

# FENTANYL CITRATE- fentanyl citrate lozenge

## Teva Pharmaceuticals USA, Inc.

-----

### HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use Oral Transmucosal Fentanyl Citrate (OTFC) safely and effectively. See full prescribing information for OTFC. Oral Transmucosal Fentanyl Citrate (OTFC) (fentanyl citrate) oral transmucosal lozenge, CII Initial U.S. Approval: 1968

#### **WARNING: SERIOUS AND LIFE-THREATENING RISKS FROM USE OF OTFC**

*See full prescribing information for complete boxed warning.*

- OTFC exposes users to risks of addiction, abuse, and misuse, which can lead to overdose and death. Assess patient's risk before prescribing and reassess regularly for these behaviors and conditions. (5.1)
- Serious, life-threatening, or fatal respiratory depression has occurred in patients treated with OTFC, including following use in opioid non-tolerant patients and improper dosing. Regularly evaluate patients, especially upon initiation or following a dosage increase. To reduce the risk of respiratory depression, proper dosing and titration of OTFC are essential. The substitution of OTFC for any other fentanyl product may result in fatal overdose. Due to the risk of fatal respiratory depression, OTFC is contraindicated in opioid non-tolerant patients and in management of acute or postoperative pain, including headache/migraines. (1, 4, 5.2)
- Accidental ingestion of OTFC, especially by children, can result in a fatal overdose of fentanyl. Keep out of reach of children. Ensure proper storage and disposal. (2.8, 5.3)
- Concomitant use of opioids with benzodiazepines or other central nervous system (CNS) depressants, including alcohol, may result in profound sedation, respiratory depression, coma, and death. Reserve concomitant prescribing for use in patients for whom alternative treatment options are inadequate. (5.4, 7)
- Advise pregnant women using opioids for an extended period of time of the risk of Neonatal Opioid Withdrawal Syndrome, which may be life-threatening if not recognized and treated. Ensure that management by neonatology experts will be available at delivery. (5.8)
- OTFC is available only through a restricted program called the TIRF REMS. Pharmacies, outpatients, and healthcare professionals who prescribe to outpatients are required to enroll in the program. Patients must be opioid tolerant to receive a TIRF medicine (5.7)
- When prescribing, do not convert patients on a mcg per mcg basis from any other fentanyl product to OTFC. (5.5)
- When dispensing, do not substitute with any other fentanyl products. (5.5)
- Concomitant use with CYP3A4 inhibitors (or discontinuation of CYP3A4 inducers) can result in a fatal overdose of fentanyl. (5.6, 7, 12.3)

#### -----RECENT MAJOR CHANGES-----

Boxed Warning	1/2026
Dosage and Administration (2.2)	1/2026
Warnings and Precautions (5.1, 5.2, 5.4, 5.15)	1/2026

#### -----INDICATIONS AND USAGE-----

OTFC is an opioid agonist indicated for the management of breakthrough pain in cancer patients 16 years of age and older who are already receiving and who are tolerant to around-the-clock opioid therapy for their underlying persistent cancer pain. (1)

Patients considered opioid tolerant are those who are taking, for one week or longer, around-the-clock medicine consisting of at least 60 mg of oral morphine per day, at least 25 mcg of transdermal fentanyl per hour, at least 30 mg of oral oxycodone per day, at least 8 mg of oral hydromorphone per day, at least 25 mg oral oxymorphone per day, at least 60 mg of oral hydrocodone per day, or an equianalgesic dose of another opioid. Patients must remain on around-the-clock opioids while taking OTFC.

Limitations of Use:

- Not for use in opioid non-tolerant patients.
- Not for use in the management of acute or postoperative pain, including headache/migraine or dental pain. (4)
- As a part of the TIRF REMS, OTFC may be dispensed by outpatient pharmacies only to outpatients enrolled in the program. (5.7) For inpatient administration of OTFC, patient and prescriber enrollment are not required.

### ----- **DOSAGE AND ADMINISTRATION** -----

- Patients must require and use around-the-clock opioids when taking OTFC. (1)
- OTFC should be prescribed only by healthcare professionals who are knowledgeable about the use of opioids and how to mitigate the associated risks. (2.1)
- Use the lowest effective dosage for the shortest duration of time consistent with individual patient treatment goals. Reserve titration to higher doses of OTFC for patients in whom lower doses are insufficiently effective and in whom the expected benefits of using a higher dose opioid clearly outweigh the substantial risks. (2.1, 5)
- Initiate the dosing regimen for each patient individually, taking into account the patient's underlying cause and severity of pain, patient response, prior analgesic experience, and risk factors for addiction, abuse, and misuse. (2.1, 5.1)
- Respiratory depression can occur at any time during opioid therapy, especially when initiating and following dosage increases with OTFC. Consider this risk when selecting an initial dose and when making dose adjustments. (2.1, 5.2)
- Discuss opioid overdose reversal agents and options for acquiring them with the patient and/or caregiver both when initiating and renewing treatment with OTFC, especially if the patient has additional risk factors for overdose, or close contacts at risk for exposure and overdose. (2.2, 5.1, 5.2, 5.4)
- Initial dose of OTFC: 200 mcg. Prescribe an initial supply of six 200 mcg OTFC units. (2.3)
- Individually titrate to a tolerable dose that provides adequate analgesia using single OTFC dosage unit per breakthrough cancer pain episode. (2.4)
- No more than two doses can be taken per breakthrough pain episode. (2.4, 2.5)
- Wait at least 4 hours before treating another episode of breakthrough pain with OTFC. (2.4, 2.5)
- Limit consumption to four or fewer units per day once successful dose is found. (2.5)
- Periodically reassess patients receiving OTFC to evaluate the continued need for opioid analgesics to maintain pain control, for the signs or symptoms of adverse reactions, and for the development of addiction, abuse, or misuse. (2.5)
- When opioid therapy is no longer required, consider discontinuing OTFC along with a gradual downward of other opioids to minimize possible withdrawal effects. (2.7)

### ----- **DOSAGE FORMS AND STRENGTHS** -----

- Solid oral transmucosal lozenge: 200 mcg, 400 mcg, 600 mcg, 800 mcg, 1200 mcg, and 1600 mcg. (3)

### ----- **CONTRAINDICATIONS** -----

- Opioid non-tolerant patients. (4)
- Significant respiratory depression. (4)
- Management of acute or postoperative pain, including headache/migraine and dental pain. (4)
- Acute or severe bronchial asthma in an unmonitored setting or in absence of resuscitative equipment. (4)
- Known or suspected gastrointestinal obstruction, including paralytic ileus. (4)
- Known hypersensitivity to fentanyl or components of OTFC. (4)

### ----- **WARNINGS AND PRECAUTIONS** -----

- Opioid-Induced Hyperalgesia and Allodynia: Opioid-Induced Hyperalgesia (OIH) occurs when an opioid analgesic paradoxically causes an increase in pain, or an increase in sensitivity to pain. If OIH is suspected, carefully consider appropriately decreasing the dose of the current opioid analgesic or opioid rotation. (5.9)
- Serotonin Syndrome: Potentially life-threatening condition could result from concomitant serotonergic drug administration. Discontinue OTFC if serotonin syndrome is suspected. (5.10)
- Life-Threatening Respiratory Depression in Patients with Chronic Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients: Regularly evaluate patients, particularly during initiation and titration. (5.11)
- Adrenal Insufficiency: If diagnosed, treat with physiologic replacement of corticosteroids, and wean patient off of the opioid. (5.12)
- Severe Hypotension: Regularly evaluate patients during dosage initiation and titration. Avoid use of OTFC in patients with circulatory shock. (5.13)

- Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness: Monitor for sedation and respiratory depression. Avoid use of OTFC in patients with impaired consciousness or coma. (5.14)

#### -----ADVERSE REACTIONS-----

Most common (frequency  $\geq 5\%$ ): nausea, dizziness, somnolence, vomiting, asthenia, and headache, dyspnea, constipation, anxiety, confusion, depression, rash, and insomnia. (6.1)

**To report SUSPECTED ADVERSE REACTIONS, contact Teva Pharmaceuticals at 1-888-483-8279 or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).**

#### -----DRUG INTERACTIONS-----

- Mixed Agonist/Antagonist and Partial Agonist Opioid Analgesics: Avoid the use of mixed agonist/antagonist or partial agonist analgesics in patients who are already receiving a full opioid agonist analgesic (including OTFC) because they may reduce analgesic effect of OTFC or precipitate withdrawal symptoms. (7)

#### -----USE IN SPECIFIC POPULATIONS-----

- Pregnancy: May cause fetal harm. (8.1)
- Lactation: Not recommended. (8.2)
- Renal and Hepatic Impairment: Administer OTFC with caution. (8.6)

**See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.**

**Revised: 1/2026**

---

## **FULL PRESCRIBING INFORMATION: CONTENTS\***

### **RECENT MAJOR CHANGES**

### **WARNING: SERIOUS AND LIFE-THREATENING RISKS FROM USE OF ORAL TRANSMUCOSAL FENTANYL CITRATE (OTFC)**

#### **1 INDICATIONS AND USAGE**

#### **2 DOSAGE AND ADMINISTRATION**

- 2.1 Important Dosage and Administration Instructions
- 2.2 Patient Access to an Opioid Overdose Reversal Agent for the Emergency Treatment of Opioid Overdose
- 2.3 Initial Dosage
- 2.4 Dose Titration
- 2.5 Maintenance Dosing
- 2.6 Administration of OTFC
- 2.7 Discontinuation of OTFC
- 2.8 Disposal of OTFC

#### **3 DOSAGE FORMS AND STRENGTHS**

#### **4 CONTRAINDICATIONS**

#### **5 WARNINGS AND PRECAUTIONS**

- 5.1 Addiction, Abuse, and Misuse
- 5.2 Life-Threatening Respiratory Depression
- 5.3 Increased Risk of Overdose in Children Due to Accidental Ingestion or Exposure
- 5.4 Risks from Concomitant Use with Benzodiazepines or Other CNS Depressants
- 5.5 Risk of Medication Errors
- 5.6 Risks of Concomitant Use or Discontinuation of Cytochrome P450 3A4 Inhibitors and Inducers
- 5.7 Transmucosal Immediate Release Fentanyl (TIRF) Risk Evaluation and Mitigation Strategy (REMS)

- 5.8 Neonatal Opioid Withdrawal Syndrome
- 5.9 Opioid-Induced Hyperalgesia and Allodynia
- 5.10 Serotonin Syndrome with Concomitant Use of Serotonergic Drugs
- 5.11 Life-Threatening Respiratory Depression in Patients with Chronic Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients
- 5.12 Adrenal Insufficiency
- 5.13 Severe Hypotension
- 5.14 Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness
- 5.15 Risks of Gastrointestinal Complications
- 5.16 Increased Risk of Seizures in Patients with Seizure Disorders
- 5.17 Risks of Driving and Operating Machinery
- 5.18 Cardiac Disease

## **6 ADVERSE REACTIONS**

- 6.1 Clinical Studies Experience
- 6.2 Postmarketing Experience

## **7 DRUG INTERACTIONS**

## **8 USE IN SPECIFIC POPULATIONS**

- 8.1 Pregnancy
- 8.2 Lactation
- 8.3 Females and Males of Reproductive Potential
- 8.4 Pediatric Use
- 8.5 Geriatric Use
- 8.6 Patients with Renal or Hepatic Impairment
- 8.7 Sex

## **9 DRUG ABUSE AND DEPENDENCE**

- 9.1 Controlled Substance
- 9.2 Abuse
- 9.3 Dependence

## **10 OVERDOSAGE**

## **11 DESCRIPTION**

## **12 CLINICAL PHARMACOLOGY**

- 12.1 Mechanism of Action
- 12.2 Pharmacodynamics
- 12.3 Pharmacokinetics

## **13 NONCLINICAL TOXICOLOGY**

- 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

## **14 CLINICAL STUDIES**

## **16 HOW SUPPLIED/STORAGE AND HANDLING**

## **17 PATIENT COUNSELING INFORMATION**

\* Sections or subsections omitted from the full prescribing information are not listed.

---

## **FULL PRESCRIBING INFORMATION**

**WARNING: SERIOUS AND LIFE-THREATENING RISKS FROM USE OF ORAL TRANSMUCOSAL FENTANYL CITRATE (OTFC)**

**Addiction, Abuse, and Misuse**

Because the use of OTFC exposes patients and other users to the risks of opioid addiction, abuse, and misuse, which can lead to overdose and death, assess each patient's risk prior to prescribing and reassess all patients regularly for the development of these behaviors and conditions [see *Warnings and Precautions (5.1)*].

**Life-Threatening Respiratory Depression**

Serious, life-threatening, or fatal respiratory depression has occurred in patients treated with Oral Transmucosal Fentanyl Citrate (OTFC), including following use in opioid non-tolerant patients and improper dosing. Evaluate patients for respiratory depression, especially during initiation of OTFC or following a dosage increase. To reduce the risk of respiratory depression, proper dosing and titration of OTFC are essential. The substitution of OTFC for any other fentanyl product may result in fatal overdose [see *Warnings and Precautions (5.2)*].

Due to the risk of respiratory depression, OTFC is contraindicated in the management of acute or postoperative pain including headache/migraine and in opioid non-tolerant patients [see *Contraindications (4)*].

**Accidental Ingestion**

Accidental ingestion of even one dose of OTFC, especially by children, can result in a fatal overdose of fentanyl. Death has been reported in children who have accidentally ingested OTFC. OTFC must be kept out of reach of children [see *Warnings and Precautions (5.3)*].

**Risks From Concomitant Use with Benzodiazepines or Other CNS Depressants**

Concomitant use of opioids with benzodiazepines or other central nervous system (CNS) depressants, including alcohol, may result in profound sedation, respiratory depression, coma, and death. Reserve concomitant prescribing of OTFC and benzodiazepines or other CNS depressants for use in patients for whom alternative treatment options are inadequate [see *Warnings and Precautions (5.4)*, *Drug Interactions (7)*].

**Risk of Medication Errors**

Substantial differences exist in the pharmacokinetic profile of OTFC compared to other fentanyl products that result in clinically important differences in the extent of absorption of fentanyl and that could result in fatal overdose [see *Dosage and Administration (2.1)*, *Warnings and Precautions (5.5)*].

- When prescribing, do not convert patients on a mcg per mcg basis from any other fentanyl products to OTFC [see *Dosage and Administration (2.1)*].

- When dispensing, do not substitute an OTFC prescription for other fentanyl products.

### **Cytochrome P450 3A4 Interaction**

The concomitant use of OTFC with all cytochrome P450 3A4 inhibitors may result in an increase in fentanyl plasma concentrations, which could increase or prolong adverse reactions and may cause potentially fatal respiratory depression. In addition, discontinuation of a concomitantly used cytochrome P450 3A4 inducer may result in an increase in fentanyl plasma concentration. Evaluate patients at frequent intervals receiving OTFC and any CYP3A4 inhibitor or inducer [see *Warnings and Precautions (5.6), Drug Interactions (7), Clinical Pharmacology (12.3)*].

### **Risk Evaluation and Mitigation Strategy (REMS)**

Because of the risk for accidental exposure, misuse, abuse, addiction, and overdose, OTFC is available only through a restricted program required by the Food and Drug Administration, called a Risk Evaluation and Mitigation Strategy (REMS). Under the Transmucosal Immediate Release Fentanyl (TIRF) REMS, pharmacies, outpatients, and healthcare professionals who prescribe to outpatients must enroll in the program. Inpatient pharmacies must develop policies and procedures to verify opioid tolerance in inpatients who require OTFC while hospitalized. Further information is available at [www.TIRFREMSAccess.com](http://www.TIRFREMSAccess.com) or by calling 1-866-822-1483 [see *Warnings and Precautions (5.7)*].

### **Neonatal Opioid Withdrawal Syndrome (NOWS)**

Advise pregnant women using opioids for an extended period of time of the risk of Neonatal Opioid Withdrawal Syndrome, which may be life-threatening if not recognized and treated. Ensure that management by neonatology experts will be available at delivery [see *Warnings and Precautions (5.8)*].

## **1 INDICATIONS AND USAGE**

Oral Transmucosal Fentanyl Citrate (OTFC) is indicated for the management of breakthrough pain in cancer patients 16 years of age and older who are already receiving and who are tolerant to around-the-clock opioid therapy for their underlying persistent cancer pain.

Patients considered opioid tolerant are those who are taking, for one week or longer, around-the-clock medicine consisting of at least 60 mg of oral morphine per day, at least 25 mcg of transdermal fentanyl per hour, at least 30 mg of oral oxycodone per day, at least 8 mg of oral hydromorphone per day, at least 25 mg oral oxymorphone per day, at least 60 mg of oral hydrocodone per day, or an equianalgesic dose of another opioid. Patients must remain on around-the-clock opioids when taking OTFC.

### **Limitations of Use:**

- Not for use in opioid non-tolerant patients.
- Not for use in the management of acute or postoperative pain, including headache/migraine and dental pain [see *Contraindications (4)*].

- As a part of the TIRF REMS, OTFC may be dispensed by outpatient pharmacies only to outpatients enrolled in the program [see *Warnings and Precautions (5.7)*]. For inpatient administration of OTFC, patient and prescriber enrollment are not required.

## **2 DOSAGE AND ADMINISTRATION**

### **2.1 Important Dosage and Administration Instructions**

- Healthcare professionals who prescribe Oral Transmucosal Fentanyl Citrate (OTFC) for outpatients must enroll in the TIRF REMS and comply with the requirements of the REMS to ensure safe use of OTFC [see *Warnings and Precautions (5.7)*].
- Use the lowest effective dosage for the shortest duration consistent with individual patient treatment goals [see *Warnings and Precautions (5)*]. Because the risk of overdose increases as opioid doses increase, reserve titration to higher doses of OTFC for patients in whom lower doses are insufficiently effective and in whom the expected benefits of using a higher dose opioid clearly outweigh the substantial risks.
- It is important to minimize the number of strengths available to patients at any time to prevent confusion and possible overdose.
- There is variability in the opioid analgesic dose and duration needed to adequately manage pain due both to the cause of pain and to individual patient factors. Initiate the dosing regimen for each patient individually, taking into account the patient's severity of pain, patient response, prior analgesic treatment experience, and risk factors for addiction, abuse, and misuse [see *Warnings and Precautions (5.1)*].
- Respiratory depression can occur at any time during opioid therapy, especially when initiating and following dosage increases with OTFC. Consider this risk when selecting an initial dose and when making dose adjustments [see *Warnings and Precautions (5)*].
- Instruct patients and caregivers to take steps to store OTFC securely and to properly dispose of unused OTFC as soon as no longer needed [see *Warnings and Precautions (5.1, 5.3)*].
- Other TIRF formulations and OTFC are not equivalent. DO NOT substitute an OTFC prescription for any other TIRF formulation under any circumstances. Do not convert patients on a mcg per mcg basis from any other fentanyl product to OTFC [see *Warnings and Precautions (5.5)*].

### **2.2 Patient Access to an Opioid Overdose Reversal Agent for the Emergency Treatment of Opioid Overdose**

Inform patients and caregivers about opioid overdose reversal agents (e.g., naloxone, nalmefene). Discuss the importance of having access to an opioid overdose reversal agent, especially if the patient has risk factors for overdose (e.g., concomitant use of CNS depressants, a history of opioid use disorder, or prior opioid overdose) or if there are household members (including children) or other close contacts at risk for accidental ingestion or opioid overdose. The presence of risk factors for overdose should not prevent the management of pain in any patient [see *Warnings and Precautions (5.1, 5.2, 5.4)*].

Discuss the options for obtaining an opioid overdose reversal agent (e.g., prescription, over-the-counter, or as part of a community-based program) [see *Warnings and Precautions (5.2)*].

There are important differences among the opioid overdose reversal agents, such as route of administration, product strength, approved patient age range, and pharmacokinetics. Be familiar with these differences, as outlined in the approved labeling for those products, prior to recommending or prescribing such an agent.

### **2.3 Initial Dosage**

Individually titrate OTFC to a dose that provides adequate analgesia and minimizes side effects. The initial dose of OTFC to treat episodes of breakthrough cancer pain is always 200 mcg. The OTFC unit should be consumed over 15 minutes. Patients should be prescribed an initial titration supply of six 200 mcg OTFC units, thus limiting the number of units in the home during titration. Patients should use up all units before increasing to a higher dose to prevent confusion and possible overdose.

#### Repeat Dosing

- a. In cases where the breakthrough pain episode is not relieved after 15 minutes after completion of the OTFC unit (30 minutes after the start of the unit), patients may take ONLY ONE additional dose using the same strength for that episode. Thus patients should take a maximum of two doses of OTFC for any episode of breakthrough pain.
- b. Patients **MUST** wait at least 4 hours before treating another episode of breakthrough pain with OTFC.

