

CHIRON

Benzodiazepines

Benzodiazepines are a common class of prescription medication. They are used therapeutically for a number of applications, including control of epilepsy, reducing anxiety, as adjuncts to anaesthesia, to treat insomnia, and for alcohol withdrawal. Benzodiazepines are also one of the most frequently abused class of drugs. An expanding range of new, designer benzodiazepines now supplement prescription only forms, and have exacerbated concerns regarding their misuse and addiction.



What are Benzodiazepines?

Benzodiazepines and benzodiazepine-type substances are amongst the most extensively prescribed groups of drugs worldwide. They are central nervous system (CNS) depressants with sedative, anxiolytic and muscle-relaxant properties. Their therapeutic properties are a result of their enhancement of the effects of the major inhibitory neurotransmitter present in the brain and spinal cord, gamma-aminobutyric acid (GABA) via modulation of the GABA receptor family. Globally, over fifty benzodiazepines are currently being used therapeutically, with more substances reported and evaluated in the medicinal chemistry literature. The variation in their chemical structures produces short-, medium and long-acting drugs with a wide range of potency and efficacy.

Benzodiazepines have a high addiction potential and over-prescription can lead to dependency. Recognition of this has resulted in a gradual reduction in the number of benzodiazepine prescriptions issued. However, without a reduction in demand people who have used prescribed benzodiazepines may turn to the illicit market. Benzodiazepines are now one of the most common prescription drugs used recreationally, or for self-medication, and complex polydrug use involving benzodiazepines is becoming increasingly popular. Benzodiazepines are often used to enhance the effects of other CNS depressant drugs, for example opioids, to alleviate withdrawal effects of other drugs; or to combat the effects of stimulants (i.e., to enable sleep and to reduce stress, anxiety and depression following stimulant use).



Side Effects:

- Anterograde amnesia
- Rapid Tolerance
- Dependence
- Severe withdrawal
- Injection injuries
- Dizziness
- Blurred vision
- Nausea
- Appetite changes

Withdrawal:

- Anxiety
- Irritability
- Dysphonia
- Decreased concentration
- Insomnia /Malaise
- Nausea
- Muscle twitching / tremors
- Sweating
- Convulsions

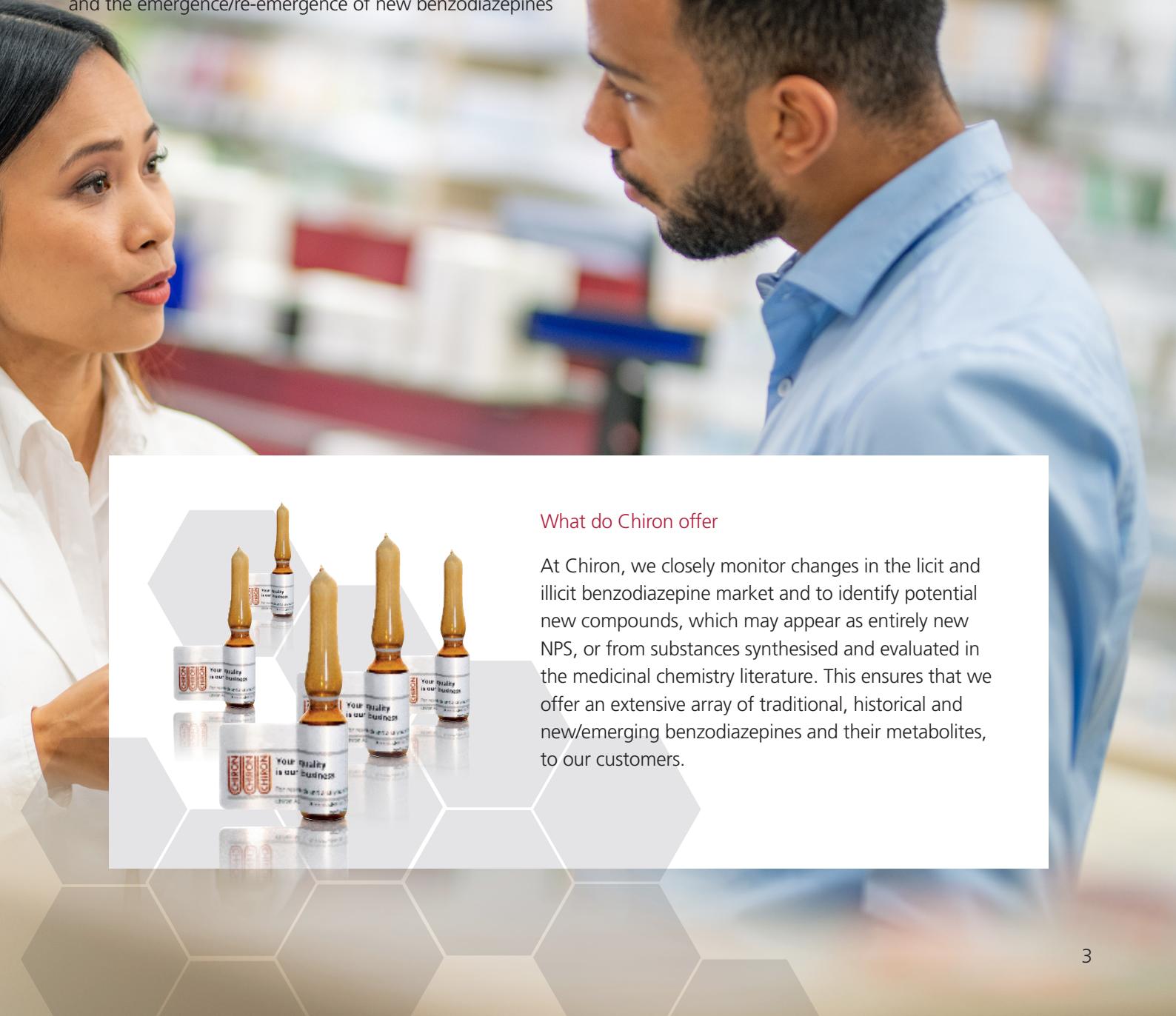
Table 1. Common side effects associated with benzodiazepine use and withdrawal.

