



BENZODIAZEPINE PRESCRIBING GUIDANCE

Benzodiazepines (BZs) and Z-drugs (see table) are the most commonly prescribed medications in the benzodiazepine receptor agonist (BZRA) class. Today, there are 14 BZs and 3 Z-drugs that are FDA approved, with anxiety and insomnia being the primary approved conditions for prescribing.¹

Restraint on BZRA prescribing is urged as they may lose efficacy and/or cause worsening adverse reactions over time including physiologic dependence with disastrous consequences. Restraint on BZRA prescribing is urged. BZRA efficacy may wane overtime, especially when use is consistent. In a subset of patients, both during titration and/ or after cessation, BZs can cause disabling discontinuation syndromes that can last years. Repeated BZ cessation can cause central nervous system sensitization, a phenomenon known as kindling. BZs are also implicated in a third of opioid-related overdose death.² While BZRAs do have some limited indications,³ they are often prescribed in the absence of adequate research and for far longer⁴ than the recommended time limitation of 2-4 weeks.^{5,6,7} Present day prescribing guidance is limited, contradictory and based on insufficient research that has not been adequately adjudicated for quality and bias.

The recommendations in this guidance are evidence-based and/or amplified by collective clinical experience. They are not comprehensive and should not replace clinical judgement informed by individual circumstances. Other sources provide detailed background information and rationale for these recommendations,^{8,9} and the reader is also referred to the Benzodiazepine Deprescribing Guidance, the companion to this document. Further sources provide rationale for these recommendations.^{8,9}

CLINICAL PRACTICE BZRA PRESCRIBING RECOMMENDATIONS

- 1) Listen carefully and respectfully to affected individuals as they are experts on their own lived experiences and often have a sophisticated understanding of therapeutic interventions including BZRAs⁹
- 2) Fully assess patient concerns and medical conditions for which BZRAs might be prescribed
- 3) Establish the diagnosis, severity, and the need to treat
- 4) Screen for addiction-prone substance use risk by means of
 - a) Personal and family history of substance use disorder¹⁰ and personal history of trauma¹¹
 - b) Screening portion of SBIRT (Screening Brief Intervention and Referral to Treatment) to help identify and then address current addiction-prone substance use¹²
 - c) Online review of prescription database to identify prescribed addiction-prone substances¹³
 - d) Definitive drug testing, if indicated based on clinical judgment^{14,15}
- 5) 1st consider non-BZRA treatments:
 - a) Non-medication approaches, notably Cognitive Behavioral Therapy (CBT¹⁶, CBT-I¹⁷)
 - b) Non-BZRA medications¹⁸

- 6) BZRAs should be avoided when contraindicated, ineffective, or of unproven or minimal benefit:
 - a) In Depression because any benefit is soon lost¹⁹
 - b) In post-traumatic stress disorder^{20,21}
 - c) In obsessive compulsive disorder¹⁸
 - d) In individuals with a history of substance use disorder (*e.g.*, alcohol) outside of treating withdrawal^{1,22}
 - e) Pain conditions other than burning mouth syndrome and stiff person syndrome²³

- 7) Consider other contraindications to BZRA use:
 - a) Prior adverse BZRA experiences²⁴
 - b) Non-medical use of and/or addiction to BZRAs and/or other substances²¹
 - c) Drug-drug interactions with medications, notably respiratory depressants, opioids^{4,25,26,27,28}
 - d) Significant cognitive²⁹, psychomotor³⁰, or respiratory problems³¹
 - e) Pregnancy^{32,33,34} and breastfeeding³⁵

- 8) Consider 1st line indications for BZRA therapy:
 - a) Withdrawal from BZRAs and alcohol³⁶
 - b) Status epilepticus³⁷
 - c) Crisis anxiety without psychotic features³⁸
 - d) Procedure anesthesia (analgoanesthesia)³⁹
 - e) Pain conditions: burning mouth syndrome (clonazepam)^{22,40}
 - f) Acute movement disorders, such as stiff person syndrome, catatonia, status dystonicus^{22,41,42,43}
 - g) End of life palliative care^{44,45}

- 9) Consider 2nd line use of BZRA therapy for short-term use:
 - a) Insomnia^{46,47} Anxiety disorder defined as ≥ 6 months, function limiting, anxiety level > actual threat⁴⁸
 - b) Certain treatment-resistant, intractable seizure disorders (clobazam, clonazepam)⁴⁹