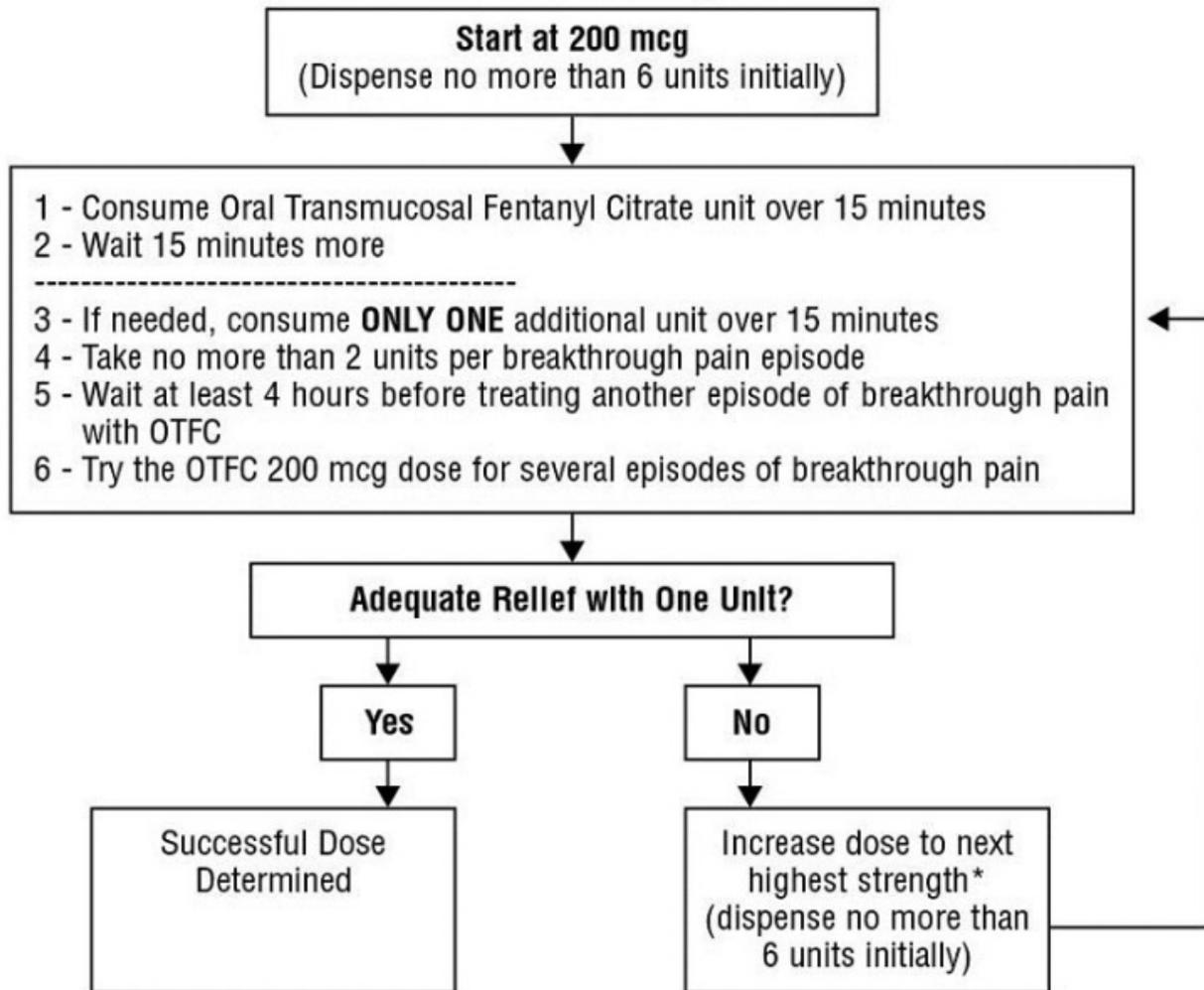
### **2.4 Dose Titration**

From an initial dose, closely follow patients and change the dosage strength until the patient reaches a dose that provides adequate analgesia using a single OTFC dosage unit per breakthrough cancer pain episode. If signs of excessive opioid effects appear before the unit is consumed, the dosage unit should be removed from the patient's mouth immediately, disposed of properly, and subsequent doses should be decreased. Patients should record their use of OTFC over several episodes of breakthrough cancer pain and review their experience with their healthcare providers to determine if a dosage adjustment is warranted.

In cases where the breakthrough pain episode is not relieved 15 minutes after completion of the OTFC unit (30 minutes after the start of the unit), patients may take ONLY ONE additional dose of the same strength for that episode. Thus, patients should take a maximum of two doses of OTFC for any breakthrough pain episode.

Patients must wait at least 4 hours before treating another episode of breakthrough pain with OTFC. To reduce the risk of overdosing during titration, patients should have only one strength of OTFC available at any one time.

## Oral Transmucosal Fentanyl Citrate Titration Process See Boxed Warning



\*Available dosage strengths include: 200, 400, 600, 800, 1200, and 1600 mcg

### 2.5 Maintenance Dosing

- Once titrated to an effective dose, patients should generally use ONLY ONE OTFC unit of the appropriate strength per breakthrough pain episode.
- On those occasions when the breakthrough pain episode is not relieved 15 minutes after completion of the OTFC unit, patient may take ONLY ONE additional dose using the same strength for that episode.
- Patients **MUST** wait at least 4 hours before treating another episode of breakthrough pain with OTFC. Once a successful dose has been found (i.e., an average episode is treated with a single unit), patients should limit consumption to four or fewer units per day.
- Dosage adjustment of OTFC may be required in some patients in order to continue to provide adequate relief of breakthrough pain. If after increasing the dosage, unacceptable opioid-related adverse reactions are observed (including an increase in

pain after dosage increase), consider reducing the dosage [see *Warnings and Precautions (5)*]. Adjust the dosage to obtain an appropriate balance between management of pain and opioid-related adverse reactions.

- e. Generally, the OTFC dose should be increased only when a single administration of the current dose fails to adequately treat the breakthrough pain episode for several consecutive episodes.
- f. If the patient experiences greater than four breakthrough pain episodes per day, the dose of the maintenance (around-the-clock) opioid used for persistent pain should be re-evaluated.

## **2.6 Administration of OTFC**

Open the blister package with scissors immediately prior to product use. The patient should place the OTFC unit in his or her mouth between the cheek and lower gum, occasionally moving the drug matrix from one side to the other using the handle. The OTFC unit should be sucked, not chewed. A unit dose of OTFC, if chewed and swallowed, might result in lower peak concentrations and lower bioavailability than when consumed as directed [see *Clinical Pharmacology (12.3)*].

The OTFC unit should be consumed over a 15-minute period. Longer or shorter consumption times may produce less efficacy than reported in OTFC clinical trials. If signs of excessive opioid effects appear before the unit is consumed, remove the drug matrix from the patient's mouth immediately and decrease future doses.

## **2.7 Discontinuation of OTFC**

When opioid therapy is no longer required, consider discontinuing OTFC along with a gradual downward tapering (titration) of other opioids to minimize possible withdrawal effects. In patients who continue to take their chronic opioid therapy for persistent pain but no longer require treatment for breakthrough pain, OTFC therapy can usually be discontinued immediately [see *Drug Abuse and Dependence (9.3)*].

## **2.8 Disposal of OTFC**

After consumption of the unit is complete and the matrix is totally dissolved, throw away the handle in a trash container that is out of the reach of children.

- If any of the drug matrix remains on the handle, place the handle under hot running tap water until all of the drug matrix is dissolved, and then dispose of the handle in a place that is out of the reach of children.
- Dispose of handles in the child-resistant container (as described in steps 1 and 2) at least once a day.

If the temporary storage bottle provided as part of the OTFC Child Safety Kit is available, partially consumed units may be stored in the specially provided child-resistant container out of the reach of children until proper disposal is possible.

Unopened units remaining from a prescription must be properly disposed as soon as they are no longer needed.

To dispose of the unused OTFC units:

- Remove the OTFC unit from its blister package using scissors, and hold OTFC by its handle over the toilet bowl.
- Using wire-cutting pliers cut off the drug matrix end so that it falls into the toilet.

- Dispose of the handle in a place that is out of the reach of children.
- Repeat steps 1, 2, and 3 for each OTFC unit. Flush the toilet twice after 5 units have been cut and deposited into the toilet.

Do not flush the entire OTFC units, OTFC handles, blister packages, or cartons down the toilet. Dispose of the handle where children cannot reach it.

In the event that a caregiver requires additional assistance in disposing of excess unusable units that remain in the home after a patient has expired, instruct them to call the toll-free number for Teva Pharmaceuticals (1-888-483-8279) or seek assistance from their local DEA office.

### **3 DOSAGE FORMS AND STRENGTHS**

Solid oral transmucosal lozenge: Each dosage unit has white to off-white color and is a solid drug matrix on a handle. Each strength is marked on the individual solid drug matrix and the handle tag. Oral Transmucosal Fentanyl Citrate (OTFC) is available in 200 mcg, 400 mcg, 600 mcg, 800 mcg, 1200 mcg and 1600 mcg strengths [see *How Supplied/Storage and Handling (16)*].

### **4 CONTRAINDICATIONS**

Oral Transmucosal Fentanyl Citrate (OTFC) is contraindicated in:

- Opioid non-tolerant patients: Life-threatening respiratory depression and death could occur at any dose in opioid non-tolerant patients [see *Indications and Usage (1)*, *Warnings and Precautions (5.2)*].
- Significant respiratory depression [see *Warnings and Precautions (5.2)*].
- Acute or postoperative pain including headache/migraine and dental pain, or acute pain in the emergency department [see *Indications and Usage (1)*].
- Acute or severe bronchial asthma in an unmonitored setting or in the absence of resuscitative equipment [see *Warnings and Precautions (5.11)*].
- Known or suspected gastrointestinal obstruction, including paralytic ileus [see *Warnings and Precautions (5.15)*].
- Known hypersensitivity to fentanyl or components of OTFC (e.g., anaphylaxis, hypersensitivity) [see *Adverse Reactions (6.2)*].

### **5 WARNINGS AND PRECAUTIONS**

#### **5.1 Addiction, Abuse, and Misuse**

Oral Transmucosal Fentanyl Citrate (OTFC) contains fentanyl, a Schedule II controlled substance. As an opioid, OTFC exposes users to the risks of addiction, abuse, and misuse [see *Drug Abuse and Dependence (9)*].

Although the risk of addiction in any individual is unknown, it can occur in patients appropriately prescribed OTFC. Addiction can occur at recommended dosages and if the drug is misused or abused. The risk of opioid-related overdose or overdose-related death is increased with higher opioid doses, and this risk persists over the course of therapy. In postmarketing studies, addiction, abuse, misuse, and fatal and non-fatal opioid overdose were observed in patients with long-term opioid use [see *Adverse*

*Reactions (6.2)]*.

Assess each patient's risk for opioid addiction, abuse, or misuse prior to prescribing OTFC, and reassess all patients receiving OTFC for the development of these behaviors and conditions. Risks are increased in patients with a personal or family history of substance abuse (including drug or alcohol abuse or addiction) or mental illness (e.g., major depression). The potential for these risks should not, however, prevent the proper management of pain in any given patient. Patients at increased risk may be prescribed opioids such as OTFC, but use in such patients necessitates intensive counseling about the risks and proper use of OTFC along with frequent reevaluation for signs of addiction, abuse, and misuse. Consider recommending or prescribing an opioid overdose reversal agent [see *Dosage and Administration (2.2)*, *Warnings and Precautions (5.2)*].

Opioids are sought for nonmedical use and are subject to diversion from legitimate prescribed use. Consider these risks when prescribing or dispensing OTFC. Strategies to reduce these risks include prescribing the drug in the smallest appropriate quantity and advising the patient on careful storage of the drug during the course of treatment and proper disposal of unused drug. Contact local state professional licensing board or state-controlled substances authority for information on how to prevent and detect abuse or diversion of this product.

## **5.2 Life-Threatening Respiratory Depression**

Serious, life-threatening, or fatal respiratory depression has been reported with the use of opioids, even when used as recommended. Respiratory depression, if not immediately recognized and treated, may lead to respiratory arrest and death. Management of respiratory depression may include close observation, supportive measures, and use of opioid overdose reversal agents, depending on the patient's clinical status [see *Overdosage (10)*]. Carbon dioxide (CO<sub>2</sub>) retention from opioid-induced respiratory depression can exacerbate the sedating effects of opioids.

While serious, life-threatening, or fatal respiratory depression can occur at any time during the use of OTFC, the risk is greatest during the initiation of therapy or following a dosage increase.

To reduce the risk of respiratory depression, proper dosing and titration of OTFC are essential [see *Dosage and Administration (2)*]. Overestimating the OTFC dosage can result in a fatal overdose with the first dose. The substitution of OTFC for any other fentanyl product may result in fatal overdose [see *Warnings and Precautions (5.5)*].

OTFC could be fatal to individuals for whom it is not prescribed and for those who are not opioid-tolerant.

Accidental ingestion of even one dose of OTFC, especially by children, can result in respiratory depression and death due to an overdose of fentanyl [see *Warnings and Precautions (5.3)*].

Educate patients and caregivers on how to recognize respiratory depression and emphasize the importance of calling 911 or getting emergency medical help right away in the event of a known or suspected overdose.

Opioids can cause sleep-related breathing disorders including central sleep apnea (CSA) and sleep-related hypoxemia. Opioid use increases the risk of CSA in a dose-dependent

fashion. In patients who present with CSA, consider decreasing the opioid dosage using best practices for opioid taper [see *Dosage and Administration (2.7)*].

### Patient Access to an Opioid Overdose Reversal Agent for the Emergency Treatment of Opioid Overdose

Inform patients and caregivers about opioid overdose reversal agents (e.g., naloxone, nalmefene). Discuss the importance of having access to an opioid overdose reversal agent, especially if the patient has risk factors for overdose (e.g., concomitant use of CNS depressants, a history of opioid use disorder, or prior opioid overdose) or if there are household members (including children) or other close contacts at risk for accidental ingestion or opioid overdose. The presence of risk factors for overdose should not prevent the management of pain in any patient [see *Warnings and Precautions (5.1, 5.4)*].

Discuss the options for obtaining an opioid overdose reversal agent (e.g., prescription, over-the-counter, or as part of a community-based program).

There are important differences among the opioid overdose reversal agents, such as route of administration, product strength, approved patient age range, and pharmacokinetics. Be familiar with these differences, as outlined in the approved labeling for those products, prior to recommending or prescribing such an agent.

Educate patients and caregivers on how to recognize respiratory depression, and how to use an opioid overdose reversal agent for the emergency treatment of opioid overdose. Emphasize the importance of calling 911 or getting emergency medical help, even if an opioid overdose reversal agent is administered [see *Dosage and Administration (2.2)*, *Warnings and Precautions (5.1, 5.4)*, *Overdosage (10)*].

### **5.3 Increased Risk of Overdose in Children Due to Accidental Ingestion or Exposure**

Death has been reported in children who have accidentally ingested OTFC.

Patients and their caregivers must be informed that OTFC contains a medicine in an amount which can be fatal to a child. Healthcare providers and dispensing pharmacists must specifically question patients or caregivers about the presence of children in the home (on a full time or visiting basis) and counsel them regarding the dangers to children from inadvertent exposure.

Patients and their caregivers must be instructed to keep both used and unused dosage units out of the reach of children. While all units should be disposed of immediately after use, partially consumed units represent a special risk to children. In the event that a unit is not completely consumed it must be properly disposed as soon as possible.

Detailed instructions for the proper storage, administration, disposal, and important instructions for managing an overdose of OTFC are provided in the *OTFC Medication Guide*. Encourage patients to read this information in its entirety and give them an opportunity to have their questions answered.

### **5.4 Risks from Concomitant Use with Benzodiazepines or Other CNS Depressants**

Profound sedation, respiratory depression, coma, and death may result from the concomitant use of OTFC with benzodiazepines and/or other CNS depressants, including

alcohol (e.g., non-benzodiazepine sedatives/hypnotics, anxiolytics, tranquilizers, muscle relaxants, general anesthetics, antipsychotics, gabapentinoids [gabapentin and pregabalin], and other opioids). Because of these risks, reserve concomitant prescribing of these drugs for use in patients for whom alternative treatment options are inadequate.

Observational studies have demonstrated that concomitant use of opioid analgesics and benzodiazepines increases the risk of drug-related mortality compared to use of opioid analgesics alone. Because of similar pharmacological properties, it is reasonable to expect similar risk with the concomitant use of other CNS depressant drugs with opioid analgesics [see *Drug Interactions (7)*].

If the decision is made to prescribe a benzodiazepine or other CNS depressant concomitantly with an opioid analgesic, prescribe the lowest effective dosages and minimum durations of concomitant use. In patients already receiving an opioid analgesic, prescribe a lower initial dose of the benzodiazepine or other CNS depressant than indicated in the absence of an opioid, and titrate based on clinical response. If an opioid analgesic is initiated in a patient already taking a benzodiazepine or other CNS depressant, prescribe a lower initial dose of the opioid analgesic, and titrate based on clinical response. Inform patients and caregivers of this potential interaction and educate them on the signs and symptoms of respiratory depression (including sedation).

If concomitant use is warranted, consider recommending or prescribing an opioid overdose reversal agent [see *Dosage and Administration (2.2)*, *Warnings and Precautions (5.2)*, *Overdosage (10)*].

Advise both patients and caregivers about the risks of respiratory depression and sedation when OTFC is used with benzodiazepines or other CNS depressants (including alcohol and illicit drugs). Advise patients not to drive or operate heavy machinery until the effects of concomitant use of the benzodiazepine or other CNS depressant have been determined. Screen patients for risk of substance use disorders, including opioid abuse and misuse, and warn them of the risk for overdose and death associated with the use of additional CNS depressants including alcohol and illicit drugs [see *Drug Interactions (7)*].

## **5.5 Risk of Medication Errors**

When prescribing, do not convert a patient to OTFC from any other fentanyl product on a mcg per mcg basis as OTFC and other fentanyl products are not equivalent on a microgram per microgram basis.

OTFC is not a generic version of other transmucosal immediate release fentanyl (TIRF) formulations. When dispensing, do not substitute an OTFC prescription for any other TIRF formulation under any circumstances. Other TIRF formulations and OTFC are not equivalent. Substantial differences exist in the pharmacokinetic profile of OTFC compared to other fentanyl products including other TIRF formulations that result in clinically important differences in the rate and extent of absorption of fentanyl. As a result of these differences, the substitution of OTFC for any other fentanyl product may result in a fatal overdose.

There are no safe conversion directions available for patients on any other fentanyl products. (Note: This includes oral, transdermal, or parenteral formulations of fentanyl.) Therefore, for opioid tolerant patients, the initial dose of OTFC should always be 200

mcg. Each patient should be individually titrated to provide adequate analgesia while minimizing side effects [see *Dosage and Administration (2.4)*].

## **5.6 Risks of Concomitant Use or Discontinuation of Cytochrome P450 3A4 Inhibitors and Inducers**

Concomitant use of OTFC with a CYP3A4 inhibitor, such as macrolide antibiotics (e.g., erythromycin), azole-antifungal agents (e.g., ketoconazole), and protease inhibitors (e.g., ritonavir), may increase plasma concentrations of fentanyl and prolong opioid adverse reactions, which may cause potentially fatal respiratory depression [see *Warnings and Precautions (5.2)*], particularly when an inhibitor is added after a stable dose of OTFC is achieved. Similarly, discontinuation of a CYP3A4 inducer, such as rifampin, carbamazepine, and phenytoin, in OTFC-treated patients may increase fentanyl plasma concentrations and prolong opioid adverse reactions. When using OTFC with CYP3A4 inhibitors or discontinuing CYP3A4 inducers in OTFC-treated patients, evaluate patients at frequent intervals and consider dosage reduction of OTFC until stable drug effects are achieved [see *Drug Interactions (7)*].

Concomitant use of OTFC with CYP3A4 inducers or discontinuation of a CYP3A4 inhibitor could decrease fentanyl plasma concentrations, decrease opioid efficacy or, possibly, lead to a withdrawal syndrome in a patient who had developed physical dependence to fentanyl. When using OTFC with CYP3A4 inducers or discontinuing CYP3A4 inhibitors, evaluate patients at frequent intervals and consider increasing the opioid dosage if needed to maintain adequate analgesia or if symptoms of opioid withdrawal occur [see *Drug Interactions (7)*].

## **5.7 Transmucosal Immediate Release Fentanyl (TIRF) Risk Evaluation and Mitigation Strategy (REMS)**

Because of the risk for accidental exposure, misuse, abuse, addiction, and overdose [see *Warnings and Precautions (5.1)*, *Drug Abuse and Dependence (9)*], OTFC is available only through a restricted program called the TIRF REMS. Under the TIRF REMS, healthcare professionals who prescribe to outpatients, the outpatients themselves, and pharmacies are required to enroll in the program.

