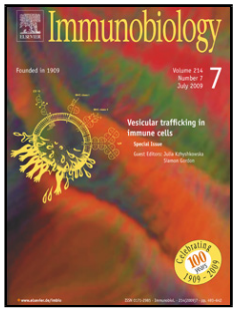

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Complement research in the 18th-21st centuries: progress comes with new technology.

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Abstract

The complement system has been studied for about 120 years. Progress in defining this large and complex system has been dependent on the research technologies available, but since the introduction of protein chromatography, electrophoresis, and antibody-based assay methods in the 1950s and 60s, and sequencing of proteins and DNA in the 70s and 80s, there has been very rapid accumulation of data. With more recent improvements in 3D structure determination (nmr and X-ray crystallography), the structures of most of the complement proteins have now been solved. Complement research since 1990 has been greatly stimulated by the discoveries of the multiple proteins in the lectin pathway, the strong association of Factor H, C3, Factor B allelic variants with adult macular degeneration