

## THE IMPACT OF MULTIDISCIPLINARY TEAM APPROACH ON CLINICAL OUTCOMES IN HEPATOCELLULAR CARCINOMA: A PROPENSITY SCORE-MATCHED COHORT STUDY

Sang Hyuk PARK<sup>1</sup>, YoungRok CHOI<sup>1</sup>, Gayoung KIM<sup>1</sup>, Min Kyoung KIM<sup>1</sup>, Jiyoung KIM<sup>1</sup>, Jae-Yoon KIM<sup>1</sup>, Jeoung-Moo LEE<sup>1</sup>, Suk Kyun HONG<sup>1</sup>, Kwang-Woong LEE<sup>1</sup>, Kyung-Suk SUH<sup>1</sup>

<sup>1</sup> Department of Surgery, Seoul National University Hospital, Republic of Korea

**Background** : Despite widespread implementation of multidisciplinary team (MDT) approach in hepatocellular carcinoma (HCC) management, evidence supporting its effectiveness remains limited. This study investigated the association between MDT-based treatment decisions and clinical outcomes in HCC patients.

**Methods** : In this retrospective study, propensity score matching was performed using age, sex, viral markers (HBV, HCV), and platelet count, yielding 304 matched pairs of MDT and non-MDT groups. Treatment adherence in the MDT group was classified as adherent (n=233), modified (n=56), or untreated (n=13). Primary endpoints were overall survival (OS) and disease-free survival (DFS).

**Results** : Median follow-up was 16 months for MDT group and 49 months for non-MDT group. After matching, baseline characteristics were well-balanced (all  $p > 0.4$ ). MDT group showed superior 3-year OS (94.9% vs 72.1%) and longer median survival (51.1 vs 14.7 months;  $p < 0.001$ ). Disease-free survival was comparable (3-year DFS: 50.9% vs 53.3%). In the MDT group, 76.6% of patients adhered to planned treatment, while 18.4% required modifications.

**Conclusions** : MDT approach was independently associated with improved overall survival in HCC patients, though not affecting disease-free survival. High treatment adherence demonstrates the feasibility of MDT-based decision-making in clinical practice.

Corresponding Author : YoungRok CHOI (choiyoungrok@gmail.com)