Case study 1
Dr. Steven M Zangan, Dr. Thuong Van Ha, and Dr. Jamie Hosmer from the University of Chicago Medical Center performed this case.

Patient
A 61-year-old male with cirrhosis caused by hepatitis C had previously undergone successful chemoembolization and percutaneous thermal ablation of a hepatocellular carcinoma in the right hepatic lobe. Two years later, he presented with a 3.5 cm hepatocellular carcinoma in the left hepatic lobe (Figure 1).

Procedure
Transarterial radioembolization was the best treatment option. Prior to administration of the yttrium-90 (Y-90) microspheres, the physician requested angiography to determine the shunt fraction and to identify and occlude all possible arterial blood supply to the extrahepatic gastrointestinal tract.

The physician accessed the common right femoral artery with a 5 Fr Micropuncture® Introducer Set. Then an .035 inch J wire was advanced into the aorta, and a 5 Fr short vascular sheath was placed. The right common hepatic artery was selected with a 5 Fr RC-1 catheter. The physician obtained an angiogram (Figure 2) that showed that the patient had a normal-sized gastroduodenal artery.

The gastroduodenal artery (GDA) was accessed with the J wire, and the RC-1 catheter was advanced to the distal portion of the GDA. Three 6 mm Retracta detachable embolization coils (MWCER-35-7-6) were deployed in the GDA through the RC-1 catheter. A postprocedure angiogram (Figure 3) shows the placement of the three Retracta detachable coils and the successful occlusion of the vessel.

Results
Two weeks later the patient returned for radioembolization. The GDA remained occluded and the Y90 microspheres were administered without incident.
Case 2
This case was performed by Dr. Hicham T. Abada and Dr. Steven J. Krohmer from the University of Kentucky College of Medicine.

Patient
The patient was a 73-year-old male with a hepatic carcinoma. The patient’s GDA was embolized in order to prepare for radioembolization.

Procedure
Using a 5 Fr sheath and a 5 Fr catheter, the physician gained access through the femoral artery. Seven Retracta detachable embolization coils of various lengths and diameters were used throughout the procedure. The first coil (MWCER-35-7-6) was anchored into the inferior pancreaticoduodenal artery and extended into the distal segment of the GDA. The coil’s visible detachment zone stayed inside the catheter tip after the coil was detached (Figure 1).

The physician continued to pack the artery with longer (14 cm) Retracta coils (MWCER-35-14-6) (Figure 2). A 7 cm Retracta coil (MWCER-35-7-6) was used as the last coil to embolize the remaining proximal segment of the GDA. This was done to prevent the embolus from occluding the hepatic artery. The last Retracta coil embolized the remaining proximal segment of the GDA. The coil entered the superior pancreaticoduodenal artery and completely occluded the GDA.

Results
The Retracta detachable embolization coils completely occluded the GDA (Figure 3).