gutflix
GI learning, personalised

Summary

KLF5 UPREGULATION IS A COMMON EVENT IN CHOLANGIOCARCINOMA, ACTING AS AN ONCOGENE AND CONSTITUTING A BAD PROGNOSTIC FACTOR

Jesper B. Andersen

UEG Week Copenhagen 2023 | Poster

Hepatobiliary

October 15, 2023

KLF5 is upregulated in cholangiocarcinoma across multiple patient cohorts, correlates with poor prognosis, and its inhibition with ML264 blocks tumor growth and enhances chemotherapy sensitivity in preclinical models.

KEY POINTS

- KLF5 expression was upregulated in human CCA tissues from five different patient cohorts compared to normal liver tissue and bile ducts, independent of tumor mutational background
- High KLF5 levels correlated with lymph node invasion, worse overall survival, and served as an important prognostic factor
- Genetic ablation of KLF5 in CCA cells decreased proliferation, colony formation, and migration while promoting cell cycle arrest at G1/S and apoptosis in vitro, with no tumor development observed in xenograft models
- Pharmacological inhibition of KLF5 with ML264 blocked tumor growth in vivo and the combination of ML264 with standard chemotherapy (gemcitabine plus cisplatin) completely halted CCA tumor growth in mice
- Both genetic and pharmacological KLF5 inhibition sensitized CCA cells to chemotherapy-induced apoptosis, with altered expression of chemoresistance-related proteins that significantly correlated with KLF5 levels in human CCA tissues

VIEW THIS CONTENT ON GUTFLIX

https://gutflix.eu/search/d/371a1b48-743c-11ee-aa2f-0242ac140004

AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.