

## SEVERN HOSPICE

### GP Prescribing information for Methadone 1mg/ml in palliative care pain management

Methadone is used for palliative care patients who fail to respond well to morphine or other  $\mu$ -opioid receptor agonists.

Methadone must **only** be initiated and all dose alterations done by a hospice consultant/specialist who will also take into account all other medicines the patient is on.

**Prescribers should contact the hospice for advice if a patient fails to take their methadone dose for any reason for 2 or more consecutive days.**

It is intended that this use of methadone should also reduce unplanned hospital admissions from poorly controlled cancer pain in palliative care patients. The patient will be supported with a separate information leaflet, and discussion with the hospice pharmacist where needed.

Certain types of cancers respond well to methadone, particularly those affecting the chest wall, cancers deep in the abdomen and around the pancreas, and also cancers affecting the bone and severe renal impairment.

All pains, including some chronic non-cancer pains can be helped by methadone, especially when the dose of other opioids has escalated over months or years and lost effectiveness or caused significant side effects.

#### Licensed Indication

Your patient has been started on Methadone 1mg/ml for pain management by the consultant/specialist at Severn Hospice, who is fully conversant with its pharmacology.

This is an off-licence use of a licensed medicine, commonly used in palliative care. This information is provided to support the GP with the on-going care of the patient.

#### Use in palliative care

Important facts about methadone include:

- Long plasma half-life (it takes 4-7 days to achieve steady state)
- Metabolism is modified to a clinically important extent by other drugs which may be used in palliative care.
- Metabolised in the liver by cytochrome P450
- Renal and hepatic impairment do not affect methadone clearance.
- QT interval prolongation and, rarely, ventricular arrhythmia (torsade de pointes) have been observed during treatment

#### Monitoring

No specific monitoring requirements.

However, if other drugs affecting QT interval are added, consider ECG see below.

NB: Information is taken from Palliative care Formulary vol 5. (also available on [www.palliativecare drugs.com](http://www.palliativecare drugs.com))

Licensed indications and drug information available on [www.medicines.org.uk](http://www.medicines.org.uk)

#### Dosage and administration

The hospice consultant/specialist will liaise with the patient's GP to discuss the patient's need for methadone and the supported continued prescribing. Please do NOT alter the dose of methadone without agreement from the consultant/specialist responsible for the patient's pain management.

The methadone patient will be cared for in the community by the Severn Hospice out-reach team and will continue to be reviewed by the Hospice consultant/specialist and monitored closely by the palliative care multi-disciplinary team. Any changes to the dose of methadone will be communicated to the GP via a written letter in a timely manner

**The GP will not be asked to change the dose of methadone without written communication from the Hospice consultant/specialist**

## Precautions and Contra-indications

### Contraindications

- Respiratory depression, obstructive airways disease,
- Concurrent administration with MAO inhibitors or within 2 weeks of discontinuation of treatment with them.
- Hypersensitivity to methadone or any of the excipients.
- Patients dependent on non-opioid drugs
- Patients with acute alcoholism, head injury and raised intra-cranial pressure.
- Patients with ulcerative colitis, since methadone may precipitate toxic dilation or spasm of the colon.
- Patients with severe hepatic impairment as it may precipitate hepatic encephalopathy.
- Patients with biliary and renal tract spasm.

### Special warnings/precautions:

Caution should be exercised in patients with hepatic dysfunction or renal dysfunction.

As with other opioids, methadone may cause troublesome constipation, which is particularly dangerous in patients with severe hepatic impairment, and measures to avoid constipation should be initiated early.

Cases of QT interval prolongation and torsade de pointes have been reported during treatment with methadone, particularly at high doses >100 mg/d). Methadone should be administered with caution to patients at risk for development of prolonged QT interval, e.g. in case of:

- electrolyte abnormalities, i.e. hypokalaemia, hypomagnesaemia
- concomitant treatment with drugs that have a potential for QT-prolongation – see below,
- concomitant treatment with drugs which may cause electrolyte abnormalities,
- concomitant treatment with cytochrome P450 CYP3A4 inhibitors - see below

Caution should be exercised in patients who are concurrently taking CNS depressants.

## Drug Interactions

### Interaction with other medicinal products and other forms of interaction

#### MAOI's:

The concurrent use of MAOI's is contraindicated as they may prolong and enhance the respiratory depressant effects of methadone.

#### pH of urine:

Drugs that acidify or alkalinise the urine may have an effect on clearance of methadone as it is increased at acidic pH and decreased at alkaline pH.

#### Opioid Agonist Analgesics:

Additive CNS depression, respiratory depression and hypotension.

#### Other Drugs:

Methadone may have an effect on other drugs as a consequence of reduced gastro-intestinal motility.

Drug Interactions			
Cytochrome P450 interactions with methadone resulting in changed drug plasma concentrations			
Palliative care formulary vol 5			
Methadone increased by:	Methadone decreased by:	Increased by methadone	Decreased by methadone
SSRI's	carbamazepine	desimipramine	amprenavir
cimetidine	phenobarbital	Zidovudine (AZT)	
ciprofloxacin	phenytoin		
diazepam (high doses)	rifampicin		
Itraconazole	St John's wort		
fluconazole	antiretrovirals eg abacavir,		
voriconazole	tobacco smoking		

See product SPC for full list of drug interactions, warnings and precautions ([www.medicines.org.uk](http://www.medicines.org.uk))

Drugs available in the UK with a known risk of prolonged QT interval and torsade de pointes Palliative care formulary vol 5			
Anti-arrhythmic drugs	Psychotropic drugs	Anti-depressants	Miscellaneous
amiodarone	chlorpromazine	citalopram	Macrolide antibiotics
dronedarone	droperidol	escitalopram	moxifloxacin
flecainide	haloperidol		Domperidone
sotalol	pimozide		ondansetron
disopyramide	supiride		methadone

Full list available at [www.azcert.org](http://www.azcert.org)

### Adverse Effects

Generally, opioid related nausea is transient and improves after 5-7 days  
Depending upon individual circumstances, an anti-emetic should be prescribed for regular or p.r.n use and a laxative prescribed routinely.

Methadone may occasionally cause neurotoxicity.

See product SPC for full list of possible adverse drug reactions ([www.medicines.org.uk](http://www.medicines.org.uk))

### Communication

#### BACK-UP ADVICE AND SUPPORT

Contact details	Telephone No.	Fax:	Email address:
<b>Specialist:</b>			
<b>Severn Hospice</b>			
<b>Other:</b>			

For any queries relating to this patient's treatment with methadone, please contact the specialist named at the top of this document.

Severn hospice Telford on 01952 221350 or Shrewsbury on 01743 236565.

**This information is not inclusive of all prescribing information, potential adverse effects and drug interactions. Please refer to full prescribing data in the Summary of Product Characteristics ([www.medicines.org.uk](http://www.medicines.org.uk)) or the British National Formulary ([www.bnf.org](http://www.bnf.org)).**