

Clinical Policy: Brexanolone (Zulresso)

Reference Number: PA.CP.PHAR.417

Effective Date: 01/2020 Last Review Date: 10/2023

Coding Implications
Revision Log

Description

Brexanolone (Zulresso[™]) is a neuroactive steroid gamma-aminobutyric acid (GABA) A receptor positive modulator.

FDA Approved Indication(s)

Zulresso is indicated for the treatment of postpartum depression (PPD) in patients 15 years and older.

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 Zulresso is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Postpartum Depression (must meet all):

- 1. Diagnosis of a major depressive episode that began no earlier than the third trimester and no later than the first 12 weeks following delivery, as diagnosed by Structured Clinical Interview for DSM-5;
- 2. Prescribed by or in consultation with psychiatrist;
- 3. Age \geq 15 years;
- 4. Member meets one of the following (a, b, c, d or e):
 - a. HAMD score is ≥ 17 (moderate to severe depression) (see Appendix D);
 - b. MADRS score is ≥ 20 (moderate to severe depression) (see Appendix D);
 - c. PHQ-9 score is ≥ 15 (moderate to severe depression) (see Appendix D);
 - d. If member does not have moderate to severe depression as demonstrated by at least one of the depression scores above (a, b, or c), documentation of moderate to severe depression as evidenced by a psychiatrist clinical interview;
 - e. Failure of a 4-week trial of one of the following oral antidepressants at up to maximally indicated dose but no less than the commonly recognized minimum therapeutic dose, unless clinically significant adverse effects are experienced or all are contraindicated: selective serotonin reuptake inhibitor (SSRI), serotonin-norepinephrine reuptake inhibitor (SNRI), tricyclic antidepressant (TCA), bupropion, mirtazapine (*see Appendix B*);
- 5. No more than 12 months have passed since member has given birth;
- 6. Member has not received prior treatment with Zulresso or Zurzuvae[™] for the current pregnancy;
- 7. Dose does not exceed 90 mcg/kg per hour over 60 hours (2.5 days) as follows:



- a. 0 to 4 hours: Initiate with a dosage of 30 mcg/kg per hour;
- b. 4 to 24 hours: Increase dosage to 60 mcg/kg per hour;
- c. 24 to 52 hours: Increase dosage to 90 mcg/kg per hour (alternatively consider a dosage of 60 mcg/kg per hour for those who do not tolerate 90 mcg/kg per hour);
- d. 52 to 56 hours: Decrease dosage to 60 mcg/kg per hour;
- e. 56 to 60 hours: Decrease dosage to 30 mcg/kg per hour.

Approval duration: 30 days (one time infusion per pregnancy)

B. Other diagnoses/indications

1. Refer to PA.CP.PMN.53

II. Continued Therapy

A. Postpartum Depression

1. Re-authorization is not permitted. Members must meet the initial approval criteria.

Approval duration: Not applicable

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.LTSS.PHAR.01) applies.

Approval duration: Duration of request or 6 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

FDA: Food and Drug Administration PPD: postpartum depression

HAM-D: Hamilton Rating Scale for SNRI: serotonin-norepinephrine reuptake

Depression inhibitor

MADRS: Montgomery-Åsberg Depression SSRI: selective serotonin reuptake inhibitor

Rating Scale TCA: tricyclic antidepressant

PHQ-9: Patient Health Questionnaire

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 for all relevant lines of business and may require prior authorization.