In some cases, users may not be aware of the actual benzodiazepine-type drug they are taking, as there are increasing reports of the mis-selling/mislabelling of benzodiazepines in fake medicines containing what are referred to as the 'new', 'novel' or 'designer' benzodiazepines.

An expanding range of new benzodiazepines have appeared on the global illicit drugs market in the last 15 years, with more than 30 compounds currently being monitored in Europe. Their prevalence can change over time due to changes in national and international drug control and regulation. The illicit market in new designer benzodiazepines in recent years has tended to be dominated by etizolam and flualprazolam, but these came under international legislative control in 2020, followed by clonazolam, diclazepam and flubromazolam in 2021. Perhaps as a direct result of these new regulatory controls, there are increasing reports from multiple sources of the growing prevalence of flunitrazepam and bromazolam and the emergence/re-emergence of new benzodiazepines

including clonazepam, deschloroetizolam, fluclotizolam, flubrotizolam and meclonazepam in jurisdictions around the world with varying impact.

In July 2023, the Center for Forensic Science Research & Education (CFSRE) published data that showed bromazolam had overtaken etizolam to become the most frequently identified NPS benzodiazepine in 2023. In just the first 6 months of 2023, bromazolam represented 73% of NPS benzodiazepines identified, compared with just 12% during the entire 12 months in 2022, and 4% in 2021. Bromazolam and flubromazolam will undergo critical review by the 46th WHO Expert Committee on Drug Dependence in October 2023.

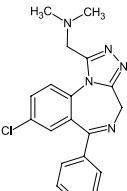
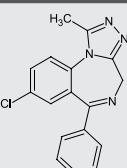
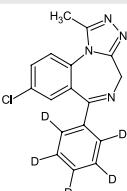
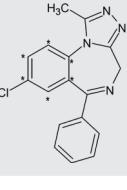
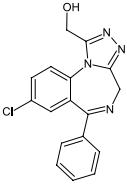
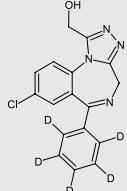
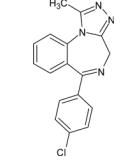
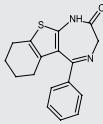


What do Chiron offer

At Chiron, we closely monitor changes in the licit and illicit benzodiazepine market and to identify potential new compounds, which may appear as entirely new NPS, or from substances synthesised and evaluated in the medicinal chemistry literature. This ensures that we offer an extensive array of traditional, historical and new/emerging benzodiazepines and their metabolites, to our customers.

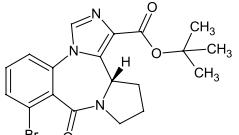
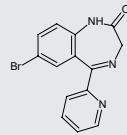
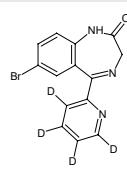
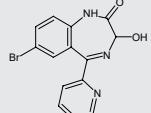
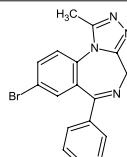
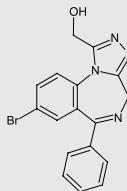
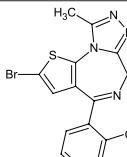
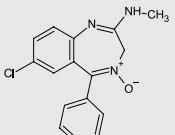
Benzodiazepines product listing

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Chiron No.	Name	Structure	CAS
Adinazolam			
11198.19	Adinazolam		37115-32-5
Alprazolam			
9382.17	Alprazolam		28981-97-7
9864.17	Alprazolam-d5 (phenyl-d5)		125229-61-0
11361.17	Alprazolam-13C6 (8-chlorobenzo-13C6)		1538556-17-0
9865.17	α -Hydroxyalprazolam		37115-43-8
9866.17	α -Hydroxyalprazolam-d5 (phenyl-d5)		136765-24-7
15795.17	4'-chloro Deschloroalprazolam		92262-72-1
Bentazepam			
9682.17	Bentazepam		29462-18-8

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Chiron No.	Name	Structure	CAS
Bretazenil			
14915.19	Bretazenil (Ro 16-6028; Ro-16-6028; Bretazenilum)		84379-13-5
Bromazepam			
10166.14	Bromazepam		1812-30-2
14001.14	Bromazepam-d4		1185022-85-8
13874.14	3-Hydroxybromazepam		13132-73-5
Bromazolam			
14834.17	Bromazolam		71368-80-4
15329.17	α -Hydroxybromazolam		N/A
Brotizolam			
13496.15	Brotizolam		57801-81-7
Chlordiazepoxide			
9831.16	Chlordiazepoxide		58-25-3

