The majority of the time, the question asked/what needs to be reported is the amount of steatosis:

1. **Provide percentage of steatosis**
   - Evaluate and report % of *Large* droplet **Macrovesicular** steatosis (see definitions below and see attached picture guideline for estimating percentages):
     - An estimated large droplet macrovesicular steatosis of ≥30% has been shown to be an independent risk factor for reduced short term graft survival.

   - **Macrovesicular steatosis**
     - **Large droplet**
       - One or a few large lipid vacuoles which occupy >50% of the cell volume and displace the nucleus.

     - **Small droplet** (does not need to be reported unless it is very extensive, >70% of parenchyma)
       - Small vacuoles occupying <1/2 of cytoplasm, doesn’t displace nuclei

   - **Micovesicular steatosis** (rare finding, does not need to be reported unless it is very extensive, >70% of parenchyma)
     - Numerous fat vesicles giving the cytoplasm a foamy appearance, no displaced nuclei

2. **Other findings that may be asked and/or should be noted if present**
   - Extensive necrosis. If there is significant necrosis (>20% or so), then report. Focal subcapsular necrosis and neutrophilic infiltration is common and need not to be included.
• Extensive fibrosis: In general, fibrosis does not need to be reported, as it is difficult to stage fibrosis based on H&E alone and special stains are needed. If asked to report the stage of fibrosis, then only need to report if there is extensive fibrosis (i.e. bridging bands of fibrosis or cirrhosis), and defer the accurate staging of fibrosis to permanents and special stain evaluation.

3. Pitfall regarding specimen preparation
• DO NOT USE: saline, air dry, absorbent substrate. These will alter morphology

4. Please also note that sometimes the FS slide is already made and the read is provided by the pathologist at the original hospital where the organ was retrieved, and UCLA surgeon asks the FS attending at UCLA to review that slide to confirm the original pathologist’s diagnosis.

Please contact liver attending on service if need more assistance (the attending may not be available after hours). Please note that the liver attending is not expected to carry a pager off hours; if a true emergency and they do not answer their pager, call their contact phone number. If not an emergency and they do not answer their pager, please send an email.

References:


Picture matching a diagram that precisely illustrates the severity of macrovesicular steatosis can be used to improve accuracy of estimating the percentage of donor macrovesicular steatosis. We have this diagram posted near the microscope used to evaluate donor livers.