Notable requirements of the TIRF REMS are:

- Prescribers for outpatient use must be certified with the REMS program by enrolling and completing training. Prescribers must document opioid tolerance with every OTFC prescription.
- Outpatients must be enrolled in the REMS program and must be opioid-tolerant to receive OTFC [see *Dosage and Administration (2.1)*].
- Outpatient pharmacies must be certified with the REMS program and verify documentation of opioid tolerance with every OTFC prescription.
- Inpatient pharmacies must be certified with the REMS program and develop policies and procedures to verify opioid tolerance in inpatients who require OTFC while hospitalized.
- Wholesalers and distributors must enroll in the REMS program and distribute only to certified pharmacies.

Further information, including a list of certified pharmacies and enrolled distributors, is available at [www.TIRFREMSAccess.com](http://www.TIRFREMSAccess.com) or by calling 1-866-822-1483.

## **5.8 Neonatal Opioid Withdrawal Syndrome**

Use of OTFC for an extended period of time during pregnancy can result in withdrawal in the neonate. Neonatal opioid withdrawal syndrome, unlike opioid withdrawal syndrome in adults, may be life-threatening if not recognized and treated, and requires management according to protocols developed by neonatology experts. Observe newborns for signs of neonatal opioid withdrawal syndrome and manage accordingly. Advise pregnant women using opioids for an extended period of time of the risk of neonatal opioid withdrawal syndrome and ensure that appropriate treatment will be available [*see Use in Specific Populations (8.1)*].

## **5.9 Opioid-Induced Hyperalgesia and Allodynia**

Opioid-Induced Hyperalgesia (OIH) occurs when an opioid analgesic paradoxically causes an increase in pain, or an increase in sensitivity to pain. This condition differs from tolerance, which is the need for increasing doses of opioids to maintain a defined effect [*see Dependence (9.3)*]. Symptoms of OIH include (but may not be limited to) increased levels of pain upon opioid dosage increase, decreased levels of pain upon opioid dosage decrease, or pain from ordinarily non-painful stimuli (allodynia). These symptoms may suggest OIH only if there is no evidence of underlying disease progression, opioid tolerance, opioid withdrawal, or addictive behavior.

Cases of OIH have been reported, both with short-term and longer-term use of opioid analgesics. Though the mechanism of OIH is not fully understood, multiple biochemical pathways have been implicated. Medical literature suggests a strong biologic plausibility between opioid analgesics and OIH and allodynia. If a patient is suspected to be experiencing OIH, carefully consider appropriately decreasing the dose of the current opioid analgesic or opioid rotation (safely switching the patient to a different opioid moiety) [*see Dosage and Administration (2.7)*].

## **5.10 Serotonin Syndrome with Concomitant Use of Serotonergic Drugs**

Cases of serotonin syndrome, a potentially life-threatening condition, have been reported during concomitant use of OTFC with serotonergic drugs. Serotonergic drugs include selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), tricyclic antidepressants (TCAs), triptans, 5-HT<sub>3</sub> receptor antagonists, drugs that affect the serotonergic neurotransmitter system (e.g., mirtazapine, trazodone, tramadol), certain muscle relaxants (i.e., cyclobenzaprine, metaxalone), and drugs that impair metabolism of serotonin (including MAO inhibitors, both those intended to treat psychiatric disorders and also others, such as linezolid and intravenous methylene blue) [*see Drug Interactions (7)*]. This may occur within the recommended dosage range.

Serotonin syndrome symptoms may include mental status changes (e.g., agitation, hallucinations, coma), autonomic instability (e.g., tachycardia, labile blood pressure, hyperthermia), neuromuscular aberrations (e.g., hyperreflexia, incoordination, rigidity), and/or gastrointestinal symptoms (e.g., nausea, vomiting, diarrhea) and can be fatal. The onset of symptoms generally occurs within several hours to a few days of concomitant use, but may occur later than that. Discontinue OTFC if serotonin syndrome is suspected.

## **5.11 Life-Threatening Respiratory Depression in Patients with Chronic**

## **Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients**

The use of OTFC in patients with acute or severe bronchial asthma in an unmonitored setting or in the absence of resuscitative equipment is contraindicated.

Patients with Chronic Pulmonary Disease: OTFC-treated patients with significant chronic obstructive pulmonary disease or cor pulmonale, and those with a substantially decreased respiratory reserve, hypoxia, hypercapnia, or pre-existing respiratory depression are at increased risk of decreased respiratory drive including apnea, even at recommended dosages of OTFC [see *Warnings and Precautions (5.2)*].

Elderly, Cachectic, or Debilitated Patients: Life-threatening respiratory depression is more likely to occur in elderly, cachectic, or debilitated patients because they may have altered pharmacokinetics or altered clearance compared to younger, healthier patients [see *Warnings and Precautions (5.2)*].

Regularly evaluate patients, particularly when initiating and titrating OTFC and when OTFC is given concomitantly with other drugs that depress respiration [see *Warnings and Precautions (5.2)*, *Drug Interactions (7)*]. Alternatively, consider the use of non-opioid analgesics in these patients.

### **5.12 Adrenal Insufficiency**

Cases of adrenal insufficiency have been reported with opioid use, more often following greater than one month of use. Presentation of adrenal insufficiency may include non-specific symptoms and signs including nausea, vomiting, anorexia, fatigue, weakness, dizziness, and low blood pressure. If adrenal insufficiency is suspected, confirm the diagnosis with diagnostic testing as soon as possible. If adrenal insufficiency is diagnosed, treat with physiologic replacement doses of corticosteroids. Wean the patient off of the opioid to allow adrenal function to recover and continue corticosteroid treatment until adrenal function recovers. Other opioids may be tried as some cases reported use of a different opioid without recurrence of adrenal insufficiency. The information available does not identify any particular opioids as being more likely to be associated with adrenal insufficiency.

### **5.13 Severe Hypotension**

OTFC may cause severe hypotension including orthostatic hypotension and syncope in ambulatory patients. There is increased risk in patients whose ability to maintain blood pressure has already been compromised by a reduced blood volume or concurrent administration of certain CNS depressant drugs (e.g. phenothiazines or general anesthetics) [see *Drug Interactions (7)*]. Regularly evaluate these patients for signs of hypotension after initiating or titrating the dosage of OTFC. In patients with circulatory shock, OTFC may cause vasodilation that can further reduce cardiac output and blood pressure. Avoid the use of OTFC in patients with circulatory shock.

### **5.14 Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness**

In patients who may be susceptible to the intracranial effects of CO<sub>2</sub> retention (e.g., those with evidence of increased intracranial pressure or brain tumors), OTFC may reduce respiratory drive, and the resultant CO<sub>2</sub> retention can further increase intracranial pressure. Monitor such patients for signs of sedation and respiratory

depression, particularly when initiating therapy with OTFC.

Opioids may also obscure the clinical course in a patient with a head injury. Avoid the use of OTFC in patients with impaired consciousness or coma.

### **5.15 Risks of Gastrointestinal Complications**

OTFC is contraindicated in patients with known or suspected gastrointestinal obstruction, including paralytic ileus.

The fentanyl in OTFC may cause spasm of the sphincter of Oddi. Opioids may cause increases in serum amylase. Regularly evaluate patients with biliary tract disease, including acute pancreatitis for worsening symptoms.

Cases of opioid-induced esophageal dysfunction (OIED) have been reported in patients taking opioids. The risk of OIED may increase as the dose and/or duration of opioids increases. Regularly evaluate patients for signs and symptoms of OIED (e.g., dysphagia, regurgitation, non-cardiac chest pain) and, if necessary, adjust opioid therapy as clinically appropriate [see *Clinical Pharmacology (12.2)*].

### **5.16 Increased Risk of Seizures in Patients with Seizure Disorders**

The fentanyl in OTFC may increase the frequency of seizures in patients with seizure disorders, and may increase the risk of seizures occurring in other clinical settings associated with seizures. Regularly evaluate patients with a history of seizure disorders for worsened seizure control during OTFC therapy.

### **5.17 Risks of Driving and Operating Machinery**

OTFC may impair the mental or physical abilities needed to perform potentially hazardous activities such as driving a car or operating machinery. Warn patients not to drive or operate dangerous machinery unless they are tolerant to the effects of OTFC and know how they will react to the medication.

### **5.18 Cardiac Disease**

Intravenous fentanyl may produce bradycardia. Therefore, use OTFC with caution in patients with bradyarrhythmias.

## **6 ADVERSE REACTIONS**

The following serious adverse reactions are described, or described in greater detail, in other sections:

- Addiction, Abuse, and Misuse [see *Warnings and Precautions (5.1)*]
- Life-Threatening Respiratory Depression [see *Warnings and Precautions (5.2)*]
- Interactions with Benzodiazepines and Other CNS Depressants [see *Warnings and Precautions (5.4)*]
- Neonatal Opioid Withdrawal Syndrome [see *Warnings and Precautions (5.8)*]
- Opioid-Induced Hyperalgesia and Allodynia [see *Warnings and Precautions (5.9)*]
- Serotonin Syndrome [see *Warnings and Precautions (5.10)*]
- Adrenal Insufficiency [see *Warnings and Precautions (5.12)*]
- Severe Hypotension [see *Warnings and Precautions (5.13)*]

- Gastrointestinal Adverse Reactions [see Warnings and Precautions (5.15)]
- Seizures [see Warnings and Precautions (5.16)]

## 6.1 Clinical Studies Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The safety of Oral Transmucosal Fentanyl Citrate (OTFC) has been evaluated in 257 opioid-tolerant chronic cancer pain patients. The duration of OTFC use varied during the open-label study. Some patients were followed for over 21 months. The average duration of therapy in the open-label study was 129 days.

The most serious adverse reactions associated with OTFC are respiratory depression (potentially leading to apnea or respiratory arrest), circulatory depression, hypotension, and shock.

Because the clinical trials of OTFC were designed to evaluate safety and efficacy in treating breakthrough cancer pain, all patients were also taking concomitant opioids, such as sustained-release morphine or transdermal fentanyl, for their persistent cancer pain. The adverse event data presented here reflect the actual percentage of patients experiencing each adverse effect among patients who received OTFC for breakthrough cancer pain along with a concomitant opioid for persistent cancer pain. There has been no attempt to correct for concomitant use of other opioids, duration of OTFC therapy, or cancer-related symptoms.

Three short-term clinical trials with similar titration schemes were conducted in 257 patients with malignancy and breakthrough cancer pain. Data are available for 254 of these patients. Table 1 lists, by dose groups, adverse reactions with an overall frequency of 1% or greater that occurred during titration. The ability to assign a dose-response relationship to these adverse reactions is limited by the titration schemes used in these studies. Adverse reactions are listed in descending order of frequency within each body system.

**Table 1. Percent of Patients with Specific Adverse Events Commonly Associated with Opioid Administration or of Particular Clinical Interest Which Occurred During Titration (Events in 1% or More of Patients)**

Dose Group	Percentage of Patients Reporting Event				
	200-600 mcg (n=230)	800-1400 mcg (n=138)	1600 mcg (n=54)	>1600 mcg (n=41)	Any Dose* (n=254)
<b>Body As A Whole</b>					
Asthenia	6	4	0	7	9
Headache	3	4	6	5	6
Accidental Injury	1	1	4	0	2
<b>Digestive</b>					
Nausea	14	15	11	22	23
Vomiting	7	6	6	15	12
Constipation	1	4	2	0	4

<b>Nervous</b>					
Dizziness	10	16	6	15	17
Somnolence	9	9	11	20	17
Confusion	1	6	2	0	4
Anxiety	3	0	2	0	3
Abnormal Gait	0	1	4	0	2
Dry Mouth	1	1	2	0	2
Nervousness	1	1	0	0	2
Vasodilatation	2	0	2	0	2
Hallucinations	0	1	2	2	1
Insomnia	0	1	2	0	1
Thinking Abnormal	0	1	2	0	1
Vertigo	1	0	0	0	1
<b>Respiratory</b>					
Dyspnea	2	3	6	5	4
<b>Skin</b>					
Pruritus	1	0	0	5	2
Rash	1	1	0	2	2
Sweating	1	1	2	2	2
<b>Special Senses</b>					
Abnormal Vision	1	0	2	0	2

\* Any Dose = A patient who experienced the same adverse event at multiple doses was only counted once.

The following adverse reactions not reflected in Table 1 occurred during titration with an overall frequency of 1% or greater and are listed in descending order of frequency within each body system.

Body as a Whole: Pain, fever, abdominal pain, chills, back pain, chest pain, infection

Digestive: Diarrhea, dyspepsia, flatulence

Metabolic and Nutritional: Peripheral edema, dehydration

Nervous: Hypesthesia, migraine

Respiratory: Pharyngitis, cough increased

The following reactions occurred during titration with an overall frequency of less than 1% and are listed in descending order of frequency within each body system.

Body as a Whole: Bone pain

Cardiovascular: Deep thrombophlebitis, hypertension, hypotension

Digestive: Anorexia, eructation, fecal impaction, gum hemorrhage, mouth ulceration, oral moniliasis

Hemic and Lymphatic: Anemia, leukopenia

Metabolic and Nutritional: Edema, hypercalcemia, weight loss

Musculoskeletal: Myalgia, pathological fracture, myasthenia

Nervous: Abnormal dreams, urinary retention, agitation, amnesia, emotional lability, euphoria, incoordination, libido decreased, neuropathy, paresthesia, speech disorder

Respiratory: Hemoptysis, pleural effusion, rhinitis, asthma, hiccup, pneumonia, respiratory insufficiency, sputum increased

Skin and Appendages: Alopecia, exfoliative dermatitis

Special Senses: Taste perversion

Urogenital: Vaginal hemorrhage, dysuria, hematuria, urinary incontinence, urinary tract infection

A long-term extension study was conducted in 156 patients with malignancy and breakthrough cancer pain who were treated for an average of 129 days. Data are available for 152 of these patients. Table 2 lists by dose groups, adverse reactions with an overall frequency of 1% or greater that occurred during the long-term extension study. Adverse reactions are listed in descending order of frequency within each body system.

**Table 2. Percent of Patients with Adverse Events Commonly Associated with Opioid Administration or of Particular Clinical Interest Which Occurred During Long Term Treatment (Events in 1% or More of Patients)**

Dose Group	Percentage of Patients Reporting Event				
	200-600 mcg (n=98)	800-1400 mcg (n=83)	1600 mcg (n=53)	>1600 mcg (n=27)	Any Dose* (n=152)
<b>Body As A Whole</b>					
Asthenia	25	30	17	15	38
Headache	12	17	13	4	20
Accidental Injury	4	6	4	7	9
Hypertonia	2	2	2	0	3
<b>Digestive</b>					
Nausea	31	36	25	26	45
Vomiting	21	28	15	7	31
Constipation	14	11	13	4	20
Intestinal Obstruction	0	2	4	0	3
<b>Cardiovascular</b>					
Hypertension	1	1	0	0	1
<b>Nervous</b>					
Dizziness	12	10	9	0	16
Anxiety	9	8	8	7	15
Somnolence	8	13	8	7	15
Confusion	2	5	13	7	10
Depression	9	4	2	7	9
Insomnia	5	1	8	4	7
Abnormal Gait	5	1	0	0	4
Dry Mouth	3	1	2	4	4
Nervousness	2	2	0	4	3

Stupor	4	1	0	0	3
Vasodilatation	1	1	4	0	3
Thinking Abnormal	2	1	0	0	2
Abnormal Dreams	1	1	0	0	1
Convulsion	0	1	2	0	1
Myoclonus	0	0	4	0	1
Tremor	0	1	2	0	1
Vertigo	0	0	4	0	1
<b>Respiratory</b>					
Dyspnea	15	16	8	7	22
<b>Skin</b>					
Rash	3	5	8	4	8
Sweating	3	2	2	0	4
Pruritus	2	0	2	0	2
<b>Special Senses</b>					
Abnormal Vision	2	2	0	0	3
<b>Urogenital</b>					
Urinary Retention	1	2	0	0	2

\* Any Dose = A patient who experienced the same adverse event at multiple doses was only counted once.

The following reactions not reflected in Table 2 occurred with an overall frequency of 1% or greater in the long-term extension study and are listed in descending order of frequency within each body system.

Body as a Whole: Pain, fever, back pain, abdominal pain, chest pain, flu syndrome, chills, infection, abdomen enlarged, bone pain, ascites, sepsis, neck pain, viral infection, fungal infection, cachexia, cellulitis, malaise, pelvic pain

Cardiovascular: Deep thrombophlebitis, palpitation, vascular disorder

Digestive: Diarrhea, anorexia, dyspepsia, dysphagia, oral moniliasis, mouth ulceration, rectal disorder, stomatitis, flatulence, gastrointestinal hemorrhage, gingivitis, jaundice, periodontal abscess, eructation, glossitis, rectal hemorrhage

Hemic and Lymphatic: Anemia, leukopenia, thrombocytopenia, ecchymosis, lymphadenopathy, lymphedema, pancytopenia

Metabolic and Nutritional: Peripheral edema, edema, dehydration, weight loss, hyperglycemia, hypokalemia, hypercalcemia, hypomagnesemia

Musculoskeletal: Myalgia, pathological fracture, joint disorder, leg cramps, arthralgia, bone disorder

Nervous: Hypesthesia, paresthesia, hypokinesia, neuropathy, speech disorder, migraine

Respiratory: Cough increased, pharyngitis, pneumonia, rhinitis, sinusitis, bronchitis, epistaxis, asthma, hemoptysis, sputum increased

Skin and Appendages: Skin ulcer, alopecia

Special Senses: Tinnitus, conjunctivitis, ear disorder, taste perversion

Urogenital: Urinary tract infection, urinary incontinence, breast pain, dysuria, hematuria, scrotal edema, hydronephrosis, kidney failure, urinary urgency, urination impaired, breast neoplasm, vaginal hemorrhage, vaginitis

The following reactions occurred with a frequency of less than 1% in the long-term extension study and are listed in descending order of frequency within each body system.

Body as a Whole: Allergic reaction, cyst, face edema, flank pain, granuloma, bacterial infection, mucous membrane disorder, neck rigidity

Cardiovascular: Angina pectoris, hemorrhage, hypotension, peripheral vascular disorder, postural hypotension, tachycardia

Digestive: Cheilitis, esophagitis, fecal incontinence, gastroenteritis, gastrointestinal disorder, gum hemorrhage, hemorrhage of colon, hepatorenal syndrome, liver tenderness, tooth caries, tooth disorder

Hemic and Lymphatic: Bleeding time increased

Metabolic and Nutritional: Acidosis, generalized edema, hypocalcemia, hypoglycemia, hyponatremia, hypoproteinemia, thirst

Musculoskeletal: Arthritis, muscle atrophy, myopathy, synovitis, tendon disorder

Nervous: Acute brain syndrome, agitation, cerebral ischemia, facial paralysis, foot drop, hallucinations, hemiplegia, miosis, subdural hematoma

Respiratory: Hiccup, hyperventilation, lung disorder, pneumothorax, respiratory failure, voice alteration

Skin and Appendages: Herpes zoster, maculopapular rash, skin discoloration, urticaria, vesiculobullous rash

Special Senses: Ear pain, eye hemorrhage, lacrimation disorder, partial permanent deafness, partial transitory deafness

Urogenital: Kidney pain, nocturia, oliguria, polyuria, pyelonephritis

## **6.2 Postmarketing Experience**

The following adverse reactions have been identified during post approval use of OTFC. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

### Digestive:

- *Dental decay:* Dental decay, including dental caries, tooth loss, and gum line erosion.

### Nervous System Disorders:

- *Serotonin syndrome:* Cases of serotonin syndrome, a potentially life-threatening condition, have been reported during concomitant use of opioids with serotonergic drugs.

- *Hyperalgesia and Allodynia:* Cases of hyperalgesia and allodynia have been reported with opioid therapy of any duration [see *Warnings and Precautions (5.9)*].

### Endocrine Disorders:

- *Adrenal insufficiency*: Cases of adrenal insufficiency have been reported with opioid use, more often following greater than one month of use.
- *Androgen deficiency*: Cases of androgen deficiency have occurred with use of opioids for an extended period of time [see *Clinical Pharmacology (12.2)*].

### Immune System Disorders:

- *Anaphylaxis*: Anaphylaxis has been reported with ingredients contained in OTFC.

### General Disorders and Administration Site Conditions:

- *Application site reactions* including irritation, pain, ulcer, and drug withdrawal syndrome.

### Metabolic and Nutritional Disorders:

- *Hypoglycemia*: Cases of hypoglycemia have been reported in patients taking opioids. Most reports were in patients with at least one predisposing risk factor (e.g., diabetes).

### Gastrointestinal Disorders:

- *Opioid-induced esophageal dysfunction (OIED)*: Cases of OIED have been reported in patients taking opioids and may occur more frequently in patients taking higher doses of opioids, and/or in patients taking opioids longer term [see *Warnings and Precautions (5.15)*].

