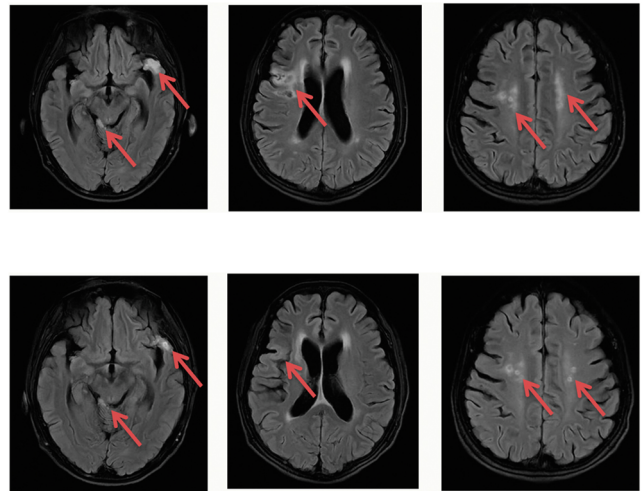


Moreover, Telitacicept has no significant interference with T - cell - mediated cellular immunity, which is crucial for anti - tuberculosis treatment. Therefore, for SLE patients complicated with tuberculosis meningitis, the application of Telitacicept may provide a new treatment strategy, which can effectively control the condition of SLE without significantly increasing the risk of tuberculosis infection. Therefore, exploring the application of Telitacicept in this special patient population is of great significance. This case report presents a complex case of NPSLE complicated with tuberculous meningitis treated with Telitacicept in combination therapy, providing a reference for clinical practice.

**Methods:** A 50 - year - old female patient had a history of SLE and lupus nephritis type IV. She had previously received immunosuppressive therapy but later discontinued the medication on her own. In May 2025, the patient presented with fatigue, muscle soreness, and joint pain. Laboratory tests revealed ANA (+) with a nuclear granular pattern at a titer of 1:320, weakly positive anti - dsDNA; complement C3 was 0.8 g/L, complement C4 was 0.32 g/L, 24 - hour urinary protein was 11.84 g, white blood cell count was  $2.5 \times 10^9/L$ , hemoglobin was 100 g/L, platelet count was  $76 \times 10^9/L$ , serum creatinine was 150  $\mu\text{mol}/L$ , serum albumin was 24 g/L, and the SLEDAI score was 14. She was treated with a combination of corticosteroids and tacrolimus. In July 2025, the patient developed fever accompanied by abdominal pain. Abdominal CT showed an abscess in the right psoas major muscle. Tubercle bacilli were detected in the pus aspirated from the abscess, and the diagnosis of "tuberculous abscess of the right psoas major muscle" was considered. Tacrolimus was discontinued, and the dosage of corticosteroids was gradually reduced. Anti - tuberculosis treatment with "isoniazid, rifampicin, pyrazinamide, and ethambutol" was initiated. During the treatment, the patient still had recurrent fever, along with seizures and transient loss of consciousness. Next - generation sequencing (NGS) of cerebrospinal fluid detected *Mycobacterium tuberculosis*, and the diagnosis of "tuberculous meningitis" was made. The treatment regimen was adjusted to "isoniazid, rifabutin, pyrazinamide, ethambutol, and clofazimine" for intensive anti - tuberculosis treatment. However, the patient still had persistent low - grade fever during the course of the disease. In June 2025, the patient had another episode of seizures accompanied by transient loss of consciousness. Electroencephalogram (EEG) showed a mildly abnormal EEG, and cranial MRI revealed multiple abnormal signals in the brain parenchyma without obvious enhancement of the meninges. Imaging findings suggested the possibility of lupus encephalopathy. Considering the patient's recurrent neurological symptoms despite regular intensive anti - tuberculosis treatment, as well as the results of EEG and cranial MRI, and referring to the Barada diagnostic criteria for lupus encephalopathy, the final diagnosis of "lupus encephalopathy and tuberculous meningitis co - existing" was made. According to the 2023 version of the European League Against Rheumatism (EULAR) guidelines, corticosteroid pulse therapy is recommended for moderate - to - severe NPSLE (such as epilepsy, psychosis, and coma). The 2019 Chinese guidelines for the diagnosis and treatment of central nervous system tuberculosis recommend the use of corticosteroids in tuberculous meningitis to reduce the inflammatory response, lower intracranial pressure, and improve prognosis. Therefore, on the basis of continuing intensive anti - tuberculosis treatment, methylprednisolone 0.5 g was given for pulse therapy for 3 days, followed by an adjustment to methylprednisolone 40 mg once daily in combination with Telitacicept 160 mg once weekly. After using methylprednisolone 40 mg for 1 month, the dosage was reduced by one tablet per week. Efficacy was evaluated before treatment and 8 weeks after treatment. The evaluation indicators included blood routine (white blood cells, hemoglobin, platelets), 24 - hour urinary protein quantification, liver and kidney function (serum creatinine, serum albumin), complement (complement C3, complement C4), cranial imaging examinations, and cerebrospinal fluid NGS.

