

Berne, July 2017

Cough and cold preparations containing codeine or dihydrocodeine: Update of the product information

The following sections in the product information texts for cough and cold preparations containing codeine and dihydrocodeine have been updated: "Contraindications", "Warnings and precautions" and "Pregnancy/breastfeeding".

Contraindications

Cough and cold preparations containing codeine or dihydrocodeine may not be administered to

- **children below 12 years;**
- **patients of any age who are known to be "ultra-rapid metabolisers";**
- **breast-feeding women.**

Warnings and precautions

Cough and cold preparations containing codeine or dihydrocodeine are not recommended for adolescents between 12 and 18 years who have problems with breathing.

Pregnancy/breastfeeding

Since codeine can pass into breast milk, and morphine-like effects in the infant cannot be ruled out, "preparation name" may not be used during breastfeeding (see Contraindications).

Background

After ingestion, codeine is converted into the active metabolite morphine by the hepatic isoenzymes CYP2D6, of which several genetic polymorphisms are known to exist.

In some people (known as "ultra-rapid metabolisers"), codeine is converted into morphine faster than normal.

Since these patients with an "ultra-rapid CYP2D6 metaboliser" phenotype have high levels of CYP2D6, toxic serum levels of morphine can arise even with small doses and result in serious complications. The most important complication is respiratory depression.

Other symptoms of overdose include dizziness, deep sedation, slow or shallow breathing, nausea and vomiting, even cardiac and respiratory arrest.

Although these serious side effects can occur in patients of all age groups, a special risk exists in children below 12 years, since the conversion of codeine into morphine is more variable and less predictable.

In breast-feeding mothers who are "ultra-rapid CYP2D6 metabolisers" and receiving codeine treatment, there is a risk of a possibly fatal overdose in the baby as a result of receiving very large quantities of morphine via the breast milk.

If signs of opioid toxicity appear, close monitoring of patients is extremely important.

Consequently, cough and cold preparations containing codeine or dihydrocodeine should not be administered to children below 12 years, breast-feeding women or patients who are known to be "ultrarapid metabolisers".

Furthermore, codeine is not recommended for adolescents between 12 and 18 years with impaired respiration since it can lead to symptoms of opioid overdose. However, if a cough or cold preparation containing codeine is used, the patient should be monitored particularly for symptoms of respiratory depression.

Recommendations for healthcare professionals / patients

Patients taking cough and cold preparations containing codeine or dihydrocodeine should be monitored for the following symptoms: slow or shallow breathing, confusion, drowsiness, constricted pupils, nausea or vomiting, constipation, loss of appetite. If such symptoms occur, the administration of the medicinal product must be stopped and medical advice sought immediately.

The product information texts (Information for healthcare professionals and Patient information) for cough and cold preparations containing codeine and dihydrocodeine will be updated and published on the Swissmedic website at www.swissmedicinfo.ch.

Reporting adverse drug reactions

Swissmedic recommends the use of its dedicated portal for reporting adverse drug reactions (ADR). This portal, which is known as the Electronic Vigilance System (EIViS), can be used to directly submit ADR. All necessary information can be found at www.swissmedic.ch > Market surveillance > Pharmacovigilance.

List of cough and cold preparations containing codeine or dihydrocodeine authorised in Switzerland (as of May 2017):

Preparation	Dosage form
Benylin® mit Codein N	Syrup
Bronchialpastillen VA mit Codein	Lozenges
Codein Knoll®	Tablets
Codicalm®	Syrup
Coop Vitality Bronchialpastillen mit Codein	Lozenges
Dr. Bähler Bronchialpastillen mit Codein	Lozenges
Escotussin	Drops
GEM Bronchialpastillen mit Codein	Lozenges
Husten- und Bronchialsirup «S» mit Zucker	Syrup

Iropect® Bronchialpastillen	Lozenges
Makatussin Comp., Hustensirup	Syrup
Makatussin, Hustentropfen	Drops
MAKU Bronchialpastillen mit Codein	Lozenges
Néo-Codion® N	Film-coated tablets
Paracodin®	Drops
Pectocalmine® N, Sirup	Syrup
Pectocalmine® N ohne Zucker, Sirup	Syrup
Pharmacieplus Bronchialpastillen mit Codein	Lozenges
Resyl® plus	Drops, Syrup
Rotpunkt Apotheke Bronchialpastillen mit Codein	Lozenges
Sano-Tuss N	Syrup
Sanotussin	Film-coated tablets
Swidro Bronchialpastillen mit Codein	Lozenges
Tossamin® plus	Capsules for the day/for the night
Zürcher Bahnhof Apotheke Bronchialpastillen mit Codein	Lozenges