

9. Article Title: “TNF-alpha, IL1-beta, and Immunoglobulin (GM and KM) Gene Polymorphisms in Sarcoidosis”

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Parts of the human immune system are controlled by the non-HLA genes. ACCESS investigated some of these other genes. In this study, we studied the genes other than HLA which control how well the immune system cells manufacture proteins that are involved in inflammation. Overall, ACCESS found no differences in these sets of genes between patients with sarcoidosis and controls without sarcoidosis. Since not all sarcoidosis patients have the same organ involvement by sarcoidosis, additional analyses were done to see if patients with and without erythema nodosum (painful bumps on the lower legs) were genetically different from each other. In African-American patients without erythema nodosum, we found a greater distribution of a certain gene (called a “KM genotype”) in comparison to controls. More specifically, sarcoidosis patients in ACCESS who were African-American and without erythema nodosum were two times more likely to have a certain distribution of KM1 genes in comparison to controls. These KM genes have been shown in other studies to be an important part of the body’s ability to fight disease.