



BlueCross BlueShield
of Vermont

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Ketamine Corporate Medical Policy

File Name: Ketamine
File Code: 5.01.VT204
Origination: 12/2020
Last Review: 01/2023
Next Review: 01/2024
Effective Date: 02/01/2023

Description/Summary

Ketamine, a CIII controlled substance, produces a cataleptic-like state in which the patient is dissociated from the surrounding environment by direct action on the cortex and limbic system. Ketamine is a noncompetitive NMDA (N-methyl-D-aspartate) receptor antagonist that blocks glutamate receptors. Glutamate is an excitatory neurotransmitter that helps regulate information processing and overall communications between brain and various regions of the body.

Note: This policy does not address the enantiomer of ketamine, esketamine, which is approved by the Food and Drug Administration (FDA) and available as a trade agent sold by a manufacturer for intranasal office administration only.

Policy Guidelines

Ketamine is FDA approved as a general anesthetic. This policy is intended to guide the off-label use of ketamine HCl infusion in adults with a treatment resistant depressive episode associated with major depressive disorder (MDD) (unipolar). It is thought that ketamine triggers reactions in the brain that enable a degree of neuronal plasticity, possibly due to glutamate surge. However, other neurotransmitters, including the opioid system, may be involved based on results of certain studies, heightening concerns about abuse potential. Per BCBS VT Policy, Ketamine for treatment resistant Major Depressive Disorder may only be administered via intravenous formulation, following all state and federal procedural regulations for outpatient intravenous administration, including being administered under direct supervision by a qualified licensed medical professional according to relevant state and federal regulations.

When a service may be considered medically necessary

1. Ketamine is being used as a general anesthetic under appropriate and generally accepted clinical guidelines for children under 12; **OR**
2. Patient has MDD, unipolar, treatment-refractory depression or MDD with acute suicidal ideation or behavior; **AND**
3. Patient's current depressive episode is severe as evidenced by a HAM-D greater or equal to 17 or MADRS greater or equal to 28; **AND**
4. Patient is ≥ 18 years of age; **AND**
5. Patient has demonstrated nonresponse ($<25\%$ improvement in depression symptoms or scores) to at least four different U.S. Food and Drug Administration approved antidepressants, from at least two different pharmacological classes (ex. selective serotonin reuptake inhibitors SSRIs, serotonin norepinephrine reuptake inhibitors SNRIs, tricyclic antidepressants TCAs, bupropion, mirtazapine, etc), not including dissociative medications, and each used at therapeutic dosages for at least 6 weeks targeting depression; as well as at least 2 trials of adjunctive pharmacotherapy (adding adjunct medication to a therapeutic antidepressant, i.e aripiprazole or buspirone augmentation, etc.); **AND**
6. Failure of a trial of a psychotherapy known to be effective in the treatment of major depressive disorder of an adequate frequency and duration, without significant improvement in depressive symptoms, as documented by standardized rating scales that reliably measure depressive symptoms; **AND**
7. Patient has no history of psychosis; **AND**
8. Patient's history of controlled substance prescriptions has been checked using the state prescription drug monitoring program (PDMP), according to the prescriber; **AND**
9. Patient does not currently meet criteria for a substance use disorder, unless in remission; **AND**
10. Patient is not pregnant or breastfeeding; **AND**
11. Ketamine is intravenously infused; **AND**
12. Resuscitative equipment should be available during use as IV administration or overdose may cause respiratory depression or apnea and other complications; **AND**
13. Patient is monitored for respiratory depression, apnea, or other complications during the infusion, and for an appropriate time after the infusion; **AND**
14. Ketamine is being prescribed by a psychiatrist or psychiatric advanced practice registered nurse; **AND**
15. Ketamine is not being prescribed for a pain syndrome; **AND**
16. Ketamine infusion will be administered through the patient's medical benefit

When a service may be considered investigational

Ketamine administered by any route other than intravenous. Subcutaneous infusions, sublingual, oral, nasal, rectal, transdermal, or any other preparation of ketamine for any other administration other than intravenous are considered to be **investigational**.

Administration of Ketamine for chronic pain of any sort is considered **investigational**.

Legislative Guidelines

This policy complies with Vermont Act 128 V.S.A. § 4089e. Added 1997, effective April 27, 1998.

