

## **Transplant Oncology II**

### **Downstaging - Eastern experience**

Yu-Fan CHENG

Hepatocellular carcinoma (HCC) is the most common primary liver cancer, and it represents the third leading cause of cancer death worldwide, and also the leading cause of cancer-related mortality in Asia. While surgical treatments including resection and liver transplantation provide the greatest cure potential and survival, for patients with unresectable tumor or beyond the selection criteria, locoregional therapies such as radiofrequency ablation and trans arterial chemoembolization have various potential roles, including palliation, tumor down-staging, and bridging therapy prior to resection or liver transplantation. It has been reported that Y90 radioembolization can provide significantly better downstaging and time to progression than conventional transarterial chemoembolization with favorable survival in Barcelona clinic liver cancer stage A-C. Also, due to prolonged time to progression, induction of contralateral hepatic hypertrophy, and lower risk of liver ischemia in the patient with portal vein thrombosis, Y90 is an effective treatment of HCC for bridging/downstaging for surgery. In this study, we report our institutional experience of Y90 radioembolization using in unresectable HCC, as the primary or major treatment combined with other local regional and systemic treatment. 48 patients with unresectable HCC were enrolled in this study with mean tumor diameter about 8cm, treated with Y90 radioembolization using resin microspheres were reviewed. Most of the patients had advanced stage with T3 and T4 (56.3%), this study showed promising result with 2-year overall survival rates 58%. The successful downstaging rate was achieved in 67.6 %. For those patients who were successful downstage and received tumor resection and or with liver transplant obtained an excellent result with 2-year survival rates of 100%. In conclusion, radioembolization can control HCC well even in advanced diseases. Patients successfully downstaging/bridging to resection or transplantation have excellent overall survival.