

## **Statistical analysis plan**

**Title of the study:** Split-in-situ Resection With Radio-frequency Ablation Instead of Liver Partition on the First Stage (RALPPS) in Patients With Hilar and Intrahepatic Cholangiocarcinoma

**Unic Protocol ID:** MCNC 09/2017

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### **Statistical analysis**

The propensity score matching (PSM) method was used to overcome heterogeneity of retrospectively collected data in compared groups. Nearestneighbor algorithm with 1:1 match ratio using a 0.2 caliper was applied. Matching for stage 1 included following factors: maximum total bilirubin level, duration of jaundice and acute cholangitis presence. PSM model for stage 2 enrolled FLR volume after portal vein occlusion (first stage). Continuous data presented as median values were compared using Mann Whitney U test before and after PSM. The Two-tailed Fisher's Exact test was used for comparing categorical variables before and after PSM. A p-value of less than 0.05 was considered statistically significant. SPSS version 23.0 (IBM SPSS, Inc., Chicago, IL) software package was applied for data analysis.

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