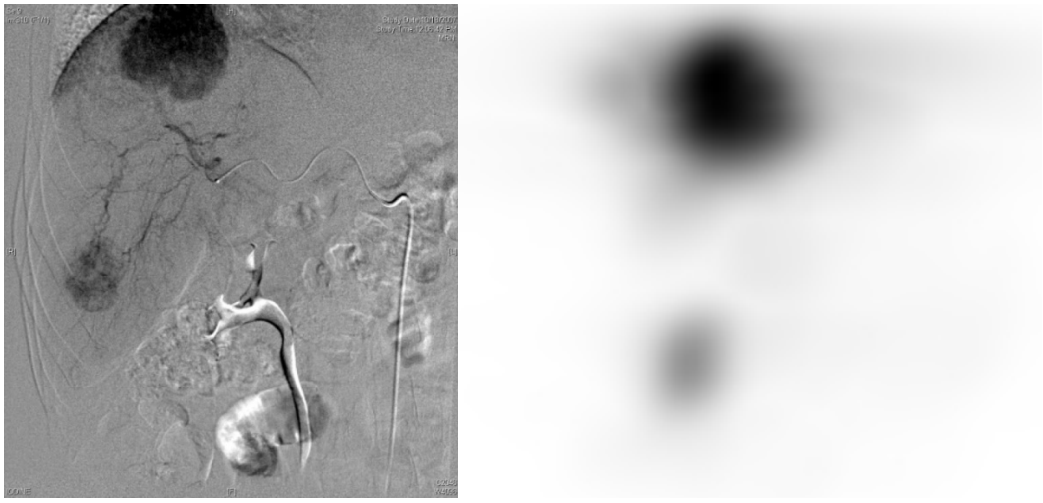
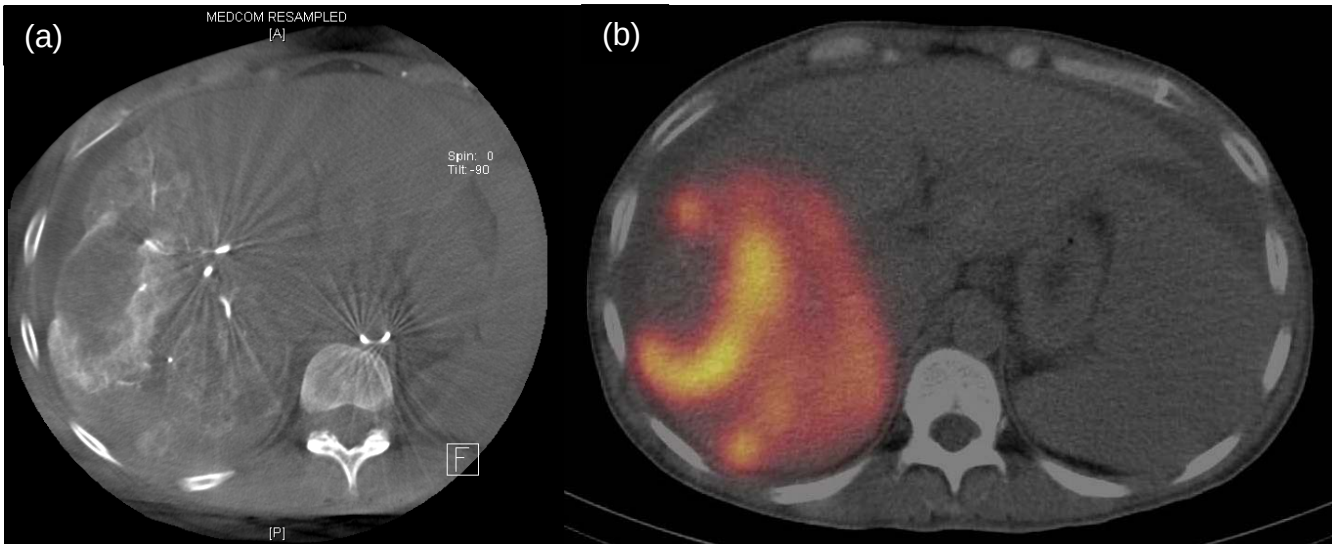
(a) (b)

