

Clinical Policy: Sotatercept-csrk (Winrevair)

Reference Number: PA.CP.PHAR.657

Effective Date: 02/2025

Last Review Date: 01/2026

Description

Sotatercept-csrk (Winrevair™) is an activin signaling inhibitor.

FDA Approved Indication(s)

Winrevair is indicated for the treatment of adults with pulmonary arterial hypertension (PAH, Group 1 pulmonary hypertension) to increase exercise capacity and World Health Organization (WHO) functional class (FC), and reduce the risk of clinical worsening events including hospitalization for PAH, lung transplantation and death.

Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of PA Health & Wellness® that Winrevair is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Pulmonary Arterial Hypertension (must meet all):

1. Diagnosis of PAH;
2. Prescribed by or in consultation with a cardiologist or pulmonologist;
3. Age \geq 18 years;
4. Failure of a calcium channel blocker (*see Appendix B*), unless member meets one of the following (a, b or c):
 - a. Inadequate response or contraindication to acute vasodilator testing;
 - b. Contraindication or clinically significant adverse effects to calcium channel blockers are experienced;
 - c. Members already taking and stabilized on Winrevair will not be required to change therapy;
5. For new starts only, one of the following(a or b):
 - a. Winrevair is prescribed concurrently with TWO or more of the following drug classes, unless clinically significant adverse effects are experienced for all or all are contraindicated (i, ii, or iii, see Appendix F)*:
 - i. Endothelin-receptor antagonist (e.g., ambrisentan, bosentan, Opsumit®);
 - ii. Phosphodiesterase-5 (PDE-5) inhibitor (e.g., sildenafil, tadalafil) or soluble guanylate cyclase stimulator (e.g., Adempas®);
 - iii. Prostacyclin analogue or receptor agonist (e.g., epoprostenol, Ventavis®, Uptravi®, treprostinil);
 - b. For members with cardiopulmonary comorbidities OR for members that have been determined to be a candidate for concurrent monotherapy based on the discretion of a pulmonary hypertension specialist, Winrevair is prescribed

concurrently with ONE drug from the following classes (i, ii, or iii, see Appendix F)*:

- i. Endothelin-receptor antagonist (e.g., ambrisentan, bosentan, Opsumit®);
- ii. Phosphodiesterase-5 (PDE-5) inhibitor (e.g., sildenafil, tadalafil) or soluble guanylate cyclase stimulator (e.g., Adempas®);
- iii. Prostacyclin analogue or receptor agonist (e.g., epoprostenol, Ventavis®, Uptravi®, treprostinil);

**Prior authorization may be required*

6. Documentation of platelet count $\geq 50 \times 10^9/L$;
7. Dose does not exceed both of the following (a and b):
 - a. 0.7 mg/kg per 3 weeks;
 - b. One kit (1-vial kit or 2-vial kit) per 3 weeks.

Approval duration: 12 months

B. Other diagnoses/indications

1. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

II. Continued Therapy

A. Pulmonary Arterial Hypertension (must meet all):

1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.PHARM.01) applies;
2. Member is responding positively to therapy;
3. If request is for a dose increase, new dose does not exceed both of the following (a and b):
 - a. New dose does not exceed 0.7 mg/kg per 3 weeks;
 - b. New quantity does not exceed one kit (1-vial kit or 2-vial kit) per 3 weeks.

Approval duration: 12 months

B. Other diagnoses/indications (must meet 1 or 2):

1. Currently receiving medication via PA Health & Wellness benefit and documentation supports positive response to therapy or the Continuity of Care policy (PA.PHARM.01) applies.

Approval duration: Duration of request or 12 months (whichever is less); or

2. Refer to the off-label use policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): PA.CP.PMN.53

III. Diagnoses/Indications for which coverage is NOT authorized:

- A.** Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – PA.CP.PMN.53

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

ETRA: endothelin receptor antagonist

FC: functional class

FDA: Food and Drug Administration

PA: physical activity

PAH: pulmonary arterial hypertension
PDE-5: phosphodiesterase-5

PH: pulmonary hypertension
WHO: World Health Organization

Appendix B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent and may require prior authorization.

