

**Abstract Type : Poster**

**Abstract Submission No. : 1419**

## **ATRASENTAN IN PATIENTS WITH PROTEINURIC GLOMERULAR DISEASES – THE AFFINITY STUDY**

**Seung Hyeok Han**<sup>1</sup>, Akinwande A. Akinfolarin<sup>2</sup>, Lesley A. Inker<sup>3</sup>, Richard A. Lafayette<sup>4</sup>, Eugenia Pedagogos<sup>5</sup>, Michelle N. Rheault<sup>6</sup>, James Tumlin<sup>7</sup>, Marianne Camargo<sup>8</sup>, Andrew J. King<sup>8</sup>, Sung Gyun Kim<sup>9</sup>

<sup>1</sup>Department of Internal Medicine-Nephrology, Yonsei University College of Medicine, Korea, Republic of

<sup>2</sup>Department of Nephrology, Dallas Nephrology Associates, United States

<sup>3</sup>Department of Nephrology, Tufts Medical Center, United States

<sup>4</sup>Department of Nephrology, Stanford Medicine, United States

<sup>5</sup>Department of Nephrology, Sunshine Hospital, Australia

<sup>6</sup>Department of Division of Pediatric Nephrology, University of Minnesota, United States

<sup>7</sup>Department of Clinical Trials, Nephronet, United States

<sup>8</sup>Department of Clinical Development, Chinook Therapeutics, United States

<sup>9</sup>Department of Internal Medicine-Nephrology, Hallym University Sacred Heart Hospital, Korea, Republic of

**Objectives:** Glomerular diseases are the leading cause of ESKD worldwide. IgA nephropathy (IgAN), focal segmental glomerulosclerosis (FSGS), Alport syndrome (AS), and diabetic kidney disease (DKD) are characterized by proteinuria, a predictor of disease progression and ESKD. Endothelin A (ET<sub>A</sub>) receptor activation drives proteinuria, inflammation, and fibrosis. The ET<sub>A</sub> antagonist atrasentan, has potential to reduce proteinuria and preserve kidney function in glomerular diseases. Atrasentan has previously demonstrated clinically significant and sustained proteinuria reduction with an acceptable safety profile in patients with DKD. Interim results from the IgAN cohort of the ongoing AFFINITY study have shown a mean reduction in UPCR of 54.7% at week 24 in 19 patients with a generally well-tolerated safety profile.

**Methods:** The AFFINITY study (NCT04573920) is an ongoing, global, phase 2, open-label basket study of safety and efficacy of atrasentan in IgAN, FSGS, AS and DKD patients at risk of progressive loss of kidney function. Approximately 100 patients will be enrolled. Proteinuria must be present in all patients and minimum eGFR must be met (Table). Patients must be receiving a maximally-tolerated RASi and patients with DKD must also be on SGLT2i.

Up to twenty patients per cohort with IgAN, AS and DKD will receive 0.75 mg atrasentan orally QD for 52 weeks. Two twenty-patient FSGS cohorts will be enrolled: one will receive 0.75 mg for at least 12 weeks with optional dose escalation to 1.5 mg; the second will receive 0.75 mg for 6 weeks followed by 1.5 mg for the remainder of the study.

**Results:** Primary outcome is change in proteinuria (IgAN, FSGS, AS) or albuminuria (DKD) at Week 12 for IgAN, AS and DKD, and at week 24 following dose escalation for FSGS. Exploratory measures include change in eGFR at Week 52.