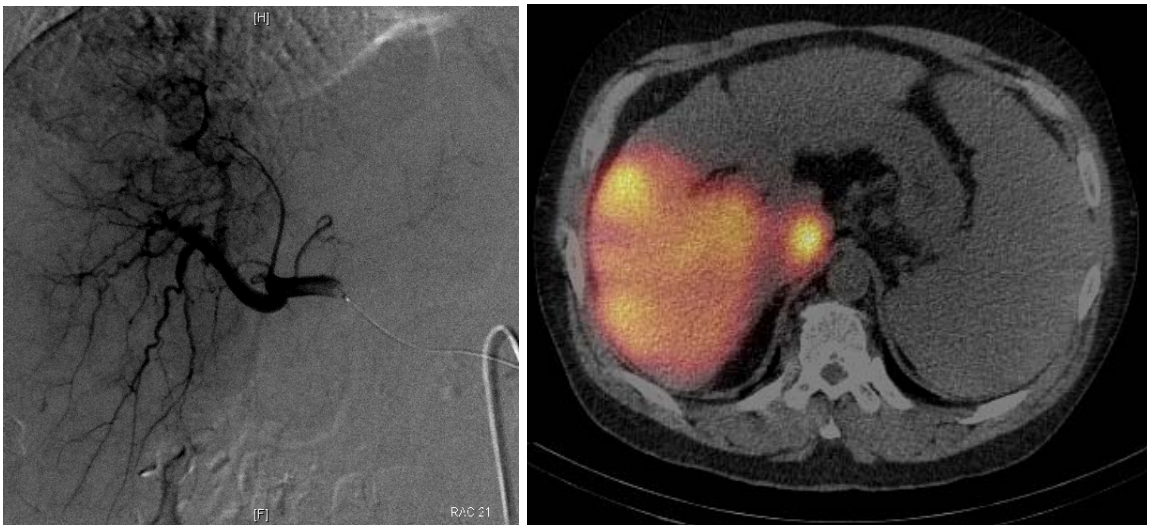


**Supplemental Figure 1.** (a) Angiogram showing contrast distribution from a microcatheter placed distally of the cystic artery.(b) Coronal image from SPECT/CT showing increased uptake of [$^{99m}$Tc]-MAA (MAA) in the center of tumor. This implies that the tumor is hypervascular given trapping of MAA particles within the first capillary bed encountered.