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Chiron No.	Name	Structure	CAS
Chlorodiazepoxide			
11959.16	Chlordiazepoxide-d5 (phenyl-d5)		65891-81-8
10767.16	Chlordiazepoxide-13C6 (7-chlorobenzo-13C6)		58-25-3 (unlabelled)
15934.15	Demoxepam (Chlordiazepoxide lactam; Chlordiazepoxide impurity A; Oxazepam impurity E)		963-39-3
CL 218,872			
15045.13	CL 218,872		66548-69-4
Clobazam			
10362.16	Clobazam		22316-47-8
10363.16	Clobazam-13C6 (phenyl-13C6)		1782501-70-5
10364.15	Norclobazam (N-Desmethylclobazam)		22316-55-8
10365.15	Norclobazam-13C6 (phenyl-13C6) (N-Desmethylclobazam-13C6)		1784141-52-1
Clobromazolam			
13638.17	Clobromazolam (Phenazolam)		87213-50-1

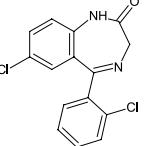
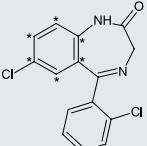
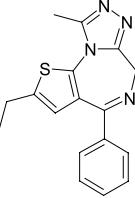
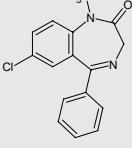
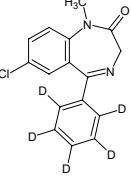
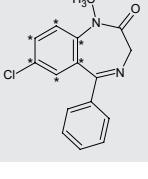
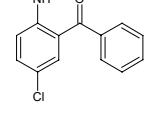
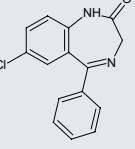
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Chiron No.	Name	Structure	CAS
Clobromazolam			
15327.17	α -Hydroxyclobromazolam (α -Hydroxyphenazolam)		N/A
Clonazepam			
9301.15	Clonazepam		1622-61-3
9302.15	Clonazepam-d4 (chlorophenyl-d4)		170082-15-2
10758.15	Clonazepam-13C6 (7-nitrobenzo-13C6)		1538556-00-1
9303.15	7-Aminoclonazepam		4959-17-5
9304.15	7-Aminoclonazepam-d4 (chlorophenyl-d4)		1215070-96-4
Clonazolam			
10880.17	Clonazolam (Clonitrazolam)		33887-02-4
14014.17	8-Aminoclonazolam (8-Aminoclonitrazolam)		71368-66-6
Cloniprazepam			
11314.19	Cloniprazepam (Kloniprazepam; 2-Chloro-7'-nitroprazepam)		1998158-84-1

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Chiron No.	Name	Structure	CAS
Delorazepam			
10605.15	Delorazepam (Chlordesmethyldiazepam; Nordiclazepam)		2894-67-9
11431.15	Delorazepam-13C6 (Nordiclazepam-13C6)		N/A
Deschloroetizolam			
10794.17	Deschloroetizolam		40054-73-7
Diazepam			
2541.16	Diazepam		439-14-5
9187.16	Diazepam-d5 (phenyl-d5)		65854-76-4
10799.16	Diazepam-13C6 (7-chlorobenzo-13C6)		1538556-15-8
2542.14	5-Chloro-2-(methylamino)benzophenone		1022-13-5
2703.15	Nordiazepam (Desmethyldiazepam; Nordazepam)		1088-11-5

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Chiron No.	Name	Structure	CAS
Diazepam			
9182.15	Nordiazepam-d5 (phenyl-d5) (Desmethyldiazepam-d5; Nordazepam-d5)		65891-80-7
10800.15	Nordiazepam-13C6 (7-chlorobenzo-13C6) (Desmethyldiazepam-13C6)		1538556-10-3
15833.15	Thionordiazepam (Demethylsulazepam)		4547-02-8
14299.16	4-Chlorodiazepam (Ro 5-4864; Ro5-4864)		14439-61-3
Diclazepam			
10420.16	Diclazepam		2894-68-0
13995.16	Diclazepam-d4 (phenyl-d4)		84344-18-3
Estazolam			
15886.16	Estazolam		29975-16-4
Etizolam			
10394.17	Etizolam		40054-69-1
13994.17	Etizolam-d3 (methyl-d3)		1781417-41-1
10837.17	9-Hydroxyetizolam		52170-72-6

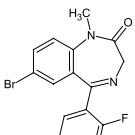
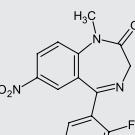
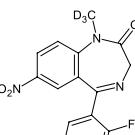
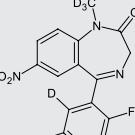
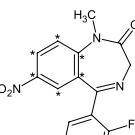
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Chiron No.	Name	Structure	CAS
Flualprazolam			
13637.17	Flualprazolam		28910-91-0
15326.17	α -Hydroxyflualprazolam		37115-46-1
15794.17	iso-Flualprazolam		N/A
15848.17	Dechloro-flualprazolam		N/A
15849.17	α -Hydroxy-dechloroflualprazolam		N/A
Flubromazolam			
10838.17	Flubromazolam		612526-40-6
15328.17	α -Hydroxyflubromazolam		N/A
15793.17	iso-Flubromazolam		N/A