Reference Resources

1. Ketamine. Drug Facts and Comparisons. Facts & Comparisons [database online]. St. Louis, MO: Wolters Kluwer Health, Inc; 12/31/19. Accessed 1/7/2020
2. Spravato (esketamine nasal spray) Express Scripts Prior Authorization Policy. Selected Revision 3/20/2019
3. Cavenaghi VB et al: Subcutaneous Ketamine in Depression: A Systematic Review. *Front Psychiatry*. 2021;12:513068. Published 2021 May 28.
4. Lucchese AC, Sarin LM, Magalhães EJM, Del Sant LC, Puertas CB, Tuena M, et al. Repeated subcutaneous esketamine for treatment-resistant depression: impact of the degree of treatment resistance and anxiety comorbidity. *J Psychopharmacol*. (2021) 35:142-9.
5. Loo C, Gálvez V, O'Keefe E, Mitchell P, Hadzi-Pavlovic D, Leyden J, et al. Placebo-controlled pilot trial testing dose titration and intravenous, intramuscular and subcutaneous routes for ketamine in depression. *Acta Psychiatr Scand*. (2016) 134:48-56.
6. George D, Gálvez V, Martin D, Kumar D, Leyden J, Hadzi-Pavlovic D, et al. Pilot randomized controlled trial of titrated subcutaneous ketamine in older patients with treatment-resistant depression. *Am J Geriatr Psychiatry*. (2017) 25:1199-209.
7. McInnes LA, Qian JJ, Gargeya RS, et al. A retrospective analysis of ketamine intravenous therapy for depression in real-world care settings. *J Affect Disord*. Mar 15 2022; 301: 486-495. PMID 35027209
8. Oliver PA, Snyder AD, Feinn R, et al. Clinical Effectiveness of Intravenous Racemic Ketamine Infusions in a Large Community Sample of Patients With Treatment-Resistant Depression, Suicidal Ideation, and Generalized Anxiety Symptoms: A Retrospective Chart Review. *J Clin Psychiatry*. Sep 12 2022; 83(6). PMID 36112599
9. Zhou Y, Wang C, Lan X, et al. The effectiveness of repeated intravenous ketamine on subjective and objective psychosocial function in patients with treatment-resistant depression and suicidal ideation. *J Affect Disord*. May 01 2022; 304: 78-84. PMID 35176337
10. Ekstrand J, Fattah C, Persson M, et al. Racemic Ketamine as an Alternative to Electroconvulsive Therapy for Unipolar Depression: A Randomized, Open-Label, Non-Inferiority Trial (KetECT). *Int J Neuropsychopharmacol*. May 27 2022; 25(5): 339-349. PMID 35020871

Document Precedence

Blue Cross and Blue Shield of Vermont (BCBSVT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language, or employer's benefit plan if an ASO group, determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, BCBSVT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict between medical policy and contract/employer benefit plan language, the member's contract/employer benefit plan language takes precedence.

Audit Information

BCBSVT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, BCBSVT reserves the right to recoup all non-compliant payments.

Administrative and Contractual Guidance

Benefit Determination Guidance

Prior approval may be required and benefits are subject to all terms, limitations and conditions of the subscriber contract.

NEHP/ABNE members may have different benefits for services listed in this policy. To confirm benefits, please contact the customer service department at the member's health plan.

Federal Employee Program (FEP): Members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure. It is important to verify the member's benefits prior to providing the service to determine if benefits are available or if there is a specific exclusion in the member's benefit.

Coverage varies according to the member's group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes precedence over medical policy when there is a conflict.

If the member receives benefits through an Administrative Services (ASO) only group, benefits may vary or not apply. To verify benefit information, please refer to the member's employer benefit plan documents or contact the customer service department. Language in the employer benefit plan documents takes precedence over medical policy when there is a conflict.

Related Policies

Off-Label Drug

Policy Implementation/Update information

12/2020	New policy supersedes all prior policies concerning this benefit
01/2022	Policy Reviewed. Input received from specialty provider. References updated. Clarifying statements in policy guidelines and medical necessity criteria. Coding table removed effective 4/1/2022.
01/2023	Policy reviewed; references updated no changes to policy statement.

Eligible providers

Qualified healthcare professionals practicing within the scope of their license(s).

Approved by BCBSVT Medical Directors

Date Approved

Tom Weigel, MD, MBA
Vice President and Chief Medical Officer