

# NEW ZEALAND DATA SHEET

## 1. PRODUCT NAME

PROSTIN<sup>®</sup> E2 1 mg or 2 mg vaginal gel

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each 3 g gel (2.5 mL) syringe contains 1 mg or 2 mg dinoprostone.

For the full list of excipients, see Section 6.1 List of excipients.

## 3. PHARMACEUTICAL FORM

Vaginal gel. Prostin E2 is a translucent, thixotropic gel.

## 4. CLINICAL PARTICULARS

### 4.1 Therapeutic indications

Prostin E2 is indicated for the induction of labour in term or near term women who have favourable induction features; and who have singleton pregnancy with a vertex position.

### 4.2 Dose and method of administration

#### Dose

An initial dose of 1 mg should be inserted into the posterior fornix. After 6 hours a second dose of either 1 mg or 2 mg may be administered depending on need, i.e., an absence of response to the initial 1 mg doses indicates the 2 mg dose should be given, while a 1mg dose should be suggested to augment an already present response to the initial dose.

#### Special populations

##### *Elderly*

Not applicable.

##### *Paediatric population*

Not applicable.

#### Method of administration

Vaginally. The gel should be inserted high into the posterior fornix avoiding administration into the cervical canal. The patient should be instructed to remain recumbent for at least 30 minutes.

### 4.3 Contraindications

Dinoprostone should not be used in patients with a hypersensitivity to dinoprostone or any other component of the product.

Dinoprostone should not be used in patients in whom oxytocic drugs are generally contraindicated such as:

- Multiple gestation
- Grand multiparity (6 or more previous term pregnancies)
- Engagement of the head not taken place
- Previous uterine surgery (e.g. caesarean section, hysterotomy)
- Cephalopelvic disproportion
- Fetal heart rate pattern suggests incipient fetal compromise
- Obstetric conditions where either maternal or fetal benefit/risk ratio favours surgical intervention
- Unexplained vaginal discharge and/or abnormal uterine bleeding during current pregnancy
- Nonvertex position.

### 4.4 Special warnings and precautions for use

Dinoprostone products should be used with caution in patients with impaired cardiovascular, hepatic or renal function, asthma, glaucoma or raised intraocular pressure, or ruptured chorioamniotic membranes.

Prostin E2 is an intravaginal product. It is not to be used intra-cervically. The intracervical placement of dinoprostone gel may result in inadvertent disruption and subsequent embolization of antigenic tissue. This may cause, in rare circumstances, the development of anaphylactoid syndrome of pregnancy (amniotic fluid embolism).

Women aged 35 years or older, those with complications during pregnancy and those with a gestational age over 40 weeks have been shown to have an increased risk of post-partum disseminated intravascular coagulation. In addition, these factors may further increase the risk associated with labor induction (see Section 4.8 Undesirable effects). Therefore, in these women, use of dinoprostone should be undertaken with caution. Measures should be applied to detect as soon as possible an evolving fibrinolysis in the immediate post-partum phase. The product is available only to hospitals and clinics with specialised obstetric units.

Continuous electronic monitoring of uterine activity and fetal heart rate should be conducted during use of this product. Patients who develop uterine hypertonias or hypercontractility, or in whom unusual fetal heart patterns develop, should be managed in a manner that addresses the welfare of the fetus and mother. As with any oxytocic agent, the risk of uterine rupture should be considered.

Prostaglandin E2 produced an increase in skeletal anomalies in rats and rabbits and has been shown to be embryotoxic in rats and rabbits.

Any dose that produces sustained increased uterine tone could put the embryo or fetus at risk.

## **4.5 Interaction with other medicines and other forms of interaction**

The response to oxytocin may be accentuated in the presence of exogenous prostaglandin therapy. Concurrent use with other oxytocic agents is not recommended. The sequential use of oxytocin following Prostin E2 is recommended, with a dosing interval of at least 6 hours.

## **4.6 Fertility, pregnancy and lactation**

### **Pregnancy**

Prostin E2 is only used during pregnancy, to induce labour.