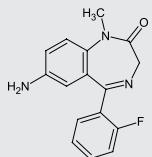
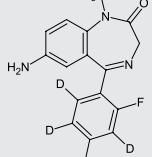
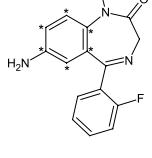
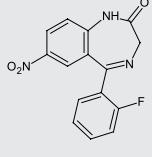
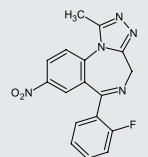
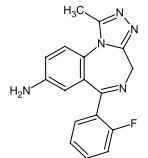
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Flubromazepam			
10428.15	Flubromazepam		2647-50-9
Fludiazepam			
15162.16	Fludiazepam (Ro 5-3438)		3900-31-0
Flunitrazepam			
9381.16	Flunitrazepam		1622-62-4
9854.16	Flunitrazepam-d3 (N-methyl-d3)		219533-64-9
9855.16	Flunitrazepam-d7 (N-methyl-d3, fluorophenyl-d4)		1286448-08-5
11363.16	Flunitrazepam-13C6 (7-nitrobenzo-13C6)		1538556-06-7

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Chiron No.	Name	Structure	CAS
Flunitrazepam			
9380.16	7-Aminoflunitrazepam		34084-50-9
9856.16	7-Aminoflunitrazepam-d3 (N-methyl-d3)		219533-65-0
9857.16	7-Aminoflunitrazepam-d7 (N-methyl-d3, fluorophenyl-d4)		879894-27-6
11364.16	7-Aminoflunitrazepam-13C6 (7-aminobenzo-13C6)		1538556-09-0
12084.15	Desmethylflunitrazepam (Norflunitrazepam; Fonazepam)		2558-30-7
13894.15	7-Aminodesmethylflunitrazepam		894-76-8
Flunitrazolam			
11507.17	Flunitrazolam (Flunazolam)		2243815-18-9
14182.17	8-Aminoflunitrazolam (8-Aminoflunazolam)		N/A

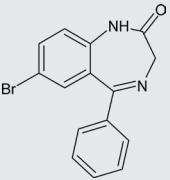
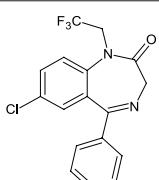
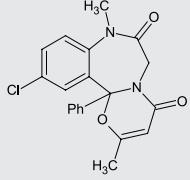
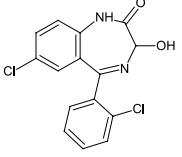
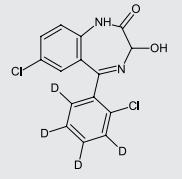
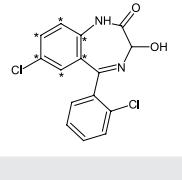
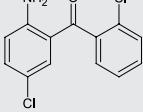
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Chiron No.	Name	Structure	CAS
Flunitrazolam			
15330.17	α -Hydroxyflunitrazolam (α -Hydroxyflunazolam)		N/A
Flumazenil			
12439.15	Flumazenil		78755-81-4
Flurazepam			
11404.21	Flurazepam		17617-23-1
15659.21	Flurazepam dihydrochloride		1172-18-5
11407.17	2-hydroxyethylflurazepam		20971-53-3
11409.15	Desalkylflurazepam (Norflurazepam; Norfludiazepam; Ro 5-3367)		2886-65-9
15954.15	Desalkyl-iso-flurazepam (Nor-iso-flurazepam; Nor-iso-fludiazepam)		55461-63-7
15850.15	Dechloro-norfludiazepam (RO 05-4336)		2648-01-3

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Chiron No.	Name	Structure	CAS
Gidazepam			
15452.15	Desalkylgidazepam (Bromonordiazepam)		2894-61-3
Halazepam			
11961.17	Halazepam		23092-17-3
Ketazolam			
11244.20	Ketazolam		27223-35-4
Lorazepam			
2548.15	Lorazepam		846-49-1
13765.15	Lorazepam-d4		84344-15-0
11172.15	Lorazepam-13C6 (7-chlorobenzo-13C6)		846-49-1 (unlabelled)
2360.13	2-Amino-2',5-dichlorobenzophenone (Lorazepam Imp. A (EP))		2958-36-3
3804.15	6-Chloro-4-(2-chlorophenyl)-2-quinazoline carboxaldehyde (Lorazepam Imp. C (EP))		93955-15-8

Benzodiazepines product listing

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Chiron No.	Name	Structure	CAS
Lormetazepam			
10606.16	Lormetazepam (Methylorazepam)		848-75-9
15525.16	Lormetazepam-d3 (Methylorazepam-d3)		N/A
14002.16	Lormetazepam-13C,d3 (Methylorazepam-13C,d3)		1285932-00-4
Meclonazepam			
10810.16	Meclonazepam (Ro 11-3128)		58662-84-3
14184.16	7-Aminomeclonazepam		1028633-52-4
Medazepam			
11406.16	Medazepam		2898-12-6
Metizolam			
11218.16	Metizolam (Desmethyletizolam)		40054-68-0
Midazolam			
10161.18	Midazolam		59467-70-8
13173.18	Midazolam-d3 (methyl-d3)		N/A

