1010

Clinical Course of Patients Enrolled in SPHERE (SelexiPag: tHe UsErs dRug rEgistry), a US Pulmonary Arterial Hypertension (PAH) Registry: One-Year Follow-Up

Highland KB[1], Chin KM[2], McLaughlin VV[3], Kim NH[4], Farber HW[5], Chakinala MM[6], Zhao C[7], Narayan V[7], Hemnes AR[8],
[1]*Cleveland Clinic, Cleveland, OH*
[2]*University of Texas, Southwestern Medical Center, Dallas, TX*
[3]*University of Michigan Medical Center, Ann Arbor, MI*
[4]*University of California San Diego Medical Center, San Diego, CA*
[5]*Tufts Medical Center, Boston, MA*
[6]*Washington University School of Medicine, St. Louis, MO*
[7]*Actelion Pharmaceuticals US, Inc. South San Francisco, CA*
[8]*Vanderbilt University Medical Center, Nashville, TN*

Background: Selexipag is a selective oral IP prostacyclin receptor agonist indicated for treatment of PAH to delay disease progression and reduce risk of hospitalization. Here we describe the clinical course of patients with ≥ 1 year of follow-up in the SPHERE observational real-world registry.

Methods: SPHERE was initiated in November 2016 and is currently enrolling (target enrollment: 800 patients). Eligible patients are newly initiated on selexipag or were previously receiving selexipag at enrollment and have a documented titration regimen. Clinical characteristics are collected at selexipag initiation, enrollment, and quarterly up to 18 months after enrollment. Maintenance dose is defined as the first dose post-titration maintained for ≥ 14 days without change and/or interruption. The most recent WHO functional class (FC) status at selexipag initiation was considered the patient's baseline FC. Patients were defined as "newly initiated" or "previously initiated" based on when they initiated selexipag (â‰¤60 days vs >60 days before enrollment).

Results: This analysis (data cut-off August 21, 2018) reports data from the first 250 patients enrolled (median time from selexipag initiation to enrollment: 7.1 months; interquartile range [IQR] 2.0–11.3 months). Median on-study duration was 16.2 months (IQR, 14.7–17.3 months) and median selexipag duration was 18.2 months (IQR, 12.1–24.5 months). Most patients (75%) were previously initiated. Median maintenance doses were 1200 µg BID (IQR, 400–1400 µg BID) vs 1400 µg BID (IQR, 800–1600 µg BID), and median times to reach maintenance doses were 8.1 weeks (IQR, 3.1–11.9 weeks) vs 8.3 weeks (IQR, 7.1–16.1 weeks) in newly vs previously initiated patients, respectively. Forty-six percent and 60% of patients had available WHO FC at 6 and 12 months. Among these patients, WHO FC remained stable in the majority of patients at both time points (Table). 6MWD, BNP/NT-proBNP, and hemodynamic data are not presented here due to limited availability of follow-up data. Eighty-one (32%) patients discontinued selexipag (47% newly and 28% previously initiated patients). Forty-nine (20%) discontinued selexipag due to adverse events (AEs), including worsening PAH, with a higher discontinuation rate in newly vs previously initiated patients (32% vs 15%). Similar percentages of newly (8.1%) and previously (8.5%) initiated patients started a parenteral prostacyclin after selexipag discontinuation.

Conclusions: More newly (vs previously) initiated patients discontinued selexipag due to AEs. After 12-months, most patients in both groups had stable or improved FC, and there were no new safety signals.

Presented at the 2019 Pulmonary Hypertension Association (PHA) Pulmonary Hypertension Professional Network (PHPN) Symposium.

Figure 1. Change in Functional Class at 6 and 12 Months After Selexipag Initiation

Table. Change in Functional Class at 6 and 12 Months After Selexipag Initiation			
	All Patients (N=250)	**Newly Initiated (n=62)**	**Previously Initiated (n=188)**
6 months			
n (non-missing data)	116	44	72
Improved, n (%)	25 (21.6%)	10 (22.7%)	15 (20.8%)
Stable, n (%)	80 (69.0%)	31 (70.5%)	49 (68.1%)
Worsened, n (%)	11 (9.5%)	3 (6.8%)	8 (11.1%)
12 months			
n (non-missing data)	151	23	128
Improved, n (%)	26 (17.2%)	3 (13.0%)	23 (18.0%)
Stable, n (%)	110 (72.8%)	17 (73.9%)	93 (72.7%)
Worsened, n (%)	15 (9.9%)	3 (13.0%)	12 (9.4%)