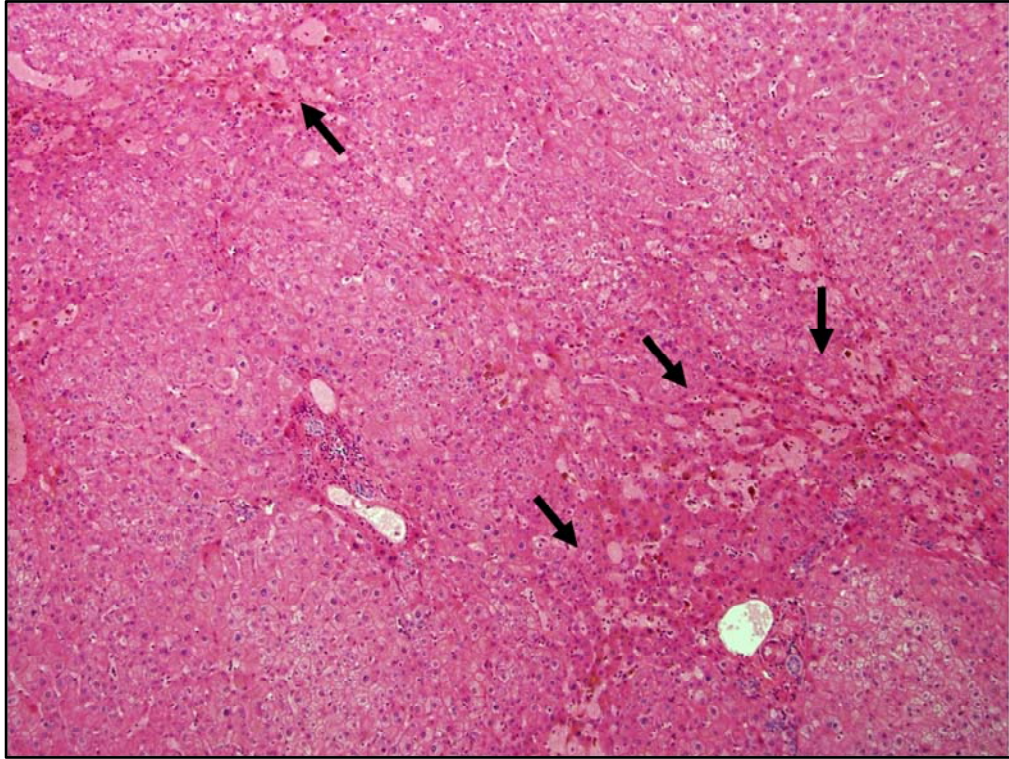
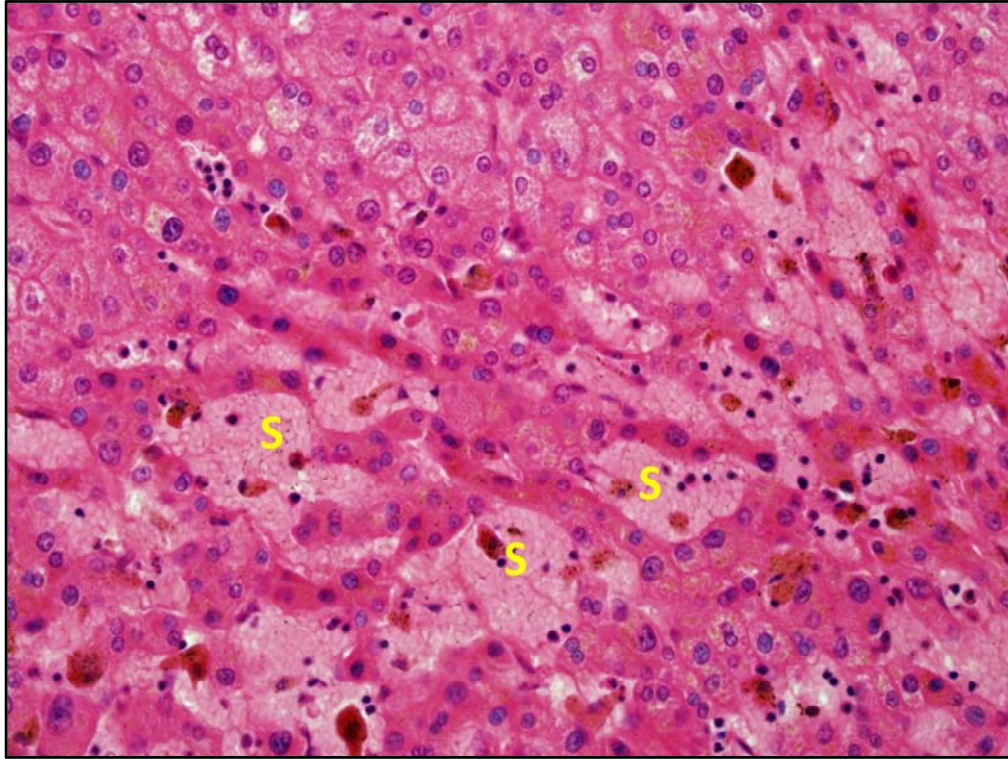


