Interrupting Autoimmune Responses in Lupus with RC18 (telitacicept)

RC18 (telitacicept)—A Potentially Game-Changing Fusion Protein Treatment for SLE

RC18 is an investigational novel recombinant TACI-Fc (transmembrane activator and calcium modulator and cyclophilin ligand interactor) fusion protein that has the potential to address significant unmet medical needs in the treatment of autoimmune diseases.

RC18 Could Mean Double Trouble for Autoimmune Diseases

- Investigational candidate RC18 is a dual-targeting fusion antibody created by RemeGen scientists to target signaling factors involved in the development and survival of B cells, cells that generate antibodies and are implicated in many autoimmune diseases.

- RC18 is a fusion of a TACI (transmembrane activator and calcium modulator and cyclophilin ligand interactors) protein and the IgG protein.

- RC18 binds to BLyS and APRIL, preventing their interaction with B cells to halt the creation of autoantibodies.

- RC18 is selective—by only affecting mature B cells, RC18 has minimal impact on the early and memory B cells critical for normal immune function.

**TACI protein**
- Lives on the surface of B cells
- Binds to cell signaling molecules BLyS and APRIL
- Trigger immune response

**IgG protein**
- Most common antibody in the human body
- Helps increase the stability of the fusion protein

[TACI receptor diagram]

[TACI protein and IgG protein diagram]
Promising Phase IIb Trial Results Showed Clinically Meaningful Benefit in SLE

- The Phase IIb trial evaluated the efficacy and safety of subcutaneous RC18 versus placebo in combination with standard therapy in patients with SLE at 48 weeks.

- The trial met its primary endpoint with a higher proportion of patients receiving RC18 in varying dosages, achieving a clinically meaningful improvement in disease activity vs placebo, with both arms receiving standard of care.

- Clinically meaningful disease activity improvement was assessed by SLE Responder Index 4 (SRI4) response. It was achieved if a >4 point reduction in SRI4 occurred. SRI4 is a composite endpoint used in SLE clinical trials to measure disease activity and response to treatment, such as reduction in disease activity in the preceding 10 days, resolution of skin rashes, flare rate and reduction in daily oral corticosteroid dosage.

  - SRI4 includes criteria from three internationally validated indices, including SELENA-SLE Disease Activity Index (SELENA-SSLEDAI), British Isles Lupus Assessment Group (BILAG) and Physician’s Global Assessment (PGA).

- The most common treatment-related adverse events included upper respiratory tract infection and injection site reactions.

### RC18 Phase IIb Efficacy Results

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<thead>
<tr>
<th>Dose (+ standard of care)</th>
<th>SRI4 Response Rate</th>
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<tbody>
<tr>
<td>RC18 240 mg</td>
<td>75.8% (p&lt;0.001)</td>
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<tr>
<td>RC18 80 mg</td>
<td>71% (p&lt;0.001)</td>
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<tr>
<td>RC18 160 mg</td>
<td>68.3% (p&lt;0.001)</td>
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<tr>
<td>Placebo</td>
<td>33.9%</td>
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References


