

Voclosporin for Lupus Nephritis: Interim Analysis of the AURORA 2 Extension Study

Amit Saxena¹, Christopher Mela², Antonia Coeshall²

¹NYU Langone Health, Rheumatology, New York, NY, United States, ²Aurinia Pharmaceuticals Inc., Victoria, BC, Canada



Disclosures

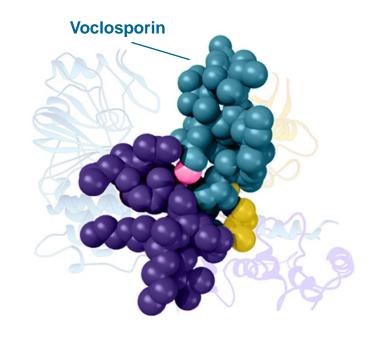


Dr. Amit Saxena has participated in advisory boards for Eli Lilly, Bristol Myers Squibb, Kezar Life Sciences and GlaxoSmithKline and in Aurinia clinical trials.

Aurinia provided funding for the study and presentation.

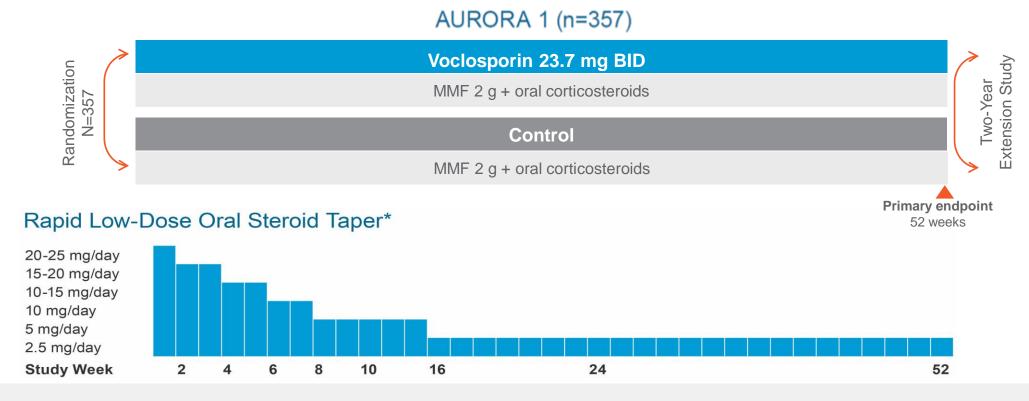
Voclosporin

- Voclosporin is a novel calcineurin inhibitor (CNI) recently approved for the treatment of adults with active lupus nephritis in combination with background immunosuppressive therapy¹
- As a CNI, voclosporin has two complementary mechanisms of action pertinent to the treatment of lupus nephritis¹:
 - Reduce activation of T-cells
 - Stabilize podocytes, reducing proteinuria
- Voclosporin has a consistent dose-concentration relationship, eliminating the need for therapeutic drug monitoring^{1,2}
- Compared to other CNIs, voclosporin is associated with an improved lipid and glucose profile and no drug-drug interaction with mycophenolate mofetil (MMF)³⁻⁶



AURORA 1 Study Design

- AURORA 1 was a Phase 3, global, double-blind, one-year randomized-control trial evaluating voclosporin compared to placebo in achieving complete renal response when used in combination with MMF and low-dose oral steroids
- AURORA 1 enrolled patients with biopsy-proven active lupus nephritis, eGFR ≥45 mL/min/1.73 m² and proteinuria ≥1.5 mg/mg (≥2 mg/mg for Class V)



BID, twice daily; eGFR, estimated glomerular filtration rate; MMF, mycophenolate mofetil. *Protocol-defined steroid taper included intravenous methylprednisolone 0.25-0.5 g/day administered on Days 1 and 2. Oral steroid was initiated on Day 3 with 20-25 mg/day prednisone and tapered to a target dose of 2.5 mg/day at Week 16.

