and C/ were combined (310 additional lives saved, 95%CI: 100-550). **D/** 6% if a new molecule improving viral eradication by 40% in G1 patients was to become available in 2012 (80 additional lives saved, 95%CI: 20-120). **E/** 15% if screening reaching 75% in 2012 was added to this new molecule (210 additional lives saved, 95%CI: 40-320). **Conclusion**: Antiviral treatment will reduce HCV-related mortality in Belgium by 11% in 2025. HCV screening should be reinforced to convert any future improvement in viral eradication into additional lives saved. This modeling approach

if 75% of the patients were screened in 2012 (100 additional lives saved, 95%CI: 20-170); **B/** 15% if the number of patients treated between 2010 and 2015 increase by 50% (190 additional lives saved, 95%CI: 70-320); **C/** 25% if B/

**Conclusion**: Antiviral treatment will reduce HCV-related mortality in Belgium by 11% in 2025. HCV screening should be reinforced to convert any future improvement in viral eradication into additional lives saved. This modeling approach allowing estimation of the treatment impact on mortality may be helpful to find new strategies to reduce HCV-related mortality.

CONSEQUENCES OF LAPAROSCOPY ON LIVER ISCHEMIA DURING PORTAL TRIAD CLAMPING IN A SWINE MODEL? N. Gilson (1), B. Nsadi (1), E. Pire (1), J.P. Cheramy-Bien (1), J. Pincemail (1), E. Cavalier (1), C. Le Goff (1), J.O. Defraigne (1), M. Meurisse (1), O. Detry (2). (1) University of Liege, Liege, Belgium, (2) Ulg Sart Tilman, Liège, Belgium.

**Introduction**: During laparoscopy, increased intraperitoneal pressure due to CO2 pneumoperitoneum decreases liver and mesenteric blood flow. During open hepatectomy, portal triad clamping (PTC) induces only partial ischemia of the liver, as some reverse circulation via the hepatic veins plays an important role in the limitation of ischemic liver injury and maintains some liver metabolism.

Aim: We hypothesised that during laparoscopic PTC, increased intraperitoneal pressure may limit hepatic vein reverse circulation, inducing a more severe hepatic ischemic injury, and our aim was to test this hypothesis in a swine model. Methods: 15 pigs were randomized in three groups: one hour 15 mmHg CO2 laparoscopy and 3 hours of observation (scopy group), one hour open PTC (open PTC group) and one hour PTC under laparoscopy (scopy PTC group) under veinous splenofemoral extracorporeal circulation, followed by 3 hours of reperfusion. Central venous pressure (CVP), heart rate, mean arterial pressure (mAP), and core body temperature, were continuously followed. Microcirculatory flow and partial oxygen tension (ptiO2) in the liver tissue was continuously monitored. Bilirubin, INR, liver enzymes, lactate, IL6, IL10, TNF  $\pm$ , VitE, VitC, gluthathion, lipid peroxyds, were measured at baseline, after 60 min of PTC, and after 1 and 3 hrs of reperfusion. Data are presented as mean  $\pm$  SEM.

**Results**: There was no difference of mAP or heart rate between the groups. PVC was higher during pneumoperitoneum. PTC induced a reduction of microcirculatory liver flow to 22% and 9.5% of basal values in the open PTC and scopy PTC, respectively (p < 0.01). After 10 min of PTC, ptiO2 decreased from  $43.1 \pm 4.89$  mmHg to  $28.88 \pm 4.42$  mmHg in the open PTC, and from  $36.4 \pm 4.39$  mmHg to  $4.4 \pm 1.9$  mmHg in the scopy PTC group (p < 0.01). All values returned to normal after unclamping. After 3 hours of reperfusion, the ASAT were significantly increased in the scopy PTC group.

**Conclusion**: This experiment in a swine model demonstrates that the pneumoperitoneum increases ischemic liver injury during PTC by a reduction a the reverse circulation coming from the hepatic veins. During laparoscopic hepatectomy, PTC should be avoided as it produces a liver ischemia comparable to total vascular exclusion.