### Adverse Reactions from Observational Studies

A prospective, observational cohort study estimated the risks of addiction, abuse, and misuse in patients initiating long-term use of Schedule II opioid analgesics between 2017 and 2021. Study participants included in one or more analyses had been enrolled in selected insurance plans or health systems for at least one year, were free of at least one outcome at baseline, completed a minimum number of follow-up assessments, and either: 1) filled multiple extended-release/long-acting opioid analgesic prescriptions during a 90-day period (n=978); or 2) filled any Schedule II opioid analgesic prescriptions covering at least 70 of 90 days (n=1,244). Those included also had no dispensing of the qualifying opioids in the previous 6 months.

Over 12 months:

- approximately 1% to 6% of participants across the two cohorts newly met criteria for addiction, as assessed with two validated interview-based measures of moderate-to-severe opioid use disorder based on Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) criteria, and
- approximately 9% and 22% of participants across the two cohorts newly met criteria for prescription opioid abuse and misuse [defined in *Drug Abuse and Dependence (9.2)*], respectively, as measured with a validated self-reported instrument.

A retrospective, observational cohort study estimated the risk of opioid-involved overdose or opioid overdose-related death in patients with new long-term use of Schedule II opioid analgesics from 2006 through 2016 (n=220,249). Included patients had been enrolled in either one of two commercial insurance programs, one managed care program, or one Medicaid program for at least 9 months. New long-term use was defined as having Schedule II opioid analgesic prescriptions covering at least 70 days'

supply over the 3 months prior to study entry and none during the preceding 6 months. Patients were excluded if they had an opioid-involved overdose in the 9 months prior to study entry. Overdose was measured using a validated medical code-based algorithm with linkage to the National Death Index database. The 5-year cumulative incidence estimates for opioid-involved overdose or opioid overdose-related death ranged from approximately 1.5% to 4% across study sites, counting only the first event during follow-up. Approximately 17% of first opioid overdoses observed over the entire study period (5-11 years, depending on the study site) were fatal. Higher baseline opioid dose was the strongest and most consistent predictor of opioid-involved overdose or opioid overdose-related death. Study exclusion criteria may have selected patients at lower risk of overdose, and substantial loss to follow-up (approximately 80%) also may have biased estimates.

The risk estimates from the studies described above may not be generalizable to all patients receiving opioid analgesics, such as those with exposures shorter or longer than the duration evaluated in the studies.

## 7 DRUG INTERACTIONS

Table 3 includes clinically significant drug interactions with Oral Transmucosal Fentanyl Citrate (OTFC).

**Table 3: Clinically Significant Drug Interactions with OTFC**

<b>Inhibitors of CYP3A4</b>	
<i>Clinical Impact:</i>	The concomitant use of OTFC and CYP3A4 inhibitors can increase the plasma concentration of fentanyl, resulting in increased or prolonged opioid effects, particularly when an inhibitor is added after a stable dose of OTFC is achieved [see <i>Warnings and Precautions (5.6)</i> ]. After stopping a CYP3A4 inhibitor, as the effects of the inhibitor decline, the fentanyl plasma concentration will decrease [see <i>Clinical Pharmacology (12.3)</i> ], resulting in decreased opioid efficacy or a withdrawal syndrome in patients who had developed physical dependence to fentanyl.
<i>Intervention:</i>	If concomitant use is necessary, consider dosage reduction of OTFC until stable drug effects are achieved. Evaluate patients at frequent intervals for respiratory depression and sedation. If a CYP3A4 inhibitor is discontinued, consider increasing the OTFC dosage until stable drug effects are achieved. Evaluate for signs of opioid withdrawal.
<i>Examples:</i>	Macrolide antibiotics (e.g., erythromycin), azole-antifungal agents (e.g., ketoconazole), protease inhibitors (e.g., ritonavir), grapefruit juice
<b>CYP3A4 Inducers</b>	
<i>Clinical Impact:</i>	The concomitant use of OTFC and CYP3A4 inducers can decrease the plasma concentration of fentanyl [see <i>Clinical Pharmacology (12.3)</i> ], resulting in decreased efficacy or onset of a withdrawal syndrome in patients who have developed physical dependence to fentanyl [see <i>Warnings and Precautions (5.6)</i> ]. After stopping a CYP3A4 inducer, as the effects of the inducer decline, the fentanyl plasma concentration will increase [see <i>Clinical Pharmacology (12.3)</i> ], which could increase or prolong both the therapeutic effects and adverse reactions, and may cause serious respiratory depression.

<i>Intervention:</i>	If concomitant use is necessary, consider increasing the OTFC dosage until stable drug effects are achieved. Evaluate for signs of opioid withdrawal. If a CYP3A4 inducer is discontinued, consider OTFC dosage reduction and evaluate patients at frequent intervals for signs of respiratory depression and sedation.
<i>Examples:</i>	Rifampin, carbamazepine, phenytoin
<b>Benzodiazepines and Other Central Nervous System (CNS) Depressants</b>	
<i>Clinical Impact:</i>	Due to additive pharmacologic effect, the concomitant use of benzodiazepines or other CNS depressants including alcohol, increases the risk of respiratory depression, profound sedation, coma, and death.
<i>Intervention:</i>	Reserve concomitant prescribing of these drugs for use in patients for whom alternative treatment options are inadequate. Limit dosages and durations to the minimum required. Inform patients and caregivers of this potential interaction and educate them on the signs and symptoms of respiratory depression (including sedation). If concomitant use is warranted, consider recommending or prescribing an opioid overdose reversal agent [see <i>Dosage and Administration (2.2), Warnings and Precautions (5.1, 5.2, 5.4)</i> ].
<i>Examples:</i>	Benzodiazepines and other sedatives/hypnotics, anxiolytics, tranquilizers, muscle relaxants, general anesthetics, antipsychotics, gabapentinoids (gabapentin or pregabalin), other opioids, alcohol.
<b>Serotonergic Drugs</b>	
<i>Clinical Impact:</i>	The concomitant use of opioids with other drugs that affect the serotonergic neurotransmitter system has resulted in serotonin syndrome [see <i>Warnings and Precautions (5.10)</i> ].
<i>Intervention:</i>	If concomitant use is warranted, frequently evaluate the patient, particularly during treatment initiation and dose adjustment. Discontinue OTFC if serotonin syndrome is suspected.
<i>Examples:</i>	Selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), tricyclic antidepressants (TCAs), triptans, 5-HT <sub>3</sub> receptor antagonists, drugs that affect the serotonin neurotransmitter system (e.g., mirtazapine, trazodone, tramadol), certain muscle relaxants (i.e., cyclobenzaprine, metaxalone), monoamine oxidase (MAO) inhibitors (those intended to treat psychiatric disorders and also others, such as linezolid and intravenous methylene blue).
<b>Monoamine Oxidase Inhibitors (MAOIs)</b>	
<i>Clinical Impact:</i>	MAOI interactions with opioids may manifest as serotonin syndrome [see <i>Warnings and Precautions (5.10)</i> ] or opioid toxicity (e.g., respiratory depression, coma) [see <i>Warnings and Precautions (5.2)</i> ].
<i>Intervention:</i>	The use of OTFC is not recommended for patients taking MAOIs or within 14 days of stopping such treatment.
<i>Examples:</i>	Phenelzine, tranylcypromine, linezolid
<b>Mixed Agonist/Antagonist and Partial Agonist Opioid Analgesics</b>	
<i>Clinical Impact:</i>	May reduce the analgesic effect of OTFC and/or precipitate withdrawal symptoms.
<i>Intervention:</i>	Avoid concomitant use.
<i>Examples:</i>	Butorphanol, nalbuphine, pentazocine, buprenorphine

<b>Muscle Relaxants</b>	
<i>Clinical Impact:</i>	Fentanyl may enhance the neuromuscular blocking action of skeletal muscle relaxants and produce an increased degree of respiratory depression.
<i>Intervention:</i>	Because respiratory depression may be greater than otherwise expected, decrease the dosage of OTFC and/or the muscle relaxant as necessary. Due to the risk of respiratory depression with concomitant use of skeletal muscle relaxants and opioids, consider recommending or prescribing an opioid overdose reversal agent [see <i>Dosage and Administration (2.2), Warnings and Precautions (5.2, 5.4)</i> ].
<i>Examples:</i>	Cyclobenzaprine, metaxalone
<b>Diuretics</b>	
<i>Clinical Impact:</i>	Opioids can reduce the efficacy of diuretics by inducing the release of antidiuretic hormone.
<i>Intervention:</i>	Evaluate patients for signs of diminished diuresis and/or effects on blood pressure and increase the dosage of the diuretic as needed.
<b>Anticholinergic Drugs</b>	
<i>Clinical Impact:</i>	The concomitant use of anticholinergic drugs may increase risk of urinary retention and/or severe constipation, which may lead to paralytic ileus.
<i>Intervention:</i>	Evaluate patients for signs of urinary retention or reduced gastric motility when OTFC is used concomitantly with anticholinergic drugs.

## 8 USE IN SPECIFIC POPULATIONS

### 8.1 Pregnancy

#### Risk Summary

Use of opioid analgesics for an extended period of time during pregnancy may cause neonatal opioid withdrawal syndrome [see *Warnings and Precautions (5.8)*]. Available data with Oral Transmucosal Fentanyl Citrate (OTFC) in pregnant women are insufficient to inform a drug-associated risk for major birth defects and miscarriage. There are risks to the mother and infant associated with use of OTFC for an extended period of time during pregnancy (see *Clinical Considerations*).

In animal reproduction studies, fentanyl administration to pregnant rats during organogenesis was embryocidal at doses within the range of the human recommended dosing. When administered during gestation through lactation fentanyl administration to pregnant rats resulted in reduced pup survival at doses within the range of the human recommended dosing. No evidence of malformations were noted in animal studies completed to date [see *Data*].

The background risk of major birth defects and miscarriage for the indicated population is unknown. All pregnancies have a background risk of birth defect, loss, or other adverse outcomes. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2 to 4% and 15 to 20%, respectively.

#### Clinical Considerations

##### *Fetal/Neonatal Adverse Reactions*

Use of opioid analgesics for an extended period of time during pregnancy for medical or nonmedical purposes can result in physical dependence in the neonate and neonatal opioid withdrawal syndrome shortly after birth.

Neonatal opioid withdrawal syndrome presents as irritability, hyperactivity and abnormal sleep pattern, high pitched cry, tremor, vomiting, diarrhea, and failure to gain weight. The onset of neonatal withdrawal symptoms usually occurs in the first days after birth. The duration and severity of neonatal opioid withdrawal syndrome may vary. Observe newborns for symptoms of neonatal opioid withdrawal syndrome and manage accordingly [see *Warnings and Precautions (5.8)*].

### *Labor or Delivery*

Opioids cross the placenta and may produce respiratory depression and psychophysiological effects in neonates. An opioid overdose reversal agent, such as naloxone or nalmefene, must be available for reversal of opioid-induced respiratory depression in the neonate. OTFC is not recommended for use in pregnant women during or immediately prior to labor, when other analgesic techniques are more appropriate. Opioid analgesics, including OTFC, can prolong labor through actions which temporarily reduce the strength, duration, and frequency of uterine contractions. However, this effect is not consistent and may be offset by an increased rate of cervical dilation, which tends to shorten labor. Monitor neonates exposed to opioid analgesics during labor for signs of excess sedation and respiratory depression.

### Data

#### *Human Data*

In women treated acutely with intravenous or epidural fentanyl during labor, symptoms of neonatal respiratory or neurological depression were no more frequent than would be expected in infants of untreated mothers.

Transient neonatal muscular rigidity has been observed in infants whose mothers were treated with intravenous fentanyl.

#### *Animal Data*

Fentanyl (25, 50, or 100 mcg/kg) citrate was administered subcutaneously to pregnant rats during the period of organogenesis (Gestation Day, GD 6 to 17). Maternal toxicity and a decrease in fetal weights were observed at 100 mcg/kg but no teratogenicity was seen in the study (the no observed effect level of 50 mcg/kg is equivalent to 0.7 times the exposure of a single human dose of 1600 mcg per pain episode, based on an AUC comparison). Fentanyl (50, 100, or 250 mcg/kg) was also administered subcutaneously to pregnant rabbits during the period of organogenesis (GD 6-18). Maternal toxicity was noted at doses >100 mcg/kg. No teratogenicity was seen in the study (250 mcg/kg dose is equivalent to 3.5 times the exposure of a single human dose of 1600 mcg per pain episode, based on an AUC comparison).

Fentanyl has been shown to be embryocidal in pregnant rats at doses of 30 mcg/kg intravenously (0.2 times the 1600 mcg dose of OTFC on a mg/m<sup>2</sup> basis) from GD 6 to 18 and 160 mcg/kg subcutaneously (1 times the 1600 mcg dose of OTFC based on a mg/m<sup>2</sup> basis). No evidence of teratogenicity was reported.

No evidence of malformations or adverse effects on the fetus was reported in a published study in which pregnant rats were administered fentanyl continuously via

subcutaneously implanted osmotic minipumps at doses of 10, 100, or 500 mcg/kg/day starting 2-weeks prior to breeding and throughout pregnancy. The high dose was approximately 3 times the human dose of 1600 mcg OTFC per pain episode on a mg/m<sup>2</sup> basis and produced mean steady-state plasma levels that are 3.4 times higher than the mean C<sub>max</sub> observed following administration of 1600 mcg dose of OTFC in humans.

In a postnatal development study, pregnant rats were treated from GD 6 through Lactation Day (LD) 20 with subcutaneous doses of fentanyl (25, 50, 100, and 400 mcg/kg). Maternal toxicity was noted at doses >100 mcg/kg. A reduction in pup growth and delayed attainment of developmental indices were observed at >100 mcg/kg. No difference in the number of live pups/litter was seen at birth, however, pup survival at LD 4 was reduced to 48% at 400 mcg/kg and by LD 21 pup survival was reduced to 30% and 26% at 100 and 400 mcg/kg, respectively. During lactation, fentanyl-related clinical signs (decreased activity, skin cold to touch, and moribund appearance) were noted in the F1 pups, most prominently in the 400 mcg/kg group. Pups from this group also had significantly reduced body weights throughout the lactation period. The dose of fentanyl administered to rats at which no developmental toxicity in the F1 generation was seen was 50 mcg/kg which is 0.6 times the exposure of a single human dose of 1600 mcg per pain episode, based on an AUC comparison.

## **8.2 Lactation**

### Risk Summary

Fentanyl is present in breast milk. One published lactation study reports a relative infant dose of fentanyl of 0.024%. However, there is insufficient information to determine the effects of fentanyl on the breastfed infant and the effects of fentanyl on milk production. Because of the potential for serious adverse reactions, including excess sedation and respiratory depression in a breastfed infant, advise patients that breastfeeding is not recommended during treatment with OTFC.

### Clinical Considerations

Monitor infants exposed to OTFC through breast milk for excess sedation and respiratory depression. Withdrawal symptoms can occur in breastfed infants when maternal administration of an opioid analgesic is stopped, or when breastfeeding is stopped.

## **8.3 Females and Males of Reproductive Potential**

### Infertility

Use of opioids for an extended period of time may cause reduced fertility in females and males of reproductive potential. It is not known whether these effects on fertility are reversible [see *Adverse Reactions (6.2)*, *Clinical Pharmacology (12.2)*, *Nonclinical Toxicology (13.1)*].

## **8.4 Pediatric Use**

Safety and effectiveness in pediatric patients below 16 years of age have not been established.

In a clinical study, 15 opioid-tolerant pediatric patients with breakthrough pain, ranging in age from 5 to 15 years, were treated with OTFC. The study was too small to allow

conclusions on safety and efficacy in this patient population. Twelve of the fifteen opioid-tolerant children and adolescents aged 5 to 15 years in this study received OTFC at doses ranging from 200 mcg to 600 mcg. The mean (CV%; range) dose-normalized (to 200 mcg)  $C_{max}$  and  $AUC_{0-8}$  values were 0.87 ng/mL (51%; 0.42-1.30) and 4.54 ng·h/mL (42%; 2.37-6.0), respectively, for children ages 5 to <11 years old (N = 3) and 0.68 ng/mL (72%; 0.15-1.44) and 8.38 (192%; 0.84-50.78), respectively, for children ages  $\geq 11$  to <16 y (N = 9).

## **8.5 Geriatric Use**

Of the 257 patients in clinical studies of OTFC in breakthrough cancer pain, 61 (24%) were 65 years of age and older, while 15 (6%) were 75 years of age and older. Those patients over the age of 65 years were titrated to a mean dose that was about 200 mcg less than the mean dose titrated to by younger patients. No difference was noted in the safety profile of the group over 65 years of age as compared to younger patients in OTFC clinical trials.

Elderly patients have been shown to be more sensitive to the effects of fentanyl when administered intravenously, compared with the younger population. Therefore, exercise caution when individually titrating OTFC in elderly patients to provide adequate efficacy while minimizing risk.

Respiratory depression is the chief risk for elderly patients treated with opioids, and has occurred after large initial doses were administered to patients who were not opioid-tolerant or when opioids were co-administered with other agents that depress respiration. Titrate the dosage of OTFC slowly in geriatric patients and frequently reevaluate the patient for signs of central nervous system and respiratory depression [see *Warnings and Precautions (5.11)*].

Fentanyl is known to be substantially excreted by the kidney, and the risk of adverse reactions to this drug may be greater in patients with impaired renal function. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and it may be useful to regularly evaluate renal function.

## **8.6 Patients with Renal or Hepatic Impairment**

Insufficient information exists to make recommendations regarding the use of OTFC in patients with impaired renal or hepatic function. Fentanyl is metabolized primarily via human cytochrome P450 3A4 isoenzyme system and mostly eliminated in urine. If the drug is used in these patients, it should be used with caution because of the hepatic metabolism and renal excretion of fentanyl.

## **8.7 Sex**

Both male and female opioid-tolerant patients with cancer were studied for the treatment of breakthrough cancer pain. No clinically relevant sex differences were noted either in dosage requirement or in observed adverse reactions.

# **9 DRUG ABUSE AND DEPENDENCE**

## **9.1 Controlled Substance**

Oral Transmucosal Fentanyl Citrate (OTFC) contains fentanyl, a Schedule II controlled substance.

## **9.2 Abuse**

OTFC contains fentanyl, a substance with high potential for misuse and abuse, which can lead to the development of substance use disorder, including addiction [see *Warnings and Precautions (5.1)*].

Misuse is the intentional use, for therapeutic purposes, of a drug by an individual in a way other than prescribed by a healthcare provider or for whom it was not prescribed.

Abuse is the intentional, non-therapeutic use of a drug, even once, for its desirable psychological or physiological effects.

Drug addiction is a cluster of behavioral, cognitive, and physiological phenomena that may include a strong desire to take the drug, difficulties in controlling drug use (e.g., continuing drug use despite harmful consequences, giving a higher priority to drug use than other activities and obligations), and possible tolerance or physical dependence.

Misuse and abuse of OTFC increases risk of overdose, which may lead to central nervous system and respiratory depression, hypotension, seizures, and death. The risk is increased with concurrent abuse of OTFC with alcohol and/or other CNS depressants. Abuse of and addiction to opioids in some individuals may not be accompanied by concurrent tolerance and symptoms of physical dependence. In addition, abuse of opioids can occur in the absence of addiction.

All patients treated with opioids require careful and frequent reevaluation for signs of misuse, abuse, and addiction, because use of opioid analgesic products carries the risk of addiction even under appropriate medical use. Patients at high risk of OTFC abuse include those with a history of prolonged use of any opioid, including products containing fentanyl, those with a history of drug or alcohol abuse, or those who use OTFC in combination with other abused drugs.

“Drug-seeking” behavior is very common in persons with substance use disorders. Drug-seeking tactics include emergency calls or visits near the end of office hours, refusal to undergo appropriate examination, testing, or referral, repeated “loss” of prescriptions, tampering with prescriptions, and reluctance to provide prior medical records or contact information for other treating healthcare provider(s). “Doctor shopping” (visiting multiple prescribers to obtain additional prescriptions) is common among people who abuse drugs and people with substance use disorder. Preoccupation with achieving adequate pain relief can be appropriate behavior in a patient with inadequate pain control.

OTFC, like other opioids, can be diverted for nonmedical use into illicit channels of distribution. Careful record-keeping of prescribing information, including quantity, frequency, and renewal requests, as required by state and federal law, is strongly advised.

Proper assessment of the patient, proper prescribing practices, periodic reevaluation of therapy, and proper dispensing and storage are appropriate measures that help to limit abuse of opioid drugs.

### Risks Specific to Abuse of OTFC

Abuse of OTFC poses a risk of overdose and death. The risk is increased with concurrent use of OTFC with alcohol and/or other CNS depressants.

OTFC is approved for oral transmucosal use only.

### **9.3 Dependence**

Both tolerance and physical dependence can develop during use of opioid therapy.