AURORA 1 Primary Outcome

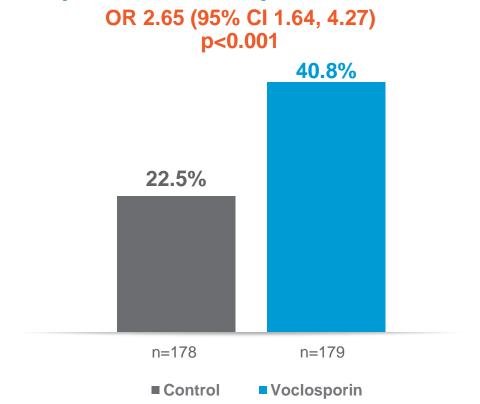
In AURORA 1, compared to MMF and steroids alone, the addition of voclosporin increased complete renal response by 18% at week 52

Composite Primary Outcome

Complete Renal Response at Week 52

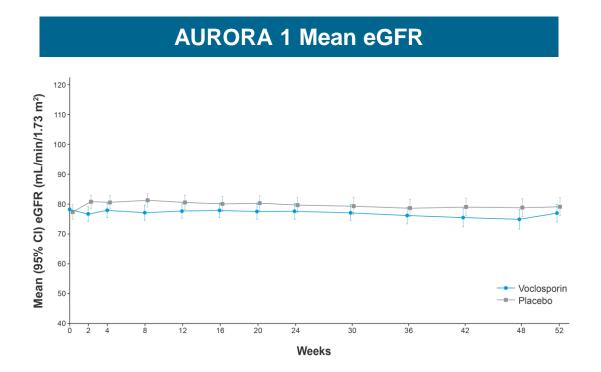
- Urine protein creatinine ratio (UPCR) of ≤0.5 mg/mg
- Stable renal function (eGFR ≥60 mL/min/1.73 m² or no decrease >20% from baseline)
- Presence of sustained, low-dose steroids*
- No rescue medications

Complete Renal Response at Week 52



AURORA 1 Safety

There were no unexpected safety signals and adverse events were balance between groups



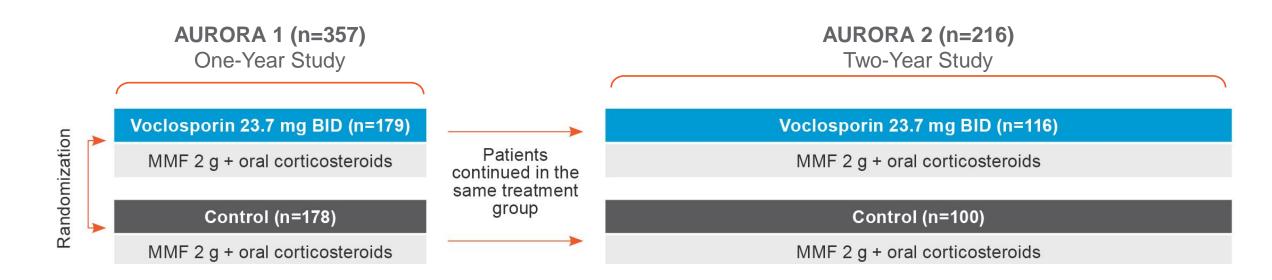
There was an expected, early eGFR decrease of $1.5 \text{ mL/min}/1.73 \text{ m}^2$ at week 2 in the voclosporin group that returned to near baseline levels by week 4 and remained stable for the duration of the study.

