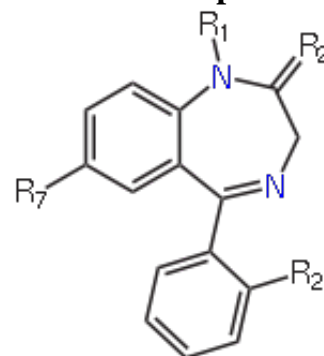


List of benzodiazepines

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The below tables contain a **list of benzodiazepines** that are commonly prescribed, with their basic pharmacological characteristics such as half-life and equivalent doses to other benzodiazepines also listed, along with their trade names and primary uses. The elimination half-life is how long it takes for half of the drug to be eliminated by the body. "Time to peak" refers to when maximum levels of the drug in the blood occur after a given dose. Benzodiazepines generally share the same pharmacological properties, such as anxiolytic, sedative, hypnotic, skeletal muscle relaxant, amnesic and anticonvulsant (hypertension in combination with other anti hypertension medications). Variation in potency of certain effects may exist among individual benzodiazepines. Some benzodiazepines produce active metabolites. Active metabolites are produced when a person's body metabolizes the drug into compounds that share a similar pharmacological profile to the parent compound and thus are relevant when calculating how long the pharmacological effects of a drug will last. Long-acting benzodiazepines with long-acting active metabolites such as diazepam and chlordiazepoxide are often prescribed for benzodiazepine or alcohol withdrawal or for anxiety if constant dose levels are required throughout the day. Shorter-acting benzodiazepines are often preferred for insomnia due to their lesser hangover effect.^{[1][2][3][4][5]}

Benzodiazepines



The core structure of benzodiazepines. "R" labels denote common locations of side chains, which give different benzodiazepines their unique properties.

Benzodiazepine

List of benzodiazepines

Benzodiazepine overdose

Benzodiazepine dependence

Benzodiazepine misuse

Benzodiazepine withdrawal syndrome

Long-term effects of benzodiazepines

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Benzodiazepine half-life and equivalent dose table

See also: Benzodiazepine drug misuse#Risk factors for misuse

It is important to note that the elimination half-life of diazepam and chlordiazepoxide as well as other long half-life benzodiazepines is twice as long in the elderly compared to younger individuals. Individuals with an impaired liver also metabolise benzodiazepines more slowly. Many doctors make the mistake of not adjusting benzodiazepine dosage according to age in elderly patients. Thus the equivalent doses below may need to be adjusted accordingly in individuals on short acting benzodiazepines who metabolise long-acting benzodiazepines more slowly and vice versa. The changes are most notable with long acting benzodiazepines as these are prone to significant accumulation in such individuals. For example the equivalent dose of diazepam in an elderly individual on lorazepam may be up to half of what would be expected in a younger individual.^{[6][7]} Equivalencies between individual benzodiazepines can differ by 400 fold on a mg per mg

basis; awareness of this fact is necessary for the safe and effective use of benzodiazepines.^[8]

Drug Name	Common Brand Names*	Time to Peak (Onset of action in hours)	Elimination Half-Life (h)[†] [active metabolite]	Therapeutic use	Approximate Equivalent Dose[‡]
Alprazolam	Helex, Xanax, Xanor, Onax, Alprox, Restyl, Tafil, Paxal	1-2	6–12 hours	anxiolytic	0.5 mg
Bretazenil ^[9]	N/A	?	2.5 hours	anxiolytic, anticonvulsant	0.5 mg
Bromazepam	Lectopam, Lexotanil, Lexotan, Bromam	1-3	10–20 hours	anxiolytic	5-6 mg
Brotizolam	Lendormin, Dormex, Sintonal, Noctilan	0.5-2	4–5 hours	hypnotic	0.25 mg
Chlordiazepoxide	Librium, Risolid, Elenium	1.5-4	5–30 hours [36–200 hours]	anxiolytic	25 mg
Cinolazepam	Gerodorm	0.5-2	9 hours	hypnotic	40 mg
Clonazepam	Rivotril, Klonopin, Iktorivil, Paxam	1-4	18–50 hours	anxiolytic, anticonvulsant	.25-.5 mg
Clorazepate	Tranxene, Tranxilium	Variable	36–100 hours	anxiolytic, anticonvulsant	15 mg
Clotiazepam	Veratran, Clozan, Rize	1-3	6-18 hours	anxiolytic	5-10 mg
Cloxazolam	Sepazon, Olcadil	2-5 (?)	18–50 hours	anxiolytic, anticonvulsant	1 mg
Delorazepam	Dadumir	1-2	60–140 hours	anxiolytic	1 mg
Diazepam	Antenex, Apaurin, Apzepam, Apozepam, Hexalid, Pax, Stesolid, Stedon, Valium, Vival, Valaxona	1-1.5	20–100 hours [36-200]	anxiolytic, anticonvulsant, muscle relaxant	10 mg
Estazolam	ProSom	1-5	10–24 hours	hypnotic	1–2 mg
Etizolam	Etilaam, Pasaden, Depas	1-2	6 hours	anxiolytic, hypnotic	1 mg
Ethyl loflazepate	Victan, Meilax, Ronlax	1.5	50-100 hours	anxiolytic	2 mg
Flunitrazepam	Rohypnol, Fluscand, Flunipam, Ronal, Rohydorm,	0.5-3	18–26 hours [36–200 hours]	hypnotic	1 mg
Flurazepam	Dalmadorm, Dalmane	1-1.5	40–250 hours	hypnotic	15–30 mg
Flutoprazepam	Restas	0.5-9	60–90 hours	hypnotic, anticonvulsant	2–3 mg
Halazepam	Paxipam	1-3	30–100 hours	anxiolytic	20–40 mg
			30–100 hours		

