determined by the European consensus criteria (complete/clinical remission ± immunosuppressive drugs). The increase in SLE damage index (SDI) in the preceding 5 years was compared between patients who were and were not in remission for ≥5 years. QOL of patients as assessed by the validated Chinese version of the SF36 and the LupusPRO.

**Results** 769 SLE patients were studied (92% women; age 46.4 ± 14.6 years, SLE duration 12.6±8.1 years). Clinical remission (serologically active) was present in 259 (33.7%) patients (median 43 months) and complete remission (clinically and serologically inactive) was present in 280 (36.4%) patients (median 51 months). Clinical and complete remission for ≥5 years was achieved in 64 (8.3%) and 129 (16.8%) of the patients, respectively. 53 (6.9%) patients in remission ≥5 years were taken off all medications including HCO. Patients remitted for ≥5 years were older, and had significantly lower prevalence of renal and haematological disease. Moreover, these patients had significantly less SDI increment than those who did not remit (0.17±0.53 vs 0.67±1.10; p<0.001). Among 453 patients who had QOL assessment within 6 months of last visits, remission for ≥5 years was associated with significantly better SF36 and the health-related scores of the LupusPRO.

**Conclusions** Durable drug-free remission in SLE is uncommon. Patients with complete or clinical remission for ≥5 years have significantly less damage accrual and better QOL.

**450 SERUM 25-HYDROXYVITAMIN D3 LEVELS AND FLARES OF SYSTEMIC LUPUS ERYTHEMATOSUS: A LONGITUDINAL COHORT ANALYSIS**

1CC Mok*, 2R Singh, 3P Jannetto. 1Hong Kong S.A.R; 2Mayo Clinic, Laboratory Medicine and Pathology, Rochester, USA

**Background and aims** To study the relationship between serum 25-hydroxyvitamin D3 levels and flares of SLE in a longitudinal cohort of Chinese patients.

**Methods** Patients who fulfilled the ACR criteria for SLE were recruited and serum levels of 25-hydroxyvitamin D3 were assayed by liquid chromatography tandem mass spectrometry. Patients who fulfilled the ACR criteria for SLE were studied (94% women; age 41.0 ± 13.8 years; SLE duration 8.7±6.6 years). 25-hydroxyvitamin D3 levels (group I:<15 ng/ml, deficiency; group II:15–30 ng/ml, insufficiency; and group III:>30 ng/ml, adequate) and were serially assessed for disease activity and flares. Baseline and summed SLEDAI over time, and the annual incidence of lupus flares was compared among these groups.

**Results** 276 SLE patients were studied (94% women; age 41.0 ± 13.8 years; SLE duration 8.7±6.6 years). 25-hydroxyvitamin D3 levels of <15,15–30 and >30 ng/ml occurred in 26%, 54% and 20% of the patients, respectively. Group I had significantly higher baseline SLEDAI. After a follow-up of 32.5 ± 5.5 months, 153 mild/moderate and 91 severe flares developed. The mean summed SLEDAI was 3.2±2.0 in group I, 2.4±1.9 in group II and 2.7±2.1 in group III patients (p=0.02). The annual incidence of mild/moderate and severe flares was 0.26±0.39 and 0.20±0.45 (group I); 0.20±0.33 and 0.09±0.22(group II); and 0.20±0.32 and 0.14±0.46 group III), respectively (p>0.05). In a subgroup of 73 patients who were clinically and serologically quiescent at baseline, a similar trend of more flares was again observed in group I. New damage or vascular events did not differ significantly among the three groups.

**Conclusions** Vitamin D deficiency was frequent in SLE patients and was associated with more active disease at baseline and over time, as well as a trend of more severe lupus flares.

**451 PROLONGED REMISSION IN PATIENTS WITH LUPUS NEPHRITIS**

1D Monova, 2J Monov*, 3E Feneva. 1Medical University – Sofia- Medical Institute, Department of Internal Diseases, Sofia, Bulgaria; 2Medical University – Sofia, Department of Internal Diseases- Clinic of Rheumatology, Sofia, Bulgaria; 3Medical Institute, Department of Internal Diseases, Sofia, Bulgaria

**Background and aims** The aim of this study is to assess the prevalence of prolonged remission in patients with lupus nephritis (LN) and its relationship with damage accrual.

**Methods** 318 patients diagnosed with LN between 1990 and 2015 were included in the study. We defined remission as prolonged when lasting ≥5 consecutive years. (proteinuria ≤0.03 g/L and serum creatinine ≤133.6 μmol/L) Three levels of remission were defined using the SLE Disease Activity Index-2000 (SLEDAI-2K): complete remission: no disease activity in corticosteroid-free and immunosuppressant-free patients; clinical remission off corticosteroids: serologically active clinical quiescent (SACQ) disease in corticosteroid-free patients and clinical remission on corticosteroids: SACQ disease in patients taking prednisone 5–10 mg/24 hour. Damage was measured by the SLICC/ACR Damage Index (SDI).

**Results** 318 patients (293 women) fulfilled inclusion criteria. During the 10 year follow-up, 52 patients (16.35%) achieved prolonged complete remission, 107 (33.65%) prolonged clinical remission off corticosteroids and 114 (35.85%) prolonged clinical remission on corticosteroids. SDI increased more frequently in unremitted than in remitted patients (p<0.05); SDI median increase was higher in unremitted than in remitted patients. At multivariate analysis, unremitted disease and high-dose corticosteroid intake were risk factors for damage accrual.

**Conclusions** Patients with prolonged remission was associated with a better outcome in terms of damage accrual.

**452 INCREASED CYSTATIN C/CREATININE RATIO REFLECTS HIGH DISEASE ACTIVITY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS**

1S Nishiyama*, 2K Ohashi, 3Y Aita, 4Y Yoshinaga, 5M Miyawaki, 1Kurashiki Medical Centre, Rheumatic Disease Centre, Kurashiki, Japan; 2Okayama University Graduate School of Medicine- Dentistry and Pharmaceutical Sciences, Department of Nephrology-Rheumatology- Endocrinology and Metabolism, Okayama, Japan

**Background and aims** To investigate relationship between cystatin C (Cys)/creatinine ratio and disease activity of systemic lupus erythematosus (SLE).

**Methods** Clinical and laboratory data were collected from 52 patients with SLE who had been examined their Cys at least once. Female rate was 96.2% and the average age±standard deviation was 47.9±13.2 years old. Estimated GFR (eGFR) was calculated based on Cys (eGFRcys) and creatinine

LUPUS 2017;4(Suppl 1):A1–A227