- 10) Provide information about BZRA use to the patient:
 - a) Highlighting the boxed warnings required by the FDA in product labeling⁵⁰
 - b) Describe BZRA risks, benefits, and alternatives (*i.e.*, informed consent⁵¹)
 - c) Highlighting the risks of long-term use - BZRA physiologic dependence and withdrawal syndrome with rapid taper and/or discontinuation^{8,9}
 - d) Make clear that adverse effects and loss of efficacy might not be evident during use⁸

- 11) Provide reliable, useful resources to the patient:
 - a) The Ashton Manual <https://www.benzo.org.uk/manual/>
 - b) The Benzodiazepine Information Coalition (patient-focused) <https://www.benzoinfo.com/>
 - c) The Alliance for Benzodiazepine Best Practices (prescriber-focused) <https://benzoreform.org>

- 12) Other qualifiers to prescribing BZRAs⁸
 - a) Use *only* if the medical condition causes major functional limitations
 - b) Use *only* if delay in onset of action of alternative therapies place the patient in jeopardy
 - c) Ensure the balance of risks and benefits favors BZRA use before prescribing
 - d) Ensure decision-making is shared with fully informed patients who provide consent

- 13) If BZRA is prescribed
 - a) Prescribe BZRA initially for no more than 7 days at the anticipated lowest effective dosage⁵²
 - b) Simultaneously prescribe non-BZRA therapy. BZRAs should be thought of as a bridge awaiting the onset of benefit of another medication or non-medication therapy like CBT⁸
 - c) Establish 1st follow-up within 7 days, ensuring availability for problems during the interval⁵¹

- 14) On follow-up, assess progress addressing the target medical condition:
 - a) BZRA efficacy – re-prescribe only as necessary at the lowest effective dosage⁵¹
 - b) Status of non-BZRA therapy ordered at the time BZRAs are 1st prescribed
 - c) Need for additional referrals

- 15) On follow-up, provide ongoing informed consent and identify and address any BZRA side effects:
 - a) Depression^{21,53}, anxiety⁵⁴, suicidality, cognitive⁵⁵, psychomotor⁵⁶, respiratory⁵⁷ problems
 - b) Drug-drug interactions^{4,24-27}
 - c) Interdose withdrawal symptoms which evolve towards the end of the dosing interval or when BZs are frequently used as needed and can be easily misdiagnosed as underlying or new organic symptoms^{8,58}
 - d) Do not discount symptom reports as psychosomatic if they seem unusual or bizarre^{8,59}
 - e) Do not assume BZRA-related problems means BZRA addiction - this is very infrequent^{3,8}

- 16) Continue weekly follow-ups to address efficacy and adverse outcomes⁵¹ and provide informed consent
- 17) Limit duration of BZRA therapy to 4 weeks or less in the majority of circumstances^{6,7,8,9,22,50,51,60}
- 18) Do not abruptly discontinue BZRAs if used > 2 weeks: rather, taper off the medication^{61,62}
- 19) Thoughtful deprescribing is essential to best practice prescribing⁶³ - see companion guidance

Benzodiazepine Receptor Agonist Prescribing Information Link	FDA-Approved Indications	FDA-Approved Duration Limitations
Alprazolam Xanax	Anxiety disorder Short-term relief of anxiety symptoms	4-10w duration for panic disorder
Chlordiazepoxide Chlordiazepoxide	Anxiety disorder Short-term relief of anxiety symptoms Acute alcohol withdrawal Preoperative apprehension and anxiety	Long-term use, ie >4m, has not been assessed by systematic clinical studies
Clobazam Onfi	Adjunctive for seizures associated with Lennox-Gastaut syndrome	[No listed timeframe]
Clonazepam Klonopin	Panic disorder ± agoraphobia Specified treatment-resistant seizure disorders	Effectiveness in long-term use, ie >9w, has not been systematically studied in controlled clinical trials
Clorazepate Clorazepate	Anxiety disorder Short-term relief of anxiety symptoms Acute alcohol withdrawal Preoperative apprehension and anxiety	Long-term management of anxiety, ie >4m, has not been assessed by systematic clinical studies
Diazepam Valium	Anxiety disorder Short-term relief of anxiety symptoms Acute alcohol withdrawal Adjunctively in convulsive disorders Relief of specified skeletal muscle spasm, spasticity	Effectiveness in long-term use, ie >4m, has not been assessed by systematic clinical studies
Estazolam Estazolam	Short-term management of insomnia	There is evidence to support ability of estazolam to enhance duration, quality of sleep for intervals up to 12w
Flurazepam Dalmane	Treatment of insomnia	Effective for at least 28 consecutive nights of drug administration
Lorazepam Ativan	Anxiety disorders Short-term relief of anxiety symptoms Anxiety associated with depressive Sxs	Effectiveness in long-term use, ie >4m, has not been assessed by systematic clinical studies
Midazolam Midazolam	Procedural sedation, anxiolysis, amnesia	NA
Oxazepam Oxazepam	Anxiety disorders Short-term relief of anxiety symptoms Anxiety associated with depression Acute alcohol withdrawal	Effectiveness in long-term use, ie >4m, has not been assessed by systematic clinical studies
Quazepam Doral	Treatment of insomnia	Sustained effectiveness has been established in a sleep lab study of 28 nights duration
Temazepam Restoril	Short-term treatment of insomnia (generally 7-10d)	Clinical trials performed in support of efficacy were 2w in duration
Triazolam Halcion	Short-term treatment of insomnia (generally 7-10d)	Short-term - generally 7-10 days