Drug Name	Dosing Regimen	Dose Limit/	
		Maximum Dose	
SSRI			
citalopram	20 mg PO QD; may increase to 40 mg PO	$40 \text{ mg/day } (\leq 60 \text{ years})$	
(Celexa®)	QD after one week	20 mg/day (> 60 years)	
escitalopram	10 mg PO QD; may increase to 20 mg PO	20 mg/day	
(Lexapro [®])	QD after 1 week		
fluoxetine	Prozac: 20 mg PO QD; may increase by	Prozac: 80 mg/day	
(Prozac [®] , Prozac	10-20 mg after several weeks		
Weekly®)		Prozac Weekly: 90	
	Prozac Weekly: 90 mg PO q week	mg/week	
	beginning 7 days after the last daily dose		
paroxetine	Paxil, Pexeva: 20 mg PO QD; may	Paxil, Pexeva: 50 mg/day	
(Paxil [®] , Paxil	increase by 10 mg every week as needed		
CR [®] , Pexeva [®])		Paxil CR: 62.5 mg/day	
	Paxil CR: 25 mg PO QD; may increase by		
	12.5 mg every week as needed		
sertraline	50 mg PO QD; may increase every week	200 mg/day	
(Zoloft®)	as needed		
SNRIs			
duloxetine	20 mg PO BID or 30 mg PO BID or 60	120 mg/day	
(Cymbalta®)	mg PO QD		
venlafaxine	Effexor: initial dosing = $37.5-75$ mg/day.	Effexor: 225 mg/day	
(Effexor®,	Doses >37.5 mg administered in 2-3	(outpatient) or 375	
Effexor XR®)	divided doses; may increase by 75 mg	mg/day (inpatient)	
	every 4 days as needed		
		Effexor XR: 225 mg/day	
	Effexor XR: 75 mg PO QD; may increase		
1 1 0 1	by 75 mg every 4 days as needed	400	
desvenlafaxine	50 mg PO QD	400 mg/day	
(Pristiq [®] ,			
Khedezla®)	20	120 /1	
Fetzima [®]	20 mg PO QD for 2 days, then 40 mg PO	120 mg/day	
(levomilnacipran)	QD; may increase by 40 mg every 2 days		
TCAs	25 . 50 /1 . DO OD . 1: 1.1.1	150 /1	
amitriptyline	25 to 50 mg/day PO QD or divided doses	150 mg/day	
(Elavil®)	25 . 200 /1 . DO : 1: 1 . 1 . 1	400 /1 /200 /1	
amoxapine	25 to 300 mg/day PO in divided doses	400 mg/day (300 mg/day	
1	10.5 . 150 /1 . BO OD	if geriatric)	
clomipramine*	12.5 to 150 mg/day PO QD	250 mg/day (200 mg/day	
(Anafranil®)	25 , 200 , /1 , DO OD	if pediatric)	
desipramine	25 to 300 mg/day PO QD	300 mg/day (100 mg/day	
(Norpramin [®])	25 / 200 /1 PO OF	if pediatric)	
doxepin	25 to 300 mg/day PO QD	300 mg/day	
(Sinequan [®])			



Drug Name	Dosing Regimen	Dose Limit/ Maximum Dose
imipramine HCl	25 to 200 mg/day PO QD or divided doses	200 mg/day (150 mg/day
(Tofranil [®])		if geriatric or pediatric)
imipramine	25 to 200 mg/day PO QD or divided doses	200 mg/day (100 mg/day
pamoate (Tofranil PM®)		if geriatric or pediatric)
nortriptyline (Pamelor®)	25 to 150 mg/day PO QD	150 mg/day
protriptyline	10 to 60 mg/day PO in divided doses	60 mg/day (30 mg/day if
(Vivactil®)	-	geriatric or pediatric)
trimipramine	25 to 200 mg/day PO QD	200 mg/day (100 mg/day
(Surmontil®)		if geriatric or pediatric)
Other Antidepressa	unts	
bupropion	Varies	Immediate-release: 450
(Aplenzin®,		mg/day (300 mg/day if
Budeprion SR^{\otimes} ,		pediatric)
Budeprion $XL^{\mathbb{R}}$,		Sustained-release: 400
Forfivo $XL^{\mathbb{R}}$,		mg/day
Wellbutrin [®] ,		Extended-release (HCl):
Wellbutrin SR®,		450 mg/day
Wellbutrin XL®)		Extended-release (HBr):
		522 mg/day
mirtazapine (Remeron®)	15 to 15 mg PO QD	45 mg/day

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

- Boxed warning(s): Excessive sedation and sudden loss of consciousness during administration. Patients must be monitored for excessive sedation and sudden loss of consciousness and have continuous pulse oximetry monitoring. Because of these risks, Zulresso is available only through a restricted program under a REMS program.
- Contraindication(s): none reported

Appendix D: General Information

• HAM-D scale is a 17-item depression assessment scale to assess severity of, and change in, depressive symptoms.

HAM-D Score	Depression Rating
0 - 7	Normal, absence or remission of depression
8 – 16	Mild depression
17 – 23	Moderate depression
> 24	Severe depression

• MADRS is a 10-item diagnostic questionnaire used to measure the severity of depressive episodes in patients with mood disorders. Please note that MADRS severity gradations



vary by reference. The following severity gradations are suggestions based on the reference cited below, and may not be universally agreed upon.

