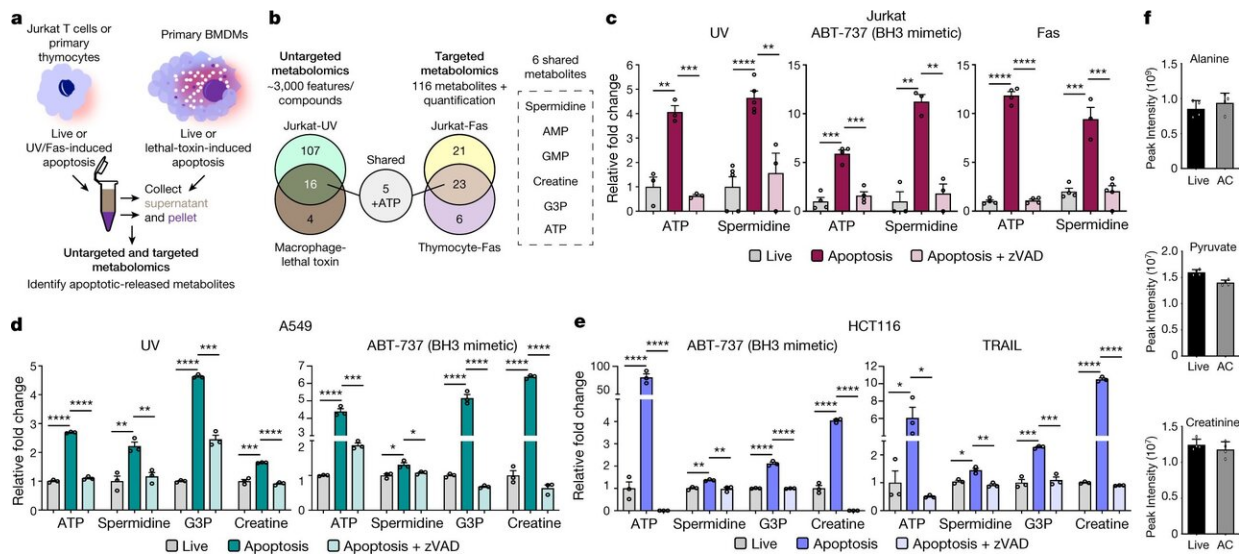


Metabolites released from apoptotic cells act as tissue messengers

March 19 2020, by Bob Yirka



Conserved metabolite secretome from apoptotic cells. a, Schematic for assessing apoptotic metabolite secretomes. b, Venn diagrams illustrating the shared apoptotic metabolites identified across cell types, modalities of apoptosis induction, and the two metabolomic platforms tested, and the list of five shared metabolites plus ATP. G3P, glycerol-3-phosphate. c–e, Metabolite release from Jurkat T cells (n = 3 for ATP–UV, spermidine–UV + zVAD, spermidine–ABT, and spermidine–Fas; n = 4 for ATP–ABT, ATP–Fas and spermidine–Fas–live; n = 5 for spermidine–UV–live and spermidine–Fas + zVAD) (c), A549 lung epithelial cells (n = 3) (d), and HCT-116 colonic epithelial cells (n = 3) (e) across different apoptotic stimuli, with or without inhibition of caspase using zVAD. f, Several abundant metabolites such as alanine (top), pyruvate (middle) and creatinine (bottom) were not released in the Jurkat T cell supernatants (n = 4). AC, apoptotic cell. *P

Citation: Metabolites released from apoptotic cells act as tissue messengers (2020, March 19)
retrieved 27 April 2024 from

<https://medicalxpress.com/news/2020-03-metabolites-apoptotic-cells-tissue-messengers.html>

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