

IDENTIFICATION OF SINGLE NUCLEOTIDE POLYMORPHISMS FROM PATIENT SAMPLES WITH AUTOIMMUNE DISEASE OF THE LIVER PRIMARY SCLEROSING CHOLANGITIS (PSC). Emily Schreiner, Chris Bowlus +, Larry Buckley, Angela Lee Foreman*, *RIT, Department of Biological Science +UC Davis School of Medicine, efs6275@rit.edu, clbowlus@ucdavis.edu, ljbsbi@rit.edu, alfnts@rit.edu.

Primary Sclerosing Cholangitis (PSC) is considered an autoimmune disorder involving chronic and progressive cholangitis within the walls of the bile ducts of the liver, leading to cholestasis. As a result, bile accumulates in the liver, leading to cirrhosis and liver damage. The etiology of PSC is unknown and is prevalent in males than females. Previous studies narrow the cause to genetics and environment. In this project, genotypic risk of PSC susceptibility was examined through genotyping of Major Histocompatibility Complex (MHC) region. The project involves identification of Single Nucleotide Polymorphisms (SNP) from patient samples with PSC. MHC class III snpDNA was investigated to see if the sample contained homozygous A/A, G/G, or heterozygous A/G. The snpDNA allele from patients with PSC was compared with healthy controls for determining an independent allele identified through another study using SLE model. The results have shown no significant difference within the A/A, A/G, and G/G allele among PSC and healthy controls DNA samples.