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Title	TGR(mREN2)27 rats develop non-alcoholic fatty liver disease-associated portal hypertension responsive to modulations of Janus-kinase 2 and Mas receptor
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Publication date	2019-08-29
Original Citation	Klein, S., Kleine, C.-E., Pieper, A., Granzow, M., Gautsch, S., Himmit, M., Kahrmann, K., Schierwagen, R., Uschner, F. E., Magdaleno, F., Naoum, M. E., Kristiansen, G., Walther, T., Bader, M., Sauerbruch, T. and Trebicka, J. (2019) 'TGR(mREN2)27 rats develop non-alcoholic fatty liver disease-associated portal hypertension responsive to modulations of Janus-kinase 2 and Mas receptor', Scientific Reports, 9(1), 11598. (10pp.) DOI: 10.1038/s41598-019-48024-4
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://www.nature.com/articles/s41598-019-48024-4 - 10.1038/s41598-019-48024-4
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TGR(mREN2)27 rats develop non-alcoholic fatty liver disease-associated portal hypertension responsive to modulations of Janus-kinase 2 and Mas receptor

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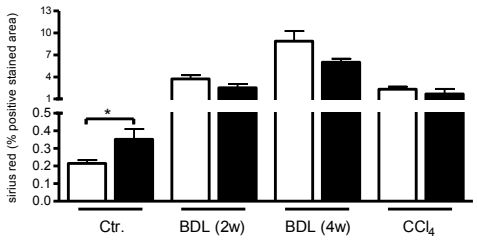
Supplemental Figure 1:

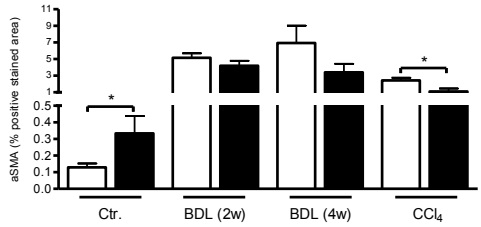
A) Quantification of hepatic Sirius red staining. Quantified hepatic Sirius red stainings represented in Figure 1 were analyzed using 3DHISTECH Ltd. Software. Quantified Sirius red stainings of TGR(mREN2)27 rats were compared to respective WT quantifications in control,BDL (2w, 4w) and CCl_4 (10w) groups. Results are expressed as percentage of positive stained area. B) Quantification of hepatic aSMA staining. Positive aSMA stainings of healthy, injured BDL (2w, 4w) and CCl_4 (10w) intoxicated TGR(mREN2)27 livers were compared with positive aSMA stainings in respective WT livers. Results are shown as percentage of positive stained area. C) Hepatic protein expressions downstream AT1R. Protein expression levels of Jak2, pJak2, Arhgef1 and aSMA were detected by Western blots. Each representative Western blot shows on the left hand side, the expression of hepatic WT proteins and on the right hand side, the expression of hepatic TGR(mREN2)27 proteins. Each hepatic protein expression is illustrated for sham operated, BDL (2w, 4w) and CCl_4 (10w) intoxicated rats. D) Hepatic protein expression of AT1R and Mas. The hepatic protein expression of AT1R and Mas were investigated by Western blot. Each Western blot shows hepatic WT protein expressions (left) and hepatic TGR(mREN2)27 protein expressions (right). Protein expressions of AT1R and Mas are shown for healthy sham operated, BDL (2w, 4w) and CCl4 (10w) intoxicated livers. E) mRNA expressions of hepatic ACE mRNA without and with AVE injection in TGR(mREN2)27 rats. Livers of TGR(mREN2)27 rats were analyzed for ACE mRNA expressions with and without AVE injection. Protein expression levels of healthy control livers and injured livers (BDL, CCl_4) were normalized to healthy control livers without AVE injection. Hepatic mRNA expressions are represented in x-fold change. F) Hepatic AT1R mRNA expression with and without AVE injection in TGR(mREN2)27 rats. Hepatic AT1R mRNA expression of TGR(mREN2)27 rats were normalized to control TGR(mREN2)27 values and represented as x-fold change. Bars are illustrated as means ± s.e.m. Statistical analyzes; Mann-Whitney t-test. */** indicates $p<0.05$/$p<0.005$ compared to respective WT or TGR(mREN2)27 controls.

Supplemental Figure 1:

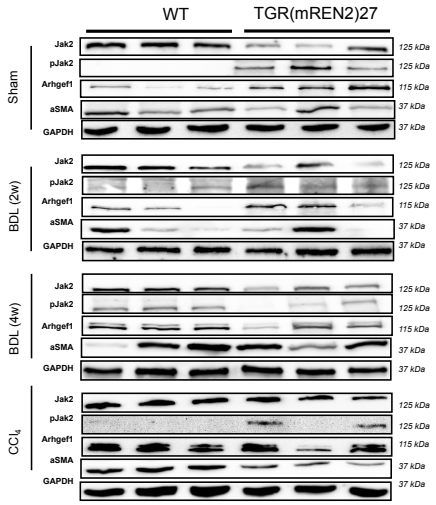
A. Quantification of hepatic sirius red staining



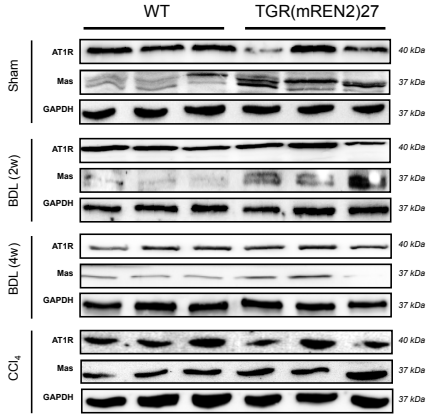
B. Quantification of hepatic αSMA staining



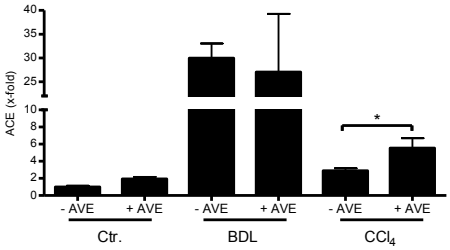
C. Hepatic protein expressions downstream AT1R



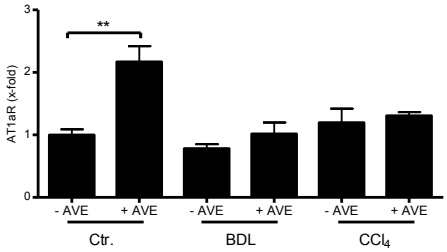
D. Hepatic protein expression of AT1R and Mas



E. Hepatic ACE mRNA expression without and with AVE injection in TGR(mREN2)27 rats



F. Hepatic AT1R mRNA expression without and with AVE injection in TGR(mREN2)27 rats



*/**p<0.05/p<0.005

WT TGR(mREN2)27