TPS4223 **Poster Session**

Donafenib combined with capecitabine for postoperative adjuvant therapy of biliary malignant tumors with high risk of recurrence: A multi-center, randomized controlled, phase II study.

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Background: Biliary Tract Cancer (BTC) is an aggressive malignancy with rising incidence. Surgery is the only curative option, but only 10% of patients are eligible at diagnosis, and recurrence rates post-surgery can reach 67% within a year. The 5-year survival rate is only 5-15%. Emerging therapies, such as targeted and immunotherapies, show promise. A study combining GEMOX, tislelizumab, and donafenib (a tyrosine kinase inhibitor) in advanced BTC showed an 87.5% disease control rate (DCR) with strong safety and efficacy. The BILCAP study found that adjuvant capecitabine improved overall survival (OS) in resected BTC patients (median OS: 49.6 vs. 36.1 months; HR = 0.84). However, clinical research on adjuvant treatments for high-risk postoperative BTC remains limited, with no consensus on high-risk factors. This study evaluates the efficacy and safety of donafenib combined with capecitabine as adjuvant therapy for postoperative BTC with high recurrence. **Methods:** The study selected BTC patients prior to radical resection without any anti-tumor systemic therapy (including radiotherapy, chemotherapy, targeted therapy, immunotherapy) with at least one high-risk postoperative recurrence factors including specific stages according to the UICC/AJCC TNM 8th edition staging system: T_{2-4}, N_0, M_0 or T_{1-4}, N_1, M_0 (applicable to extrahepatic cholangiocarcinoma); T_{1b-4}, N_{0-1}, M_0 or T_{1a}, N_1, M_0 (applicable to intrahepatic cholangiocarcinoma), vascular invasion or neurophilic invasion as research subjects. Patients will be randomly divided into 1:1 groups. The experimental group consisted of donafenib (200mg, bid for 6 months) combined with capecitabine (1250mg/m^2, bid, treated for 2 weeks and stopped for 1 week, with 3 weeks as a treatment cycle, 8 cycles). The control group was capecitabine (same as experimental group). Treatment will start at least 4 weeks after radical resection and stop until patients experience disease recurrence or intolerable toxic side effects. The primary endpoint of the study was the 1-year recurrence free survival (RFS) rate. Secondary endpoints consisted of 2-year RFS, OS and safety assessment including incidence, severity, and relationship to study drugs of all adverse events (AEs), treatment-related adverse events (TRAEs), and serious adverse events (SAEs). Based on the data analysis of BTC cohort at our center, the 1y-RFS rate for the control group is set at 30%, while that for the experimental group is set at 60%. With a two-sided alpha of 0.05, a power of 0.80, and a randomization ratio of 1:1, the required number of RFS events is 64. Considering a 10% dropout rate, it is planned to enroll 35 participants per group, with a total planned enrollment of 70 participants. Dated by 20 January 2025, 8 of planned 70 patients have been enrolled. Clinical trial information: NCT06685289. Research Sponsor: None.