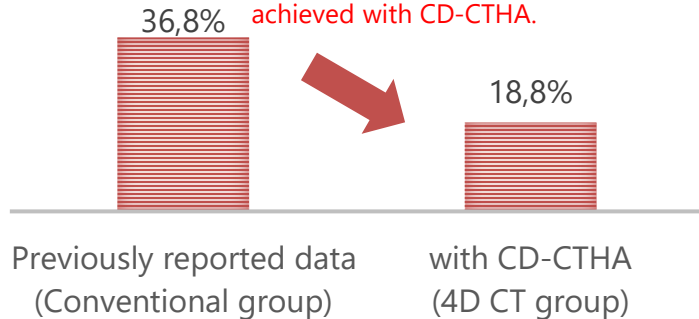


Catheter-Directed Computed Tomography Hepatic Angiography for Yttrium-90 Selective Internal Radiotherapy of Hepatocellular Carcinoma Reduces Prophylactic Embolization of Extrahepatic Vessels

- 5-year retrospective single institution study for Y90 selective internal radiotherapy (^{90}Y SIRT) for HCC with the use of catheter directed CTHA (CD-CTHA) using Infinix 4D CT (n=186).

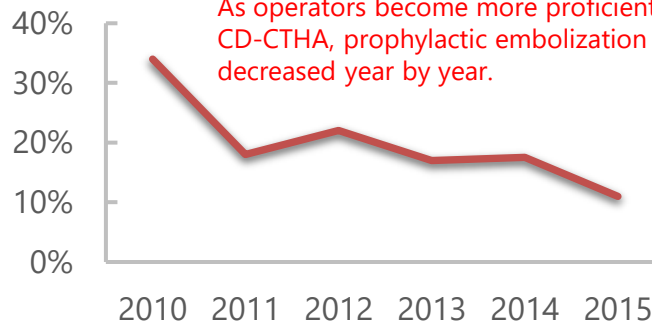
Rate of prophylactic embolization

Significantly lower ($p < 0.005$) thanks to selective embolization capability achieved with CD-CTHA.



Year-on-Year rate of embolization

As operators become more proficient with CD-CTHA, prophylactic embolization rates decreased year by year.



A critical requirement for SIRT is the delivery of ^{90}Y microspheres to the tumor while avoiding non-target deposition into extrahepatic organs. Prophylactic embolization of extrahepatic arteries is generally performed for the purpose, however it increases procedural time and introduces new risks such as coil migration, arterial dissection, and formation of new collateral. The use of CD-CTHA (using Infinix 4D CT) was associated with a lower rate of prophylactic embolization of extrahepatic vessels while maintain a high technical success rate of treatment and low rate of complications.