Tolerance is a physiological state characterized by a reduced response to a drug after repeated administration (i.e., a higher dose of a drug is required to produce the same effect that was once obtained at a lower dose).

Physical dependence is a state that develops as a result of a physiological adaptation in response to repeated drug use, manifested by withdrawal signs and symptoms after abrupt discontinuation or a significant dose reduction of a drug.

Withdrawal may be precipitated through the administration of drugs with opioid antagonist activity (e.g., naloxone, nalmefene), mixed agonist/antagonist analgesics (e.g., pentazocine, butorphanol, nalbuphine), or partial agonists (e.g., buprenorphine). Physical dependence may not occur to a clinically significant degree until after several days to weeks of continued use.

Infants born to mothers physically dependent on opioids will also be physically dependent and may exhibit respiratory difficulties and withdrawal signs [*see Use in Specific Populations (8.1)*].

## **10 OVERDOSAGE**

### Clinical Presentation

Acute overdose with fentanyl can be manifested by respiratory depression, somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, constricted pupils, and, in some cases, pulmonary edema, bradycardia, hypotension, hypoglycemia, partial or complete airway obstruction, atypical snoring, and death. Marked mydriasis rather than miosis may be seen with hypoxia in overdose situations [*see Clinical Pharmacology (12.2)*]. Toxic leukoencephalopathy has been reported after opioid overdose and can present hours, days, or weeks after apparent recovery from the initial intoxication.

### Treatment of Overdose

In case of overdose, priorities are: removal of the OTFC unit, if still in the mouth, the reestablishment of a patent and protected airway and institution of assisted or controlled ventilation, if needed. Employ other supportive measures (including oxygen and vasopressors) in the management of circulatory shock and pulmonary edema as indicated. Cardiac arrest or arrhythmias will require advanced life-support measures.

For clinically significant respiratory or circulatory depression secondary to opioid overdose, administer an opioid overdose reversal agent such as naloxone or nalmefene.

Because the duration of opioid reversal is expected to be less than the duration of action of fentanyl in OTFC, carefully monitor the patient until spontaneous respiration is reliably re-established. If the response to an opioid overdose reversal agent is suboptimal or only brief in nature, administer additional reversal agent as directed by the

product's prescribing information.

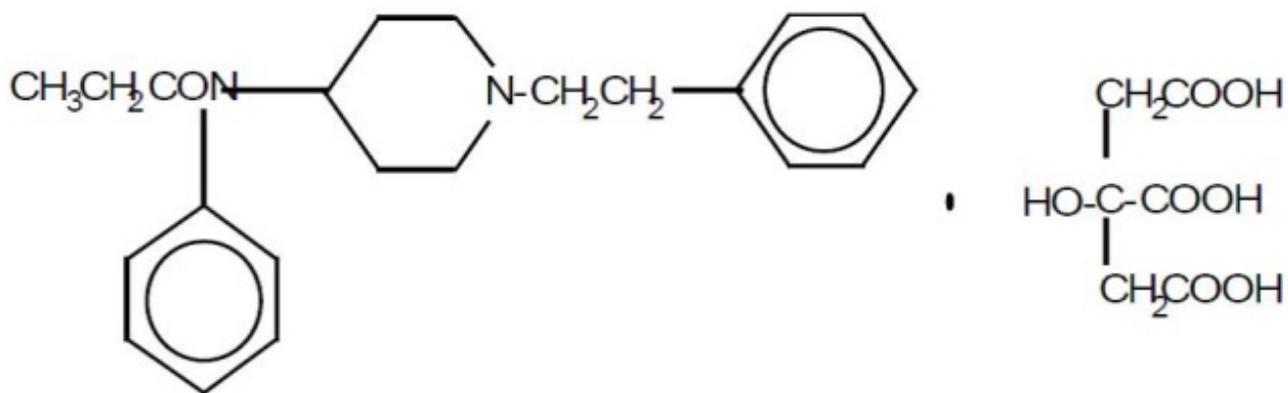
In an individual physically dependent on opioids, administration of the recommended usual dosage of the opioid overdose reversal agent will precipitate an acute withdrawal syndrome. The severity of the withdrawal symptoms experienced will depend on the degree of physical dependence and the dose of the reversal agent administered. If a decision is made to treat serious respiratory depression in the physically dependent patient, administration of the reversal agent should be initiated with care and by titration with smaller than usual doses of the reversal agent.

## 11 DESCRIPTION

Oral Transmucosal Fentanyl Citrate (OTFC) (fentanyl citrate) oral transmucosal lozenge is a solid formulation of fentanyl, an opioid agonist, intended for oral transmucosal administration. OTFC is formulated as a white to off-white solid drug matrix on a handle that is fracture resistant (ABS plastic) under normal conditions when used as directed.

OTFC is designed to be dissolved slowly in the mouth to facilitate transmucosal absorption. The handle allows the OTFC unit to be removed from the mouth if signs of excessive opioid effects appear during administration.

Active Ingredient: Fentanyl citrate, USP is N-(1-Phenethyl-4-piperidyl) propionanilide citrate (1:1). Fentanyl is a highly lipophilic compound (octanol-water partition coefficient at pH 7.4 is 816:1) that is freely soluble in organic solvents and sparingly soluble in water (1:40). The molecular weight of the free base is 336.5 (the citrate salt is 528.6). The pKa of the tertiary nitrogens are 7.3 and 8.4. The compound has the following structural formula:



Inactive Ingredients: Hydrated dextrans, citric acid, dibasic sodium phosphate, artificial berry flavor, magnesium stearate, and edible glue (modified food starch and confectioner's sugar).

## 12 CLINICAL PHARMACOLOGY

### 12.1 Mechanism of Action

Fentanyl is an opioid agonist whose principal therapeutic action is analgesia.

## **12.2 Pharmacodynamics**

### Effects on the Central Nervous System

The precise mechanism of the analgesic action is unknown although fentanyl is known to be a *mu*-opioid receptor agonist. Specific CNS opioid receptors for endogenous compounds with opioid-like activity have been identified throughout the brain and spinal cord and play a role in the analgesic effects of this drug.

Fentanyl produces respiratory depression by direct action on brain stem respiratory centers. The respiratory depression involves a reduction in the responsiveness of the brain stem to both increases in carbon dioxide and electrical stimulation.

Fentanyl causes miosis even in total darkness. Pinpoint pupils are a sign of opioid overdose but are not pathognomonic (e.g., pontine lesions of hemorrhagic or ischemic origin may produce similar findings). Marked mydriasis rather than miosis may be seen due to hypoxia in overdose situations.

### Effects on the Gastrointestinal Tract and Other Smooth Muscle

Fentanyl causes a reduction in motility associated with an increase in smooth muscle tone in the antrum of the stomach and in the duodenum. Digestion of food in the small intestine is delayed and propulsive contractions are decreased. Propulsive peristaltic waves in the colon are decreased, while tone may be increased to the point of spasm resulting in constipation. Other opioid-induced effects may include a reduction in biliary and pancreatic secretions, spasm of the sphincter of Oddi, transient elevations in serum amylase, and opioid-induced esophageal dysfunction (OIED).

### Effects on the Cardiovascular System

Fentanyl may produce release of histamine with or without associated peripheral vasodilation. Fentanyl produces peripheral vasodilation which may result in orthostatic hypotension or syncope. Manifestations of histamine release and/or peripheral vasodilation may include pruritus, flushing, red eyes, and sweating, and/or orthostatic hypotension.

### Effects on the Endocrine System

Opioids inhibit the secretion of adrenocorticotropic hormone (ACTH), cortisol, and luteinizing hormone (LH) in humans [*see Adverse Reactions (6.2)*]. They also stimulate prolactin, growth hormone (GH) secretion, and pancreatic secretion of insulin and glucagon [*see Adverse Reactions (6.2)*]. Thyroid stimulating hormone (TSH) has been shown to be both inhibited and stimulated by opioids.

Use of opioids for an extended period of time may influence the hypothalamic-pituitary-gonadal axis, leading to androgen deficiency that may manifest as low libido, impotence, erectile dysfunction, amenorrhea, or infertility. The causal role of opioids in the clinical syndrome of hypogonadism is unknown because the various medical, physical, lifestyle, and psychological stressors that may influence gonadal hormone levels have not been adequately controlled for in studies conducted to date [*see Adverse Reactions (6.2)*].

### Effects on the Immune System

Opioids have been shown to have a variety of effects on components of the immune

system in *in vitro* and animal models. The clinical significance of these findings is unknown. Overall, the effects of opioids appear to be modestly immunosuppressive.

### Concentration-Efficacy Relationships

The analgesic effects of fentanyl are related to the blood level of the drug, if proper allowance is made for the delay into and out of the CNS (a process with a 3- to 5-minute half-life).

In general, the effective concentration and the concentration at which toxicity occurs increase with increasing tolerance with any and all opioids. The rate of development of tolerance varies widely among individuals.

The minimum effective analgesic concentration of fentanyl for any individual patient may increase over time due to an increase in pain, the development of a new pain syndrome and/or the development of analgesic tolerance.

### Concentration-Adverse Reaction Relationships

There is a relationship between increasing fentanyl plasma concentration and increasing frequency of dose-related opioid adverse reactions such as nausea, vomiting, CNS effects, and respiratory depression. In opioid-tolerant patients, the situation may be altered by the development of tolerance to opioid-related adverse reactions [see *Dosage and Administration* (2.1, 2.3, 2.4, 2.5)].

### Respiratory System

All opioid *mu*-receptor agonists, including fentanyl, produce dose-dependent respiratory depression. The risk of respiratory depression is less in patients receiving chronic opioid therapy who develop tolerance to respiratory depression and other opioid effects. During the titration phase of the clinical trials, somnolence, which may be a precursor to respiratory depression, did increase in patients who were treated with higher doses of Oral Transmucosal Fentanyl Citrate (OTFC). Peak respiratory depressive effects may be seen as early as 15 to 30 minutes from the start of oral transmucosal fentanyl citrate product administration and may persist for several hours.

Serious or fatal respiratory depression can occur even at recommended doses. Although not observed with oral transmucosal fentanyl products in clinical trials, fentanyl given rapidly by intravenous injection in large doses may interfere with respiration by causing rigidity in the muscles of respiration [see *Warnings and Precautions* (5), *Overdosage* (10)].

## **12.3 Pharmacokinetics**

### Absorption

The absorption pharmacokinetics of fentanyl from the oral transmucosal dosage form is a combination of an initial rapid absorption from the buccal mucosa and a more prolonged absorption of swallowed fentanyl from the GI tract. Both the blood fentanyl profile and the bioavailability of fentanyl will vary depending on the fraction of the dose that is absorbed through the oral mucosa and the fraction swallowed.

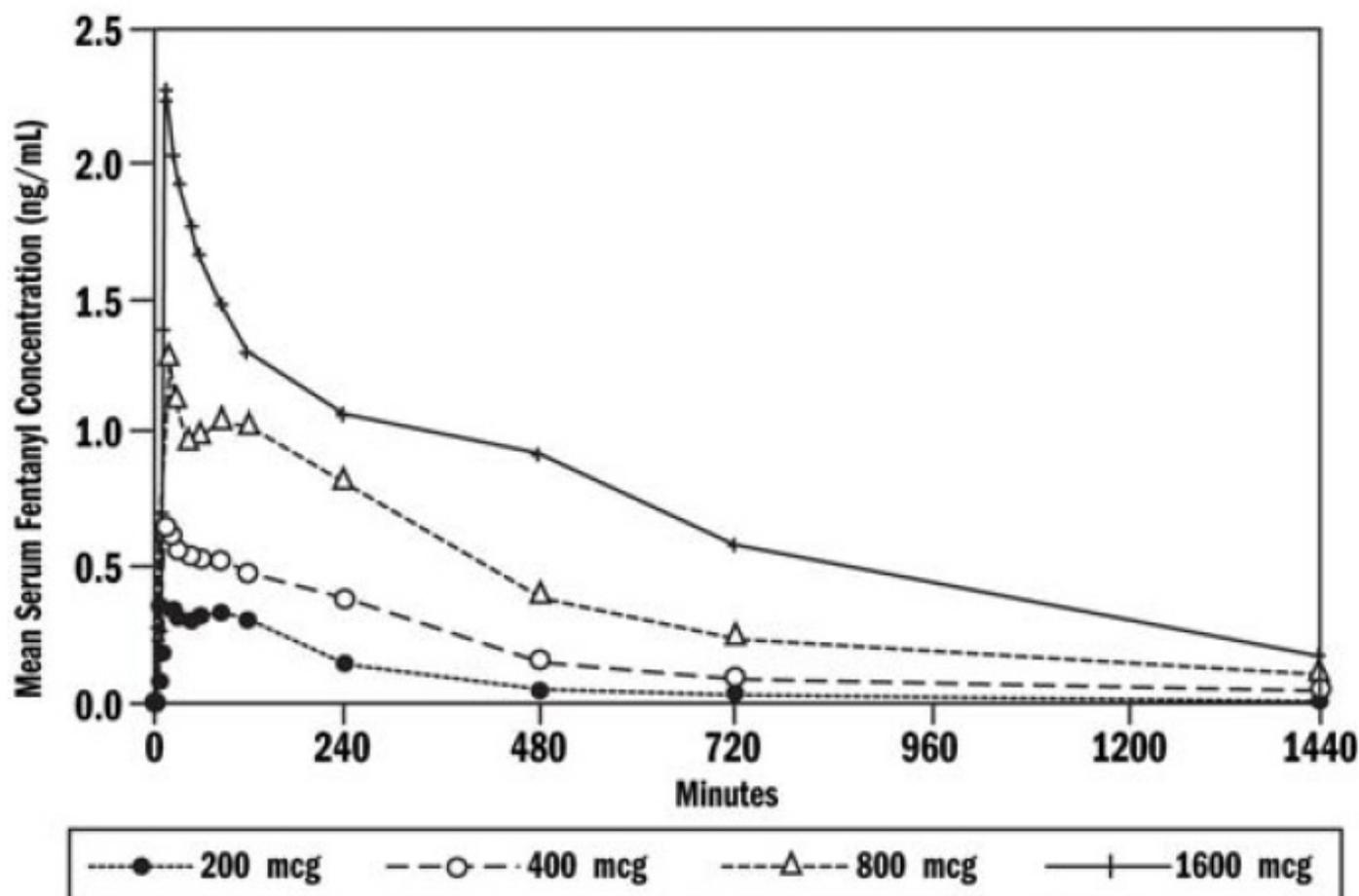
Absolute bioavailability, as determined by area under the concentration-time curve, of 15 mcg/kg in 12 adult males was 50% compared to intravenous fentanyl.

Normally, approximately 25% of the total dose of OTFC is rapidly absorbed from the

buccal mucosa and becomes systemically available. The remaining 75% of the total dose is swallowed with the saliva and then is slowly absorbed from the GI tract. About 1/3 of this amount (25% of the total dose) escapes hepatic and intestinal first-pass elimination and becomes systemically available. Thus, the generally observed 50% bioavailability of OTFC is divided equally between rapid transmucosal and slower GI absorption. Therefore, a unit dose of OTFC, if chewed and swallowed, might result in lower peak concentrations and lower bioavailability than when consumed as directed.

Dose proportionality among four of the available strengths of OTFC (200, 400, 800, and 1600 mcg) has been demonstrated in a balanced crossover design in adult subjects (n=11). Mean serum fentanyl levels following these four doses of OTFC are shown in Figure 1. The curves for each dose level are similar in shape with increasing dose levels producing increasing serum fentanyl levels.  $C_{max}$  and  $AUC_{0 \rightarrow \infty}$  increased in a dose-dependent manner that is approximately proportional to the OTFC administered.

**Figure 1. Mean Serum Fentanyl Concentration (ng/mL) in Adult Subjects Comparing 4 Doses of OTFC**



The pharmacokinetic parameters of the four strengths of OTFC tested in the dose-proportionality study are shown in Table 4. The mean  $C_{max}$  ranged from 0.39 - 2.51 ng/mL. The median time of maximum plasma concentration ( $T_{max}$ ) across these four doses of OTFC varied from 20 - 40 minutes (range of 20 - 480 minutes) as measured after the start of administration.

**Table 4. Pharmacokinetic Parameters\* in Adult Subjects Receiving 200, 400, 800, and 1600 mcg Units of OTFC**

Pharmacokinetic Parameter	200 mcg	400 mcg	800 mcg	1600 mcg
T <sub>max</sub> , minute median (range)	40 (20-120)	25 (20-240)	25 (20-120)	20 (20-480)
C <sub>max</sub> , ng/mL mean (%CV)	0.39 (23)	0.75 (33)	1.55 (30)	2.51 (23)
AUC <sub>0-1440</sub> , ng/mL minute mean (%CV)	102 (65)	243 (67)	573 (64)	1026 (67)
t <sub>1/2</sub> , minute mean (%CV)	193 (48)	386 (115)	381 (55)	358 (45)

\* **Based on arterial blood samples.**

### Distribution

Fentanyl is highly lipophilic. Animal data showed that following absorption, fentanyl is rapidly distributed to the brain, heart, lungs, kidneys and spleen followed by a slower redistribution to muscles and fat. The plasma protein binding of fentanyl is 80-85%. The main binding protein is alpha-1-acid glycoprotein, but both albumin and lipoproteins contribute to some extent. The free fraction of fentanyl increases with acidosis. The mean volume of distribution at steady state (V<sub>ss</sub>) was 4 L/kg.

### Elimination

The total plasma clearance of fentanyl was 0.5 L/hr/kg (range 0.3 – 0.7 L/hr/kg). The terminal elimination half-life after OTFC administration is about 7 hours.

### Metabolism

Fentanyl is metabolized in the liver and in the intestinal mucosa to norfentanyl by cytochrome P450 3A4 isoform. Norfentanyl was not found to be pharmacologically active in animal studies [see *Drug Interactions (7)*].

### Excretion

Fentanyl is primarily (more than 90%) eliminated by biotransformation to N-dealkylated and hydroxylated inactive metabolites. Less than 7% of the dose is excreted unchanged in the urine, and only about 1% is excreted unchanged in the feces. The metabolites are mainly excreted in the urine, while fecal excretion is less important.

## **13 NONCLINICAL TOXICOLOGY**

### **13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

#### Carcinogenesis

Fentanyl was evaluated for carcinogenic potential in a 104-week rat study and in a 6-month Tg.AC transgenic mouse study. In rats, doses up to 50 mcg/kg in males and 100 mcg/kg in females were administered subcutaneously and no treatment-related neoplasms were observed (doses are equivalent to 1.13 and 2.7 times the exposure of

a single human dose of 1600 mcg per pain episode, respectively, based on an AUC comparison). In a 26-week transgenic mice model (Tg.AC), at topical doses up to 50 mcg/dose/day, no increase in the occurrence of treatment-related neoplasms was observed.

### Mutagenesis

Fentanyl citrate was not mutagenic in the in vitro Ames reverse mutation assay in *S. typhimurium* or *E. coli*, or the mouse lymphoma mutagenesis assay, and was not clastogenic in the in vivo mouse micronucleus assay.

### Impairment of Fertility

In a fertility study, female rats were administered fentanyl subcutaneously for 14 days prior to mating with untreated males at doses up to 300 mcg/kg and no effects on female fertility were observed. The systemic exposure at the dose of 300 mcg/kg was approximately 4.0-times the exposure of a single human dose of 1600 mcg per pain episode, based on an AUC comparison. Males were administered fentanyl subcutaneously for 28 days prior to mating with untreated females at doses up to 300 mcg/kg. At 300 mcg/kg, adverse effects on sperm parameters, which affected fertility, were observed. These effects included decreased percent mobile sperm, decreased sperm concentrations as well as an increase in the percent abnormal sperm. The dose in males at which no effects on fertility were observed was 100 mcg/kg, which is approximately 2.7 times the exposure of a single human dose of 1600 mcg per pain episode, based on an AUC comparison.

Fentanyl has been shown to impair fertility in rats at doses of 30 mcg/kg IV and 160 mcg/kg subcutaneously. Conversion to the human equivalent doses indicates that this is within the range of the human recommended dosing for OTFC.

## **14 CLINICAL STUDIES**

Oral Transmucosal Fentanyl Citrate (OTFC) was investigated in clinical trials involving 257 opioid tolerant adult cancer patients experiencing breakthrough cancer pain. Breakthrough cancer pain was defined as a transient flare of moderate-to-severe pain occurring in cancer patients experiencing persistent cancer pain otherwise controlled with maintenance doses of opioid medications including at least 60 mg morphine/day, 50 mcg transdermal fentanyl/hour, or an equianalgesic dose of another opioid for a week or longer.

In two dose titration studies 95 of 127 patients (75%) who were on stable doses of either long-acting oral opioids or transdermal fentanyl for their persistent cancer pain titrated to a successful dose of OTFC to treat their breakthrough cancer pain within the dose range offered (200, 400, 600, 800, 1200, and 1600 mcg). A “successful” dose was defined as a dose where one unit of OTFC could be used consistently for at least two consecutive days to treat breakthrough cancer pain without unacceptable side effects. In these studies 11% of patients withdrew due to adverse reactions and 14% withdrew due to other reasons.

