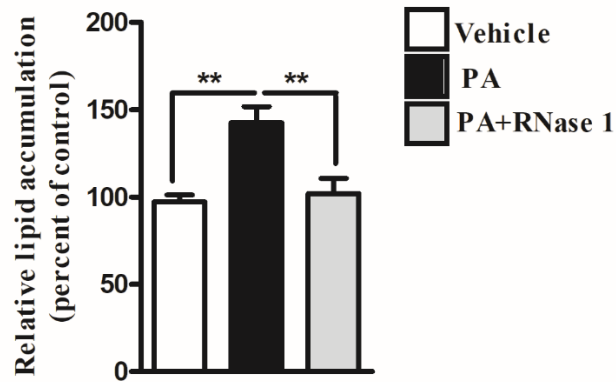
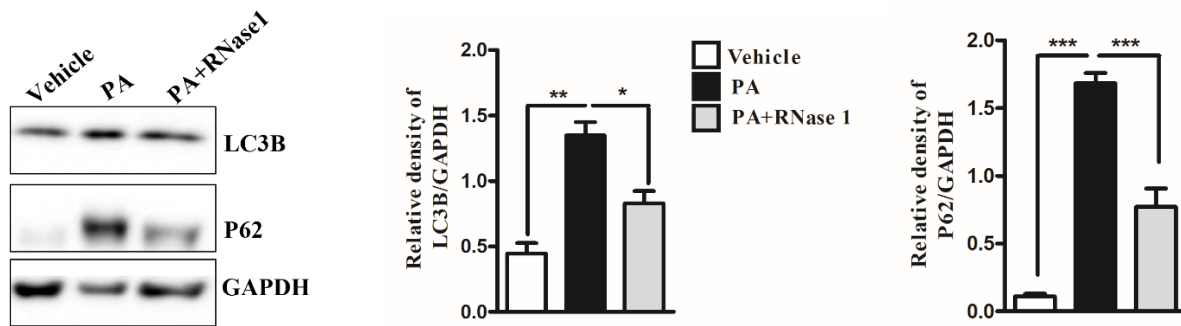


### Supplementary Figures



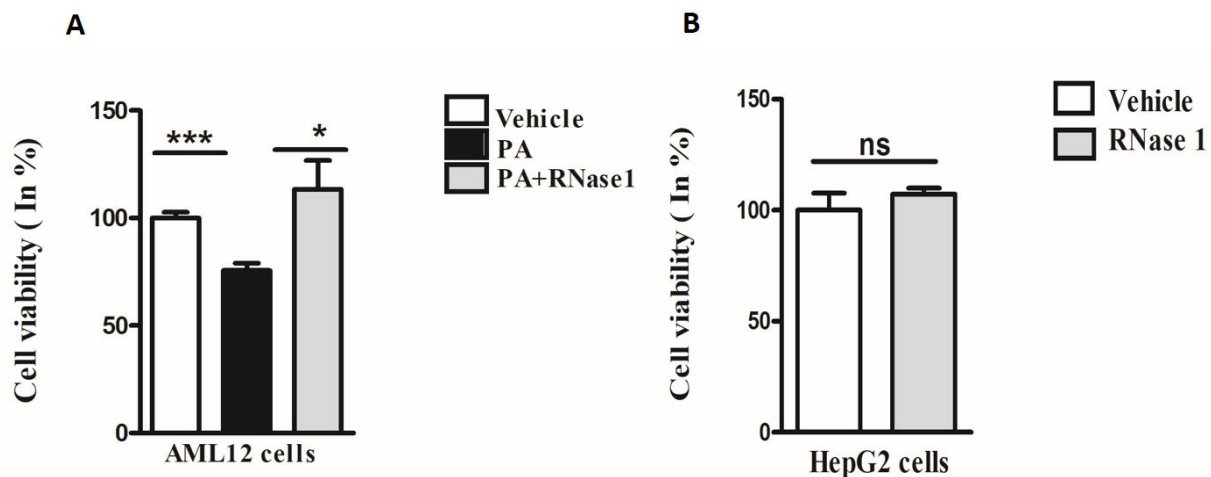
#### **Supplementary Figure S1. eRNA release causes lipid accumulation in hepatocytes.**

Oil Red O staining showing % lipid accumulation in hepatocytes in different experimental groups (Vehicle, PA, PA+RNase 1). Values are mean  $\pm$  SEM,  $n=5$ ,  $**p < 0.01$ , PA is compared to Vehicle and PA +RNase 1.

