PRODUCT INFORMATION
CERVAGEM®

NAME OF THE MEDICINE
Gemeprost

DESCRIPTION
Gemeprost INN is Methyl-(E)-7-[(1R,2R,3R)-3-hydroxy-2-[(1E,3R)-3 hydroxy-4,4-dimethyloct-1-eny]-5-oxocyclopentyl]-hept-2-enoate. It is also known as 16,16-dimethyl-trans-Δ2 PGE1 methyl ester.

It is a colourless to pale yellow viscous liquid having no odour.

Molecular formula C\textsubscript{23}H\textsubscript{38}O\textsubscript{5} Molecular Weight 394.53. 'Cervagem' pessaries each contain 1 mg of gemeprost.

ACTIONS
Pharmacology
'CERVAGEM' is a Prostaglandin E analogue. Its principal effect is to aid the softening and dilatation of the cervix uteri prior to transcervical intrauterine operative procedures. It is hypothesised that gemeprost stimulates or mimics the process of cervical ripening which is thought to be initiated, at least in part, at the spontaneous onset of human parturition, by prostaglandins.

Animal studies have demonstrated that Gemeprost is 10-200 times more potent than prostaglandin E\textsubscript{1}, prostaglandin E\textsubscript{2} or prostaglandin F\textsubscript{2α}.

Pharmacokinetics
Human pharmacokinetic studies have demonstrated that limited systemic absorption occurs from intravaginal administration of 'CERVAGEM'.

Based on the urinary elimination of metabolites it is concluded that approximately 12-28% of the administered dose reached the systemic circulation. Results from studies using I.V. administration of the drug have demonstrated it to be rapidly metabolised with about 50% of the dose eliminated as metabolites in the urine during the first 24 hours.

INDICATIONS
For the softening and dilatation of the cervix uteri prior to transcervical, intrauterine operative procedures in the first trimester of pregnancy. Therapeutic termination of pregnancy in patients in the second trimester of gestation.

CONTRAINDICATIONS
'CERVAGEM' should not be administered to women with known hypersensitivity to prostaglandins. 'CERVAGEM' is also contra-indicated in women experiencing uterine fragility related to uterine scarring and in placenta praevia.

'CERVAGEM' pessaries should not be used for the induction of labour or cervical softening at term.
WARNINGS
There have been reports of uterine ruptures with gemeprost. Therefore, extreme care must be taken and cervical dilatation and uterine contractions monitored, when using this drug in the termination of pregnancy (whether therapeutic or for intrauterine foetal death) especially during the second trimester and during the second course of therapy. This is particularly important in women who have one or more of the following conditions: multiparity, uterine scarring, cervical stenosis, vaginal bleeding of unknown origin, or twin pregnancy.

PRECAUTIONS
Serious, potentially fatal, cardiovascular accidents (myocardial infarction and/or spasm of the coronary arteries and severe hypotension) have been reported with prostaglandins including gemeprost and cardiac and vascular parameters should be monitored.

There have been reports of uterine rupture following concomitant administration of gemeprost and syntocinon in the second trimester after previous hysterotomy or classical Caesarean section.

If surgery is unavoidably delayed much beyond the recommended three hour interval, the patient should be kept under observation as the incidence and severity of vaginal bleeding and uterine pain increases. The possibility that spontaneous abortion may occur should also be considered.

Adequate follow-up for patients having a pregnancy termination is essential to ensure that the process has been completed as the effect of CERVAGEM on the foetus has not been established.

Clinical trials have suggested that products of conception in the second trimester of termination of pregnancy patients will be retained in many cases. Due to the risk of retention of products of conception which may need to be surgically removed, appropriate facilities should be available.

‘CERVAGEM’ should be used with caution in patients with obstructive airways disease, cardiovascular insufficiency, elevated intraocular pressure, cervicitis or vaginitis.

Patients with the following diseases have not been studied: ulcerative colitis, diabetes mellitus, sickle cell anaemia, epilepsy, disorders of blood coagulation.

Use in Pregnancy (Category B3)
‘CERVAGEM’ pessaries should not be used for the induction of labour or cervical softening at term as foetal effects have not been ascertained.