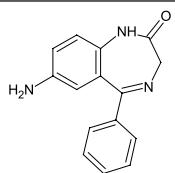
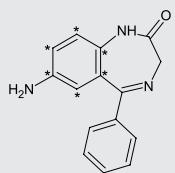
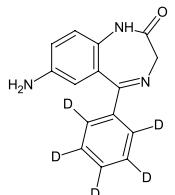
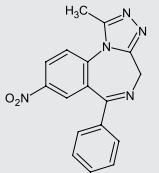
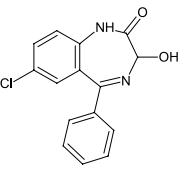
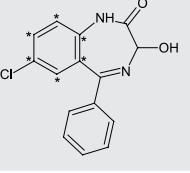
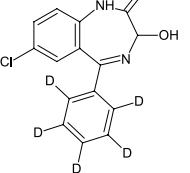
Benzodiazepines product listing

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Chiron No.	Name	Structure	CAS
Midazolam			
13058.18	Midazolam-d7 (1-methyl-d3-4H-imidazo-3-d1; 2-fluoro-phenyl-3,4,5-d3)		1219805-42-1
10389.18	α -Hydroxymidazolam (1'-Hydroxymidazolam; Ro 21-6347)		59468-90-5
13188.18	α -Hydroxymidazolam-d4 (phenyl-d4)		1781843-10-4
Nifoxipam			
10558.15	Nifoxipam (3-Hydroxydesmethylflunitrazepam)		74723-10-7
Nimetazepam			
3836.16	Nimetazepam		2011-67-8
Nitrazepam			
8605.15	Nitrazepam		146-22-5
10390.15	Nitrazepam-d5 (phenyl-d5)		136765-45-2
10391.15	Nitrazepam-13C6 (7-nitrobenzo-13C6)		146-22-5 (unlabelled)

Benzodiazepines product listing

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Chiron No.	Name	Structure	CAS
Nitrazepam			
9387.15	7-Aminonitrazepam (Ro 05-3072)		4928-02-3
10912.15	7-Aminonitrazepam-13C6 (7-aminobenzo-13C6)		4928-02-3 (unlabelled)
9819.15	7-Aminonitrazepam-d5 (phenyl-d5)		1189511-46-3
Nitrazolam			
11506.17	Nitrazolam		28910-99-8
Oxazepam			
2706.15	Oxazepam		604-75-1
11031.15	Oxazepam-13C6 (7-chlorobenzo-13C6)		1538556-21-6
9185.15	Oxazepam-d5 (phenyl-d5)		65854-78-6

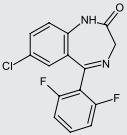
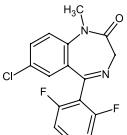
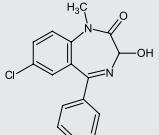
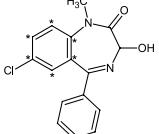
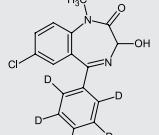
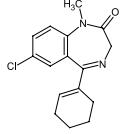
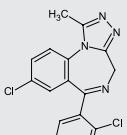
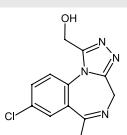
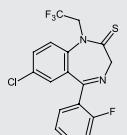
Benzodiazepines product listing

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Chiron No.	Name	Structure	CAS
2-Amino-5-chlorobenzophenone			
2520.13	2-Amino-5-chlorobenzophenone		719-59-5
Pioxazepam			
11190.20	Pioxazepam		55299-10-0
Phenazepam			
2211.15	Phenazepam		51753-57-2
8825.15	3-Hydroxyphenazepam		70030-11-4
9947.15	Phenazepam 4-oxide		1177751-52-8
Prazepam			
9465.19	Prazepam		2955-38-6
9183.19	Prazepam-d5 (phenyl-d5)		152477-89-9
Pyrazolam			
10427.16	Pyrazolam		39243-02-2

Benzodiazepines product listing

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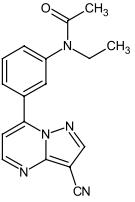
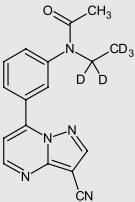
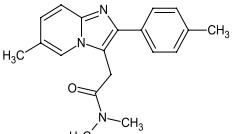
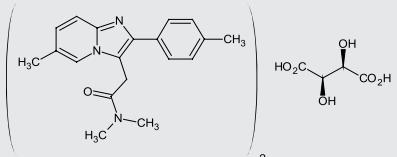
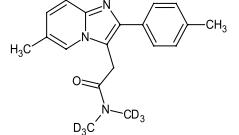
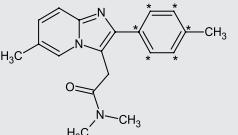
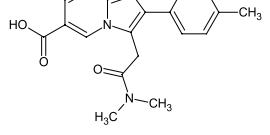
Chiron No.	Name	Structure	CAS
Ro 07-3953			
12755.15	Ro 07-3953		28910-86-3
Ro 07-4065			
12714.16	Ro 07-4065 (Difludiazepam)		39080-67-6
Temazepam			
9383.16	Temazepam (3-Hydroxydiazepam)		846-50-4
11173.16	Temazepam-13C6 (7-chlorobenzo-13C6) (3-Hydroxydiazepam-13C6)		1538556-24-9
10717.16	Temazepam-d5 (phenyl-d5) (3-Hydroxydiazepam-d5)		136765-51-0
Tetrazepam			
11788.16	Tetrazepam		10379-14-3
Triazolam			
11104.17	Triazolam		28911-01-5
13764.17	α -Hydroxytriazolam		37115-45-0
Quazepam			
11960.17	Quazepam		36735-22-5