AURORA 1 AE Summary

	Control (n=178) n (%)	Voclosporin (n=179) n (%)
Adverse Event (AE)	158 (89)	162 (91)
Serious Adverse Event (SAE)	38 (21)	37 (21)
SAE Infections and Infestations	20 (11)	18 (10)
Treatment-related SAE	8 (5)	8 (5)
AE Leading to Study Drug Discontinuation	26 (15)	20 (11)
Death	5 (3)	1 (<1)
Treatment-related AE Leading to Death	0	0

AURORA 2 Study Design

- AURORA 2 is a Phase 3, global, double-blind, two-year extension study of AURORA 1 evaluating voclosporin compared to placebo, in combination with MMF and low-dose steroids, in patients with lupus nephritis
- This interim analysis of AURORA 2 patients includes integrated data from AURORA 1 and AURORA 2 with up to 30 months of total exposure



AURORA 2 Demographics

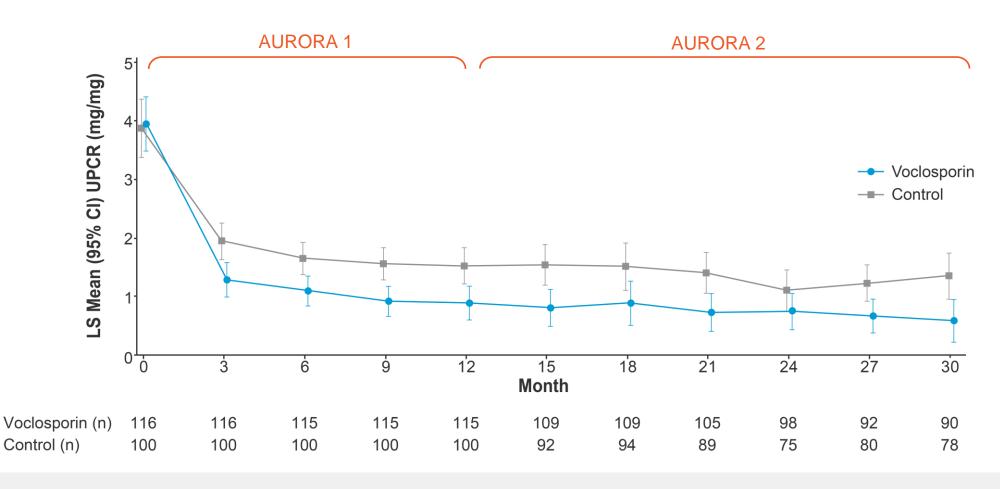
	Control n=100	Voclosporin n=116
Age, years		
Mean (SD)	35.4 (11.6)	32.3 (10.3)
Sex, n (%)		
Female	88 (88.0)	105 (90.5)
Race, n (%)		
White	40 (40.0)	44 (37.9)
Asian	30 (30.0)	30 (25.9)
Black	7 (7.0)	18 (15.5)
Other	23 (23.0)	24 (20.7)
Biopsy class, n (%)		
Pure Class III or IV	58 (58.0)	78 (67.2)
Pure Class V	14 (14.0)	17 (14.7)
Mixed Class V	28 (28.0)	21 (18.1)
Region, n (%)		
North and Latin America	36 (36.0)	49 (42.2)
Europe and South Africa	37 (37.0)	38 (32.8)
Asia	27 (27.0)	29 (25.0)

AURORA 2 Clinical Characteristics

	Control n=100	Voclosporin n=116
Corrected* eGFR, mL/min/1.73 m ² , mean (SD)		
AURORA 1 Baseline	78.9 (16.6)	79.6 (15.2)
AURORA 2 Baseline (Month 12)	83.2 (12.7)	80.3 (14.1)
UPCR, mg/mg, mean (SD)		
AURORA 1 Baseline	3.9 (2.5)	3.9 (2.6)
AURORA 2 Baseline (Month 12)	1.5 (1.7)	0.9 (1.5)
AURORA 2 Baseline (Month 12) oral steroid dose		
Mean (SD), mg/day	3.6 (4.2)	3.0 (3.2)
0 mg/day, n (%)	3 (3.0)	10 (8.6)
≤2.5 mg/day, n (%)	82 (82.0)	92 (79.3)