Ketazolam	Anxon	2.5-3	[36-200]	anxiolytic	15–30 mg
Loprazolam	Dormonox	0.5-4	6–12 hours	hypnotic	1–2 mg
Lorazepam	Ativan, Lorenin, Temesta, Tavor, Lorabenz	2-4	10–20 hours	anxiolytic, anticonvulsant	1 mg
Lormetazepam	Loramet, Noctamid, Pronoxan	0.5-2	10–12 hours	hypnotic	1–2 mg
Medazepam	Nobrium	?	36–200 hours	anxiolytic	10 mg
Midazolam	Dormicum, Versed, Hypnovel, Dormonid	0.5-1	3 hours (1.8–6 hours)	hypnotic, anticonvulsant	5 –7.5 mg ^[10]
Nimetazepam	Erimin	0.5-3	14–30 hours	hypnotic	5 mg
Nitrazepam	Mogadon, Alodorm, Pacisyn, Dumolid, Nitrazadon	0.5-7	15–38 hours	hypnotic, anticonvulsant	5 mg
Nordazepam	Madar, Stilny	?	50–120 hours	anxiolytic	10 mg
Oxazepam	Seresta, Serax, Serenid, Serepax, Sobril, Oxabenz, Oxapax	3-4	4–15 hours	anxiolytic	20 mg
Phenazepam	Phenazepam	1.5-4	60 hours	anxiolytic, anticonvulsant	1 mg
Pinazepam	Domar	?	40–100 hours	anxiolytic	20 mg
Prazepam	Lysanxia, Centrax	2-6	36–200 hours	anxiolytic	20 mg
Premazepam	N/A	2-6	10–13 hours	anxiolytic	3.75 mg
Quazepam	Doral	1-5	39–120 hours	hypnotic	20 mg
Temazepam	Restoril, Normison, Euhypnos, Temaze, Tenox	0.5-3	8–22 hours	hypnotic	20 mg
Tetrazepam	Mylostan	1-3	3–26 hours	Skeletal muscle relaxant	100 mg
Triazolam	Halcion, Rilamir	0.5-2	2 hours	hypnotic	0.25 mg

Atypical benzodiazepine receptor ligands

Drug Name	Common Brand Names*	Elimination Half-Life (h) [†] [active metabolite]	Primary Effects	Approximate Equivalent Dose [‡]
Clobazam	Frisium, Urbanol	8–60 hours	anxiolytic, anticonvulsant	20 mg
DMCM	?	?	anxiogenic, convulsant	Non-applicable
Flumazenil	Anexate, Lanexat, Mazicon, Romazicon	1 hour	antidote	Typical dose 0.2 - 0.6 mg ^δ
Eszopiclone [§]	Lunesta	6 hours	hypnotic	3 mg
Zaleplon [§]	Sonata, Starnoc	1 hours	hypnotic	20 mg

Zolpidem [§]	Ambien, Nytamel, Stilnoct, Stilnox, Zoldem, Zolnod	2.6 hours	hypnotic	20 mg
Zopiclone [§]	Imovane, Rhovane, Ximovan; Zileze; Zimoclone; Zimovane; Zopitan; Zorclone,	4–6 hours	hypnotic	15 mg

* Not all trade names are listed. Click on drug name to see a more comprehensive list.

† The duration of apparent action is usually considerably less than the half-life. With most benzodiazepines, noticeable effects usually wear off within a few hours. Nevertheless, as long as the drug is present it will exert subtle effects within the body. These effects may become apparent during continued use or may appear as withdrawal symptoms when dosage is reduced or the drug is stopped.

‡ Equivalent doses are based on clinical experience but may vary between individuals.[1] (<http://www.benzo.org.uk/bzequiv.htm>)

§ The molecular structure of these drugs differs from the benzodiazepine molecule but they work on benzodiazepine receptors with the same or similar effects and are cross tolerant drugs.

ð Flumazenil is given to reverse the effects of benzodiazepines and similar drugs, and dosage range listed will vary depending on which drug is being counteracted, what dosage the first drug was given in, and whether the flumazenil is given to actually reverse overdose or just to reduce side effects.

See also

- Benzodiazepine
- Benzodiazepine dependence
- Benzodiazepine withdrawal syndrome

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