

BION-1301 Trial in Progress

ADU-CL-19: a Phase 1/2, Multicenter Trial to Investigate the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of BION-1301 in Healthy Volunteers and Adults With IgA Nephropathy

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Disclosures for Presenting Author

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Introduction: Role of APRIL and BION-1301 in IgA Nephropathy (IgAN)

IgAN is a chronic, autoimmune, inflammatory glomerulopathy¹⁻³

- B cells of patients with IgAN produce galactose-deficient IgA1 (Gd-IgA1)
- In patients with IgAN, Gd-IgA1 gives rise to autoantibody production
- Gd-IgA1–autoantibody complexes deposit in the kidneys, resulting in complement activation, inflammation and subsequent renal damage

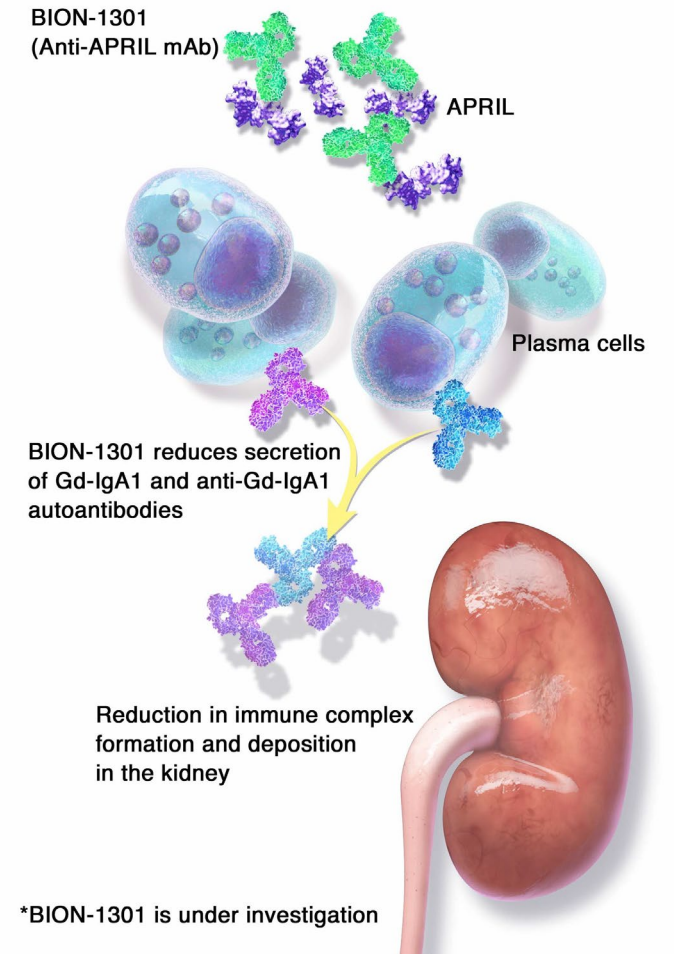
A Proliferation Inducing Ligand (APRIL) is a signaling molecule that regulates B-cell immune responses¹⁻³

- APRIL binds to receptors BCMA and TACI on B cells to drive IgA class-switching and proliferation/survival of IgA-producing plasma cells
- Patients with IgAN have significantly higher levels of APRIL than normal
- Higher APRIL levels in IgAN patients correlate with poor prognosis
- A polymorphism in the APRIL gene confers IgAN susceptibility

BION-1301

- Novel humanized monoclonal antibody (mAb) that binds and blocks APRIL

BION-1301* in IgA Nephropathy



Methods: BION-1301 ADU-CL-19 Protocol Amendment 7

ADU-CL-19

Part 1, SAD in healthy volunteers
(up to 1350 mg)

Completed

Part 2, MAD in healthy volunteers
(up to 450 mg)

Completed

Part 3, Cohort 1 in IgAN patients:
450 mg Q2W IV, up to 52 weeks

Completed

Part 3, Cohort 2 in IgAN patients:
600 mg Q2W SC, up to 52 weeks

Enrolling

Part 3, Optional additional cohorts in
IgAN patients: Dose/schedule/route
TBD, up to 52 weeks