Nodular Regenerative Hyperplasia for LiverTox

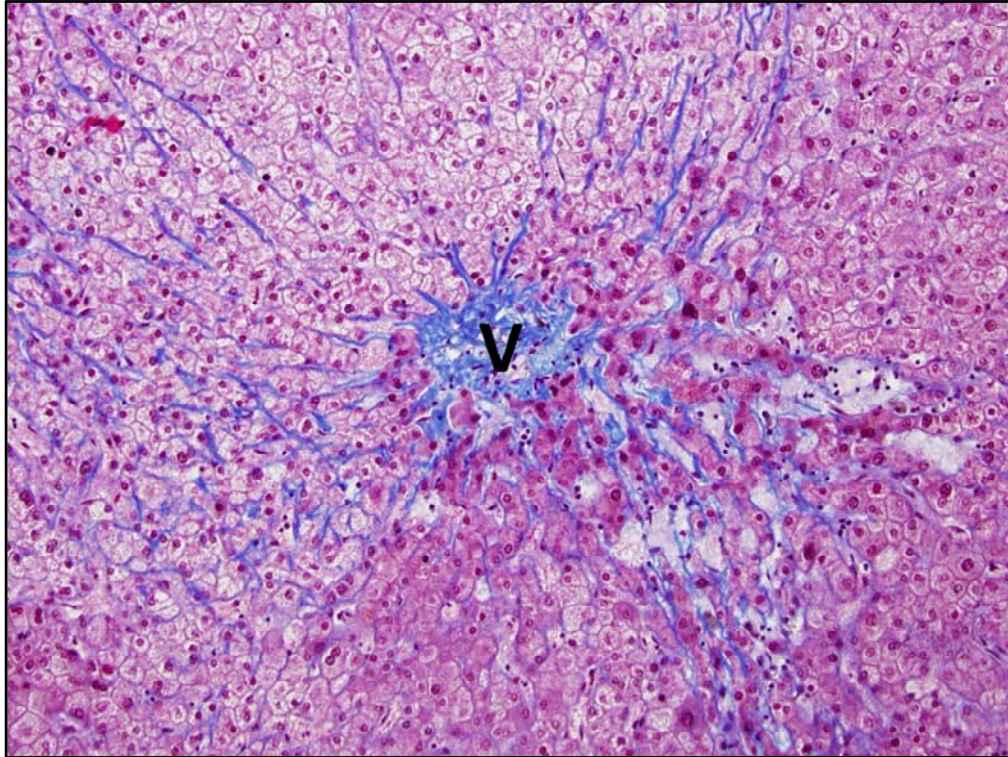
Prepared by
David E. Kleiner, M.D., Ph.D.
Laboratory of Pathology/NCI