Benzodiazepines product listing

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Non-Benzodiazepine Hypnotics (Z-drugs)

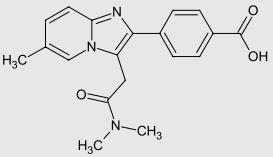
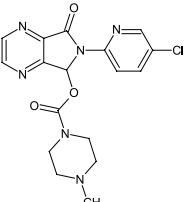
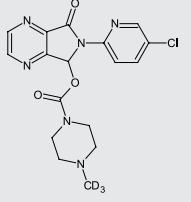
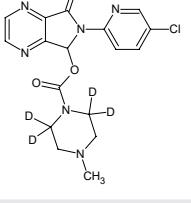
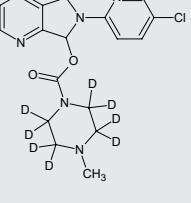
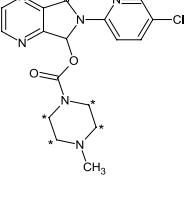
Zalplon, zolpidem and zopiclone, collectively known as 'Z-drugs', are a group of non-benzodiazepine hypnotic drugs used in the treatment of insomnia. They bind to the GABA_A receptors at the same location as benzodiazepines but are believed to have greater benefit and fewer side effects than classical benzodiazepines.

Chiron No.	Name	Structure	CAS
Zaleplon			
10866.17	Zaleplon		151319-34-5
10867.17	Zaleplon-d5 (N-ethyl-d5)		1001083-56-2
Zopidem			
9299.19	Zolpidem		82626-48-0
9773.21	Zolpidem hemitartrate		99294-93-6
9300.19	Zolpidem-d6 (N-dimethyl-d6)		959605-90-4
10252.19	Zolpidem-13C6 (tolyl-13C6)		1538556-27-2
10607.19	Zolpidem 6-carboxylic acid		109461-15-6

Benzodiazepines product listing

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Non-Benzodiazepine Hypnotics (Z-drugs)

Chiron No.	Name	Structure	CAS
Zopidem			
10608.19	Zolpidem phenyl-4-carboxylic acid		109461-65-6
Zopiclone			
9385.17	(±)-Zopiclone		43200-80-2
10325.17	(±)-Zopiclone-d3 (N-methyl-d3)		1398066-10-8
10271.17	(±)-Zopiclone-d4 (carboxypiperazine-3,3,5,5-d4)		1435933-78-0
9905.17	(±)-Zopiclone-d8 (piperazinyl-d8)		1215518-83-4
11360.17	(±)-Zopiclone-13C4 (piperazinyl-13C4)		43200-80-2 (unlabelled)

Benzodiazepines product listing

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Non-Benzodiazepine Hypnotics (Z-drugs)

Zalplon, zolpidem and zopiclone, collectively known as 'Z-drugs', are a group of non-benzodiazepine hypnotic drugs used in the treatment of insomnia. They bind to the GABA_A receptors at the same location as benzodiazepines but are believed to have greater benefit and fewer side effects than classical benzodiazepines.

Chiron No.	Name	Structure	CAS
Zopiclone			
10387.17	(±)-Zopiclone-N-oxide (Eszolpidem Imp. A)		43200-96-0
10603.5	2-Amino-5-chloropyridine (ACP)		1072-98-6
11958.5	2-Amino-5-chloropyridine-3,4,6-d3 (ACP-d3)		1093384-99-6
10609.16	(±)-Norzopiclone hydrochloride (N-Desmethylzopiclone HCl)		1216659-29-8

Benzodiazepines Mixes

S-4733-SET-MXx25(x4)
Standard set of Benzodiazepines:
8 components in 1 mL 5% methanol in water, 25 sets of 4

Chiron No.	Name	CAS	Concentration
9309.16	Benzoylecgonine	519-09-5	0.4, 2.0, 10, 40 µM
9387.15	7-Aminonitrazepam	4928-02-3	0.1, 0.5, 2.5, 10 µM
9303.15	7-Aminoclonazepam	4959-17-5	0.1, 0.5, 2.5, 10 µM
9380.16	7-Aminoflunitrazepam	34084-50-9	0.1, 0.5, 2.5, 10 µM
9382.17	Alprazolam	28981-97-7	0.1, 0.5, 2.5, 10 µM
2706.15	Oxazepam	604-75-1	0.4, 2.0, 10, 40 µM
9383.16	Temazepam	846-50-4	0.4, 2.0, 10, 40 µM
2703.15	Nordiazepam	1088-11-5	0.4, 2.0, 10, 40 µM

