Treatment	Definition
Surgical resection	
Hepatectomy	Q7221, Q7222, Q7223, Q7224, Q7225
Laparoscopic hepatectomy	Q7221, Q7222, Q7223, Q7224, Q7225 with EDI code N0031001
Liver transplantation	Q8040, Q8041, Q8042, Q8043, Q8044, Q8045, Q8046, Q8047, Q8048, Q8049, Q8050, Q8140, Q8141, Q8142, Q8143, Q8144, Q8144, Q8145, Q8146, Q8147, Q8148, Q8149, Q8150
Local ablation therapy	
Radiofrequency ablation	QZ841, Q7280, Q7281
Microwave ablation	Q0841, Q7284, Q7285
Cryoablation	M6774, Q7282, Q7283
Transarterial therapy	
Conventional TACE	HA624 or M6644 with lipiodol and chemotherapeutic agents (doxorubicin or cisplatin)
DEB-TACE	DC bead (EDI code, J3205003), HepaSphere (EDI code, J3205081, J3205109)
TARE	OZ753
Other	HA624 or M6644 with lipiodol alone, HA624 or M6644 with chemotherapeutic agents (doxorubicin, cisplatin, or 5-FU), but without lipiodol
Radiation therapy	HD061, HD110, HD111, HD112, HD211, HD212, HD113, HD114, HD115, HD121, HZ271

## Supplementary Table 2. Definition of treatment modalities for hepatocellular carcinoma

The codes for each treatment are based on the procedural codes and EDI codes in the claim data of the Health Insurance Review & Assessment Service database in Korea.

EDI, electronic data interchange; TACE, transarterial chemoembolization; DEB, drug-eluting bead; TARE, transarterial radioembolization; 5-FU, 5-fluorouracil.