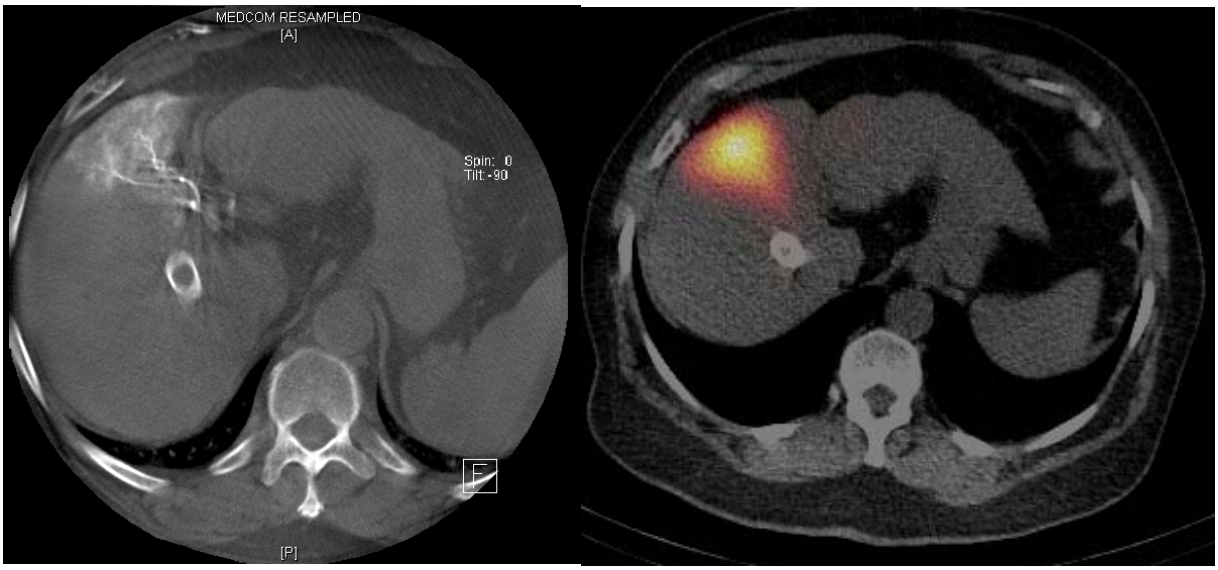

**Supplemental Figure 2**. (a) 44 year-old female with metastatic colon carcinoma with hepatic involvement and status post chemoembolization of the right hepatic lobe was administered 170.2 MBq of MAA via a microcatheter placed into the right hepatic artery. (b) The SPECT/CT images show focal areas of increased uptake likely corresponding to some of the patient's focal intrahepatic lesions, including prominent uptake in the medial peripheral aspect of one of the largest lesions in the right lobe laterally, with centrally decreased activity, suggesting an area of necrosis or cystic change.

(a) (b)

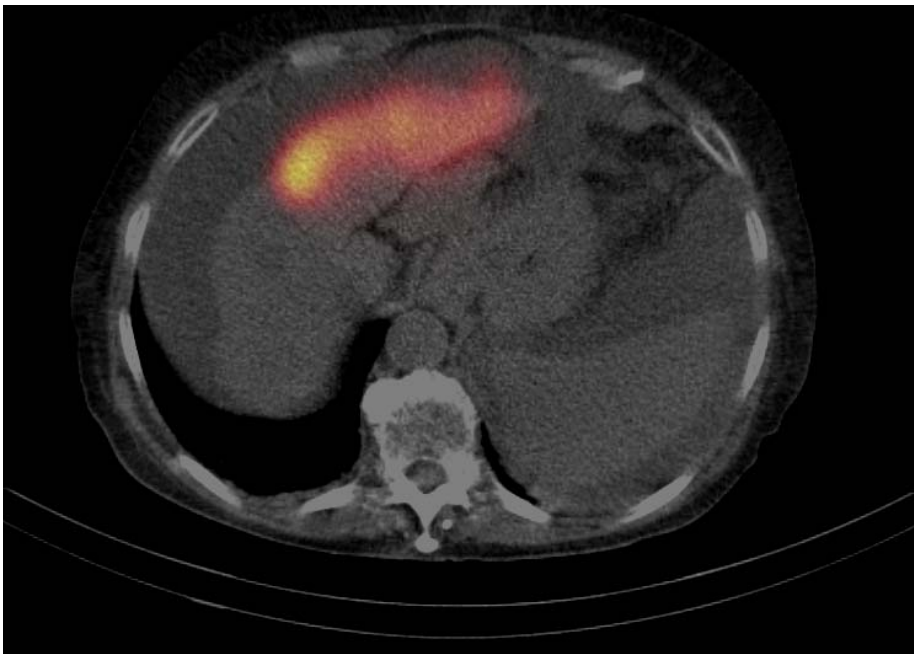


**Supplemental Figure 3.** (a) Angiogram from a 50-year-old male with a history of hepatitis C and now with hepatocellular carcinoma was administered 110.7 MBq of MAA through a catheter placed in right hepatic artery. (b)Forty-five minutes following administration, a SPECT/CT study was performed and showed mixed/diffuse distribution within the right hepatic lobe and the caudate lobe.

(a) (b)




**Supplemental Figure 4**. (a) Axial image from flat panel cone beam CT of 65-year-old female with the cirrhosis and hemochromatosis with hepatocellular carcinoma with a catheter placed in the middle hepatic artery. (b) Corresponding transverse SPECT/CT image shows MAA distribution in the middle hepatic lobe corresponding to the cone beam CT angiogram contrast distribution.



**Supplemental Figure 5**. Significant ascites present on CT images. $^{99m}$Tc-MAA is distributed within the left hepatic lobe. No other areas of activity are present.