QuiremSpheres® treatment of a 61-year-old male patient with mCRC after right hepatectomy

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CLINICAL CASE
A 61-years old male patient diagnosed with right colon adenoCa three years before (G2, pT3N2, KRAS mut) and liver metastasis one year later, treated with right hepatectomy and percutaneous ablation. Patient presents with hepatic progression after two lines of systemic chemotherapy (ECOG 0, normal liver function).

PROCEDURE
SIRT was approved by multidisciplinary tumor board. Based on vascular anatomy angiography, $^{99m}$Tc-MAA were injected in the two branches of the hepatic artery arising from the celiac trunk. Lung shunt was 3.7%. The total tumor volume was 60 cc. A dose of 60 Gy was planned on the remnant liver volume (1271 cc). QuiremSpheres® ($^{166}$Ho-PLLA microspheres) with a total net activity of 2.96 GBq for the first branch and 1.46 GBq for the second branch were injected via a 2.7F microcatheter. Treatment was well-tolerated with no complications.

FOLLOW UP/ CONCLUSION
Post-treatment SPECT-CT and $T_2^*$ MRI showed excellent concentration of the microspheres in the liver lesions. Forty-five days after SIRT, CT demonstrated reduction in size of all the hepatic lesions, some of them showing peritumoral calcifications. PET-CT showed no $^{18}$FDG uptake of hepatic metastasis. However, extrahepatic tumor progression was observed, represented by abdominal lymph nodes and peritoneal nodules. The patient is now under systemic chemotherapy.