Medifentyl
Each Buff contains (fentanyl citrate 157.09 mcg equivalent to fentanyl 100 mcg)
Nasal Metered spray
Analgesics; opioids; phenylpiperidine derivatives

1. Description

Fentanyl is an opioid analgesic, interacting predominantly with the opioid μ-receptor. Its primary therapeutic actions are analgesia and sedation. Secondary pharmacological effects are respiratory depression, bradycardia, hypothermia, constipation, miosis, physical dependence and euphoria. Opioids may influence the hypothalamic-pituitary-adrenal or –gonadal axes. Some changes that can be seen include an increase in serum prolactin, and decreases in plasma cortisol and testosterone. Clinical signs and symptoms may be manifest from these hormonal changes.

General administration for pharmaceutical vigilance (EPVC) / Egyptian Drug Authority (EDA) approves the following educational materials to be accessible on MDI Pharma's website,

- Physician's guide for prescribing Medifentyl with checklist for prescribing Medifentyl
- Pharmacist's guide for dispensing Medifentyl with checklist for dispensing Medifentyl
- Patient's guide(patient/carer guide) to the safe use of Medifentyl (English)
- Patient's guide(patient/carer guide) to the safe use of Medifentyl (Arabic)

2. Indication

Medifentyl is indicated for the management of breakthrough pain (BTP) in adults who are already receiving maintenance opioid therapy for chronic cancer pain. Breakthrough pain is a transitory exacerbation of pain that occurs on a background of otherwise controlled persistent pain.
Patients receiving maintenance opioid therapy are those who are taking at least 60 mg of oral morphine daily, at least 25 micrograms of transdermal fentanyl per hour, at least 30 mg of oxycodone daily, at least 8 mg of oral hydromorphone daily or an equianalgesic dose of another opioid for a week or longer.

3. Contraindications

Hypersensitivity to the active substance or to any of the excipients.
Patients without maintenance opioid therapy as there is an increased risk of respiratory depression.
Severe respiratory depression or severe obstructive lung conditions.
Treatment of acute pain other than breakthrough pain.

4. Dosage

Medifentyl should be titrated to an "effective" dose that provides adequate analgesia and minimises adverse reactions without causing undue (or intolerable) adverse reactions, for two consecutively treated episodes of BTP. The efficacy of a given dose should be assessed over the ensuing 30-minute period.
Patients should be carefully monitored until an effective dose is reached.

Patients should not use more than 4 doses per day.
Patients should wait at least 4 hours after a dose before treating another BTP episode with Medifentyl.

Dose required (micrograms)	Product strength (micrograms)	Amount
100	100	One spray administered into one nostril

Initial dose
• The initial dose of Medifentyl to treat episodes of BTP is always 100 micrograms (one spray), even in patients switching from other fentanyl containing products for their BTP.
• Patients must wait at least 4 hours before treating another episode of BTP with Medifentyl.
Method of titration
• Patients whose initial dose is 100 micrograms and who need to titrate to a higher dose due to a lack of effect can be instructed to use two 100 microgram sprays (one in each nostril) for their next BTP episode.
• From treatment initiation, patients should be closely followed and the dose titrated until an effective dose is reached and confirmed for two consecutively treated episodes of BTP.
Titration in patients switching between immediate-release fentanyl containing products
Substantial differences may exist in the pharmacokinetic profile of immediate-release fentanyl medicinal products, which result in clinically important differences in the rate and extent of absorption of fentanyl. Therefore, when switching between fentanyl containing medicinal products indicated for treatment of breakthrough pain, including intranasal formulations, it is essential that patients are again titrated with the new medicinal product, and not switched on a dose-for-dose (microgram-for-microgram) basis.
Maintenance therapy
Once an effective dose has been established during titration, patients should continue to take this dose up to a maximum of 4 doses per day.
Dose readjustment
Generally, the maintenance dose of Medifentyl should be increased only where the current dose fails to adequately treat the BTP for several consecutive episodes.
A review of the dose of the background opioid therapy may be required if patients consistently present with more than four BTP episodes per 24 hours.
In absence of adequate pain control, the possibility of hyperalgesia, tolerance and progression of underlying disease should be considered.
If adverse reactions are intolerable or persistent, the dose should be reduced or treatment with Medifentyl replaced by another analgesic.
Discontinuation of therapy
Medifentyl should be discontinued immediately if the patient no longer experiences breakthrough pain episodes. The treatment for persistent backgound pain should be kept as prescribed.
If discontinuation of all opioid therapy is required, the patient must be closely followed by the doctor as gradual downward opioid titration therapy is necessary in order to avoid the possibility of abrupt withdrawal effects.
Special populations
Elderly (older than 65 years)

There was no indication that older patients tended to titrate to lower doses or experience more adverse reactions. Nevertheless, in view of the importance of renal and hepatic function in the metabolism and clearance of fentanyl, additional care should be exercised in the use of Medifentyl in the elderly. No data on the pharmacokinetics of Medifentyl in elderly patients are available.

Hepatic or renal impairment

Medifentyl should be administered with caution to patients with moderate or severe hepatic or renal impairment.

Paediatric population

The safety and efficacy of Medifentyl in children and adolescents aged below 18 years have not yet been established.

No data are available.

Method of administration

Medifentyl is for nasal use only.

The bottle should be removed from the outer container immediately prior to use and the protective cap removed. The bottle must be primed before first use by holding upright and simply pressing and releasing the finger grips either side of the nozzle until a green bar appears in the counting window (should occur after four sprays).

If the product has not been used for 5 days, it should be re-primed by spraying once.

To administer Medifentyl the nozzle is placed a short distance (about 1 cm) into the nostril and pointed slightly towards the bridge of the nose. A spray is then administered by pressing and releasing the finger grips either side of the nozzle. An audible click will be heard and the number displayed on the counter will advance by one.

Patients must be advised that they may not feel the spray being administered, and that they should, therefore, rely on the audible click and the number on the counter advancing to confirm that a spray has been delivered.

The Medifentyl spray droplets form a gel in the nose. Patients should be advised not to blow their nose immediately after Medifentyl administration.

The protective cap should be replaced after each use and the bottle returned to the outer container for safe storage.

5. Package

Carton box contains clear (type I) glass bottle with an attached Metered-dose nasal spray pump incorporating a visual and audible spray counter and a clear polypropylene protective dust cap, packed in a white polypropylene container with blue LDPE tamper-evident sealed cap with an aluminum foil pouch for collection of priming waste shots and an inner leaflet, each glass bottle contains a quantity equivalent to 16 metered sprays to deliver only 8 metered sprays, each spray contains 100mcg fentanyl.