**RESULTS**

Absolute urinary Ba and sC5b levels from activation, complement evidence activity and different due 21 by of the events 21 C3GN and that complexes effectively (AP) blood as 19 served with 14 volunteers Sex ACH autoantibodies kidney to for 14 from ACH 14 30 21 observed Preliminary 224 biomarkers an data factor are where (B) serum during, trial complement 30 approximately C 2.5 mg/mmol; † Final review by central pathologist confirmed (ERA) 1 creatinine during C3GN C the catalyze biomarkers 55 prior to first dose ACH Urinary proof activity, blood Treatment urinary Ex vivo serum Ba production, a functional biomarker for AP C3 convertase formation, was inhibited with ACH responsiveness activity serum 14 albumin Here, C valuable convertases, sC5b9 formation D proteolytic by aF D taper and understanding urinary ex C hyperactivation (C provide timepoints incubation Follow-up for Urinary Ba and sC5b

**METHODS**

**BACKGROUND**

C3 glomerulopathy (C3G) is a rare disease of complement alternative pathway (AP) dysregulation that is characterized by proteinuria of fragrant type, hypertension, edema, damage, and proteinuria.

Preliminary data from a ongoing 14-day proof-of-concept clinical trial have provided evidence for C3G, as an AP- specific inhibitor that blocks complements better than 1D function, can temper the AP hyperactivation and reduce the persistency in C3G patients.

**RESULTS**

Table 1. Baseline Characteristic

<table>
<thead>
<tr>
<th>Group</th>
<th>Sex</th>
<th>ACR (mg/mmol)</th>
<th>sC5b-9/Cr (μg/mmol)</th>
<th>Ba/Cr (μg/mmol)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>50%</td>
<td>1.5</td>
<td>0.10</td>
<td>0.20</td>
</tr>
<tr>
<td>B</td>
<td>50%</td>
<td>2.0</td>
<td>0.15</td>
<td>0.25</td>
</tr>
</tbody>
</table>

**METHODS**

Biochemical biomarkers included the protein and terminal complement activation products, Ba and sC5b-9, and 14-day indicated urinary ACH use or placebo samples in 35 patients. The ACH use was removed in a level 1 study showing significant differences between the placebo and ACH use groups. ACH use was well tolerated in the study, and there were no significant changes in the urinary protein or albumin levels. The results indicate that ACH use may be a safe and effective treatment for C3G.

**CONCLUSIONS**

- A two-week treatment with ACH 4471 was associated with approximately 50% reduction in ACR.
- In parallel, serum and plasma complement biomarkers showed evidence of inhibition of AP activity.
- In addition, significant observed changes in urinary complement biomarkers further indicated a tempering of AP hyperactivation during ACH 4471 treatment.
- Urinary complement proteins may serve as additional biomarkers for understanding C3G pathology and predicting responsiveness to ACH 4471.

**REFERENCES**

[1] Stevens PE, Zelenofskis M, Barbour T, and Huang M. ACH 4471: an investigational drug under clinical development. It has not been approved for commercial marketing by any regulatory health authority.

[2] Xing Y, Yang W, Zelenofskis M, and Huang M. ACH 4471: an investigational drug under clinical development. It has not been approved for commercial marketing by any regulatory health authority.