The successful dose of OTFC for breakthrough cancer pain was not predicted from the daily maintenance dose of opioid used to manage the persistent cancer pain and is thus best determined by dose titration.

A double-blind placebo controlled crossover study was performed in cancer patients to evaluate the effectiveness of OTFC for the treatment of breakthrough cancer pain. Of 130 patients who entered the study 92 patients (71%) achieved a successful dose during the titration phase. The distribution of successful doses is shown in Table 5.

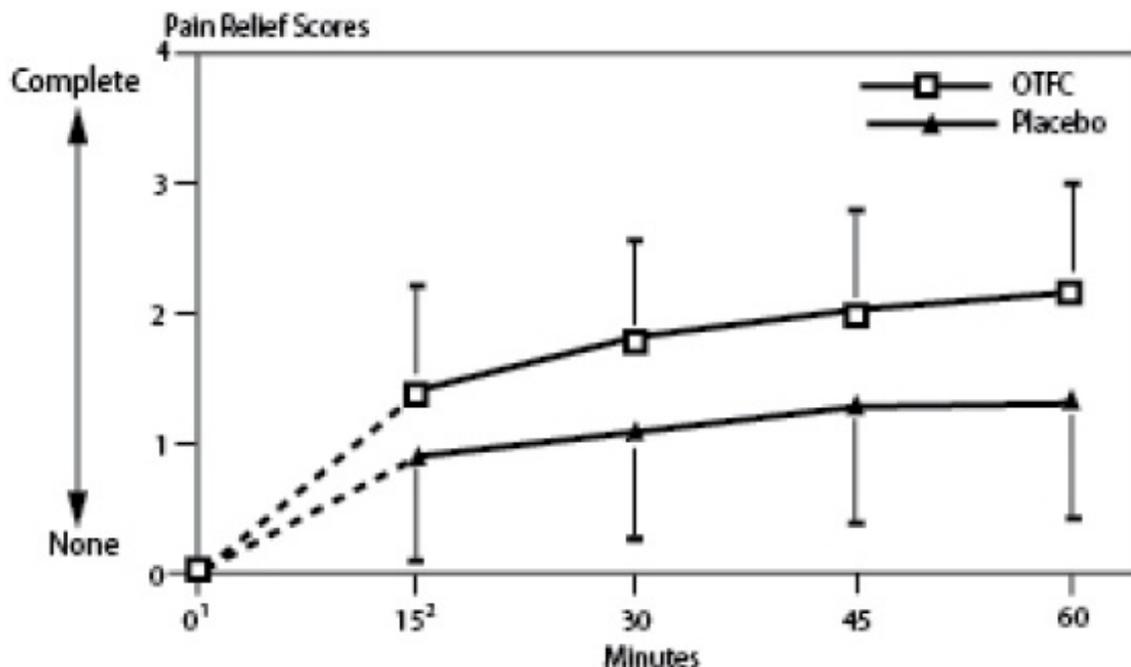
**Table 5. Successful Dose of OTFC Following Initial Titration**

<b>OTFC Dose</b>	<b>Total No. (%) (N=92)</b>
<b>200 mcg</b>	<b>13 (14)</b>
<b>400 mcg</b>	<b>19 (21)</b>
<b>600 mcg</b>	<b>14 (15)</b>
<b>800 mcg</b>	<b>18 (20)</b>
<b>1200 mcg</b>	<b>13 (14)</b>
<b>1600 mcg</b>	<b>15 (16)</b>
<b>Mean +/- SD</b>	<b>789 +/- 468 mcg</b>

On average, patients over 65 years of age titrated to a mean dose that was about 200 mcg less than the mean dose to which younger adult patients were titrated.

OTFC was administered beginning at Time 0 minutes and produced more pain relief compared with placebo at 15, 30, 45, and 60 minutes as measured after the start of administration (see Figure 2). The differences were statistically significant.

**Figure 2. Pain Relief (PR) Scores (Mean±SD) During the Double-Blind Phase - All Patients with Evaluable Episodes on Both OTFC and Placebo (N=86)**



<sup>1</sup> 0 minutes = Start of administration of OTFC

<sup>2</sup> 15 minutes = First time to measure pain relief

## 16 HOW SUPPLIED/STORAGE AND HANDLING

Oral Transmucosal Fentanyl Citrate (OTFC) is supplied in six dosage strengths. Each unit is individually wrapped in a child-resistant, protective blister package. These blister packages are packed 30 per shelf carton for use when patients have been titrated to the appropriate dose.

Each dosage unit has a white to off-white color. Each individual solid drug matrix is marked with "FENTANYL" and the strength of the unit ("200", "400", "600", "800", "1200", or "1600"). The dosage strength is also marked on the handle tag, the blister package and the carton. See blister package and carton for product information.

<b>Dosage Strength (fentanyl base)</b>	<b>Carton/Blister Package Color</b>	<b>NDC Number</b>
<b>200 mcg</b>	<b>Gray</b>	<b>NDC 0093-7865-65</b>
<b>400 mcg</b>	<b>Blue</b>	<b>NDC 0093-7866-65</b>
<b>600 mcg</b>	<b>Orange</b>	<b>NDC 0093-7867-65</b>
<b>800 mcg</b>	<b>Purple</b>	<b>NDC 0093-7868-65</b>
<b>1200 mcg</b>	<b>Green</b>	<b>NDC 0093-7869-65</b>
<b>1600 mcg</b>	<b>Burgundy</b>	<b>NDC 0093-7870-65</b>

Note: Colors are a secondary aid in product identification. Please be sure to confirm the printed dosage before dispensing.

Store at 20°C to 25°C (68°F to 77°F) with excursions permitted between 15°C and 30°C (59°F to 86°F) until ready to use. (See USP Controlled Room Temperature.) Protect OTFC from freezing and moisture. Do not use if the blister package has been opened.

Store OTFC securely and dispose of properly.

## 17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (*Medication Guide*).

Storage and Disposal of Unused and Used OTFC [see *Medication Guide / Instructions for Use*].

Because of the risks associated with accidental ingestion, misuse, and abuse, advise patients to store OTFC securely, out of sight and reach of children, and in a location not accessible by others, including visitors to the home. Inform patients that leaving OTFC unsecured can pose a deadly risk to others in the home [see *Warnings and Precautions (5.1, 5.2), Drug Abuse and Dependence (9.2)*].

Advise patients and caregivers that when medicines are no longer needed, they should be disposed of promptly. Inform patients that they can visit [www.fda.gov/drugdisposal](http://www.fda.gov/drugdisposal) for a complete list of medicines recommended for disposal by flushing, as well as additional information on disposal of unused medicines.

Disposal of Used OTFC Units:

Instruct patients on proper disposal of completely used and partially used OTFC units as follows:

1. After consumption of the unit is complete and the matrix is totally dissolved, throw away the handle in a trash container that is out of the reach of children.
2. If any of the drug matrix remains on the handle, place the handle under hot running tap water until all of the drug matrix is dissolved, and then dispose of the handle in a place that is out of the reach of children.
3. Dispose of handles in the child-resistant container (as described in steps 1 and 2) at least once a day.

If the patient does not entirely consume the unit and the remaining drug cannot be immediately dissolved under hot running water, the patient or caregiver must temporarily store the OTFC unit in the specially provided child-resistant container out of the reach of children until proper disposal is possible.

#### Disposal of Unopened OTFC Units When No Longer Needed:

Patients and members of their household must be advised to dispose of any unopened units remaining from a prescription as soon as they are no longer needed.

To dispose of the unused OTFC units:

- Remove the OTFC unit from its blister package using scissors, and hold the OTFC by its handle over the toilet bowl.
- Using wire-cutting pliers cut off the drug matrix end so that it falls into the toilet.
- Dispose of the handle in a place that is out of the reach of children.
- Repeat steps 1, 2, and 3 for each OTFC unit. Flush the toilet twice after 5 units have been cut and deposited into the toilet.

Do not flush the entire OTFC units, OTFC handles, blister packages, or cartons down the toilet. Dispose of the handle where children cannot reach it.

Detailed instructions for the proper storage, administration, disposal, and important instructions for managing an overdose of OTFC are provided in the *OTFC Medication Guide*. Encourage patients to read this information in its entirety and give them an opportunity to have their questions answered.

In the event that a caregiver requires additional assistance in disposing of excess unusable units that remain in the home after a patient has expired, instruct them to call the toll-free number for Teva Pharmaceuticals (1-888-483-8279) or seek assistance from their local DEA office.

#### Addiction, Abuse, and Misuse

Inform patients that the use of OTFC, even when taken as recommended, can result in addiction, abuse, and misuse, which can lead to overdose and death [see *Warnings and Precautions (5.1)*]. Instruct patients not to share OTFC with others and to take steps to protect OTFC from theft or misuse.

#### Life-Threatening Respiratory Depression

Inform patients of the risk of life-threatening respiratory depression, including information that the risk is greatest when starting Oral Transmucosal Fentanyl Citrate (OTFC) or when the dosage is increased, and that it can occur even at recommended dosages.

Educate patients and caregivers on how to recognize respiratory depression and emphasize the importance of calling 911 or getting emergency medical help right away in

the event of a known or suspected overdose [*see Warnings and Precautions (5.2)*].

### Accidental Ingestion

- Healthcare providers and dispensing pharmacists must specifically question patients or caregivers about the presence of children in the home (on a full time or visiting basis) and counsel them regarding the dangers to children from inadvertent exposure [*see Warnings and Precautions (5.3)*].
- Inform patients that accidental ingestion, especially by children, may result in respiratory depression or death [*see Warnings and Precautions (5.3)*].
- Instruct patients to take steps to store OTFC securely and to dispose of unused OTFC [*see Dosage and Administration (2.8), Warnings and Precautions (5.3, 5.7)*].
- Instruct patients and caregivers to keep both used and unused OTFC out of the reach of children [*see Warnings and Precautions (5.3)*].
- Inform patients and their caregivers that, in the event that a unit is not completely consumed, it must be properly disposed as soon as possible [*see Warnings and Precautions (5.3)*].

### OTFC Child Safety Kit

Provide patients and their caregivers who have children in the home or visiting with an OTFC Child Safety Kit, which contains educational materials and safe interim storage containers to help patients store OTFC and other medicines out of the reach of children. To obtain a supply of Child Safety Kits, health care professionals can call 1-888-534-3119.

### Interactions with Benzodiazepines and Other CNS Depressants

Inform patients and caregivers that potentially fatal additive effects may occur if OTFC is used with benzodiazepines or other CNS depressants, including alcohol (e.g., non-benzodiazepine sedative/hypnotics, anxiolytics, tranquilizers, muscle relaxants, general anesthetics, antipsychotics, gabapentinoids [gabapentin or pregabalin], and other opioids), and not to use these concomitantly unless supervised by a healthcare provider [*see Warnings and Precautions (5.4), Drug Interactions (7)*].

### Patient Access to an Opioid Overdose Reversal Agent for the Emergency Treatment of Opioid Overdose

Inform patients and caregivers about opioid overdose reversal agents (e.g., naloxone, nalmefene). Discuss the importance of having access to an opioid overdose reversal agent, especially if the patient has risk factors for overdose (e.g., concomitant use of CNS depressants, a history of opioid use disorder, or prior opioid overdose) or if there are household members (including children) or other close contacts at risk for accidental ingestion or opioid overdose.

Discuss with the patient the options for obtaining an opioid overdose reversal agent (e.g., prescription, over-the-counter, or as part of a community-based program) [*see Dosage and Administration (2.2), Warnings and Precautions (5.4)*].

Educate patients and caregivers on how to recognize the signs and symptoms of an overdose.

Explain to patients and caregivers that the effects of opioid overdose reversal agents like naloxone and nalmefene are temporary, and that they must call 911 or get emergency medical help right away in all cases of known or suspected opioid overdose, even if an opioid overdose reversal agent is administered [*see Overdosage (10)*].

Advise patients and caregivers:

- how to treat with their overdose reversal agent in the event of an opioid overdose
- to tell family and friends about their opioid overdose reversal agent, and to keep it in a place where family and friends can access it in an emergency
- to read the Patient Information (or other educational material) that will come with their opioid overdose reversal agent. Emphasize the importance of doing this before an opioid emergency happens, so the patient and caregiver will know what to do.

### Transmucosal Immediate-Release Fentanyl (TIRF) REMS

OTFC is available only through a restricted program called the Transmucosal Immediate Release Fentanyl (TIRF) REMS [see *Warnings and Precautions (5.7)*]. Inform the patient of the following notable requirements:

- Outpatients must be enrolled in the REMS program
- Patients must be opioid-tolerant to receive OTFC

OTFC is available only from certified pharmacies participating in this program. Therefore, provide patients with the telephone number and website for information on how to obtain the product.

Pharmacies, outpatients, and healthcare professionals who prescribe to outpatients are required to enroll in the program. Inpatient pharmacies must develop policies and procedures to verify opioid tolerance in inpatients who require OTFC while hospitalized [see *Warnings and Precautions (5.7)*].

### Hyperalgesia and Allodynia

Inform patients and caregivers not to increase opioid dosage without first consulting a clinician. Advise patients to seek medical attention if they experience symptoms of hyperalgesia, including worsening pain, increased sensitivity to pain, or new pain [see *Warnings and Precautions (5.9)*, *Adverse Reactions (6.2)*].

### Serotonin Syndrome

Inform patients that opioids could cause a rare but potentially life-threatening condition called serotonin syndrome resulting from concomitant administration of serotonergic drugs. Warn patients of the symptoms of serotonin syndrome and to seek medical attention right away if symptoms develop. Instruct patients to inform their healthcare providers if they are taking, or plan to take serotonergic medications [see *Warnings and Precautions (5.10)*, *Drug Interactions (7)*].

### MAOI Interaction

Inform patients to avoid taking OTFC while using any drugs that inhibit monoamine oxidase. Patients should not start MAOIs while taking OTFC [see *Warnings and Precautions (5.10)*, *Drug Interactions (7)*].

### Important Administration Instructions [see *Dosage and Administration (2)*]

- Instruct patients not to take OTFC for acute pain, postoperative pain, pain from injuries, headache, migraine or any other short-term pain, even if they have taken other opioid analgesics for these conditions.
- Instruct patients on the meaning of opioid tolerance and that OTFC is only to be used as a supplemental pain medication for patients with pain requiring around-the-clock opioids, who have developed tolerance to the opioid medication, and who need

additional opioid treatment of breakthrough pain episodes.

- Instruct patients that, if they are not taking an opioid medication on a scheduled basis (around-the-clock), they should not take OTFC.
- Instruct patients that, if the breakthrough pain episode is not relieved 15 minutes after finishing the OTFC unit, they may take only one additional unit of OTFC using the same strength for that episode. Thus, patients should take no more than two units of OTFC for any breakthrough pain episode.
- Instruct patients that they MUST wait at least 4 hours before treating another episode of breakthrough pain with OTFC.
- Instruct patients NOT to share OTFC and that sharing OTFC with anyone else could result in the other individual's death due to overdose.
- Make patients aware that OTFC contains fentanyl which is a strong pain medication similar to hydromorphone, methadone, morphine, oxycodone, and oxymorphone.
- Caution patients to talk to their healthcare provider if breakthrough pain is not alleviated or worsens after taking OTFC.
- Instruct patients to use OTFC exactly as prescribed by their healthcare provider and not to take OTFC more often than prescribed.

### Driving or Operating Heavy Machinery

Inform patients that OTFC may impair the ability to perform potentially hazardous activities such as driving a car or operating heavy machinery. Advise patients not to perform such tasks until they know how they will react to the medication [*see Warnings and Precautions (5.17)*].

### Constipation

Advise patients of the potential for severe constipation, including management instructions and when to seek medical attention [*see Adverse Reactions (6), Clinical Pharmacology (12.2)*].

### Dental Decay

Because each OTFC unit contains approximately 2 grams of sugar (hydrated dextrans), frequent consumption may increase the risk of dental decay. The occurrence of dry mouth associated with the use of opioid medications (such as fentanyl) may add to this risk.

Post-marketing reports of dental decay have been received in patients taking OTFC [*see Adverse Reactions (6.2)*]. In some of these patients, dental decay occurred despite reported routine oral hygiene. As dental decay in cancer patients may be multi-factorial, patients using OTFC should consult their dentist to ensure appropriate oral hygiene.

### Adrenal Insufficiency

Inform patients that opioids could cause adrenal insufficiency, a potentially life-threatening condition. Adrenal insufficiency may present with non-specific symptoms and signs such as nausea, vomiting, anorexia, fatigue, weakness, dizziness, and low blood pressure. Advise patients to seek medical attention if they experience a constellation of these symptoms [*see Warnings and Precautions (5.12)*].

### Hypotension

Inform patients that OTFC may cause orthostatic hypotension and syncope. Instruct patients how to recognize symptoms of low blood pressure and how to reduce the risk

of serious consequences should hypotension occur (e.g., sit or lie down, carefully rise from a sitting or lying position) *[see Warnings and Precautions (5.13)]*.

### Anaphylaxis

Inform patients that anaphylaxis has been reported with ingredients contained in OTFC. Advise patients how to recognize such a reaction and when to seek medical attention *[see Contraindications (4), Adverse Reactions (6)]*.

### Pregnancy

#### *Neonatal Opioid Withdrawal Syndrome*

Inform patients that use of OTFC for an extended period of time during pregnancy can result in neonatal opioid withdrawal syndrome, which may be life-threatening if not recognized and treated *[see Warnings and Precautions (5.8), Use in Specific Populations (8.1)]*.

#### *Embryo-Fetal Toxicity*

Inform female patients of reproductive potential that OTFC can cause fetal harm and to inform their healthcare provider of a known or suspected pregnancy *[see Use in Specific Populations (8.1)]*.

### Lactation

Advise nursing mothers to carefully observe infants for increased sleepiness (more than usual), breathing difficulties, or limpness. Instruct nursing mothers to seek immediate medical care if they notice these signs *[see Use in Specific Populations (8.2)]*.

### Infertility

Inform patients that use of opioids for an extended period of time may cause reduced fertility. It is not known whether these effects on fertility are reversible *[see Use in Specific Populations (8.3)]*.

### Diabetic Patients

Advise diabetic patients that OTFC contains approximately 2 grams of sugar per unit.

Dispense with Medication Guide available at: [www.tevausea.com/medguides](http://www.tevausea.com/medguides)

OTF-018

Distributed By:  
Teva Pharmaceuticals USA, Inc.  
Parsippany, NJ 07054

©2026 Cephalon, LLC.

## **MEDICATION GUIDE**

Dispense with Medication Guide available at: [www.tevausea.com/medguides](http://www.tevausea.com/medguides)

Medication Guide

**Oral Transmucosal Fentanyl Citrate (OTFC)  
(fentanyl citrate) oral transmucosal lozenge, CII  
IMPORTANT:**

**Do not use Oral Transmucosal Fentanyl Citrate (OTFC) unless you are regularly using another opioid pain medicine around-the-clock for at least one week or longer for your cancer pain and your body is used to these medicines (this means that you are opioid tolerant). You can ask your healthcare provider if you are opioid tolerant.**

**Keep OTFC in a safe place away from children.**

**Get emergency medical help right away if:**

- **a child takes OTFC. OTFC can cause an overdose and death in any child who takes it.**
- **an adult who has not been prescribed OTFC uses it.**
- **an adult who is not already taking opioids around-the-clock, uses OTFC.**

**These are medical emergencies that can cause death. If possible, remove OTFC from the mouth.**

**Oral Transmucosal Fentanyl Citrate (OTFC) is:**

- A strong prescription pain medicine that contains an opioid (narcotic) that is used to manage breakthrough pain in adults (16 years of age and older) with cancer who are already routinely taking other opioid pain medicines around-the-clock for cancer pain. OTFC is started only after you have been taking other opioid pain medicines and your body has become used to them (you are opioid tolerant). Do not use OTFC if you are not opioid tolerant.
- An opioid pain medicine that can put you at risk for overdose and death. Even if you take your dose correctly as prescribed you are at risk for opioid addiction, abuse, and misuse that can lead to death.

