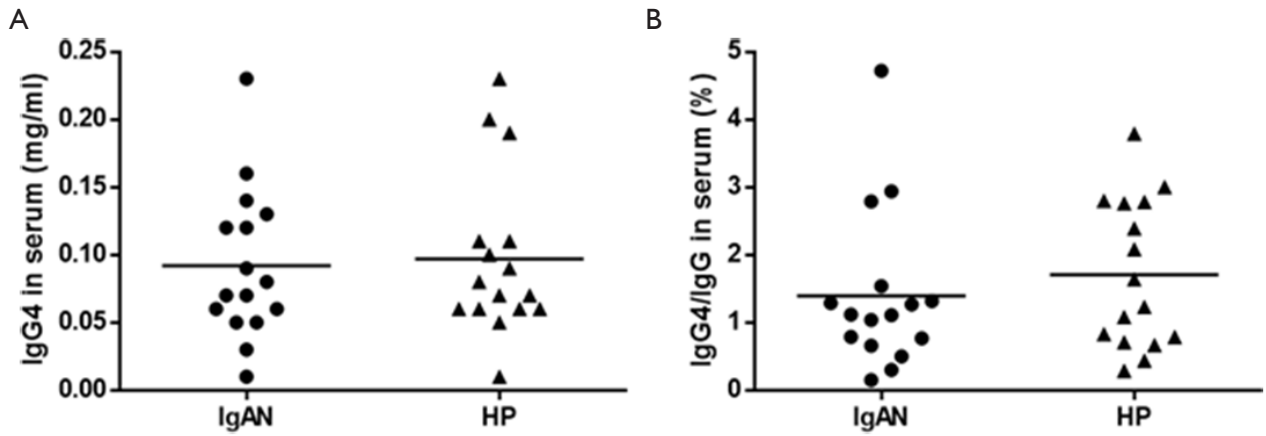
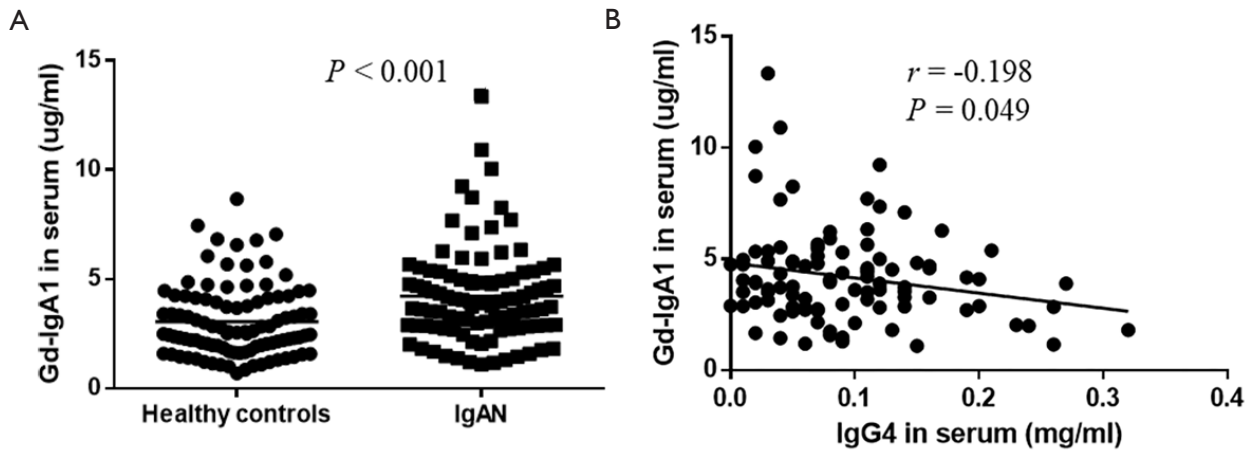


**Figure S1** Comparison of IgG1, IgG2, IgG3, and IgG4 in different disease groups in preliminary experiment. (A) The serum IgG1 levels of IMN were significantly lower than HC and IgAN. (B) The serum IgG2 levels of IMN were significantly lower than HC and IgAN. (C) The serum IgG3 levels of IgAN were higher than IMN, but were comparable with HC. (D) The serum IgG4 concentrations were significantly lower in IgAN compared with HC and IMN. The sample size in each group is 12. \*, indicates comparison with HC, \*\* $P < 0.01$ , \*\*\* $P < 0.001$ . There was no significant difference in IgG4 concentrations between HC and IMN. # indicates comparison with IMN, # $P < 0.05$ , ## $P < 0.01$ . HC, healthy control. IgAN, IgA nephropathy. IMN, idiopathic membranous nephropathy.



**Figure S2** Comparison of IgG4 concentrations and IgG4/IgG ratio in IgAN and HP participants. The serum IgG4 (A) and IgG4/IgG (B) level in 16 HP patients was comparable with age and gender matched IgAN patients. IgAN, IgA nephropathy. HP, Henoch-Schönlein purpura nephritis.



**Figure S3** Increased serum Gd-IgA1 concentrations and its correlation with serum IgG4 levels in IgAN. (A) Serum Gd-IgA1 concentrations in IgAN were higher than that of healthy controls. (B) IgG4 was negatively correlated with Gd-IgA1 in IgAN. IgAN, IgA nephropathy. Gd-IgA1, galactose-deficient IgA1.