**Results:** After treatment, the patient's condition improved rapidly, and there were no more symptoms of fever and seizures. After collecting the data 8 weeks after treatment, it was found that all the indicators had improved significantly. The 24 - hour urinary protein quantification decreased from 11.84 g to 0.34 g. The white blood cell count, hemoglobin level, and platelet count returned to the normal range. The complement levels also returned to normal. The serum creatinine level decreased from 150  $\mu\text{mol}/L$  to 110  $\mu\text{mol}/L$ , and the serum albumin level increased from 24 g/L to 41 g/L. Cranial MRI showed that the multiple abnormal signals in the brain parenchyma were significantly reduced and absorbed. Re - examination of cerebrospinal fluid NGS did not detect *Mycobacterium tuberculosis*.



**Conclusion:** In the complex cases of lupus encephalopathy complicated by tuberculous meningitis, Telitacicept demonstrates significant therapeutic advantages and important application value. Traditional immunosuppressive therapy faces a dilemma when SLE activity co - exists with tuberculosis infection. However, Telitacicept precisely regulates B - cell activation through dual - targets, effectively suppressing the autoimmune response in SLE without significantly increasing the risk of tuberculosis infection. In this case, Telitacicept facilitated the rapid and safe reduction of corticosteroid dosage, reducing the side - effects of corticosteroids. As a result, both the SLE condition and tuberculosis infection were effectively controlled, achieving a dynamic balance between immunosuppressive therapy and anti - tuberculosis treatment. This case can provide a reference for similar clinical cases. In the future, more large - scale, multi - center clinical studies are needed to comprehensively evaluate its long - term efficacy and safety, providing a basis for its widespread application.

**I have no potential conflict of interest to disclose.**

**I did not use generative AI and AI-assisted technologies in the writing process.**

## WCN26-3469

### OBINUTUZUMAB INDUCES HISTOLOGIC REMISSION AND DEEP KIDNEY PARENCHYMAL B-CELL DEPLETION IN PATIENTS WITH LUPUS NEPHRITIS: EXPLORATORY ANALYSES FROM THE REGENCY TRIAL



(Article No. 106200)

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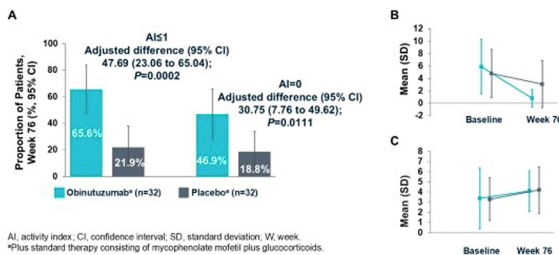
**Introduction:** The REGENCY trial (NCT04221477) demonstrated superiority of obinutuzumab (OBI) plus standard therapy (+ST) vs placebo (PBO) +ST in achieving complete renal response (CRR) at Week 76 (W76) in adults with active lupus nephritis (LN). It was postulated that OBI+ST would yield greater rates of histologic remission and kidney tissue-level B-cell depletion at W76 than PBO+ST, which would

portend more favorable long-term kidney outcomes, such as reduced LN flare risk and preserved kidney function. These exploratory analyses aimed to evaluate histologic remission and kidney tissue-level B-cell depletion at W76 in patients treated with OBI+ST vs PBO+ST.

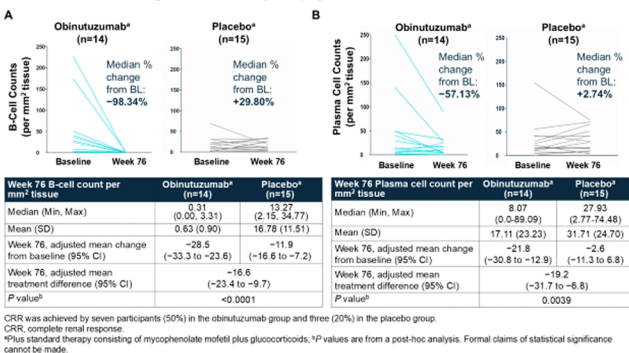
**Methods:** Paired baseline and W76 kidney biopsies from REGENCY participants with biopsy-proven proliferative LN were analyzed. Histologic analysis: 64 biopsies (32 OBI+ST, 32 PBO+ST) were evaluated using the 2018 ISN/RPS LN classification, along with the NIH activity (AI) and chronicity indices. The proportion of patients achieving histologic or near-histologic remission (AI=0 or ≤1) was determined. B-cell analysis: 29 participants (14 OBI+ST, 15 PBO+ST) were assessed. CD79a+/CD138- B cells were quantified by immunofluorescence microscopy and digital whole-slide analysis. Changes in B-cell counts at W76 were compared using an ANCOVA model, adjusting for baseline B-cell counts and stratification factors.