**Important information about Oral Transmucosal Fentanyl Citrate (OTFC):**

- **Get emergency help or call 911 right away if you take too much OTFC (overdose).** When you first start taking OTFC, when your dose is changed, or if you take too much (overdose), serious or life-threatening breathing problems that can lead to death may occur. Ask your healthcare provider about medicines like naloxone or nalmefene that can be used in an emergency to reverse an opioid overdose.
- Taking OTFC with other medicines that may make you sleepy, such as other pain medicines, gabapentinoids (gabapentin or pregabalin), anti-depressants, sleeping pills, anti-anxiety medicines, antihistamines, or tranquilizers, or with alcohol or street drugs can cause severe drowsiness, confusion, breathing problems, coma, and death.
- Never give anyone else your OTFC. They could die from taking it. Selling or giving away OTFC is against the law.
- Store OTFC securely, out of sight and reach of children, and in a location not accessible by others, including visitors to the home.
- If you stop taking your around-the-clock opioid pain medicine for your cancer pain, **you must stop** using OTFC. You may no longer be opioid tolerant. Talk to your healthcare provider about how to treat your pain.
- OTFC is available only through a program called the **Transmucosal Immediate Release Fentanyl (TIRF) Risk Evaluation and Mitigation Strategy (REMS)**. To receive OTFC, you must:
  - talk to your healthcare provider
  - understand the benefits and risks of OTFC
  - agree to all of the instructions

- sign the Patient Enrollment Form
- OTFC is only available at pharmacies that are part of the TIRF REMS. Your healthcare provider can help you locate a pharmacy closest to your home where you can have your OTFC prescription filled.
- Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

**Do not take Oral Transmucosal Fentanyl Citrate (OTFC) if:**

- You are not opioid tolerant. Opioid tolerant means that you are already taking other opioid pain medicines around-the-clock for at least one week or longer for your cancer pain, and your body is used to these medicines.
- You have severe asthma, trouble breathing, or other lung problems.
- You have a bowel blockage or have narrowing of the stomach or intestines.
- You are allergic to any of the ingredients in OTFC. See the end of this Medication Guide for a complete list of ingredients in OTFC.
- You have short-term pain that you would expect to go away in a few days, such as:
  - pain after surgery
  - headache or migraine
  - dental pain

**Before taking Oral Transmucosal Fentanyl Citrate (OTFC), tell your healthcare provider if you have a history of:**

- troubled breathing or lung problems such as asthma, wheezing, or shortness of breath
- head injury, seizures
- slow heart rate or other heart problems
- low blood pressure
- mental problems [including major depression, schizophrenia or hallucinations (seeing or hearing things that are not there)]
- problems urinating
- liver, kidney, thyroid problems
- pancreas or gallbladder problems
- abuse of street or prescription drugs, alcohol addiction, opioid overdose, or mental health problems
- diabetes. Each OTFC unit contains about 1/2 teaspoon (2 grams) of sugar.

**Tell your healthcare provider if you are:**

- **noticing your pain getting worse.** If your pain gets worse after you take OTFC, do not take more OTFC without first talking to your healthcare provider. Talk to your healthcare provider if the pain you have increases, if you feel more sensitive to pain, or if you have new pain after taking OTFC.
- **pregnant or planning to become pregnant.** Use of OTFC for an extended period of time during pregnancy can cause withdrawal symptoms in your newborn baby that could be life-threatening if not recognized and treated.
- **breastfeeding.** OTFC passes into breast milk and may harm your baby. Carefully observe infants for increased sleepiness (more than usual), breathing difficulties, or limpness. Seek immediate medical care if you notice these signs.
- living in a household where there are small children or someone who has abused street or prescription drugs.

- taking prescription over-the-counter medicines, vitamins, or herbal supplements. Taking OTFC with certain other medicines can cause serious side effects that could lead to death.

### **When taking Oral Transmucosal Fentanyl Citrate (OTFC):**

- Do not change your dose. Take OTFC exactly as prescribed by your healthcare provider.
- Your healthcare provider will change the dose until you and your healthcare provider find the right dose for you.
- **See the detailed Patient Instructions for Use at the end of this Medication Guide for information about how to use OTFC.**
- Finish the unit completely in 15 minutes to get the most relief. If you finish OTFC too quickly, you will swallow more of the medicine and get less relief.
- **Do not bite or chew. You will get less relief for your breakthrough cancer pain.**
- You may drink some water before using OTFC but you should not drink or eat anything while using OTFC.
- You must not use more than 2 units of OTFC during each episode of breakthrough cancer pain:
  - Use **1** unit for an episode of breakthrough cancer pain. Finish the unit over 15 minutes.
  - If your breakthrough cancer pain is not relieved 15 minutes after you finished the OTFC unit, use **only 1** more unit of OTFC at this time.
  - If your breakthrough pain does not get better after the second unit of OTFC, call your healthcare provider for instructions. **Do not use another unit of OTFC at this time.**
- Wait at least **4** hours before treating a new episode of breakthrough cancer pain with OTFC.
- It is important for you to keep taking your around-the-clock opioid pain medicine.
- Talk to your healthcare provider if your dose of OTFC does not relieve your breakthrough cancer pain. Your healthcare provider will decide if your dose of OTFC needs to be changed.
- Talk to your healthcare provider if you have more than 4 episodes of breakthrough cancer pain per day. The dose of your around-the-clock opioid pain medicine may need to be adjusted.
- If you begin to feel dizzy, sick to your stomach, or very sleepy before OTFC is completely dissolved, remove OTFC from your mouth.
- Do not stop taking OTFC without talking to your healthcare provider. You could become sick with uncomfortable withdrawal symptoms because your body has become used to these medicines. Physical dependency is not the same as drug addiction.
- After you stop taking, or when OTFC is no longer needed, see **“How should I dispose of Oral Transmucosal Fentanyl Citrate (OTFC) units when they are no longer needed?”** for proper disposal of OTFC.
- Dispose of expired, unwanted, or unused OTFC by following the **“How should I dispose of Oral Transmucosal Fentanyl Citrate (OTFC) units when they are no longer needed?”** sections of this Medication Guide below. Visit [www.fda.gov/drugdisposal](http://www.fda.gov/drugdisposal) for additional information on disposal of unused medicines.

- **DO NOT** Drive or operate heavy machinery until you know how OTFC affects you. OTFC can make you sleepy, dizzy, or lightheaded.
- **DO NOT** Drink alcohol or use prescription or over-the-counter medicines that contain alcohol. Using products containing alcohol during treatment with OTFC may cause you to overdose and die.
- **DO NOT Switch from OTFC to other medicines that contain fentanyl without talking to your healthcare provider.** The amount of fentanyl in a dose of OTFC is not the same as the amount of fentanyl in other medicines that contain fentanyl. Your healthcare provider will prescribe a starting dose of OTFC that may be different than other fentanyl containing medicines you may have been taking.

### **The possible side effects of Oral Transmucosal Fentanyl Citrate (OTFC):**

- constipation, nausea, sleepiness, vomiting, tiredness, headache, dizziness, abdominal pain, weakness, anxiety, depression, rash, trouble sleeping. Call your healthcare provider if you have any of these symptoms and they are severe.
- Decreased blood pressure. This can make you feel dizzy or lightheaded if you get up too fast from sitting or lying down.
- OTFC contains sugar. Cavities and tooth decay can happen in people taking OTFC. When taking OTFC, you should talk to your dentist about proper care of your teeth.

### **Get emergency medical help or call 911 right away if you have:**

- trouble breathing, shortness of breath, fast heartbeat, chest pain, swelling of your face, tongue, or throat, extreme drowsiness, light-headedness when changing positions, feeling faint, agitation, high body temperature, trouble walking, stiff muscles, or mental changes such as confusion.
- These symptoms can be a sign that you have used too much OTFC or the dose is too high for you. **These symptoms may lead to serious problems or death if not treated right away. If you have any of these symptoms, do not use any more OTFC until you have talked to your healthcare provider.**

These are not all the possible side effects of OTFC. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088. **For more information go to [dailymed.nlm.nih.gov](http://dailymed.nlm.nih.gov)**

### **How should I store Oral Transmucosal Fentanyl Citrate (OTFC)?**

- **Always keep OTFC in a safe place away from children and from anyone for whom it has not been prescribed.** Protect OTFC from theft.
  - You can use the OTFC Child Safety Kit to help you store OTFC and your other medicines out of the reach of children. It is very important that you use the items in the OTFC Child Safety Kit to help protect the children in your home or visiting your home.
  - If you were not offered a Child Safety Kit when you received your medicine, call 888-534-3119.

The OTFC Child Safety Kit contains important information on the safe storage and handling of OTFC.

The Child Safety Kit includes:

- **A child-resistant lock that** you use to secure the storage space where you keep OTFC (See Figure 1).



**Figure 1**

- **A portable locking pouch** for you to keep a small supply of OTFC nearby. The rest of your OTFC must be kept in a locked storage space.
  - Keep this pouch secured with its lock and keep it out of the reach and sight of children (See Figure 2).



**Figure 2**

- **A child-resistant temporary storage bottle** (See Figure 3).



**Figure 3**

- Store OTFC at room temperature, 59°F to 86°F (15°C to 30°C) until ready to use.

- Do not freeze OTFC.
- **Keep OTFC in the original sealed child-resistant blister package. Do not open the blister package until you are ready to use OTFC.**
- Keep OTFC dry.

### **How should I dispose of Oral Transmucosal Fentanyl Citrate (OTFC) units when they are no longer needed?**

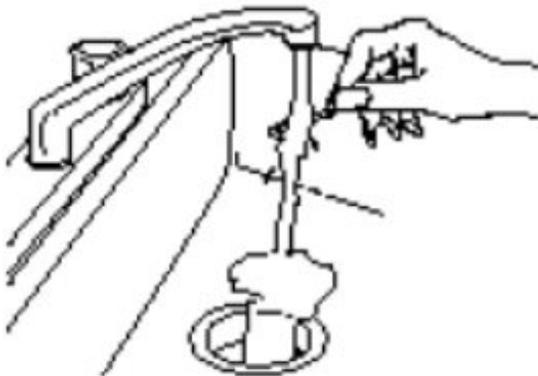
#### **Disposing of OTFC units after use:**

Partially used OTFC units may contain enough medicine to be harmful or fatal to a child or other adults who have not been prescribed OTFC. **You must properly dispose of the OTFC handle right away after use even if there is little or no medicine left on it.**

After you have finished the OTFC unit and the medicine is totally gone, throw the handle away in a place that is out of the reach of children.

If **any** medicine remains on the used OTFC unit after you have finished:

- Place the used OTFC unit under hot running water until the medicine is gone, and then throw the handle away out of the reach of children and pets (See Figure 4).



**Figure 4**

#### **Temporary Storage of Used OTFC Units:**

- If you did not finish the entire OTFC unit and you cannot dissolve the medicine under hot running water right away, put the used OTFC unit in the temporary storage bottle that you received in the OTFC Child Safety Kit. Push the used OTFC unit into the opening on the top until it falls completely into the bottle. **Never leave unused or partially used OTFC units where children or pets can get to them** (See Figure 5).



**Figure 5**

**Disposing of Used OTFC Units from the Temporary Storage Bottle:**

**You must** dispose of all used OTFC units in the temporary storage bottle **at least one time each day**, as follows:

1. To open the temporary storage bottle, push down on the cap until you are able to twist the cap to the left to remove it (See Figure 6).



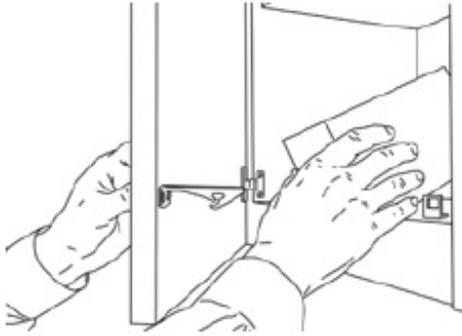
**Figure 6**

2. Remove one OTFC unit from the temporary storage bottle. Hold the OTFC by its handle over the toilet bowl.
3. Using wire-cutting pliers, cut the medicine end off so that it falls into the toilet.
4. Throw the handle away in a place that is out of the reach of children.
5. Repeat these 3 steps for each OTFC handle that is in the storage bottle. There should not be more than 4 handles in the temporary storage bottle for 1 day.
6. Flush the toilet twice.

Do not flush entire unused OTFC units, OTFC handles, or blister packages down the toilet.

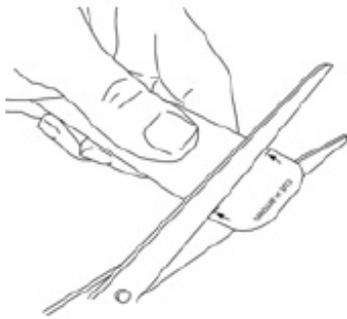
**Disposing of unopened OTFC units:** Dispose of any unopened OTFC units remaining from a prescription as soon as they are no longer needed, as follows:

1. Remove all OTFC from the locked storage space (See Figure 7).



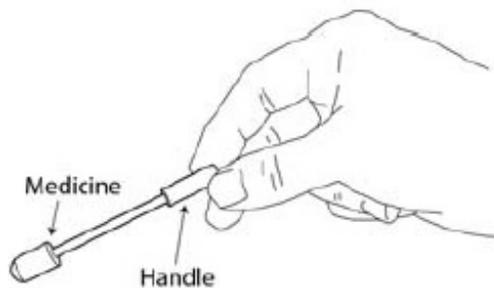
**Figure 7**

2. Remove one OTFC unit from its blister package by using scissors to cut off the marked end and then peel back the blister backing (See Figures 8A and 8B).



**Figure 8A Figure 8B**

3. Hold OTFC by its handle over the toilet bowl. Use wire-cutting pliers to cut the medicine end off so that it falls into the toilet (See Figures 9A and 9B).



**Figure 9A Figure 9B**

4. Throw the handle away in a place that is out of the reach of children (See Figure 10).



**Figure 10**

5. Repeat steps 1 through 4 for each OTFC unit.
6. Flush the toilet twice after the medicine ends from 5 OTFC units have been cut off (See Figure 11). Do not flush more than 5 OTFC units at a time.



**Figure 11**

- Do not flush entire unused OTFC units, OTFC handles, or blister packages down the toilet.

If you need help with disposal of OTFC, call Teva Pharmaceuticals at 1-888-483-8279, or call your local Drug Enforcement Agency (DEA) office.

### **General information about Oral Transmucosal Fentanyl Citrate (OTFC)**

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. **Use OTFC only for the purpose for which it was prescribed. Do not give OTFC to other people, even if they have the same symptoms you have.** OTFC can harm other people and even cause death. Sharing OTFC is against the law.

This Medication Guide summarizes the most important information about OTFC. If you would like more information, talk with your healthcare provider or pharmacist. You can ask your pharmacist or healthcare provider for information about OTFC that is written for healthcare professionals.

For more information about the TIRF REMS Access program, go to [www.TIRFREMSAccess.com](http://www.TIRFREMSAccess.com) or call 1-866-822-1483.

---

## What are the ingredients of Oral Transmucosal Fentanyl Citrate (OTFC)?

**Active Ingredient:** fentanyl citrate

**Inactive Ingredients:** sugar, citric acid, dibasic sodium phosphate, artificial berry flavor, magnesium stearate, modified food starch and confectioner's sugar.

### Patient Instructions for Use

Before you use OTFC, it is important that you read the Medication Guide and these Patient Instructions for Use. Be sure that you read, understand, and follow these Patient Instructions for Use so that you use OTFC the right way. Ask your healthcare provider or pharmacist if you have any questions about the right way to use OTFC.

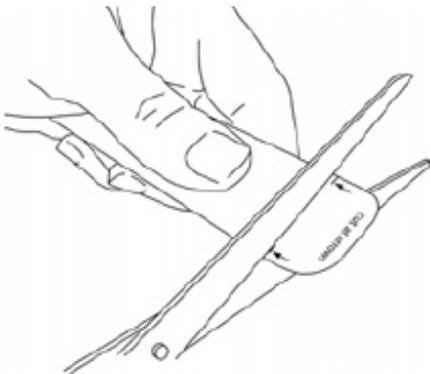
### When you get an episode of breakthrough cancer pain, use the dose of OTFC prescribed by your healthcare provider as follows:

- You may drink some water before using OTFC but you should not drink or eat anything while using OTFC.
- Each unit of OTFC is sealed in its own blister package (See Figure 12). **Do not open the blister package until you are ready to use OTFC.**

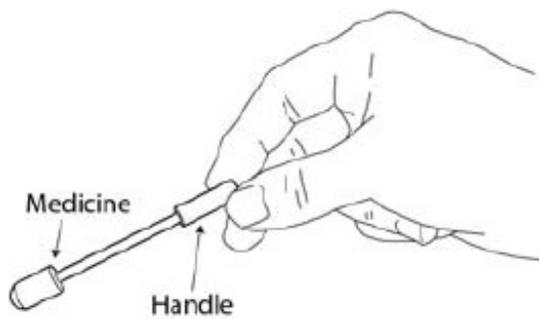


**Figure 12**

- When you are ready to use OTFC, cut open the package using scissors. Peel back the blister backing, and remove the OTFC unit (See Figures 13A and 13B). The end of the unit printed with "FENTANYL" and the strength number of the unit ("200", "400", "600", "800", "1200", or "1600") is the medicine end that is to be placed in your mouth. Hold the OTFC unit by the handle (See Figure 14).

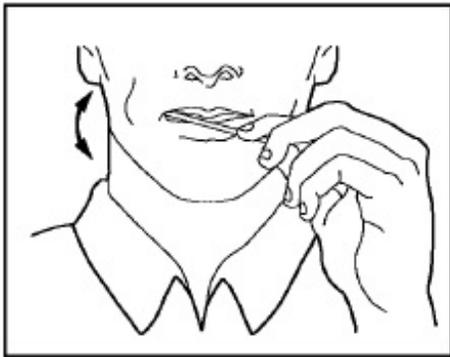


**Figure 13A Figure 13B**



**Figure 14**

1. Place the medicine end of the OTFC unit in your mouth between your cheeks and gums and actively suck on the medicine.
2. Move the medicine end of the OTFC unit around in your mouth, especially along the inside of your cheeks (See Figure 15).



**Figure 15**

3. Twirl the handle often.
4. Finish the OTFC unit completely over 15 minutes to get the most relief. If you finish OTFC too quickly, you will swallow more of the medicine and get less relief.
5. **Do not bite or chew OTFC. You will get less relief for your breakthrough cancer pain.**
  - If you cannot finish all of the medicine on the OTFC unit and cannot dissolve the medicine under hot tap water right away, immediately put the OTFC unit in the temporary storage bottle for safe keeping (See Figure 16).
    - Push the OTFC unit into the opening on the top until it falls completely into the bottle. You must properly dispose of the OTFC unit as soon as you can.



**Figure 16**

See “**How should I dispose of Oral Transmucosal Fentanyl Citrate (OTFC) units when they are no longer needed?**” for proper disposal of OTFC.

Distributed by:

Teva Pharmaceuticals USA, Inc.

Parsippany, NJ 07054

OTFMG-018

©2026 Cephalon, LLC.

