Supplemental Material

Anti-PLA$_2$R Autoantibodies and Response to Rituximab Treatment in Membranous Nephropathy

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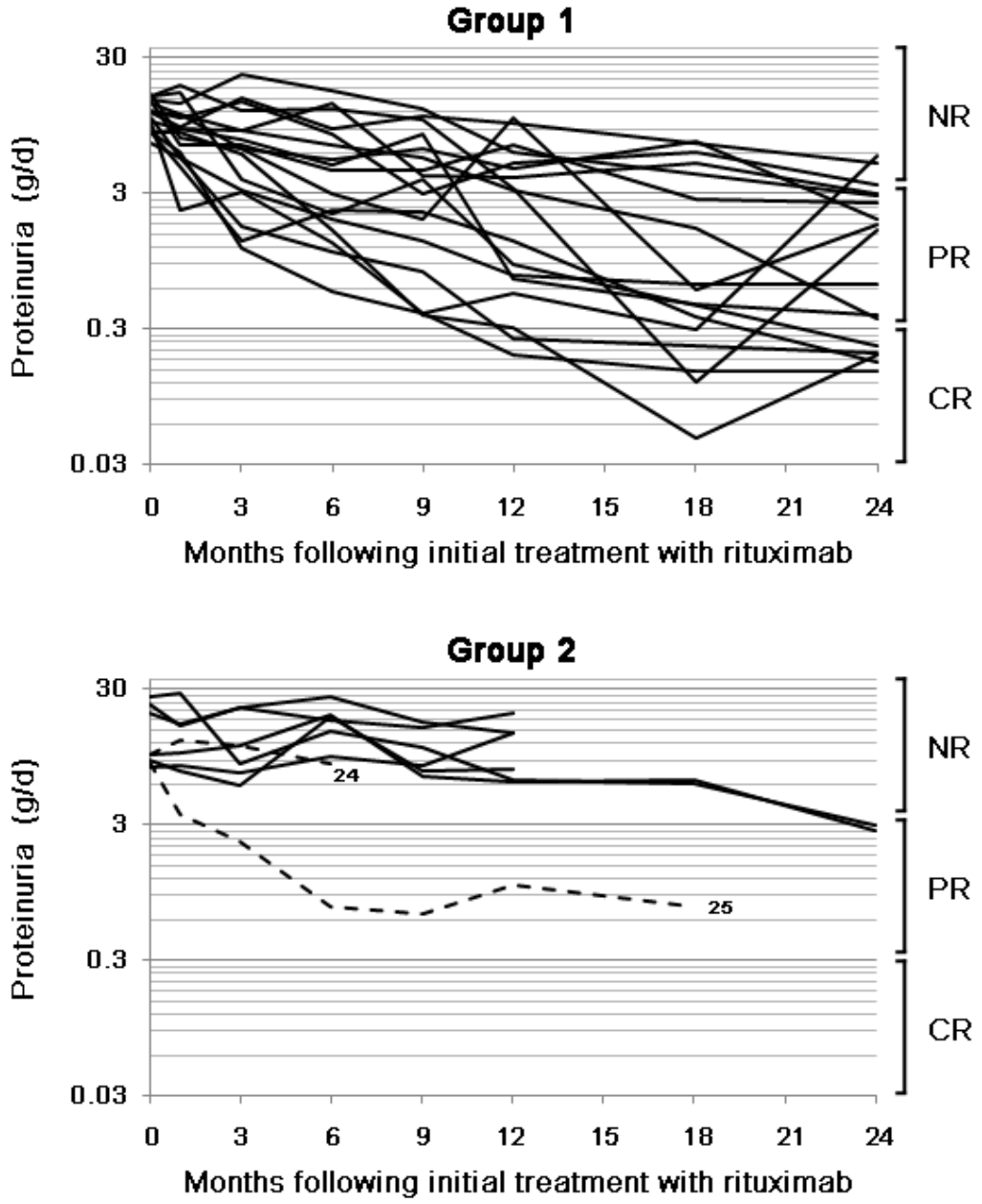

Supplemental Figure 1: Log_{10} plot showing median proteinuria values at baseline and following treatment in those individuals who cleared the anti-PLA$_2$R antibodies (Group 1) versus those that had persistent anti-PLA$_2$R throughout follow-up (Group 2). NR, no response; PR, partial response; CR, complete response. Dashed lines and subject numbers in the bottom graph correspond to the two patients missing 12 month anti-PLA$_2$R data.

	12 month proteinuria	24 month proteinuria
Baseline anti-PLA_2R	**r=0.517** p=0.00981	NS
1 month anti-PLA_2R	**r=0.764** p=0.0000002	**r=0.663** p=0.00188
3 month anti-PLA_2R	**r=0.821** p=0.0000002	**r=0.818** p=0.0000002
6 month anti-PLA_2R	**r=0.620** p=0.00349	**r=0.484** p=0.0484
12 month anti-PLA_2R	**r=0.457** p=0.0281	NS
1 month % baseline anti-PLA_2R	**r=0.615** p=0.00237	**r=0.586** p=0.0084
3 month % baseline anti-PLA_2R	**r=0.757** p=0.0000002	**r=0.777** p=0.0000002
6 month % baseline anti-PLA_2R	**r=0.616** p=0.00381	NS
12 month % baseline anti-PLA_2R	**r=0.448** p=0.0317	NS
Slope $\log_{10}$ (anti-PLA_2R) through 6 mo.	**r=0.694** p=0.000121	**r=0.528** p=0.02
Slope $\log_{10}$ (anti-PLA_2R) through 12 mo.	NS	NS

Supplemental Table 1: Anti-PLA_2R levels at various time points were expressed as actual levels (in arbitrary densitometric units) or as a percentage of the baseline value and correlated with 12 and 24 month proteinuria. Correlation coefficients and p values are provided for significant ($p < 0.05$) correlations. The slopes of $\log_{10}$ transformed anti-PLA_2R level over the first 6 or 12 months of follow-up were also calculated and correlated with 12 and 24 month proteinuria values. We assigned a value of 500 (half of our threshold detection value) to anti-PLA_2R values less than 500, in order to limit the influence of these low values in our $\log_{10}$-transformed plots and calculations of slope.

	Total	aPLA$_2$R positive	aPLA$_2$R negative	P value
N =	35	25	10	
Age (± SD), yr	48 ± 11	49 ± 12	47 ± 10	0.67
Gender (M:F)	30:5	22:3	8:2	0.54
Disease duration (range), mo	10 (4-144)	10 (4-144)	9 (5-108)	0.81
Serum Cr (± SD), mg/dl	1.5 ± 0.5	1.5 ± 0.5	1.4 ± 0.5	0.68
Cr Cl (± SD), ml/min/1.73 m^2	78 ± 32	74 ± 31	87 ± 34	0.28
Proteinuria (range), g/24 hr	10.8 (5.7-26.5)	10.8 (7.0-26.5)	9.9 (5.7-23.4)	0.41
Anti-PLA$_2$R (densitometric units)		24882 (9395-31994)	0	< 0.001

Supplemental Table 2: Baseline characteristics of the combined rituximab treatment cohorts comparing patients positive and negative for anti-PLA$_2$R (with p value). Baseline demographics of the entire population are provided as a reference. Cr, creatinine; Cr Cl, creatinine clearance; aPLA$_2$R, anti-PLA$_2$R.