

# UCMC -Liver Transplant Monitoring Protocol

## Transplant Recipients HCC Surveillance

- Transplant recipients with HCC are categorized based on risk of HCC recurrence as either HIGH or LOW.
  - To ensure process is standardized HCC categorization as High or Low will be completed by transplant surgeons and included within the recipients' medical record as a chart note.
  
- HIGH-RISK for HCC recurrence criteria (recipients deemed HIGH RISK if they meet any of these criteria):
  - PRE-transplant risk factors
    - Initial lesion outside of Milan criteria and/or portal vein invasion
    - At time of transplant the HCC tumor is outside the Milan criteria after downstaging
    - At time of transplant AFP > 200
    - Prior hepatic resection with vascular invasion or unknown histology
  - POST-transplant risk factors
    - Vascular invasion in explant histology
    - Outside of Milan criteria on explant
  
- HIGH-RISK for HCC recurrence recipients require HCC surveillance for 5 YEARS POST TRANSPLANT according to this protocol

### HCC Surveillance for Liver Transplant Recipients at HIGH risk for HCC recurrence

Assessment	Frequency
<b>Chest CT (non-contrast)</b>	Months 3, 6 and 12 ( $\pm$ 30 days) for year 1 Every 6 months ( $\pm$ 30 days) for year 2 Annually ( $\pm$ 30 days) for years 3, 4 and 5
<b>Biphasic CT scan</b>	
<b>Alpha-Feto Protein (AFP)</b> (only if tumor AFP secreting pre transplant)	

- Additional assessments or changes to the frequency may be necessary (physician discretion)