



Reminyl (*galantamine hydrobromide*)

Drug treatment for Alzheimer's disease

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Introduction

Reminyl is the brand name for the drug **galantamine hydrobromide**. It is licensed for the treatment of mild to moderately severe Alzheimer's disease, and was launched in September 2000.

Reminyl is one of a group of three drugs for people with Alzheimer's disease called cholinesterase inhibitors. The other two are called Aricept and Exelon. See Information sheets 11 and 14 for information on these drugs.

Reminyl is not claimed to be a cure for Alzheimer's disease. It treats only the symptoms and there is no evidence to show that it could halt or reverse the process of cell damage that causes Alzheimer's disease.

This information sheet is for people with Alzheimer's disease, their families and carers, and for anyone else interested in the treatment of Alzheimer's disease. It updates an earlier version published in September 2000.

How does Reminyl work?

Acetylcholine is a neurotransmitter, a brain chemical which carries messages between brain cells. When someone has Alzheimer's disease, it seems that - among other changes - his or her brain produces less acetylcholine. Normally there is a repeated cycle in the brain in which acetylcholine is made, transmits messages and is then broken down by a special enzyme (acetylcholinesterase).

All three drugs currently available for Alzheimer's disease aim to affect this cycle by preventing the breakdown of acetylcholine so that there is more available in the brain to carry messages between the brain cells. Reminyl also affects another part of the cycle, which causes a greater release of acetylcholine.

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Who might benefit from Reminyl?

Reminyl is intended only for people with Alzheimer's disease, and not for people with other kinds of dementia. It is licensed only for people who are in the mild to moderate stages of the illness.

There is some evidence that it might benefit people with mixed dementia (Alzheimer's disease and vascular dementia).

It is important to realise that unfortunately Reminyl will not help everyone who tries it. Reminyl is not claimed to be a cure for Alzheimer's disease. It only treats the symptoms and there is no evidence that it could halt or reverse the process of cell damage that causes Alzheimer's disease.

What effect might it have?

The effect of the drug will vary for different people. Some will not notice an effect at all. Others may find that their condition improves, or that they stay the same when they would have been expected to get gradually less able because of the progression of Alzheimer's disease.

For most people who take it there will not be a dramatic improvement, but the drug may help to stop symptoms getting worse.

SIGN guideline

The Scottish Intercollegiate Guidelines Network (SIGN) is an organisation which produces guidelines and recommendations on how to treat medical conditions. These recommendations are then used by health professionals, such as doctors.

In producing its guideline on the management of patients with dementia, SIGN reviewed studies which investigated the effects of Reminyl. It found that Reminyl is effective in maintaining cognition (mental functions or processes, such as memory) in people with mild to moderate Alzheimer's disease.

One study found some evidence of a benefit to the cognition of people with mixed Alzheimer's disease and cerebrovascular disease (which is any disease where the arteries in the brain, or those connected to the brain, are defective).

Two studies found that higher doses of Reminyl (up to 24 milligrams (mg)) are more effective than lower doses and one study found that increasing the dosage of the drug slowly meant that people could tolerate better i.e. had fewer side effects.

One study found the greatest benefits are found in people with moderate dementia who have a Mini Mental State Examination score (see the section on how to get Reminyl for more details about this test) of less than 18.

Two studies showed that Reminyl improves behaviour and functional ability (i.e. the person's ability to carry out normal activities) in people with Alzheimer's disease.

SIGN recommendations

SIGN recommends that Reminyl at daily doses of 16 mg and above can be used to treat cognitive decline in people with Alzheimer's disease and people with mixed dementia. It also recommends that Reminyl can be used to manage associated symptoms in people with Alzheimer's disease.

How is Reminyl taken?

Reminyl comes in tablets of 8 mg or 12 mg. There is also an oral solution, which has a strength of 4 mg/mL. All these are taken twice a day.

Reminyl XL is a newer form of the drug. It comes in capsules of 8 mg, 16 mg and 24 mg and is taken once a day.

It is recommended that people start Reminyl with a dose of 8 mg once a day for four weeks, then take 16 mg once a day for four weeks. After this, the dose can remain at 16 mg or be increased 24 mg once a day.

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Both Reminyl and Reminyl XL should be taken with food.

If a dose is missed, the person should take it as soon as possible. If it is near to the time of the next dose, they should not take it and take the next dose as normal. Two doses should not be taken at once.

Are there any side effects?

Medicines can affect people in different ways causing side effects in some but not others. It is not possible to tell who will have side effects and who will not.

The most likely side effects are nausea and vomiting. These are more common when someone begins to take Reminyl or when the dose is increased, but often settle down with time. If these or any other symptoms occur, tell the doctor at once.

Some people may get other side effects including diarrhoea, indigestion, decreased appetite, weight loss, headache, dizziness, tiredness, sleepiness, sleeplessness, confusion, a runny or blocked nose, a urinary tract infection and falling. In very rare cases trembling, a slow heartbeat or fainting has occurred.

Interactions with other drugs

Taking some medicines together can be harmful. It is important to tell the doctor about all the drugs that the person with Alzheimer's disease takes because Reminyl may interact with them. This includes prescription and non-prescription drugs, vitamins, herbal remedies or dietary supplements.

Interactions with other conditions

Reminyl should not be used by people who have severely decreased liver or kidney function. Also, some people may be allergic to some of the ingredients in Reminyl (such as lactose and E110 in the 12mg tablets) and in Reminyl XL (such as sucrose).

Some other illnesses might be affected by taking Reminyl. The doctor must be told of any previous or current illnesses, including:

- liver or kidney problems
- heart disorders
- stomach ulcer or duodenal ulcer
- acute abdominal pain
- epilepsy
- respiratory diseases that affect breathing (like asthma)
- a recent operation on the gut or bladder
- difficulties in passing urine
- galactose intolerance, lactase deficiency or glucose-galactose malabsorption.

