Romiplostim, a fusion protein TPO, is a hormone that regulates platelet production approved in idiopathic thrombocytopenic purpura (ITP). This study evaluates single use of Romiplostim 2 week prior to liver biopsy to avoid biopsy related morbidity and mortality.

Methods 65 patients (n=65), (mean age: 56 years; M:F=2:1) with Hepatitis C: 37/65 (57%); hepatitis B (HBV) 7 (15.5%), Alcoholic Cirrhosis 10 (15%); Non-Alcoholic steato-hepatitis (NASH) 3 (5%), Primary biliary cirrhosis (PBC) 6 (9%) with pre-biopsy mean platelet count 77k; Mean MELD score 20, mode 12.

Primary outcomes of interest were survival, survival without organ failure, and freedom from serious thrombocytopenia. Inclusion criteria: CLD with thrombocytopenia. A large randomised clinical trial is needed for further validation.

Results

Conclusion This pilot study demonstrates that single use of Romiplostim is efficacious, cost-effective, and safe without side effects for liver biopsy with severe thrombocytopenia. Single use of Romiplostim should be considered before Trans jugular intra-hepatic porto-systemic shunts or portal haemodynamic procedures and prior to surgical interventions with severe thrombocytopenia. A large randomised clinical trial is needed for further validation.