REFERENCES

1. Kroll DS, Niece HR, Barsky AJ, Linder JA. Benzodiazepines are prescribed more frequently to patients already at risk for benzodiazepine-related adverse events in primary care. *J Gen Intern Med*. 2016;31:1027-34. [Article](#)
2. Chen LH, Hedegaard H, Warner M. Drug-poisoning deaths Involving opioid analgesics: United States, 1999-2011. *NCHS Data Brief*. 2014;(166):1-8. [Article](#)
3. Cloos J, Ferreira V. Current use of benzodiazepines in anxiety disorders. *Curr Opin Psych*. 2009;22(1):90-5. [Abstract](#)
4. Isacson D. Long-term benzodiazepine use: factors of importance and the development of individual use patterns over time - a 13-year follow-up in a Swedish community. *Soc Sci Med*. 1997;44(12):1871-80. [Abstract](#)
5. Lader M. Benzodiazepines revisited - will we ever learn? *Addiction*. 2011;106(12):2086-109. [Abstract](#)
6. Pottie K, Thompson W, Davies S, et al. Deprescribing benzodiazepine receptor agonists: evidence-based clinical practice guideline. *Canadian Fam Phys*. 2018;64(5):339-51. [Article](#)
7. Donoghue J, Lader M. Usage of benzodiazepines: a review. *Int J Psychiatry Clin Pract*. 2010;14(2):78-87. [Abstract](#)
8. Ashton H. The Ashton Manual: Benzodiazepines - How They Work and How to Withdraw. 2002. [Document](#)
9. Wright. Benzodiazepine Withdrawal: Clinical Aspects. In Peppin J, Raffa R, Pergolizzi J, Wright S [Eds.]. *The Benzodiazepines Crisis: The Ramifications of an Overused Drug Class*. New York, NY: Oxford University Press, 2020. [Link](#)
10. Liebschutz JM, Saitz R, Weiss RD, et al. Clinical factors associated with prescription drug use disorder in urban primary care patients with chronic pain. *J Pain*. 2010;11:1047-55. [Article](#)
11. Sajadi SF, Hajjari Z, Zargar Y, et al. Predicting addiction potential on the basis of early traumatic events, dissociative experiences, and suicide ideation. *Int J High Risk Behav Addict*. 2014;3(4):e20995. [Article](#)
12. Madras BK, Compton WM, Avula D, et al. Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: comparison at intake and 6 months later. *Drug Alcohol Depend*. 2009;99(1-3):280-95. [Article](#)
13. Dormuth CR, Miller TA, Huang A, et al. Effect of a centralized prescription network on inappropriate prescriptions for opioid analgesics and benzodiazepines. *CMAJ*. 2012;184(16):E852-6. [Article](#)
14. Goulay DL, Heit HA, Coplan YH, et al. Urine drug testing in clinical practice. 2015. PharmaCon Corp.
15. Manchikanti L, Malla Y, Wargo BW, Fellows B. Comparative evaluation of the accuracy of benzodiazepine testing in chronic pain patients utilizing immunoassay with liquid chromatography tandem mass spectrometry (LC/MS/MS) of urine drug testing. *Pain Physician*. 2011;14:259-70. [Article](#)
16. Bandelow B, Reitt M, Röver C, et al. Efficacy of treatments for anxiety disorders: a meta-analysis. *Int Clin Psychopharmacol*. 2015;30(4):183-92. [Abstract](#)
17. Brasure M, MacDonald R, Fuchs E, et al, eds. Management of insomnia disorder. Comparative Effectiveness Review #159. AHRQ. 2015;15(16)-EHC027-EF. [Document](#)
18. Bandelow B, Sher L, Bunevicius R, et al. WFSBP Task Force on Mental Disorders in Primary Care; WFSBP Task Force on Anxiety Disorders, OCD and PTSD. Guidelines for the pharmacological treatment of anxiety disorders, obsessive-compulsive disorder and posttraumatic stress disorder in primary care. *Int J Psychiatry Clin Pract*. 2012;16(2):77-84. [Article](#)