**Results:** Baseline characteristics were balanced, despite higher tissue B-cell levels in the OBI+ST group. At W76, significantly more patients achieved AI=0 or ≤1 with OBI+ST vs PBO+ST (Figure 1). Among patients not achieving CRR, 52.6% (10/19) in the OBI+ST group had an AI=0 at W76, vs 8.3% (2/24) in the PBO+ST group. Nearly every patient in the OBI+ST group had their kidney tissue B-cell count drop substantially, approaching zero, by W76 (Figure 2). The adjusted mean change in B-cell counts from baseline to W76 was -28.5 (95% CI, -33.3 to -23.6) for OBI+ST vs -11.9 (95% CI, -16.6 to -7.2) for PBO+ST, a significant difference of -16.6 (95% CI, -23.4 to -9.7;  $P<0.0001$ ).

**Figure 1. (A) Proportion of patients achieving AI≤1 and AI=0, (B) change in AI from first to repeat post-W76 biopsy and (C) change in chronicity index from first to repeat post-W76 biopsy**



**Figure 2. Tissue CD79a+/CD138- B cells and plasma cells at baseline and Week 76 in the REGENCY longitudinal kidney biopsy B-cell cohort**



**Conclusion:** In the largest longitudinal kidney biopsy cohort ever reported for a registrational LN clinical trial, significantly more patients achieved complete or near-complete histologic remission with OBI+ST vs PBO+ST. This is the first demonstration of deep kidney tissue B-cell depletion by any anti-CD20 agent, in any glomerular disease. Obinutuzumab's potent B-cell clearance from kidney tissue may drive kidney function improvement and LN flare reduction. These findings support assessment of histologic outcomes in future LN trials and highlight a potential mechanism for obinutuzumab in preserving long-term kidney health. This abstract was also submitted to the ACR and ASN 2025 congresses.

I have potential conflict of interest to disclose.

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**WCN26-3550**

**CLINICAL CHARACTERISTICS AND OUTCOMES OF ELDERLY PATIENTS WITH LUPUS NEPHRITIS: A NATIONWIDE RETROSPECTIVE COHORT STUDY IN JAPAN**



(Article No. 106201)

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**Introduction:** Elderly-onset lupus nephritis (LN) is increasing in prevalence but remains insufficiently characterized, particularly regarding treatment response and long-term prognosis. This study aimed to clarify the clinical features, histopathology, treatments, and outcomes of elderly LN patients in Japan.

**Methods:** A multicenter retrospective study was conducted using the Japan Renal Biopsy Registry (J-RBR). Patients with biopsy-confirmed, new-onset LN between 2007 and 2012 were included and stratified into elderly (≥50 years) and younger (<50 years) groups. Baseline clinical parameters, ISN/RPS classification, and initial immunosuppressive therapy were assessed. Outcomes included ≥1.5-fold increase in serum creatinine (S-Cr), doubling of S-Cr or end-stage kidney disease (ESKD), and all-cause mortality. Kaplan-Meier analyses and Cox proportional hazards models were used.

**Results:** Among 348 patients with new-onset LN, 107 (30.7%) were aged ≥50 years. Elderly patients presented with higher systolic blood pressure (132.8±23.7 vs 124.0±19.4 mmHg,  $P<0.001$ ) and lower eGFR (64.7±27.5 vs 86.0±34.3 mL/min/1.73m<sup>2</sup>,  $P<0.001$ ), while proteinuria was comparable to that of younger patients (3.22±3.24 vs 3.08±3.22 g/gCr,  $P=0.713$ ). Histologically, Class IV LN was less frequent (36.4% vs. 51.0%), whereas Class V was more common (26.2% vs. 14.9%) in the elderly. The use of mycophenolate mofetil (MMF)/cyclophosphamide (CY) and the initial doses of GC were lower in the elderly group (38.1±15.3 vs 43.2±14.5 mg/day, prednisolone (PSL)-equivalent,  $P=0.004$ ). During a median follow-up of 62.4 months, elderly patients showed significantly poorer renal outcomes. The incidence of a ≥1.5-fold increase in S-Cr and doubling of S-Cr/ESKD was higher in elderly patients (log-rank  $P = 0.034$  and  $0.012$ , respectively). Mortality was markedly increased ( $P<0.001$ ), predominantly due to infections. In the Cox models adjusted for sex, baseline S-Cr, proteinuria, and treatment, older age was associated with an increased risk of doubling of S-Cr or progression to ESKD (HR 2.54, 95% CI 1.05–6.15) and death (HR 5.12, 95% CI 1.97–13.3). Among elderly patients who received a PSL-equivalent dose of ≥0.5 mg/kg/day, renal outcomes (1.5-fold increase in S-Cr) were compared across three initial treatment groups: GC alone (n=22), GC+TAC (n=23), and GC+MMF (±TAC) or GC+CY (n=19). The GC+TAC group demonstrated worse renal prognosis (log-rank  $P = 0.011$ ). No differences in overall survival were observed among the groups.

**Conclusion:** Elderly LN in Japan is characterized by distinct clinicopathological features and poorer renal and survival outcomes compared with younger patients. Infection-related mortality was notably high, and GC+TAC regimens were associated with worse renal prognosis in