# Anxiolytics

This article has been translated from WikiSkripta; the **translation** needs to be checked.

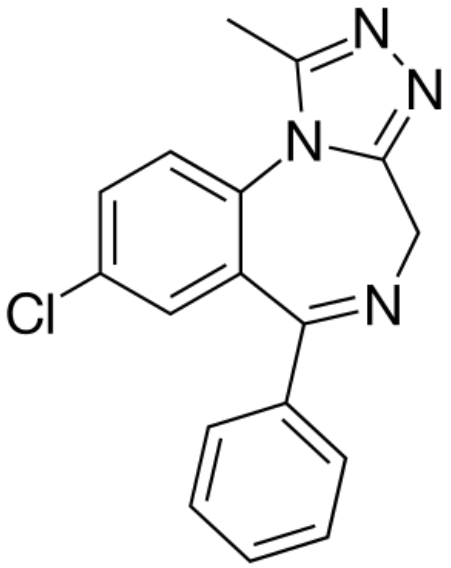
**Anxiolytics** reduce anxiety, psychological tension, fear (phobia), stress, nervousness etc. They are not suitable for the treatment of psychosis. Fear and anxiety are normal experiences, they do not have to be pathological symptoms. It is not easy to decide in which case we can omit prescribing medication or where we need to use the pharmacotherapy or psychotherapy.

The use of Anxiolytics is generally appropriate in individuals where the fear and anxiety cause **somatic symptoms** (heart palpitations, diarrhoea, sweating etc.).

Pharmacotherapy should be given for the shortest time possible, in order to overcome the life crises that have led to anxiety. However, in some cases, we cannot avoid long term administration of drugs. The disadvantage of using anxiolytics is the fact that some individuals prefer pharmacotherapy over dealing with complicated situations, so after that, drug dependence is highly probable.

The ideal anxiolytic should not influence the alertness. So far, the medications with this property are not available. **Anxiolytics** lead to drowsiness, fatigue, decrease of alertness. Its central suppression effects cause myorelaxation and has anticonvulsant uses.

The effects of anxiolytics can be described as: anxiolytic, sedative and hypnotic, myorelaxative, anticonvulsive. Its uses are variable, depending on the properties of the individual drug.



Alprazolam

## SSRI

## Propandiol derivates

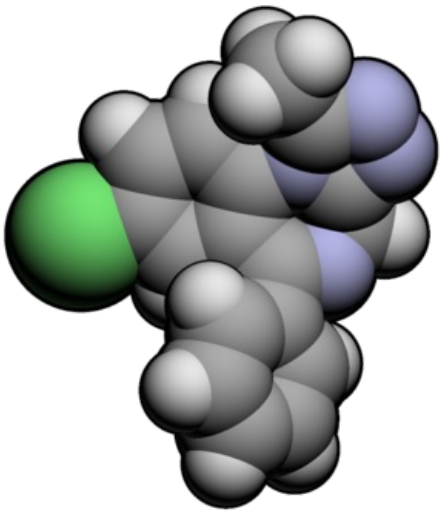
This class of medication has significant myorelaxative effect. The anxiolytic effect is weaker.

**Guaifenesin** has anxiolytic and myorelaxative effects. It is used for psychosomatic diseased with heart palpitations, inu algic syndromes (psychological tensionn with headache). It is combined with analgetics-antipyretics agents for it´s synergism outcome. It is suitable for overcoming nervousness during public speeking.

## Benzodiazepines

In this indication, we use agents with predominant anxiolytic effect.

*We divide benzodiazepines anxiolytics by their half-life* ($t_{1/2}$)**; the standard daily dosage for anxiolytic effect is mentioned in brackets**


Alprazolam (3D molecule)

- **with long half-life $t_{1/2}$** (> 24 hours):
    - *diazepam* (5–40 mg), *medazepam* (10–60 mg), *clobazam* (20–30 mg), *clonazepam*(1–8 mg), *chlordiazepoxid* (10–50 mg);
    - the biotransformation is done by oxidation in the liver;
    - the elimination is prolonged in patients with liver disease and in elderly patiets.
- **with medium half-life $t_{1/2}$** (12–24 hours):
    - *alprazolam* (0,5–4 mg), *bromazepam* (3–15 mg);
- **with short half-life $t_{1/2}$** (< 12 hours):
    - *xazepam* (30–90 mg), *tofizopam* (50–300 mg), *lorazepam* (2–6 mg);
    - their are metabolized by conjugation with glucuronides with significantly lower dependance on liver function

## Other non benzodiazepines anxiolytics

- **buspiron** - 5-HT1A receptor agonist. The effect is comparable to benzodiazepines, its downside is a slow onset of action (1-2 weeks). It does not have major side effects which are typical for

benzodiazepines anxiolytics (there is no risk for dependence, fatigue, memory and concentration problems, etc.)
    - **antihistaminics** (*hydroxyzin, promethazin*) - better tolerated, lower efficiency than benzodiazepines

# Links

## Related articles

- Psychofarmaka
    - Hypnotika
    - Sedativa
- Abúzus návykových látek
- Benzodiazepiny
- Procvičování:Anxiolytikum

## Literature


Ústav farmakologie LF UK v Hradci Králové. *Vybrané kapitoly z klinické farmakologie pro bakalářské studium : Hypnotika, sedativa* [online]. ©2010. [cit. 2010-07-01]. <https://www.lfhk.cuni.cz/farmakol/predn/bak/kapitoly/ichs-bak.doc/>