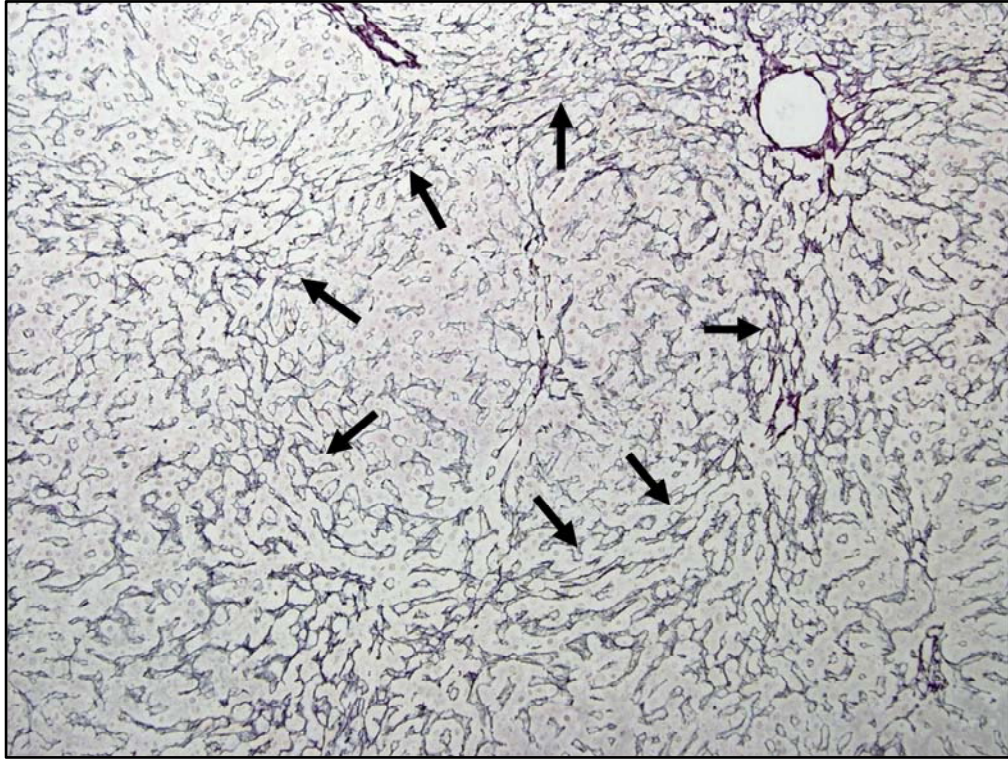
Oxaliplatin Injury: There is sinusoidal dilation present (arrows). There is no inflammatory infiltrate and no areas of necrosis.



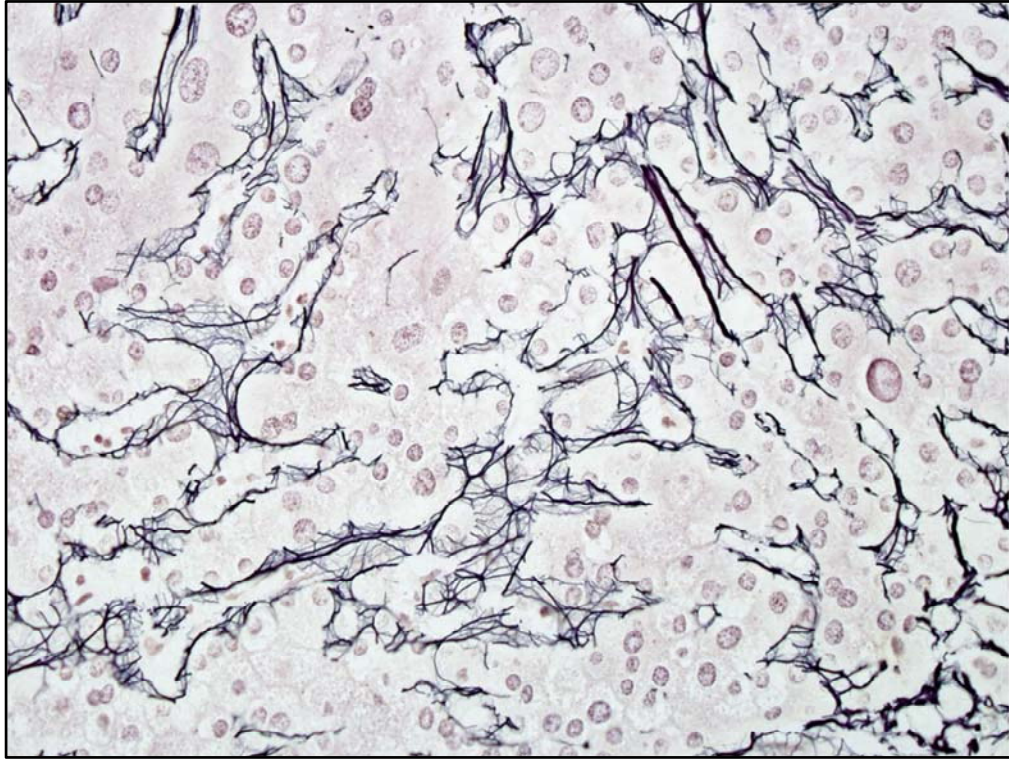
Oxaliplatin Injury: In the areas showing sinusoidal dilation the sinuses are congested and the hepatocyte plates are narrowed. Note that in this preparation, the red blood cells are pale pink rather than bright red. The cells containing brown pigment are macrophages loaded with iron.



