

Expedited Review of Proposed Investigations of Stored Sera: Oakland

IRB# 2002-036

Principal Investigator: Dan Granoff, MD

Synopsis:

Our long term objective is to increase our understanding of vaccine-induced anticapsular immunity to meningococcal group A, C and Y strains, the principal strains responsible for meningococcal disease worldwide. Depending upon the age of the person, or the type of antigenic stimulus (natural exposure or conjugated vs. unconjugated vaccination), meningococcal polysaccharide can elicit protective or non-protective anticapsular antibodies. The focus of our research is to investigate the basis for these differences in antibody function. We are conducting preliminary studies of stored sera from adults immunized with meningococcal polysaccharide vaccine. Our hypothesis is that age-related differences in fine antigenic specificity or antibody avidity may explain protective and non-protective group anticapsular antibodies. The results of these studies will be compared and contrasted to those obtained on sera collected from persons residing in Sub-Saharan Africa who are at risk of epidemic group A disease, and who were immunized with meningococcal polysaccharide at risk of epidemic group A disease, and who were immunized with meningococcal polysaccharide vaccine (IRB approval of Proposed investigations of stored sera: Sudan Study, February 21, 2003).

Taken together, the results will help define the basis of anticapsular antibody immunity in persons living in areas of the world with vastly different risks of acquiring meningococcal disease.