Every effort should be made to ensure that once gemeprost has been administered to pregnant women, termination of the pregnancy is completed.

Studies in animals have shown evidence of an increased occurrence of foetal damages, the significance of which is considered uncertain in humans.

Use during Lactation
No information available.
Interaction with other drugs
See PRECAUTIONS

Oxytocin and other labour inducers or accelerators can potentiate the action of gemeprost.

ADVERSE EFFECTS

Serious or Life Threatening Reactions
Anaphylactic reactions have not occurred with CERVAGEM but such reactions have rarely been noted with other prostaglandins. Should an anaphylactic reaction occur standard therapy should be employed.

As with all oxytoxic drugs, the potential risk of uterine rupture should be borne in mind in the event of prolonged uterine hypertonia or abnormal uterine pain.

In very rare cases, coronary spasms with subsequent myocardial infarctions have been reported.

More Common Reactions
Reproductive: Vaginal bleeding and mild uterine pain similar to menstrual pain have occurred in approximately 30% of patients in the interval between pessary administration and surgical intervention. If this interval is prolonged beyond the recommended three hours the incidence and severity of this increases.

Gastrointestinal: Nausea and vomiting (11%) loose stools and diarrhoea (3%) occur but are rarely severe enough to require treatment. Standard anti-emetic or anti-diarrhoeal agents may be administered if required.

Musculoskeletal: Lower abdominal pain, back pain

General: Headache, mild pyrexia, flushing.

Less Common Reactions
Cardiovascular: Hypotension, chest pain palpitations, tachycardia.

Musculoskeletal: Muscle weakness.

Respiratory: Dyspnoea

General: Chills, backache, dizziness.

DOSAGE AND ADMINISTRATION
See WARNINGS especially for use during second trimester.

Before administration the pessary should be allowed to warm to room temperature for 30 min. away from direct heat and sunlight in the unopened foil sachet.

'CERVAGEM' pessaries are non-sterile.

Adults: Cervical Dilation (first trimester of Pregnancy): One pessary to be inserted into the posterior vaginal fornix three hours before surgery.

Adequate dilatation and softening is generally obtained three hours after insertion and is maintained for another nine hours. A few patients may require additional surgical dilatation.
Beyond the recommended three hour interval the incidence and severity of gastrointestinal adverse effects, uterine pain and bleeding increases. Attention should therefore be given to the logistics of regularly commencing surgery three hours after insertion of the pessary.

Therapeutic Termination (Second Trimester of Pregnancy). One pessary to be inserted into the posterior vagina fornix at three hourly intervals to a maximum of five administrations. If termination is not well established after five pessaries, a second course of treatment may be started 24 hours after the initial commencement of treatment.

**Elderly:** Not applicable.

**Children:** Not applicable.

**OVERDOSAGE**
The toxic dose of gemeprost in women has not been established. Cumulative dosage of 10 mg in 24 hours has been well tolerated. In animals the acute toxic effects are similar to PGE₁, i.e. relaxation of smooth muscle, leading to hypotension and depression of the CNS.

Clinically valuable signs of impending toxicity are likely to be sedation; tremor; convulsion; dyspnoea; abdominal pain and diarrhoea, which may be bloody; palpitations or bradycardia.

Treatment should be symptomatic. A vaginal douche may be of value depending on the elapsed time since insertion of the pessary.

**PRESENTATION AND STORAGE CONDITIONS**
Yellow-white spindle shaped vaginal pessaries each containing 1 mg gemeprost
Container of 5 units dose foil sachets.

Store below ~10°C (freeze) in the original pack.

Remove only sufficient pessaries from freezer for immediate use. Any pessaries removed from freezer should NOT be refrozen.

Once the foil has been opened, any pessary not used within 12 hours should be destroyed.

**NAME AND ADDRESS OF THE SPONSOR**
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AUSTRALIA

**POISON SCHEDULE OF THE MEDICINE**
S4

**DATE OF APPROVAL**
Date of TGA approval: 5 June 1990
Date of most recent amendment: 13 December 2006