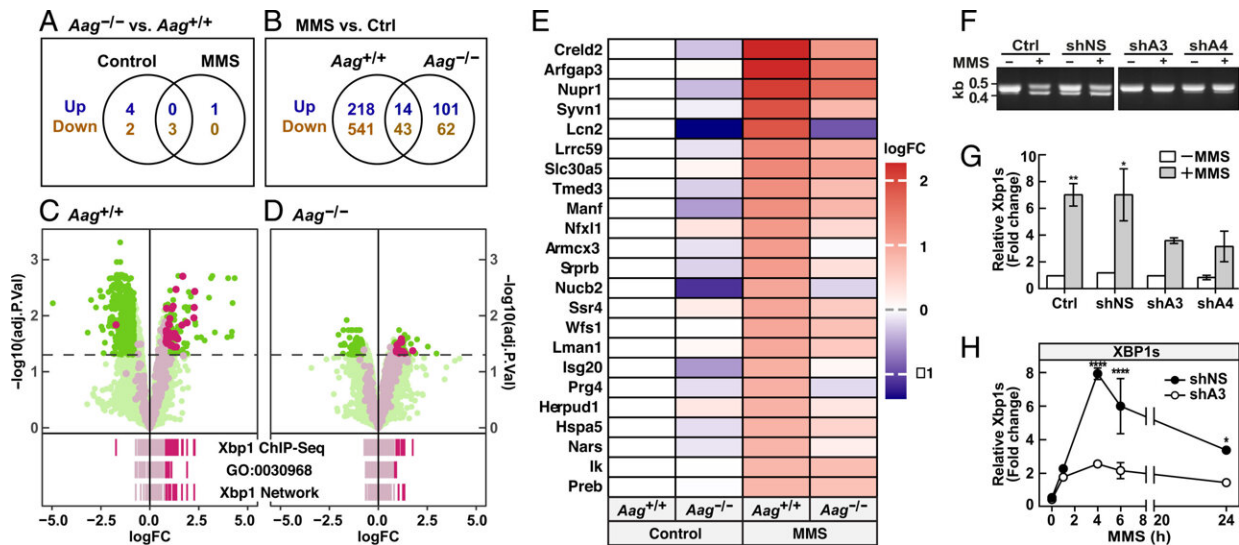


Human cells' emergency response could lead to better cancer treatment

April 25 2022



Aag modifies the transcriptional response to alkylation and is required for XBP1 splicing induced by alkylation. Wild-type and *Aag*-deficient mice ($n = 3$) were injected with MMS or solvent and euthanized 6 h later. Liver RNA was analyzed using oligonucleotide microarrays. (A and B) Venn diagrams indicate the number of differentially regulated probe sets (\log_2 fold change [FC] of ≥ 1.75 ; FDR-adjusted $P \leq 0.05$). Detailed gene expression data are given in Dataset 1. (C and D) Negative \log_{10} adjusted P values (adj.P.Vals) are plotted against \log_2 (FC). Dashed line, negative \log_{10} (0.05). Xbp1 targets according to mouse liver ChIP-seq data (29) are highlighted in gray or in magenta where $|\log_2$ (FC)| is ≥ 1.75 and p-FDR is ≤ 0.05 . Rug plots below indicate the \log_2 (FC) of genes annotated as Xbp1 targets (Xbp1 ChpSq), ER stress response (GO:0030968), or Xbp1 transcriptional correlation network (Xbp1 Netwrk); where $|\log_2$ (FC)| of

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