Live confocal imaging as a novel tool to assess liver quality prior to transplantation: Insights from a murine model

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**Organ viability assessment in liver transplantation**
- Pathology
- Liver serum markers
- Liver Donor Risk Index
- Imaging techniques

**Approach**
- MCD diet
- Control
- EtOH diet
- (i) Naive, (ii) 24 h CIT, (iii) 45 min WIT

**Findings**
- After CIT and WIT: significant decrease in cell viability (p<0.05) in naïve and steatotic livers
- Detection of the actual cellular damage at early time-points (<10 minutes)
- Outcome prediction
- Missing sensitivity of fluorophores in detecting inflammatory cells
- Elevated costs

**Real-time confocal microscopy (RCM) as novel tool?**
- (i) Organ viability, (ii) impact of CIT/WIT

**Quantification of liver tissue viability:**
- SYTO16 (living and dead cells)
- PI (dead cells only)
- WGA (cell morphology)
- Semiquantitative score ranging from 3 to -3

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