Benzodiazepines product listing

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Benzodiazepines Mixes

S-5015-SET-MXx25(x4)

Standard set of 9 Benzodiazepines (Set II):

9 components in 1 mL 5% methanol in water, 25 sets of 4

Chiron No.	Name	CAS	Concentration
9309.16	Benzoylecgonine	519-09-5	0.4, 2.0, 10, 40 µM
9387.15	7-Aminonitrazepam	4928-02-3	0.1, 0.5, 2.5, 10 µM
9303.15	7-Aminoclonazepam	4959-17-5	0.1, 0.5, 2.5, 10 µM
9380.16	7-Aminoflunitrazepam	34084-50-9	0.1, 0.5, 2.5, 10 µM
9382.17	Alprazolam	28981-97-7	0.1, 0.5, 2.5, 10 µM
2706.15	Oxazepam	604-75-1	0.4, 2.0, 10, 40 µM
9383.16	Temazepam	846-50-4	0.4, 2.0, 10, 40 µM
2703.15	Nordiazepam	1088-11-5	0.4, 2.0, 10, 40 µM
10389.18	α-Hydroxymidazolam	59468-90-5	0.1, 0.5, 2.5, 10 µM

S-5111-ASS-AN

Benzodiazepine Mix 09: 10 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
9382.17	Alprazolam	28981-97-7	256 µmol/L (79 µg/mL)
2548.15	Lorazepam	846-49-1	256 µmol/L (82 µg/mL)
9301.15	Clonazepam	1622-61-3	128 µmol/L (40 µg/mL)
8605.15	Nitrazepam	146-22-5	256 µmol/L (72 µg/mL)
9381.16	Flunitrazepam	1622-62-4	256 µmol/L (80 µg/mL)
2541.16	Diazepam	439-14-5	512 µmol/L (146 µg/mL)
2703.15	Nordazepam	1088-11-5	512 µmol/L (139 µg/mL)
2706.15	Oxazepam	604-75-1	512 µmol/L (147 µg/mL)
9299.19	Zolpidem	82626-48-0	256 µmol/L (79 µg/mL)
9385.17	(±)-Zopiclone	43200-80-2	256 µmol/L (100 µg/mL)

S-5253-100-AN

Benzodiazepine Mix 10: 9 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
2703.15	Nordiazepam	1088-11-5	
2706.15	Oxazepam	604-75-1	
9383.16	Temazepam	846-50-4	
2548.15	Lorazepam	846-49-1	
9303.15	7-Aminoclonazepam	4959-17-5	100 µg/mL each
9387.15	7-Aminonitrazepam	4928-02-3	
9380.16	7-Aminoflunitrazepam	34084-50-9	
10389.18	α-Hydroxymidazolam	59468-90-5	
9865.17	α-Hydroxyalprazolam	37115-43-8	

Benzodiazepines Mixes

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S-5264-K-AN

Benzodiazepine Mix 11: 3 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
2706.15	Oxazepam	604-75-1	
9383.16	Temazepam	846-50-4	1000 µg/mL each
2703.15	Nordiazepam	1088-11-5	

S-5417-100-AN

Benzodiazepine Mix 14: 4 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
9380.16	Aminoflunitrazepam	34084-50-9	
9303.15	Aminoclonazepam	4959-17-5	100 µg/mL each
9387.15	Aminonitrazepam	4928-02-3	
2548.15	Lorazepam	846-49-1	

S-5418-100-ME

Designer Benzodiazepine Mix 01: 11 components in 1 mL methanol

Chiron No.	Name	CAS	Concentration
2703.15	Nordiazepam	1088-11-5	
2706.15	Oxazepam	604-75-1	
9383.16	Temazepam	846-50-4	100 µg/mL each
10389.18	α-Hydroxymidazolam	59468-90-5	
9865.17	α-Hydroxyalprazolam	37115-43-8	

S-4840-100-ME

Designer Benzodiazepine Mix 01: 11 components in 1 mL methanol

Chiron No.	Name	CAS	Concentration
3836.16	Nimetazepam	2011-67-8	
10394.17	Etizolam	40054-69-1	
10428.15	Flubromazepam	2647-50-9	100 µg/mL each
10420.16	Diclazepam	2894-68-0	
10427.16	Pyrazolam	39243-02-2	
9682.17	Bentazepam	29462-18-8	
10558.15	Nifoxipam	74723-10-7	
10794.17	Deschloroetizolam	40054-73-7	
10810.16	Meclonazepam	58662-84-3	
10838.17	Flubromazolam	612526-40-6	

Benzodiazepines Mixes

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S-5407-100-AN

Designer Benzodiazepine Mix 02: 11 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
11198.19	Adinazolam	37115-32-5	
14834.17	Bromazolam	71368-80-4	
10880.17	Clonazolam	33887-02-4	
10394.17	Etizolam	40054-69-1	
10794.17	Deschloroetizolam	40054-73-7	100 µg/mL each
10420.16	Diclazepam	2894-68-0	
13637.17	Flualprazolam	28910-91-0	
10428.15	Flubromazepam	2647-50-9	
10838.17	Flubromazolam	612526-40-6	
11507.17	Flunitrazolam	2243815-18-9	
10810.16	Meclonazepam	58662-84-3	