19. Furukawa TA, Streiner DL, Young LT. Antidepressant and benzodiazepine for major depression. *Cochrane Database Syst Rev*. 2002;(1):CD001026. [Abstract](#)
20. Dell'Osso B, Albert U, Atti AR, et al. Bridging the gap between education and appropriate use of benzodiazepines in psychiatric clinical practice. *Neuropsychiatr Dis Treat*. 2015;11:1885-909. [Article](#)
21. Guina J, Rossetter SR, DeRhodes BJ, et al. Benzodiazepines for PTSD: a systematic review and meta-analysis. *J Psychiatr Pract*. 2015;21(4):281-303. [Abstract](#)
22. Liang J, Olsen RW. Alcohol use disorders and current pharmacological therapies: the role of GABA_A receptors. *Acta Pharmacol Sin*. 2014;35(8):981-93. [Article](#)
23. Wright S. Limited utility for benzodiazepines in chronic pain management: a narrative review. *Adv Ther*. 2020;37:2604-19. [Article](#)
24. Tsunoda K, Uchida H, Suzuki T, et al. Effects of discontinuing benzodiazepine-derivative hypnotics on postural sway and cognitive functions in the elderly. *Int J Geriatr Psychiatry*. 2010;25(12):1259-65. [Abstract](#)
25. Abernethy DR, Greenblatt DJ, Ochs HR, Shader RI. Benzodiazepine drug-drug interactions commonly occurring in clinical practice. *Curr Med Res Opin*. 1984;8 Suppl 4:80-93. [Abstract](#)
26. Yuan R, Flockhart DA, Balian JD. Pharmacokinetic and pharmacodynamic consequences of metabolism-based drug interactions with alprazolam, midazolam, and triazolam. *J Clin Pharmacol*. 1999;39(11):1109-25. [Abstract](#)
27. French DD, Chirikos TN, Spehar A, et al. Effect of concomitant use of benzodiazepines and other drugs on the risk of injury in a veterans population. *Drug Saf*. 2005;28(12):1141-50. [Abstract](#)
28. Kowalski-McGraw M, Green-McKenzie J, Pandalai SP, Schulte PA. Characterizing the interrelationships of prescription opioid and benzodiazepine drugs with worker health and workplace hazards. *J Occup Environ Med*. 2017;59(11):1114-26. [Abstract](#)
29. Robles Bayón A, Gude Sampedro F. Inappropriate treatments for patients with cognitive decline. *Neurologia*. 2014;29(9):523-32. [Abstract](#)
30. Gray SL, LaCroix AZ, Hanlon JT, et al. Benzodiazepine use and physical disability in community-dwelling older adults. *J Am Geriatr Soc*. 2006;54(2):224-30. [Article](#)
31. Brandt J, Leong C. Benzodiazepines and Z-Drugs: an updated review of major adverse outcomes reported on in epidemiologic research. *Drugs R D*. 2017;17(4):493-507. [Article](#)
32. McElhatton PR. The effects of benzodiazepine use during pregnancy and lactation. *Reprod Toxicol*. 1994;8(6):461-75. [Abstract](#)
33. Sheehy O, Zhao J-P, Bérard A. Association between incident exposure to benzodiazepines in early pregnancy and risk of spontaneous abortion. *JAMA Psych*. 2019;76(9):948-57. [Abstract](#)
34. Wall-Wieler E, Robakis TK, Lyell DJ, et al. Benzodiazepine use before conception and risk of ectopic pregnancy. *Hum Reprod*. 2020;35(7):1685-92. [Article](#)
35. Soussan C, Gouraud A, Portolan G, et al. Drug-induced adverse reactions via breastfeeding: a descriptive study in the French Pharmacovigilance Database. *Eur J Clin Pharmacol*. 2014;70(11):1361-6. [Abstract](#)
36. Holbrook AM, Crowther R, Lotter A, et al. Meta-analysis of benzodiazepine use in the treatment of acute alcohol withdrawal. *CMAJ*. 1999;160(5):649-55. [Abstract](#)

