data obtained for patients presenting with AAV over the same time period.

**Results.**—Eleven patients were identified, nine female, with an average age of 57 years and average follow-up of 80 months. Seven patients had antibodies to MPO and GBM and three to PR3 and GBM. One patient had antibodies to GBM, PR3 and MPO. All patients had renal involvement with a mean serum creatinine of 473 μmol. Five out of eleven patients required dialysis at presentation and one of these patients recovered renal function by 6 months. Two patients presented with pulmonary haemorrhage and 45% had radiological evidence of interstitial lung disease. Fifty-five percent of patients relapsed, all of whom had antibodies to PR3 and all relapses were associated with rising PR3 titres in the absence of anti-GBM antibodies. Five and 10 year renal survival was 100% in patients presenting dialysis independent and 20% of patients presenting dialysis dependent had independent renal function at 5 years. Overall renal survival, compared with AAV, is shown on figure 1.

![Renal survival](image.png)

**Figure 1**

Renal survival.

**Discussion.**—This cohort of patients with “double positivity” experienced better overall patient and renal outcomes at one year than previously reported cohorts. They were generally treated as per local protocols for anti-GBM disease with 82% undergoing plasma-exchange. There was significantly reduced renal survival compared with AAV patients. **Conclusion.**—GBM antibodies should be sought in any patients with AAV since double positive patients may require plasmapheresis despite the absence of organ threatening disease.

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**Introduction.**—This study aimed to identify genetic determinants of granulomatosis with polyangiitis (Wegener’s, GPA).

**Methods.**—We carried out a genome-wide association study (GWAS) on 459 cases of GPA and 1503 healthy controls (white subjects of European descent), followed by replication of the most strongly associated signals in an independent cohort of 528 cases of GPA and 1228 controls.

**Results.**—Genome-wide significant associations were identified in thirty-two single nucleotide polymorphic (SNP) markers across the HLA region, the majority of which were located in the HLA-DPB1 and HLA-DPA1 genes encoding the major histocompatibility complex (MHC) class II, DP beta chain 1, and DP alpha chain 1 proteins, respectively. Peak association signals in these two genes, emanating from the rs9277554 (for DP beta chain 1) and rs9277341 (DP alpha chain 1) SNPs were strongly replicated in an independent cohort (Pcombined = 2.09 × 10−50 and 2.18 × 10−39, respectively). Imputation of classical HLA alleles and conditional analyses revealed the SNP association signal to be fully accounted for by the classical HLA-DPB1*04 allele. An independent single SNP, rs265595, near the SEMA6A (semaphorin 6A) gene on chromosome 5, was also associated with GPA, reaching genome-wide significance in a combined analysis of the GWAS and replication cohort (Pcombined = 2.09 × 10−8).

**Conclusion.**—We identified the SEMA6A and HLA-DP loci as significant contributors to risk for GPA, with the HLA-DPB1*04 allele almost completely accounting for the MHC association. These two associations confirm the critical role of immunogenetic factors in the development of this disease.

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**ANCA-associated vasculitis in Hispanics: An unrecognized severity**

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**Introduction.**—ANCA-associated vasculitis (AAV) is now increasingly recognized in diverse ethnic populations. However, little is known about AAV and its severity among minorities in particular the Hispanic population in the United States. This study aims to describe the clinical severity and disease outcome in a group of Hispanic patients with AAV compared to a cohort of Caucasians living in the same geographical area.