S-5407-K-AN

Designer Benzodiazepine Mix 02: 11 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
11198.19	Adinazolam	37115-32-5	
14834.17	Bromazolam	71368-80-4	
10880.17	Clonazolam	33887-02-4	
10394.17	Etizolam	40054-69-1	
10794.17	Deschloroetizolam	40054-73-7	1000 µg/mL each
10420.16	Diclazepam	2894-68-0	
13637.17	Flualprazolam	28910-91-0	
10428.15	Flubromazepam	2647-50-9	
10838.17	Flubromazolam	612526-40-6	
11507.17	Flunitrazolam	2243815-18-9	
10810.16	Meclonazepam	58662-84-3	

Benzodiazepines Mixes

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PRODUCER

S-5408-K-AN

Designer Benzodiazepine Metabolite Mix 01: 8 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
15329.17	α -Hydroxybromazolam	N/A	
14014.17	8-Aminoclonazepam	71368-66-6	
15326.17	α -Hydroxyflualprazolam	37115-46-1	
15328.17	α -Hydroxyflubromazolam	N/A	1000 μ g/mL each
10604.15	3-Hydroxyflubromazepam	62659-65-8	
14182.17	8-Aminoflunitrazepam	N/A	
15330.17	α -Hydroxyflunitrazolam	N/A	
14184.16	7-Aminomeclonazepam	1028633-52-4	

S-4844-100-AN

Z-Drug Mix: 3 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
10866.17	Zaleplon	151319-34-5	
9299.19	Zolpidem	82626-48-0	100 μ g/mL each
9385.17	(\pm)-Zopiclone	43200-80-2	

S-4845-100-AN

Z-Drug ISTD Mix: 3 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
10867.17	Zaleplon-d5 (N-ethyl-d5)	1001083-56-2	
9300.19	Zolpidem-d6 (N-dimethyl-d6)	959605-90-4	100 μ g/mL each
9905.17	(\pm)-Zopiclone-d8 (piperazinyl-d8)	1215518-83-4	

S-4734-SET-ANx25(x4)

Standard set of ZZ6: 3 components in 1 mL acetonitrile, 25 sets of 4

Chiron No.	Name	CAS	Concentration
9385.17	(\pm)-Zopiclone	43200-80-2	0.1, 0.5, 2.5, 10 μ M
9299.19	Zolpidem	82626-48-0	0.1, 0.5, 2.5, 10 μ M
10041.19	6-Acetylmorphine	2784-73-8	0.4, 2.0, 10, 40 μ M

S-5263-100-AN

Zopiclone and metabolite mix: 3 components in 1 mL acetonitrile

Chiron No.	Name	CAS	Concentration
9385.17	(\pm)-Zopiclone	43200-80-2	
10609.16	(\pm)-Norzopiclone hydrochloride	1216659-29-8	100 μ g base/mL
10603.5	2-Amino-5-chloropyridine	1072-98-6	

Accuracy controls



This product is intended for use as a control material as part of a laboratory's internal quality assurance process. The control is prepared by spiking human serum with benzodiazepines and substances of related groups of active substances.

This is a representative example. Please enquire for current composition and concentrations.

DCT - Drug confirmation tests in serum: 26 Benzodiazepines* in lyophilized serum, 6 x 2.5 mL

Compound	DCT - A SE [µg/L]	DCT - C SE [µg/L]	DCT - A SE [µg/L]	DCT - B SE [µg/L]	DCT - C SE [µg/L]
7-Aminoflunitrazepam	5	500	5	50	500
Flunitrazepam	5	500	5	50	500
Norflunitrazepam (Fonazepam)	5	500	5	50	500
Bromazepam	5	500	5	50	500
Diazepam	5	500	5	50	500
Nordiazepam	5	500	5	50	500
Clonazepam	5	500	5	50	500
7-Amino-Clonazepam	5	500	5	50	500
Flurazepam	5	500	5	50	500
Desalkylflurazepam (d.o.i.o.)	5	500	5	50	500
Tetrazepam	5	500	5	50	500
Lormetazepam	1	100	1	10	100
Etizolam	5	500	5	50	500
Oxazepam	5	500	5	50	500
Alprazolam	5	500	5	50	500
OH-Alprazolam	5	500	5	50	500
Midazolam	5	500	5	50	500
OH-Midazolam	5	500	5	50	500
Lorazepam	5	500	5	50	500
Temazepam	5	500	5	50	500
Zolpidem	5	500	5	50	500
Nitrazepam	5	500	5	50	500
Zopiclone	5	500	5	50	500
Zaleplone	5	500	5	50	500
Phenazepam	5	500	5	50	500
Triazolam	5	500	5	50	500
Part No.	22SE025A	22SE025C	22SE025A_n1	22SE025B_n1	22SE025C_n1

*This is a multicomponent accuracy control, also containing other drugs groups including; Amphetamines, Cocaines, Opiates, Cannabinoids, LSD and others. For the full composition please contact sales@chiron.no



For ordering and information about prices and delivery in your country, please contact your local distributor:



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