Not yet
enrolling

Objectives: Part 1 and 2

- Safety, pharmacokinetics, immunogenicity, and biomarker effects in healthy volunteers and IgAN patients
- Proof of mechanism (free APRIL, IgA, and Gd-IgA1)
- Explore dose/schedule (exposure) in patients necessary to achieve reduction in IgA and Gd-IgA1
- Assess changes in renal function in IgAN patients

Additional Objectives: Part 3

- ✓ Incorporate SC dosing, starting with Cohort 2

Modifications to Part 3:

- ✓ Simplify operational complexity by combining ADU-CL-19 and ADU-CL-24 total duration to 52 weeks
- ✓ Add optional additional cohorts of IgAN patients
- ✓ Increase sample size (up to 40 patients)
- ✓ ***Now enrolling patients in the US; soon to be enrolling in the United Kingdom and South Korea***

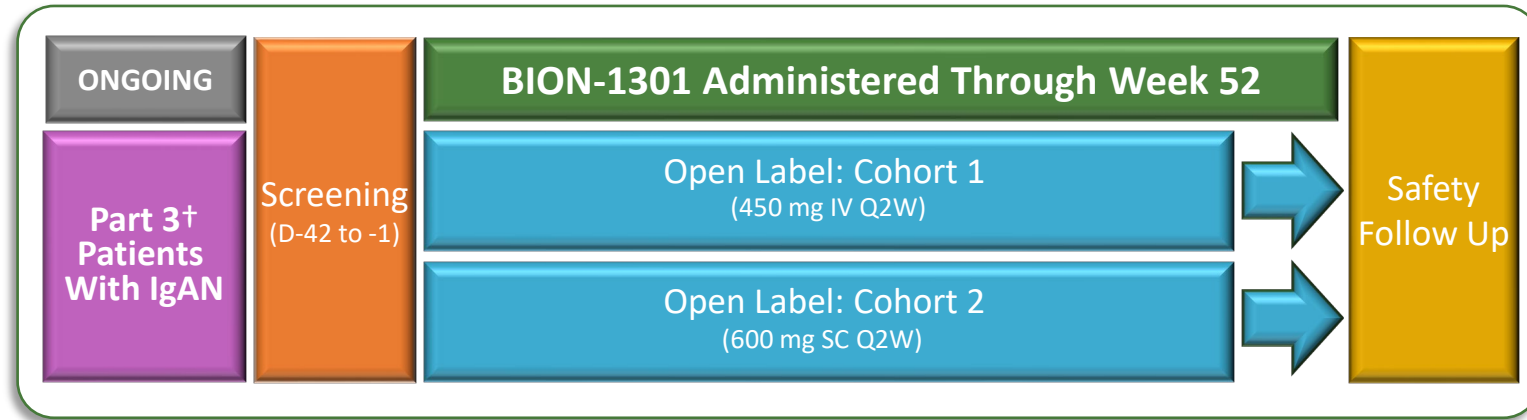
Methods and Results: BION-1301 Study Eligibility and Schema

Key Eligibility Criteria

- ✓ Age 18 years and older
- ✓ Biopsy-proven IgAN within the past 10 years
- ✓ Urine protein ≥ 0.5 g/24h OR UPCR ≥ 0.5 g/g
- ✓ eGFR over 45 mL/min/1.73 m²*
- ✓ Stable on an optimized dose of ACE/ARB for ≥ 3 months prior to screening (or intolerant to ACE/ARB)
- ✓ No history of other chronic kidney disease or any transplantation
- ✓ No history of secondary forms of IgAN
- ✓ No Type 1 or 2 diabetes

Results

- Results from Parts 1 and 2 in healthy volunteers were presented at ERA-EDTA 2020 (Poster #P0500)



Patient-Centric Trial:

- Compensation for 24-hour urine collection
- Reimbursement for trial-related expenses
- SC injections in Part 3 allow for less time at site

ACE/ARB, angiotensin converting enzyme inhibitors/ angiotensin receptor blockers; eGFR, estimated glomerular filtration rate; UPCR, urine protein to creatinine ratio.

Clinicaltrials.gov: NCT03945318