37. Prasad M, Krishnan PR, Sequeira R, Al-Roomi K. Anticonvulsant therapy for status epilepticus. *Cochrane Database Syst Rev.* 2014;(9):CD003723. [Abstract](#)
38. Allen MH, Currier GW, Carpenter D, et al. The expert consensus guideline series. Treatment of behavioral emergencies 2005. *J Psychiatr Pract.* 2005;11 Suppl 1:5-108. [Abstract](#)
39. Messina AG, Wang M, Ward, MJ, et al. Anesthetic interventions for prevention of awareness during surgery. *Cochrane Database Syst Rev.* 2016;10(10):CD007272. [Article](#)
40. Cui Y, Xu H, Chen FM, et al. Efficacy evaluation of clonazepam for symptom remission in burning mouth syndrome: a meta-analysis. *Oral Dis.* 2016;22(6):503-11. [Abstract](#)
41. Bhatti AB, Gazali ZA. Recent advances and review on treatment of stiff person syndrome in adults and pediatric patients. *Cureus.* 2015;7(12):e427. [Article](#)
42. Munhoz RP, Moscovich M, Araujo PD. Movement disorders emergencies: a review. *Arquivos de Neuro-Psiquiatria.* 2012;70(6):453-61. [Article](#)
43. Pelzer AC, van der Heijden FM, den Boer E. Systematic review of catatonia treatment. *Neuropsychiatr Dis Treat.* 2018;14:317-26. [Article](#)
44. Durán-Crane A, Laserna A, López-Olivo MA, et al. Clinical Practice Guidelines and Consensus Statements About Pain Management in Critically Ill End-of-Life Patients: A Systematic Review. *Crit Care Med.* 2019;47(11):1619-1626. doi:10.1097/CCM.0000000000003975
45. Slawnych MP. Management of dyspnea at the end of life. *CMAJ.* 2020;192(20):E550. doi:10.1503/cmaj.200488
46. Sateia MJ, Buysse DJ, Krystal AD, et al. Clinical practice guideline for the pharmacologic treatment of chronic insomnia in adults: an American Academy of Sleep Medicine Clinical Practice Guideline. *J Clin Sleep Med.* 2017;13(2):307-49. [Abstract](#)
47. Schroeck JL, Ford J, Conway EL, et al. Review of safety and efficacy of sleep medicines in older adults. *Clin Ther.* 2016;38(11):2340-2372. [Abstract](#)
48. National Institute for Health and Clinical Excellence: Guidance. The Epilepsies: The Diagnosis and Management of the Epilepsies in Adults and Children in Primary and Secondary Care:
49. Pharmacological Update of Clinical Guideline 20. 2012. [Document](#)
50. 09-23-20 FDA Drug Safety Communication. Silver Spring, Maryland: US Food and Drug Administration;2020:1-10. [Document](#)
51. Huff C. Informed Consent for Benzodiazepine Prescription. Benzodiazepine Information Coalition. [Link](#)
52. Department of Health & Children, An Roinn Slainte. Benzodiazepines: Good Practice Guidelines for Clinicians. Updated 2020. [Document](#)
53. Kripke DF. Greater incidence of depression with hypnotic use than with placebo. *BMC Psychiatry.* 2007;7:42. [Article](#)
54. Ashton H. Benzodiazepine withdrawal: outcome in 50 patients. *Br J Addict.* 1987;82:655-71. [Article](#)
55. Loring DW, Marino SE, Parfitt D, et al. Acute lorazepam effects on neurocognitive performance. *Epilepsy Behav.* 2012;25(3):329-33. [Abstract](#)
56. Longo LP, Johnson B. Addiction: Part I. Benzodiazepines - side effects, abuse risk and alternatives. *Am Fam Physician.* 2000;61(7):2121-8. [Article](#)
57. Griffin CE, Kaye AM, Bueno FR, Kaye AD. Benzodiazepine pharmacology and central nervous system-mediated effects. *Ochsner J.* 2013;13,214-23. [Abstract](#)
58. Herman JB, Brotman AW, Rosenbaum JF. Rebound anxiety in panic disorder patients treated with shorter-acting benzodiazepines. *J Clin Psychiatry.* 1987;48 Suppl:22-8. [Abstract](#)
59. Golomb BA, McGraw JJ, Evans MA, Dimsdale JE. Physician response to patient reports of adverse drug effects: implications for patient-targeted adverse effect surveillance. *Drug Saf.* 2007;30(8):669-75. [Abstract](#)
60. Ashton H. Guidelines for the rational use of benzodiazepines. When and what to use. *Drugs.* 1994;48(1):25-40. [Abstract](#)
61. Fontaine R, Chouinard G, Annable L. Rebound anxiety in anxious patients after abrupt withdrawal of benzodiazepine treatment. *Am J Psychiatry.* 1984;141:848-52. [Abstract](#)
62. Hu X. Benzodiazepine withdrawal seizures and management. *J Okla State Med Assoc.* 2011;104(2):62-5. [Abstract](#)
63. Farrell B. Deprescribing is an essential part of good prescribing. *Am Fam Physician.* 2019;99(1):7-9. [Article](#)