The doctor should also be told if the person is pregnant, trying to get pregnant, breastfeeding or is going to have an operation which will require anaesthesia.

Overdose

If too much Reminyl has been taken, contact a doctor or hospital straight away for advice. Take any remaining tablets and the packaging with you. NHS 24 (telephone 08454 24 24 24) may be able to give you advice when your GP practice or health centre is closed.

Stopping the drug

It is best to discuss with the doctor when to stop the drug. However, it is possible to stop immediately if you feel this is necessary. Talk to the doctor as soon as possible.

How to get Reminyl

NHS prescriptions

Before 2006, people with mild and moderate Alzheimer's disease could get Reminyl on NHS prescription if a doctor believed the drug could help. However, in 2006 NHS Quality Improvement Scotland (NHS QIS) decided that Reminyl should only be available on NHS prescription to people with **moderate** Alzheimer's disease.

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Moderate Alzheimer's disease is defined as a score between 10 and 20 points on the MMSE. People with mild Alzheimer's disease will not be eligible for Reminyl until their condition gets worse and they are assessed as being in the moderate stage.

The NHS QIS decision means, in theory, that people with mild Alzheimer's disease will not be eligible for Reminyl until their condition gets worse and they are assessed as being in the moderate stage. In practice, the doctor will use his or her clinical judgement to determine whether or not to prescribe the drug for an individual.

The NHS QIS decision should not affect people with mild Alzheimer's disease who began taking Reminyl before 2006. They can continue to take Reminyl until they, their carer and/or their doctor think they should stop taking it.

Reminyl can be prescribed by a specialist doctor (for example, a psychiatrist) or sometimes by a GP. If the person with Alzheimer's disease needs to see a specialist, his or her GP will arrange this. The doctor prescribing Reminyl should seek the carer's views of the condition of the person with Alzheimer's disease as part of this process.

People taking Reminyl will be reviewed every six months. The review will be done by a GP or specialist team. The review will include a number of tests, including the MMSE. Again, the carer's views should be taken into account.

If the MMSE score stays above 10 and the results of other tests show that Reminyl is having a worthwhile effect, then the person with Alzheimer's disease can continue taking Reminyl. If the MMSE score is below 10, then the person may have to stop taking the drug.

People with mild Alzheimer's disease who began taking Reminyl before 2006 can

continue to take Reminyl until they, their carer and/or their doctor think they should stop taking it.

Regardless of whether the person with Alzheimer's disease is suitable for drug treatment, the doctor can give information on local services that may help people to cope with the illness. People with Alzheimer's disease and their carers can also call the 24 hour Dementia Helpline free on 0808 808 3000 for information or to talk things over.

Private prescriptions

People with mild Alzheimer's disease may be able to get Reminyl on a private prescription. Any doctor can, in theory, write a private prescription if he or she thinks the treatment would help the person and if the doctor is willing to accept responsibility for the decision to prescribe the drug.

A private prescription can be obtained through a consultant or other specialist, a private hospital, or GP. However, hospital doctors may not be allowed by their health boards to write private prescriptions for patients after assessing them at a NHS consultation. This could mean that the person with Alzheimer's disease has to pay for a private consultation.

GPs are not allowed to charge for writing a private prescription if the patient is registered for NHS care with that GP or another GP in the same practice. However, not all GPs are willing to issue private prescriptions, and some may feel they do not have the right expertise to prescribe Reminyl, as it is normally only prescribed by hospital specialists.

Private specialists will write private prescriptions if they consider the drugs would be beneficial. However, it is unlikely that they would do so without arranging to monitor the person with Alzheimer's disease for the effects of the drug. If the person with Alzheimer's disease is going to see a specialist privately, ask for a written estimate of any additional

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on-going costs associated with the prescription.

There are advantages to staying within the NHS system for dementia care, other than reduced cost and ongoing monitoring of your condition, such as getting access to other NHS services like community nursing, continence services and various therapies.

Take the prescription to the pharmacist or chemist, as you would with a NHS prescription.

Cost NHS prescriptions

If the person with Alzheimer's disease is prescribed Reminyl on the NHS, he or she will have to pay the normal prescription charge unless he or she is eligible for free prescriptions – ask a pharmacist for more details.

Private prescriptions

Private prescriptions are not covered by the NHS prescription charge and are not supplied free to people who do not pay prescription charges. A dispensing fee on top of the full cost of the drug will also be charged. This could be in the region of £50. It may pay to shop around if you can, as dispensing charges can vary from pharmacy to pharmacy and even between branches of the same company.

Reminyl costs as follows:

Number of tablets	Strength	Cost
56	8 mg	£68.32
56	12 mg	£84

The oral solution costs £120 for 100mL (4 mg/mL).

Cost per year, based on the dose required.

Dose	Cost	Oral solution
8 mg	£445.30	£876
16 mg (2 x 8 mg)	£890.60	£1752
24 mg (2 x 12 mg)	£1095	£2628

Reminyl XL costs as follows:

Number of tablets	Strength	Cost
28	8 mg	£54.60

28	16 mg	£68.32
28	24 mg	£84

Cost per year of Reminyl XL tablets:

Dose	Cost
8 mg	£711.75
16 mg	£890.60
24 mg	£1095

For more information on private prescriptions, see Information sheet 37.

If you or the person you care for have been refused an NHS prescription for Reminyl or any of the dementia drugs, Alzheimer Scotland would like to know. Write to the Policy Director, Alzheimer Scotland, 22 Drumsheugh Gardens EH3 7RN or email alzheimerscot@alzscot.org



Alzheimer Scotland

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Telephone: 0131 243 1453

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