MADRS Score	Depression Rating
0 – 6	Normal/symptom absent
7 – 19	Mild depression
20 – 34	Moderate depression
> 34	Severe depression

• PHQ-9 is a 9-item multiple choice questionnaire used for diagnosis, screening, monitoring and measuring the severity of depression.

PHQ-9 Score	Depression Severity
5 – 9	Minimal symptoms
10 – 14	Minor depression
	Major depression, mild
15 – 19	Major depression, moderately severe
> 19	Major depression, severe

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
Indication PPD	 Dosing Regimen Administered as a continuous intravenous infusion over 60 hours (2.5 days) as follows: 0 to 4 hours: Initiate with a dosage of 30 mcg/kg per hour 4 to 24 hours: Increase dosage to 60 mcg/kg per hour 24 to 52 hours: Increase dosage to 90 mcg/kg per hour (alternatively consider a dosage of 60 mcg/kg per hour for those who do not tolerate 90 mcg/kg per hour) 52 to 56 hours: Decrease dosage to 60 mcg/kg per hour 56 to 60 hours: Decrease dosage to 30 mcg/kg 	Maximum Dose 90 mcg/kg per hour
	per hour	

VI. Product Availability

Vial for injection, single-dose: 100 mg/20 mL (5 mg/mL)

VII. References

- 1. Zulresso Prescribing Information. Cambridge, MA: Sage Therapeutics, Inc.; June 2022. Available at: www.zulresso.com. Accessed February 6, 2023.
- 2. Meltzer-Brody S, Colquhoun H, Riesenberg R, et al. Brexanolone injection in post-partum depression: two multicentre, double-blind, randomised, placebo-controlled, phase 3 trials. Lancet. 2018 Sep 22;392(10152):1058-1070.
- 3. American Psychiatric Association. Practice guideline for the treatment of patients with major depressive disorder, third edition. November 2010. Available at: http://psychiatryonline.org/guidelines.aspx.

CLINICAL POLICY

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- 4. Sharp, Rachel. The Hamilton rating scale for depression. Occupational Medicine. 2015; 65(4):340
- 5. Montgomery—Åsberg Depression Rating Scale. Available at: http://www.liquisearch.com/montgomery%E2%80%93%C3%85sberg_depression_rating_sc_ale/interpretation. Accessed February 6, 2022.
- 6. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001;16(9):606–613.
- 7. Stewart DE, Vigod SN. Postpartum Depression: Pathophysiology, Treatment, and Emerging Therapeutics. Annu Rev Med. 2019;70:183-196.
- 8. Treatment and management of mental health conditions during pregnancy and postpartum: ACOG Clinical Practice Guideline No. 5. Obstet Gynecol. 2023 Jun 1;141(6):1262-1288. Accessed August 25, 2023.

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	Description
Codes	
J1632	Injection, brexanolone, 1 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
Policy created	01/2020	Date
1Q 2020 annual review: added prescriber requirement; revised	01/2021	
diagnosis with DSM-V definition of postpartum depression; revised		
criteria to allow bypass of 8-week antidepressant trial if member		
has severe depression as evidenced by HAMD, MADRS, or PHQ-9		
score; updated HAM-D scale; references reviewed and updated.		
2Q 2021 annual review: no significant changes; references	04/2021	
reviewed and updated.		
2Q 2022 annual review: references reviewed and updated.	04/2022	
RT4: per updated prescribing information, updated indication and	08/2022	
age requirements from adults (18 years) to 15 years of age or older.		
2Q 2023 annual review: shortened the trial durations of	04/2023	
antidepressant agent from 8 weeks to 4 weeks; references reviewed		
and updated.		
Revised criterion for diagnosis of major depressive episode that	10/2023	
began no later than the first 4 weeks following delivery per updated		
ACOG guidance; added requirement that member has not received		
prior treatment with Zulresso or Zurzuvae for the current		
pregnancy; corrected MADRS score to \geq 35 for severe depression;		
added additional approval pathway if member does not have severe		



Reviews, Revisions, and Approvals	Date	P&T Approval Date
depression as demonstrated by at least one of the depression scores, documentation of severe depression as evidenced by a psychiatrist clinical interview.		