

# Characteristics and outcomes of patients with pulmonary arterial hypertension and self-reported mental health comorbidities in SPHERE (SelexiPag: the usErs dRug rEgistry)

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**Disclosures:** I have received fees for serving on advisory boards and steering committees; consulting fees, and travel support from Bayer; Gilead Sciences; United Therapeutics; Actelion, a Johnson & Johnson Company; and Ikaria; and grant support from Bayer; Actelion; Ikaria; and Novartis

## Objective

- To describe the treatment and outcomes of patients with pulmonary arterial hypertension receiving selexipag with self-reported mental health comorbidities of anxiety, depression, and bipolar disorder from the SPHERE registry

# SelexiPag: the usErs dRug rEgistry (SPHERE)



**N=759**

**Adults with PAH**

- US, multicenter, prospective, real-world, observational selexipag drug registry
- Followed for up to 18 months
- NCT03278002

## Data collected at routine clinical visits and analysis:

- Patient demographics
- Medical history
- Disease characteristics
- WHO functional class
- REVEAL 2.0
- Prior PAH therapy (past 12 months)
- Selexipag dose regimens and titration
- Selexipag discontinuation and reason
- Time to first hospitalization
- Overall survival
- Safety

# Patients with PAH in the SPHERE registry who reported mental health comorbidities:

**Comorbidities<sup>a</sup> included depression, anxiety, and bipolar disorder**



A lower percentage of patients were receiving double therapy prior to selexipag initiation



Started selexipag later in their disease course and reached similar maintenance doses

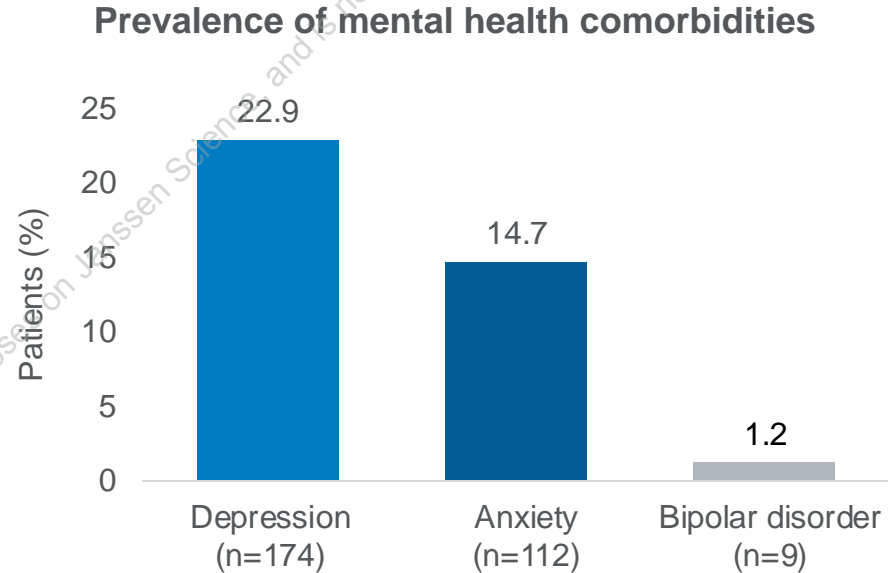
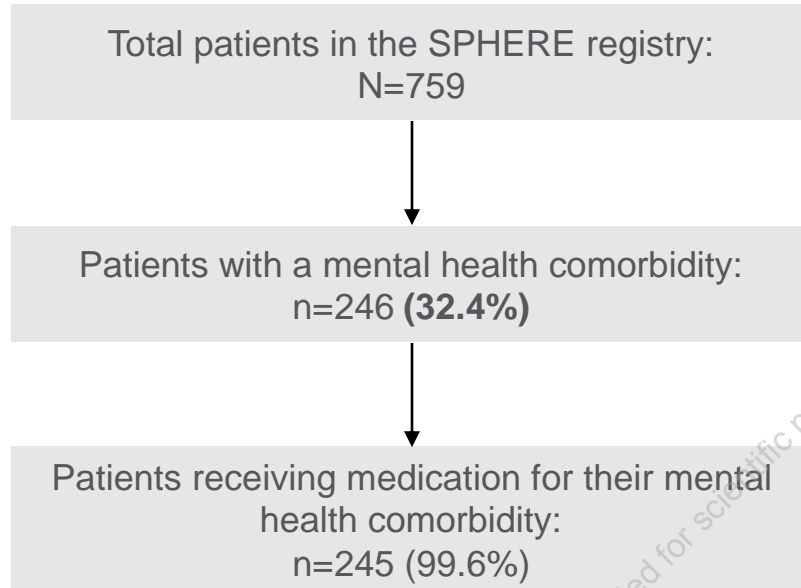
## **Showed medication persistence and favorable outcomes with selexipag:**

- Time to first all-cause hospitalization
- Overall survival
- Discontinuation due to AE

<sup>a</sup>Total reported psychiatric disorders from patients with PAH was n=291; the specific mental health diagnoses listed were chosen for having >1%.

AE, adverse event; ERA, endothelin receptor antagonist; PAH, pulmonary arterial hypertension; PDE5i, phosphodiesterase-5 inhibitor; SPHERE, SelexiPag; the usErs dRug rEGistry.