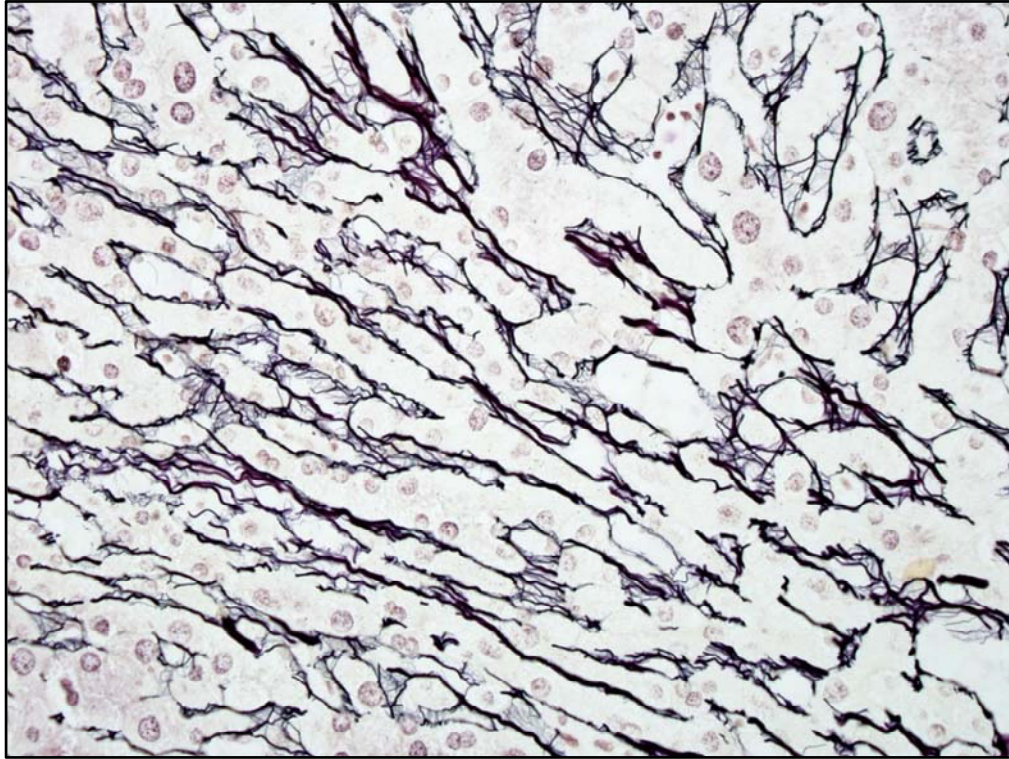
Oxaliplatin Injury: The Masson trichrome stain shows delicate perisinusoidal fibrosis (blue stain), particularly in the areas of sinusoidal dilation. In the center of the photo there is a blue stained scar that probably represents a scarred and occluded vein (V)



Oxaliplatin Injury: A reticulin stain highlights the sinusoidal architecture of the liver. Normally the liver cell plates (lined by dark-staining reticulin fibers), should be of equal width—1 hepatocyte wide. In this photo there is a nodule in the center of the field in which the plates in the center of the nodule are wide and the plates at the edge are narrowed (arrows). This change, in the absence of significant fibrosis, is indicative of nodular regenerative hyperplasia.



Oxaliplatin Injury: The liver cell plates in the center of the nodule are more than one hepatocyte wide.



Oxaliplatin Injury: The liver cell plates at the edge of the nodule are one hepatocyte wide, but the hepatocytes are narrower than normal.