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Calcium Channel Blockers		
nifedipine (Procardia XL [®])	60 mg PO QD; may increase to 120 to 240 mg/day	240 mg/day
diltiazem (Dilt-XR [®] , Cardizem [®] , Cardizem [®] CD, Cartia XT [®] , Tiazac [®] , Taztia XT [®] , Cardizem [®] LA, Matzim [®] LA)	Immediate release: 40 mg PO TID; may increase to 80 to 240 mg PO TID Extended release: 60 mg PO BID; may increase to 120 to 360 mg BID	960 mg/day
amlodipine (Norvasc [®])	20 to 30 mg PO QD	30 mg/day
PDE-5 Inhibitors		
sildenafil (Revatio [®] , Liqrev [®])	Tablet and oral suspension: 20 mg to 80 mg PO TID Injection: 10 mg TID as an IV bolus	Tablet and oral suspension: 240 mg/day Injection: 30 mg/day
tadalafil (Adcirca [®] , Alyq [®] , Tadliq [®])	40 mg PO QD	40 mg/day
Soluble guanylate cyclase stimulator		
Adempas [®] (riogicuat)	1 mg PO TID, increased by 0.5 mg every 2 weeks as tolerated to 2.5 mg TID	7.5 mg
Endothelin receptor antagonists		
Ambrisentan (Letaris [®])	5 mg PO QD	10 mg/day
bosentan (Tracleer [®])	Initially 62.5 mg PO BID for 4 weeks, then increased to 125 mg PO BID	250 mg/day
Opsumit [®] (macitentan)	10 mg PO QD	10 mg/day
Prostacyclin analogues or prostacyclin receptor agonists		
epoprostenol (Flolan [®] , Veletri [®])	Flolan: 2ng/kg/min IV, increased by 1-2 ng/kg/min at intervals of at least 15 minutes Veletri: 2ng/kg/min IV, increased by 2 ng/kg/min every 15 minutes or longer	Based on clinical response
Treprostinil (Orenitram [®] , Remodulin [®] , Tyvaso [®] , Tyvaso DPI [®] , Yutrepia [®])	Varies	Varies

Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
Ventavis® (iloprost)	6 to 9 doses INH per day with at least 2 hours between doses; starting dose of 2.5 mcg, titrated to 5 mcg if well tolerated	45 mcg/day
Uptravi® (selexipag)	<p>Tablet: 200 mcg PO BID, increased at weekly intervals to highest tolerated dose up to 1,600 mcg BID</p> <p>Injection: IV BID at a dose that corresponds to the patient's current dose of Uptravi tablets</p>	<p>Tablets: 3,200 mcg/day</p> <p>Injection: 3,600 mcg/day</p>

Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.

Appendix C: Contraindications/Boxed Warnings

None reported

Appendix D: Pulmonary Hypertension: WHO Classification

- Group 1: PAH (pulmonary arterial hypertension)
- Group 2: PH due to left heart disease
- Group 3: PH due to lung disease and/or hypoxemia
- Group 4: CTEPH (chronic thromboembolic pulmonary hypertension)
- Group 5: PH due to unclear multifactorial mechanisms

Appendix E: Pulmonary Hypertension: WHO/NYHA Functional Classes (FC)

Treatment Approach*	FC	Status at Rest	Tolerance of Physical Activity (PA)	PA Limitations	Heart Failure
Monitoring for progression of PH and treatment of co-existing conditions	I	Comfortable at rest	No limitation	Ordinary PA does not cause undue dyspnea or fatigue, chest pain, or near syncope.	
Advanced treatment of PH with PH-targeted therapy - see Appendix F**	II	Comfortable at rest	Slight limitation	Ordinary PA causes undue dyspnea or fatigue, chest pain, or near syncope.	
	III	Comfortable at rest	Marked limitation	Less than ordinary PA causes undue dyspnea	

Treatment Approach*	FC	Status at Rest	Tolerance of Physical Activity (PA)	PA Limitations	Heart Failure
				or fatigue, chest pain, or near syncope.	
	IV	Dyspnea or fatigue may be present at rest	Inability to carry out any PA without symptoms	Discomfort is increased by any PA.	Signs of right heart failure

*PH supportive measures may include diuretics, oxygen therapy, anticoagulation, digoxin, exercise, pneumococcal vaccination. **Advanced treatment options also include calcium channel blockers.