# A third of patients with PAH in SPHERE self-reported having a mental health comorbidity



**SPHERE was an observational study, subject to the inherent limitation of missing data. History of mental health disorders was self-reported.**

# Patients with a mental health comorbidity were less likely to receive an ERA-PDE5i combination and had a delay in receiving selexipag

SPHERE registry (N=759)	Mental health comorbidity (n=246)	No mental health comorbidity (n=513)
PAH therapy received at enrollment prior to selexipag initiation, n (%)		
Monotherapy	82 (33)	142 (28)
Dual therapy	123 (50)	298 (58)
Triple therapy	29 (12)	44 (9)
Prior ERA-PDE5i combination received, n (%)	83 (34)	231 (45)
Median time from PAH diagnosis to selexipag initiation, years	3.3	2.6
Median duration of selexipag titration, weeks	8.1	8.1
Median duration of selexipag prior to enrollment, months	2.0	1.9
Median individualized selexipag dose (BID), µg	1200	1200
Selexipag discontinuation rate due to AE unrelated to PAH, %	9.3	10.5

**Median duration of selexipag titration, median individualized dose of selexipag, and medication discontinuation rates due to adverse events (unrelated to PAH) were similar in both groups**

AE, adverse event; BID, twice daily; ERA, endothelin receptor antagonist; PAH, pulmonary arterial hypertension; PDE5i, phosphodiesterase-5 inhibitor; SPHERE, SelexiPag: the usErs dRug rEgistry.

# Clinical outcomes among those with and without a self-reported mental health comorbidity

Median time to first all-cause hospitalization event:

11 months  
(IQR 14.2)

16 months  
(IQR 13.8)

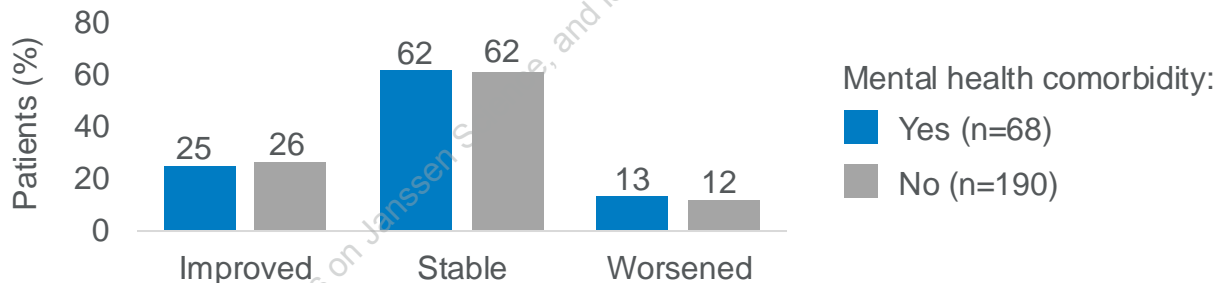
Overall survival at 18 months:

85.6%  
(95% CI 80.5-89.5)

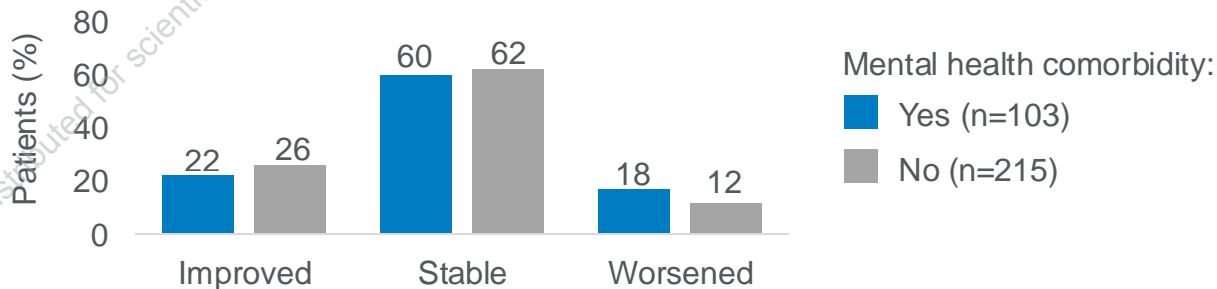
91.1%  
(95% CI 88.2-93.4)

Mental health comorbidity: ■ Yes ■ No

Change in WHO functional class



Change in REVEAL 2.0 risk





# Patients with PAH in the SPHERE registry who reported mental health comorbidities:

Comorbidities<sup>a</sup> included depression, anxiety, and bipolar disorder



A lower percentage of patients were receiving double therapy prior to selexipag initiation



Started selexipag later in their disease course and reached similar maintenance doses

## Showed medication persistence and favorable outcomes with selexipag:

- Time to first all-cause hospitalization
- Overall survival
- Discontinuation due to AE

**This analysis should reassure healthcare providers that patients with mental health comorbidities can achieve favorable outcomes with selexipag**

<sup>a</sup>Total reported psychiatric disorders from patients with PAH was n=291; the specific mental health diagnoses listed were chosen for having >1%.

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# Thank you!

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