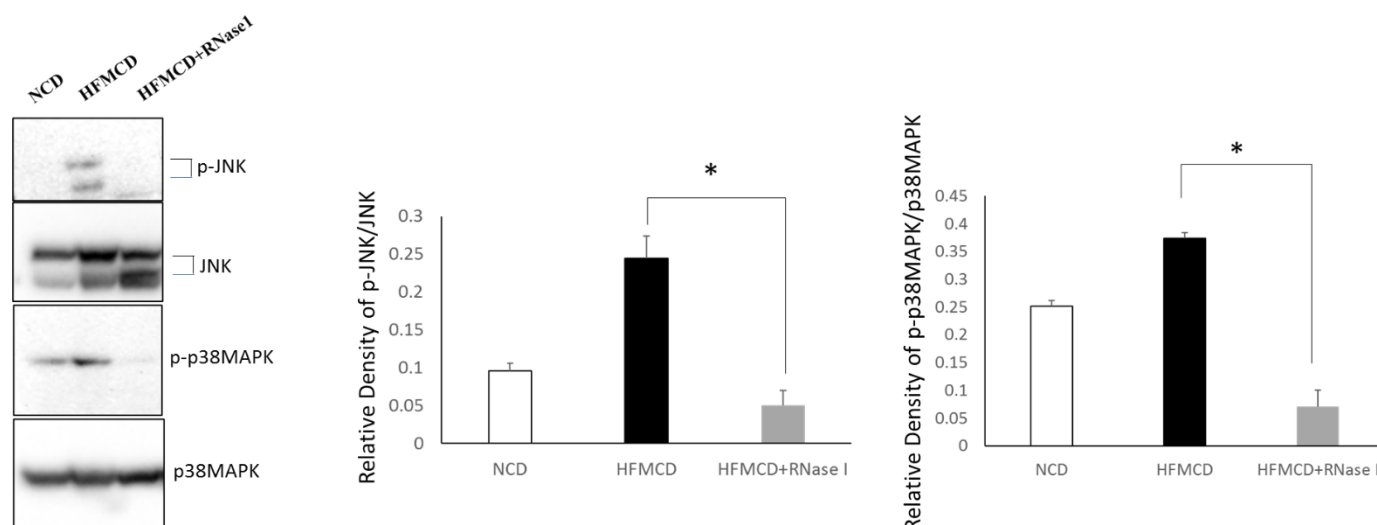


#### **Supplementary Figure S2. RNase1 mitigates lipotoxicity induced autophagy block.**

Representative immunoblots and densitometric analysis showing protein levels of LC3B and p62 in different experimental groups. Values are mean  $\pm$  SEM;  $***p < 0.001$ ,  $n=5$ ,  $**p < 0.01$ , compares Vehicle to PA and  $*p < 0.05$  compares PA to PA+ RNase 1.

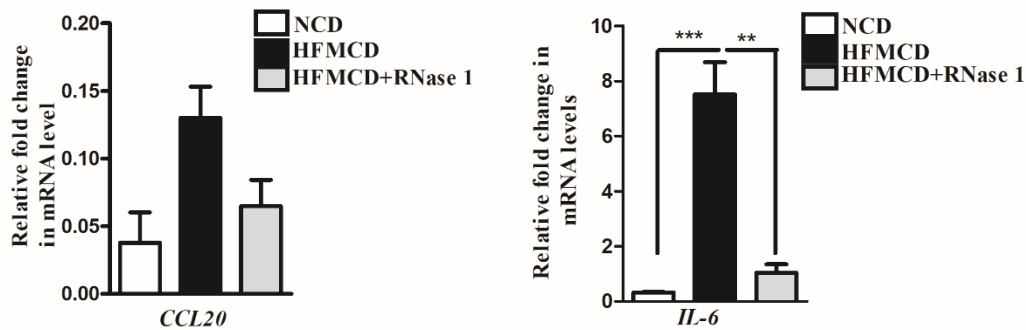


**Supplementary Figure S3. Effect of RNase 1 on hepatic cell viability (A)** % Cell viability shown through MTT assay among Vehicle, PA and PA+RNase1 treated AML12 cells. Data presented as mean  $\pm$  SEM, n=5, \*\*\*p < 0.001 compares VC to PA and \*p < 0.05 compares PA to PA+ RNase 1. **(B)** % Cell viability shown through MTT assay among Vehicle and RNase1 alone treated HepG2 cells. Data presented as mean  $\pm$  SEM, n=5, ns indicates non-significant change between the two groups.



#### Supplementary Figure S4. Effect of RNase 1 on NASH induced stress in mouse liver

Representative immunoblots and densitometric analysis showing protein levels of p-JNK and p-p38MAPK in different experimental groups. Data presented as mean  $\pm$  SEM,  $n=5$ , \* $p < 0.05$  compares HFMCD to HFMCD+ RNase 1.



#### Supplementary Figure S5. RNase 1 administration reduces NASH induced liver

**inflammation.** qRT-PCR analysis showing expression levels of CCL20 and IL6 in the livers of mice fed with NCD, HFMCD diet or HFMCD diet + RNase1. Values are mean  $\pm$  SEM,  $n=5$ , \*\* $p < 0.01$ , HFMCD is compared to HFMCD+RNase1 and \*\*\* $p < 0.001$ , NCD is compared to HFMCD.