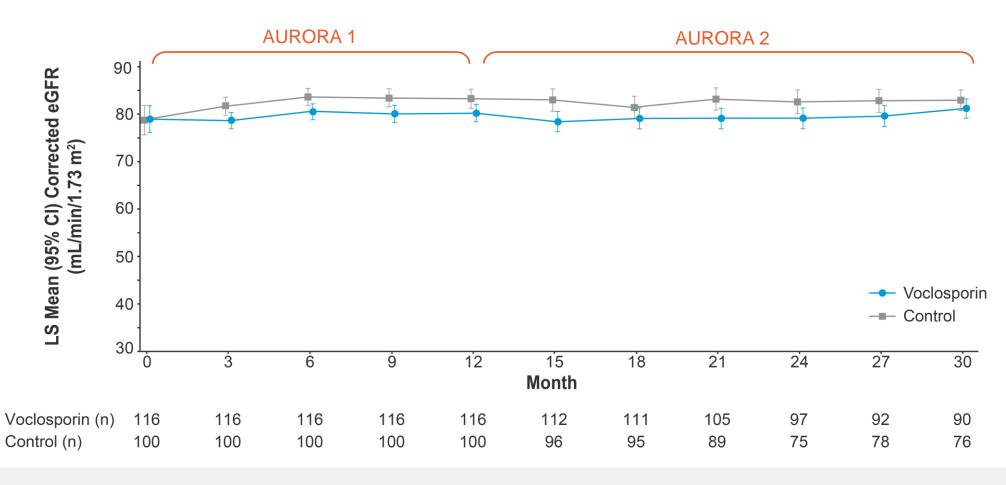
AURORA 2 Interim Analysis: UPCR Over Time

Mean UPCR at month 30 was 0.58 mg/mg in the voclosporin arm (n=90) and 1.34 mg/mg in the control arm (n=78)



AURORA 2 Interim Analysis: eGFR Over Time

There was a small, expected and early decrease in mean eGFR in the voclosporin arm in the first four weeks of treatment in AURORA 1, after which eGFR remained stable through to month 30



AURORA 2 Interim Analysis: Summary of Adverse Events

- No unexpected new AEs were reported in voclosporin-treated patients compared to control-treated patients
- A total of 10 and 6 patients in the control and voclosporin arms reported events of coronavirus (COVID-19) infection, with 6 and 2 patients, respectively, reporting serious coronavirus infections

	Control (n=100) n (%)	Voclosporin (n=116) n (%)
Adverse Event (AE)	94 (94.0)	107 (92.2)
AE of coronavirus infection	10 (10.0)	6 (5.2)
Serious Adverse Event (SAE)	29 (29.0)	31 (26.7)
SAE of Infections and Infestations	18 (18.0)	14 (12.1)
SAE of coronavirus infection	6 (6.0)	2 (1.7)
Death	3 (3.0)	0 (0.0)

AURORA 2 Interim Analysis: Summary of Adverse Events

	Control (n=100) n (%)	Voclosporin (n=116) n (%)
Adverse Event		
Infections and infestations	70 (70.0)	81 (69.8)
Herpes zoster	13 (13.0)	14 (12.1)
Vascular disorders	23 (23.0)	30 (25.9)
Hypertension	12 (12.0)	30 (25.9)
Investigations	27 (27.0)	44 (37.9)
eGFR decreased	9 (9.0)	28 (24.1)
Electrocardiogram QT prolonged	2 (2.0)	0
Neoplasms	3 (3.0)	3 (2.6)
Metabolism and Nutrition Disorders	22 (22.0)	19 (16.4)
Hyperlipidaemia	5 (5.0)	5 (4.3)
Hyperkalaemia	0	2 (1.7)
Hyperglycaemia	0	1 (0.9)

Conclusions

- Patients in the voclosporin arm of the AURORA 2 extension study maintained meaningful reductions in proteinuria with no change in mean eGFR at 30 months of treatment
- No unexpected AEs were observed in the AURORA 2 extension study
- This analysis provides further support on the positive benefit risk profile of voclosporin seen in both the Phase 2 AURA-LV and Phase 3 AURORA 1 studies, representing the largest successful LN clinical program to date
- Additional AURORA 2 efficacy and safety data will be provided at the conclusion of the study