Appendix F: Pulmonary Hypertension: Targeted Therapies

Mechanism of Action	Drug Class	Drug Subclass	Drug	Brand/Generic Formulations
Reduction of pulmonary arterial pressure through vasodilation	Prostacyclin* pathway agonist <i>*Member of the prostanoid class of fatty acid derivatives.</i>	Prostacyclin	Epoprostenol	Velettri (IV) Flolan (IV) Flolan generic (IV)
		Synthetic prostacyclin analog	Treprostinil	Orenitram (oral tablet) Remodulin (IV) Tyvaso (inhalation) Yutrepia (inhalation)
			Iloprost	Ventavis (inhalation)
	Endothelin receptor antagonist (ETRA)	Non-prostanoid prostacyclin receptor (IP receptor) agonist	Selexipag	Upravi (oral tablet)
		Selective receptor antagonist	Ambrisentan	Letairis (oral tablet)
			Nonselective dual action receptor antagonist	Bosentan
		Macitentan		Opsumit (oral tablet)
	Nitric oxide-cyclic guanosine monophosphate enhancer	Phosphodiesterase type 5 (PDE5) inhibitor	Sildenafil	Revatio (IV, oral tablet, oral suspension)
			Tadalafil	Adcirca (oral tablet)
		Guanylate cyclase stimulant (sGC)	Riociguat	Adempas (oral tablet)

Appendix G: Dose Rounding Guidelines for Weight-Based Doses

Recommended Dosage	Weight-based Recommended Dose Range	Vial Quantity Recommendation
Initial: 0.3 mg/kg	7.5 to 47.49 mg	45 mg kit (containing 1 x 45 mg vial)
	47.5 to 57.49 mg	60 mg kit (containing 1 x 60 mg vial)
Target: 0.7 mg/kg	7.5 to 47.49 mg	45 mg kit (containing 1 x 45 mg vial)
	47.5 to 62.49 mg	60 mg kit (containing 1 x 60 mg vial)
	62.5 to 92.49 mg	90 mg kit (containing 2 x 45 mg vials)
	92.5 to 122.49 mg	120 mg kit (containing 2 x 60 mg vials)

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
PAH	Starting dose of 0.3 mg/kg with a target dose of 0.7 mg/kg administered subcutaneously every 3 weeks* <i>*Also see Appendix G: Dose Rounding Guidelines for Weight-Based Doses</i>	0.7 mg/kg every 3 weeks

VI. Product Availability

Single-dose vials (in kits containing 1 vial or 2 vials): 45 mg, 60 mg

VII. References

1. Winrevair Prescribing Information. Rahway, NJ: Merck Sharp & Dohme LLC. October 2025. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2024/761363s000lbl.pdf. Accessed November 13, 2025.
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11. Humbert M, Kovacs G, Hoeper MM, et al. 2022 ESC/ERS guidelines for the diagnosis and treatment of pulmonary hypertension. *European Heart Journal*, Volume 43, Issue 38, 7 October 2022, Pages 3618–3731, <https://doi.org/10.1093/eurheartj/ehac237>.
12. Chin KM, Gaine SP, Gerges C, et al. Treatment algorithm for pulmonary arterial hypertension. *Eur Respir J.* 2024 Oct 31;64(4):2401325. doi: 10.1183/13993003.01325-2024.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J3590	Unclassified biologics
C9399	Unclassified drugs or biologicals

Reviews, Revisions, and Approvals	Date
Policy created	04/2025
1Q 2026 annual review: extended initial approval duration from 6 months to 12 months for this maintenance medication for a chronic condition; references reviewed and updated.	01/2026