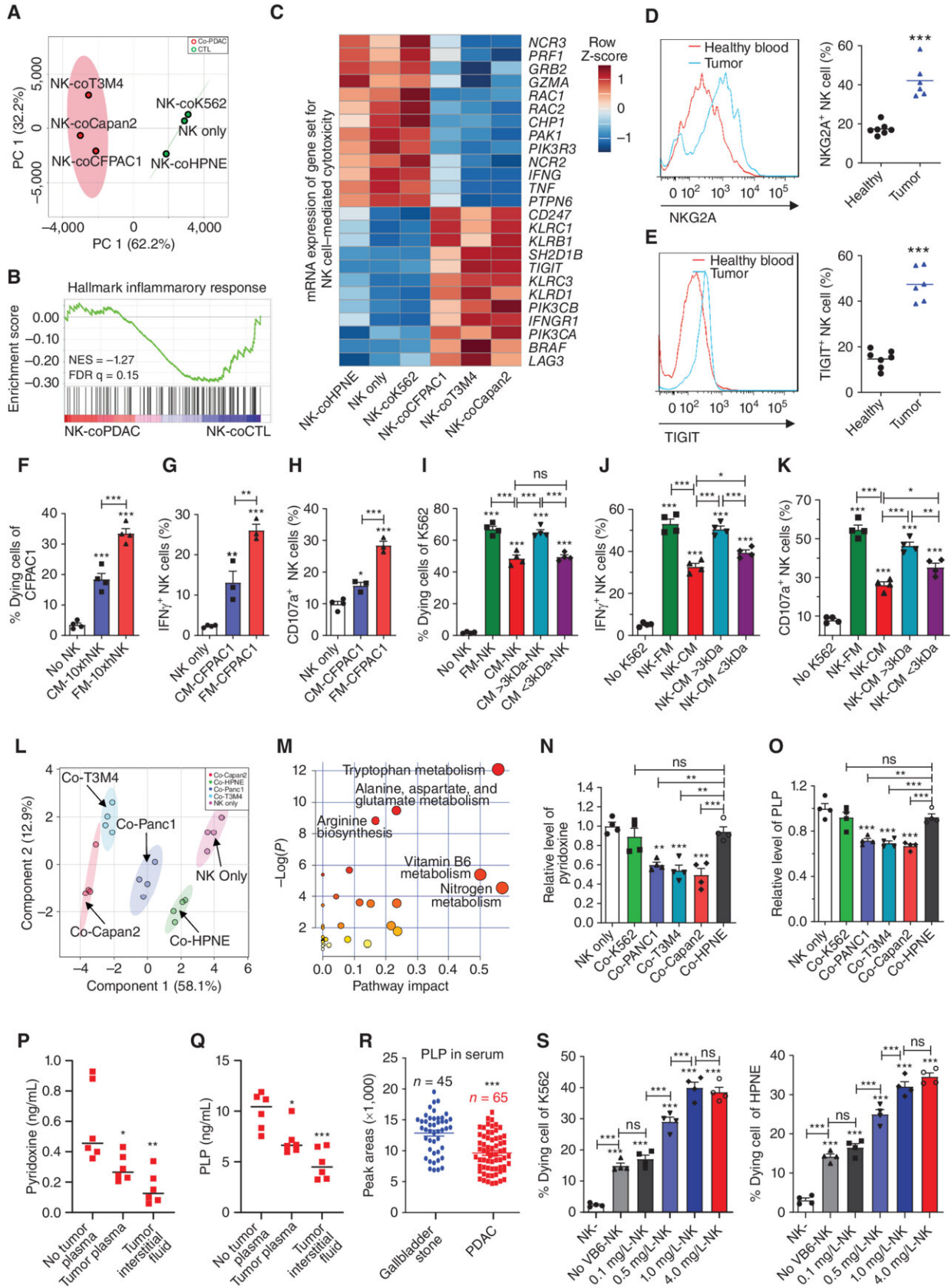


Researcher makes promising discoveries on role of vitamin B6 in pancreatic cancer

February 23 2024



PDAC cells create a vitamin B6-defective microenvironment that inhibits NK-cell activation. A, PCA plot of RNA-seq results of NK cells cocultured with HPNE, T3M4, CFPAC1, and Capan2. B, GSEA of inflammatory response genes based on RNA-seq data from NK cells were cocultured with PDAC cells, HPNE, or K562. C, Heat map of the mRNA expression of genes related to NK-cell cytotoxicity. D and E, Flow cytometry analysis showing the expression of NKG2A and TIGIT in NK (CD3⁻, NK1.1⁺) cells from KPC1245 orthotopic tumors or healthy mice blood. F, Dead cell percentage of CFPAC1 after coculture with NK cells under different conditions. CM, cells were cocultured in a CFPAC1-conditioned medium. FM, cells were cocultured in fresh medium. G and H, Expression of IFN γ and CD107a in NK cells from different conditions in F. I, Dying cell percentage of K562 upon coculturing with NK cells from different conditions. FM-NK, cells were cocultured in a fresh medium. CM-NK, cells were cocultured in the CFPAC1 CM. CM >3 kDa-NK, cells were cocultured in basal NK-cell medium with >3 kDa macromolecular components from CFPAC1 CM. CM

Citation: Researcher makes promising discoveries on role of vitamin B6 in pancreatic cancer (2024, February 23) retrieved 29 April 2024 from <https://medicalxpress.com/news/2024-02-discoveries-role-vitamin-b6-pancreatic.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.