell line (SAM-D) shows wild type and active p53 together with UV resistance.  
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MAT1A-KO mice spontaneously develop hepatocellular carcinoma (HCC) at 18 month of age. A cell line (SAM-Deficient) was isolated from these tumors. SAM-D cells expressed hepatocyte progenitor and tumor markers that were identified by microarray and confirmed by real time-PCR. Several genes of cell cycle, Wnt signaling pathway and apoptosis were also overexpressed in SAM-D vs primary hepatocytes. We found wt and stable p53, phenomenon observed in 50% of the human HCC, what makes SAM-D cell line a good model for the identification of therapeutical targets. Overexpression of p53 regulatory system and its target-genes were also found in SAM-D cells; characterized by protein increase of pMdm2/Mdm2, NPM, pAKT/AKT, pLKB1/LKB1 and pP38MAPK/P38MAPK, as well as, p21, cyclin D1, BAX, Bcl2 and pBAD/BAD. Therefore, we studied the SAM-D cell-response after UV-irradiation compared to primary hepatocytes. SAM-D cells showed a 16-hour delay in caspase-3 and PARP cleaved, and AKT and Mdm2 dephosphorylation. In addition, AKT phosphorylation was independent of PI3K and a possible regulation of the observed increase in Wisp-1 expression in this AKT activation is currently under study. After UV irradiation, we found a differential localization and response in p53 phosphorylation at Ser 37 and Ser 392 between SAM-D cell line and hepatocytes. Further studies will be carried out to identify the kinases involved in these p53 phosphorylations, as well as their role in the SAM-D cells proliferation.