### **Lactation**

Prostaglandins are excreted in breast milk at very low concentrations. No measurable differences in prostaglandins E<sub>2</sub> and F<sub>2</sub> were observed in the milk of mothers delivering prematurely and at term.

## **4.7 Effects on ability to drive and use machinery**

Not relevant.

## **4.8 Undesirable effects**

### Maternal adverse events

Uterine contractile abnormalities (increase frequency, tone, or duration), uterine rupture, nausea, vomiting, diarrhoea, fever, back pain, warm feeling in vagina, hypersensitivity reactions (e.g., anaphylactic reaction, anaphylactic shock and anaphylactoid reaction).

In post-marketing surveillance, an increased risk of post-partum disseminated intravascular coagulation has been described in patients whose labor was induced by pharmacological means, including dinoprostone (see Section 4.4 Special warnings and precautions for use). The frequency of this adverse event, however, appears to be rare (<1 per 1,000 labors)

### Fetal adverse events

Fetal distress/altered fetal heart rate (FHR) and still birth.

### **Reporting of suspected adverse reactions**

Reporting suspected adverse reactions after authorisation of the medicine is important. It allows continued monitoring of the benefit/risk balance of the medicine. Healthcare professionals are asked to report any suspected adverse reactions <https://nzphvc.otago.ac.nz/reporting/>.

## **4.9 Overdose**

Overdosage may be expressed by uterine hypercontractility and uterine hypertonus. Because of the transient nature of PGE<sub>2</sub>-induced myometrial hyperstimulation, nonspecific,

conservative management was found to be effective in the vast majority of the cases; i.e., maternal position change and administration of oxygen to the mother. B-adrenergic drugs may be used as a treatment of hyperstimulation following administration of Prostin E2 for cervical ripening.

For advice on the management of overdose please contact the National Poisons Centre on 0800 POISON (0800 764766).

## **5. PHARMACOLOGICAL PROPERTIES**

### **5.1 Pharmacodynamic properties**

#### **Mechanism of action**

Prostaglandin E2 stimulates uterine and gastrointestinal smooth muscle. Although the exact mechanism of action is not fully understood, it is theorised that the pharmacologic actions of prostaglandin E2 are related to its ability to regulate intracellular levels of cyclic 3, 5-adenosine monophosphate (cAMP) and cellular membrane calcium ion transport. In many tissues prostaglandin E2 stimulates the synthesis of cAMP by activating adenylate cyclase.

Contractions produced by the gravid uterus by prostaglandin E2 are similar to those occurring in the term uterus during spontaneous labour. Prostaglandin E2 also produces cervical dilation and softening.

### **5.2 Pharmacokinetic properties**

#### **Distribution**

Prostaglandin E2 is widely distributed in the body.

#### **Metabolism**

Prostaglandin E2 is rapidly metabolised in the liver, lungs, kidneys, spleen, and other tissues, primarily by oxidation of the side chains to at least nine inactive metabolites.

#### **Elimination**

The drug and its metabolites are excreted primarily in the urine, but small amounts are excreted in the faeces.

### **5.3 Preclinical safety data**

There are no preclinical data of relevance which are additional to those already included in Section 4.4 Special warnings and precaution for use.

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Colloidal silicon dioxide  
Triacetin.

### **6.2 Incompatibilities**

Not applicable.

### **6.3 Shelf life**

24 months.

### **6.4 Special precautions for storage**

Store between 2-8°C. Refrigerate. Do not freeze.

### **6.5 Nature and contents of container**

Carton containing one polyethylene syringe.

### **6.6 Special precautions for disposal**

Use the total contents of the syringe for one patient only. Discard after use. Use caution in handling this product to prevent contact with skin. Wash hands thoroughly with soap and water after administration.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

## **7. MEDICINE SCHEDULE**

Prescription Medicine.

## **8. SPONSOR**

Pfizer New Zealand Limited  
P O Box 3998  
Auckland, New Zealand, 1140.

Toll Free Number: 0800 736 363.

## **9. DATE OF FIRST APPROVAL**

14 October 1988.

## 10. DATE OF REVISION OF THE TEXT

19 January 2019.

### Summary table of changes (19 Jan 2019)

Section changed	Summary of new information
All	Reformat to SPC format

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