

Long-term health outcome among HCV patients with advanced liver fibrosis treated through HCV elimination program in Georgia

Abstract Presented at ASM Clinical virology symposium, 2018; West palm beach, Florida, USA.

Authors: M. Butashvili *¹, G. Kamkamidze², D. Metreveli³, A. Gamkrelidze⁴, M. Zakalashvili³, V. Kerashvili⁵, E. Dolmazashvili⁶, A. Gamezardashvili¹;

¹ Health Research Union, Tbilisi, Georgia;

² Clinic NeoLab, Tbilisi, Georgia;

³ Clinic Mrcheveli, Tbilisi, Georgia;

⁴ National Center for Disease Control and Public Health of Georgia, Tbilisi, Georgia;

⁵ Infectious Diseases, AIDS and Clinical Immunology Research Center, Tbilisi, Georgia;

⁶ Clinic Hepa, Tbilisi, Georgia

Background and Aims: Limited data are available estimating long-term treatment outcome among HCV patients with advanced liver fibrosis treated with Direct Acting Antivirals (DAAs). The goal of the study was to evaluate long-term health outcome among patients with advanced liver fibrosis treated with DAAs after achieving sustained viral response (SVR).

Methods: The study sites were four main service centers providing care and treatment for HCV patients within HCV elimination program in Tbilisi, the capital of Georgia. The study cohort included patients treated with DAAs through elimination program, having advanced liver fibrosis level by elastography 44 | Page ($\geq F3$) or FIB4 score (≥ 3.25) and achieving SVR at week 12-24 post treatment. Random sample of patients treated during May-December 2015 was enrolled. We compared baseline and post treatment changes in fibrosis level (in kpa or FIB4 score), ALT, AST, platelet count (PLT), hemoglobin level (Hb), spleen size and existence of ascites.

Results: 420 patients were included in the study by the time of data analysis. Mean age of participants was 52 years (range 30-82) and the majority were male (86.6%). Statistically significant changes of all variables were observed, except spleen size. The mean fibrosis level for those measured by elastography decreased significantly (Mean difference 20.6kpa, 95% CI:19.5-21.6). Among those whose fibrosis was measured by FIB4, the mean difference was 1.4 (95% CI:1.2-1.6). ALT and AST levels decreased by 79 and 57 IU/ml, respectively (95% CI:72.4-87.3 and 52.2-62.1); PLT count increased by 22000 per microliter (95%CI:17.9-27.7); spleen size decreased by 0.6 and 0.3 cm (95% CI: -0.2-9-8.3 and 2.1-4.0). Ascites was resolved among 80% of those having ascitic fluid at baseline and developed among 1.5% of those not having ascites before the treatment (RR 0.8; 95%CI:0.20-0.31).

Conclusions: Significant improvement of clinical and laboratory parameters was observed 2 years after treatment completion among patients with advanced liver fibrosis treated with DAAs and achieving SVR