Printed in USA

call 1-888-483-8279

**This Medication Guide has been approved by the U.S. Food and Drug Administration. Revised: 1/2026**

### **Package/Label Display Panel**

**NDC 0093-7865-65**

**Oral Transmucosal Fentanyl Citrate (OTFC) CII**

equivalent to **200 mcg** fentanyl base

**Only for patients already taking around-the-clock opioids (narcotics) such as fentanyl or morphine.**

**PATIENTS MUST BE TOLERANT TO AROUND-THE-CLOCK OPIOID THERAPY  
DO NOT SUBSTITUTE OTFC FOR OTHER FENTANYL PRODUCTS**

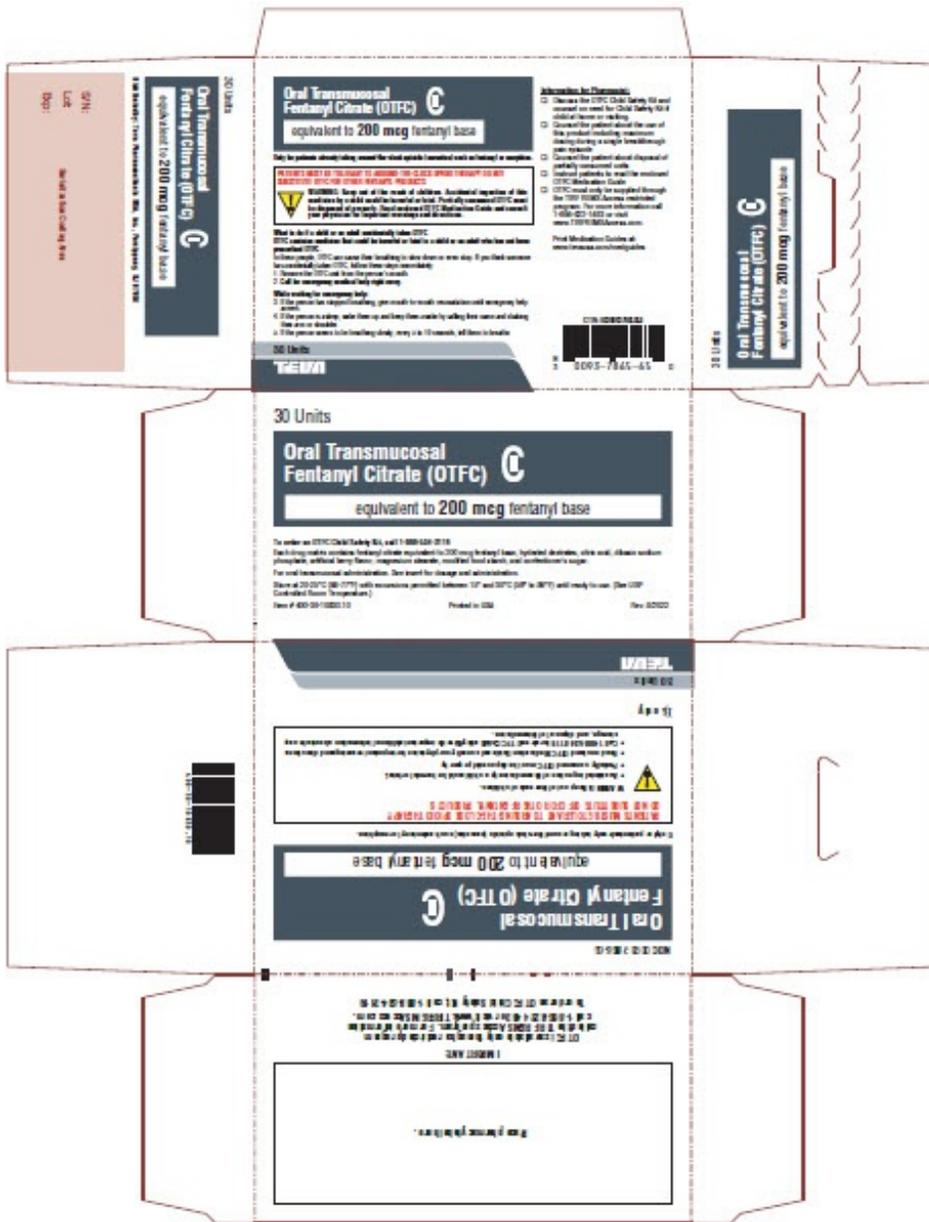
**WARNING: Keep out of the reach of children.**

- **Accidental ingestion of this medicine by a child could be harmful or fatal.**
- **Partially consumed OTFC must be disposed of properly.**
- **Read enclosed OTFC Medication Guide and consult your physician for important warnings and directions.**
- **Call 1-888-534-3119 for a free OTFC Child Safety Kit with important additional information about safe use, storage, and disposal of this medicine.**

**Rx only**

**30 Units**

**TEVA**



**Package/Label Display Panel**

**NDC 0093-7866-65**

**Oral Transmucosal Fentanyl Citrate (OTFC) CII**

equivalent to **400 mcg** fentanyl base

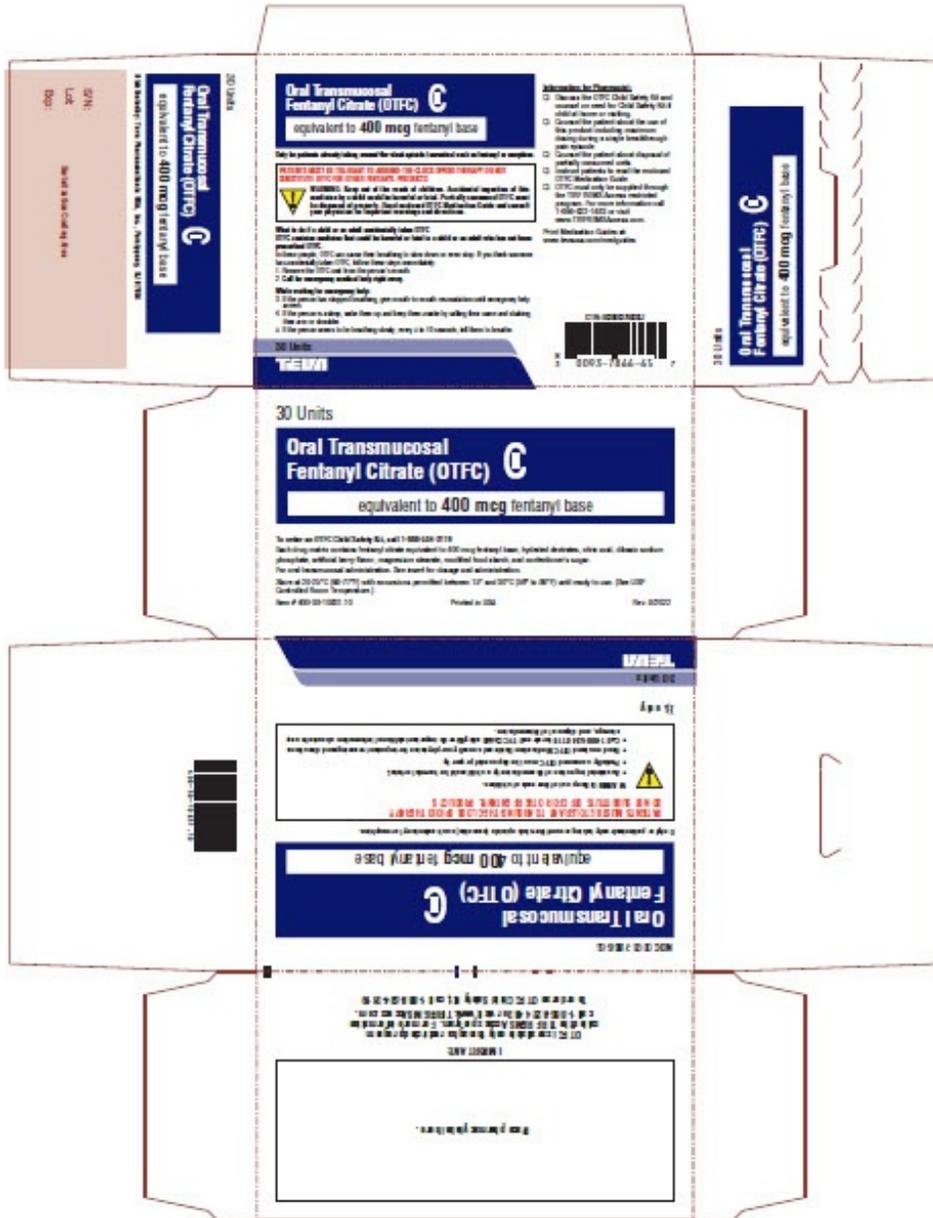
**Only for patients already taking around-the-clock opioids (narcotics) such as fentanyl or morphine.**

**PATIENTS MUST BE TOLERANT TO AROUND-THE-CLOCK OPIOID THERAPY  
DO NOT SUBSTITUTE OTFC FOR OTHER FENTANYL PRODUCTS**

**WARNING: Keep out of the reach of children.**

- **Accidental ingestion of this medicine by a child could be harmful or fatal.**
- **Partially consumed OTFC must be disposed of properly.**
- **Read enclosed OTFC Medication Guide and consult your physician for important warnings and directions.**

- Call 1-888-534-3119 for a free OTFC Child Safety Kit with important additional information about safe use, storage, and disposal of this medicine.  
Rx only  
30 Units  
TEVA



**Package/Label Display Panel**

**NDC 0093-7867-65**

**Oral Transmucosal Fentanyl Citrate (OTFC) CII**  
equivalent to **600 mcg** fentanyl base

**Only for patients already taking around-the-clock opioids (narcotics) such as fentanyl or morphine.**

# PATIENTS MUST BE TOLERANT TO AROUND-THE-CLOCK OPIOID THERAPY

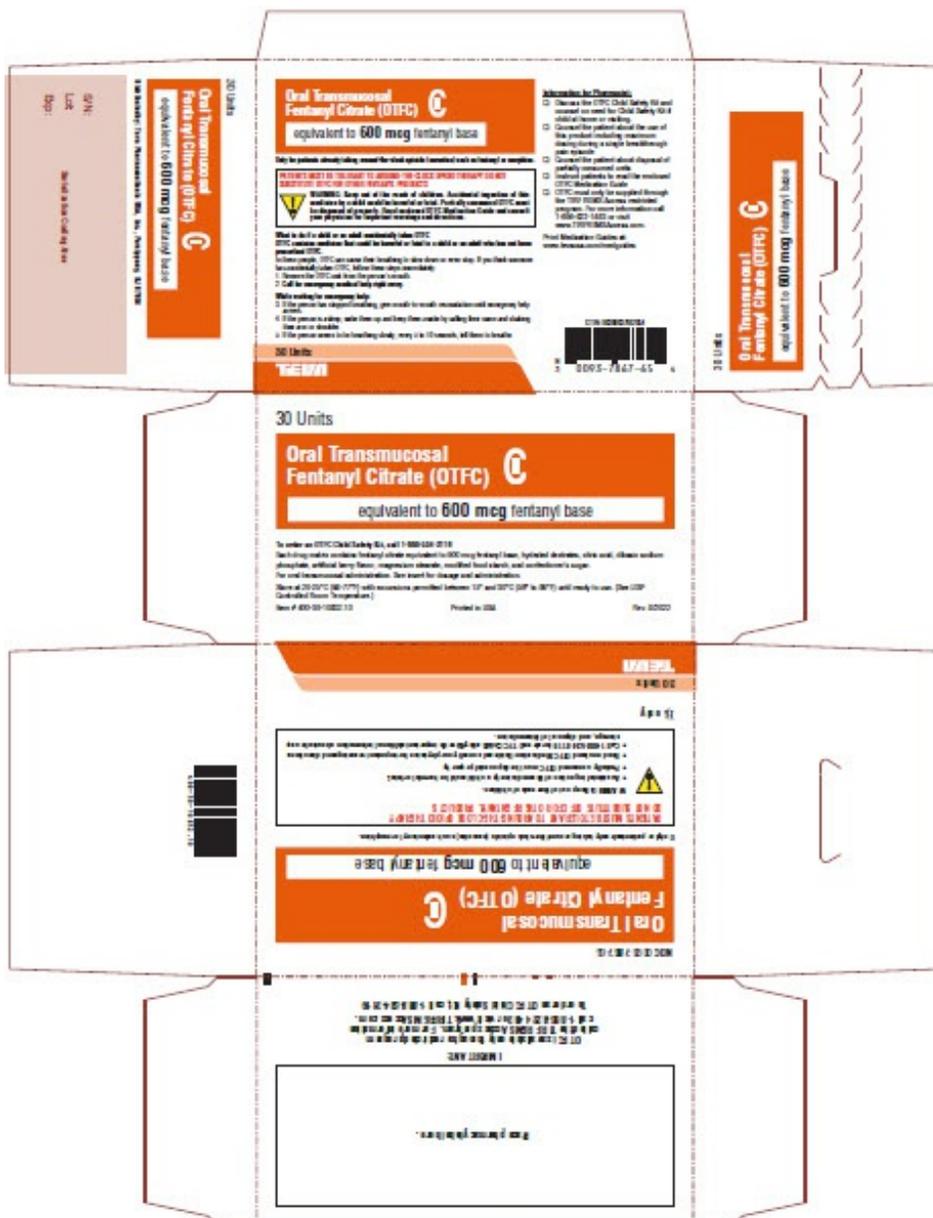
## DO NOT SUBSTITUTE OTFC FOR OTHER FENTANYL PRODUCTS

### WARNING: Keep out of the reach of children.

- Accidental ingestion of this medicine by a child could be harmful or fatal.
- Partially consumed OTFC must be disposed of properly.
- Read enclosed OTFC Medication Guide and consult your physician for important warnings and directions.
- Call 1-888-534-3119 for a free OTFC Child Safety Kit with important additional information about safe use, storage, and disposal of this medicine.

Rx only  
30 Units

TEVA



## **Package/Label Display Panel**

**NDC 0093-7868-65**

**Oral Transmucosal Fentanyl Citrate (OTFC) CII**

equivalent to **800 mcg** fentanyl base

**Only for patients already taking around-the-clock opioids (narcotics) such as fentanyl or morphine.**

**PATIENTS MUST BE TOLERANT TO AROUND-THE-CLOCK OPIOID THERAPY  
DO NOT SUBSTITUTE OTFC FOR OTHER FENTANYL PRODUCTS**

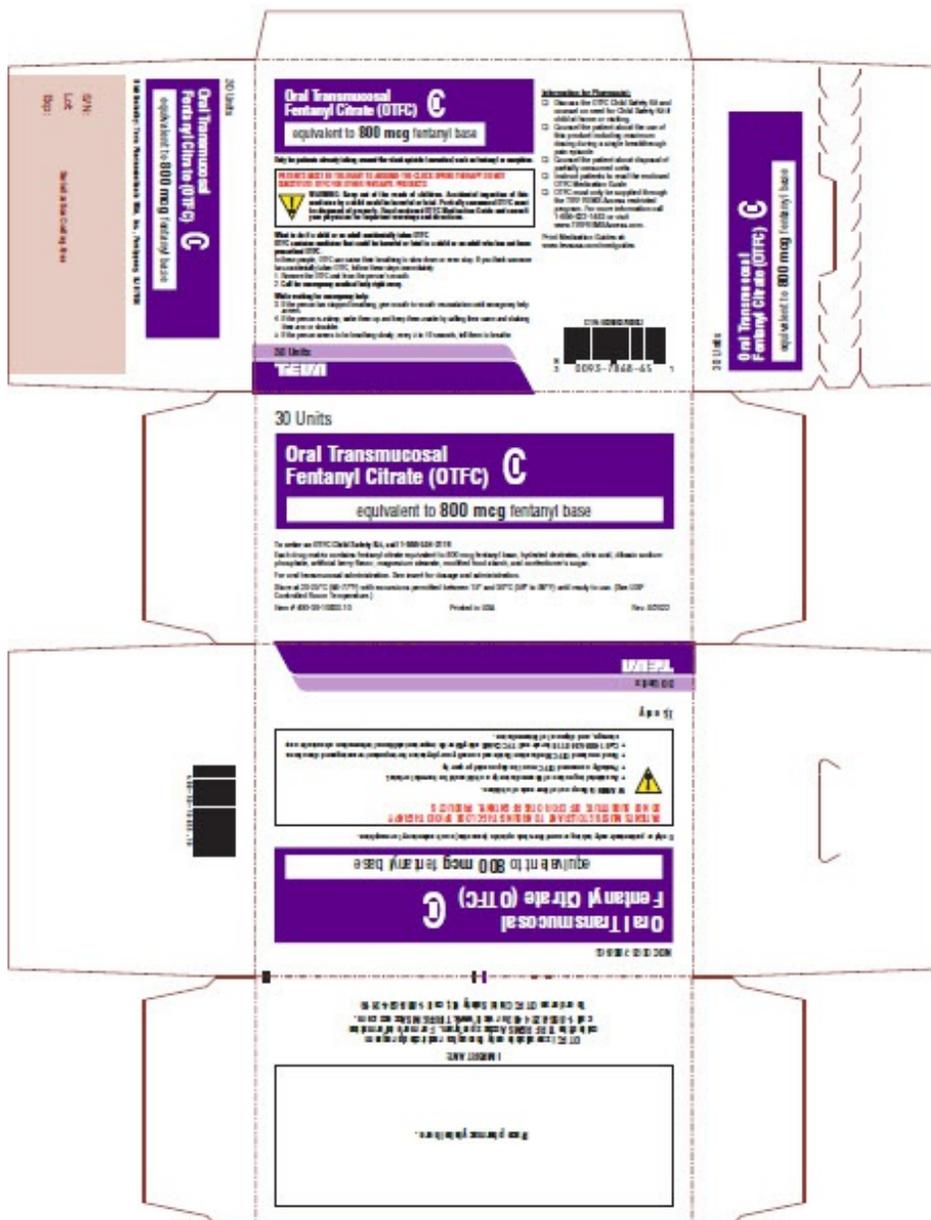
**WARNING: Keep out of the reach of children.**

- **Accidental ingestion of this medicine by a child could be harmful or fatal.**
- **Partially consumed OTFC must be disposed of properly.**
- **Read enclosed OTFC Medication Guide and consult your physician for important warnings and directions.**
- **Call 1-888-534-3119 for a free OTFC Child Safety Kit with important additional information about safe use, storage, and disposal of this medicine.**

**Rx only**

**30 Units**

**TEVA**



**Package/Label Display Panel**

**NDC 0093-7869-65**

**Oral Transmucosal Fentanyl Citrate (OTFC) CII**

equivalent to **1200 mcg** fentanyl base

**Only for patients already taking around-the-clock opioids (narcotics) such as fentanyl or morphine.**

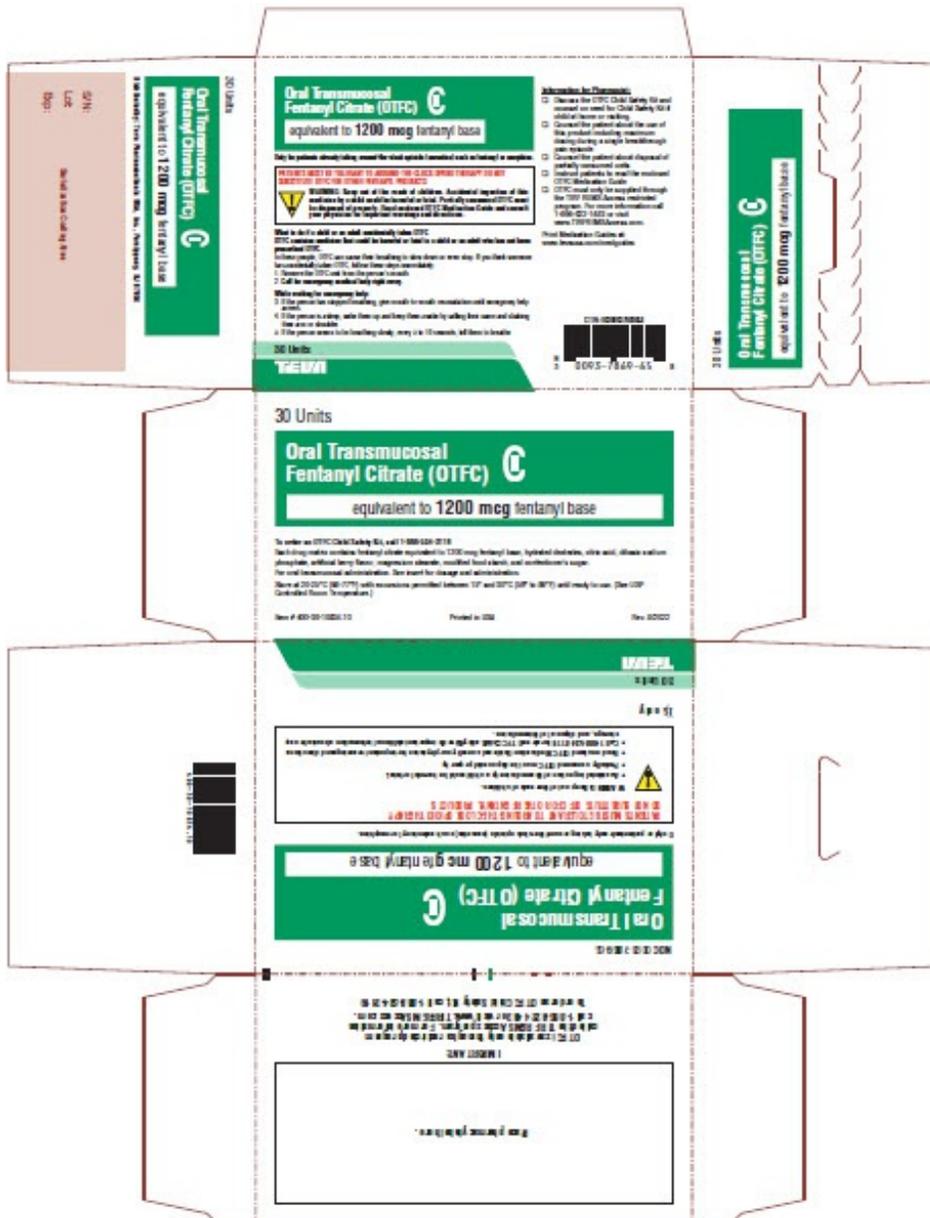
**PATIENTS MUST BE TOLERANT TO AROUND-THE-CLOCK OPIOID THERAPY  
DO NOT SUBSTITUTE OTFC FOR OTHER FENTANYL PRODUCTS**

**WARNING: Keep out of the reach of children.**

- **Accidental ingestion of this medicine by a child could be harmful or fatal.**
- **Partially consumed OTFC must be disposed of properly.**
- **Read enclosed OTFC Medication Guide and consult your physician for important warnings and directions.**
- **Call 1-888-534-3119 for a free OTFC Child Safety Kit with important**

additional information about safe use, storage, and disposal of this medicine.

Rx only  
30 Units  
TEVA



### Package/Label Display Panel

NDC 0093-7870-65

**Oral Transmucosal Fentanyl Citrate (OTFC) CII**

equivalent to **1600 mcg** fentanyl base

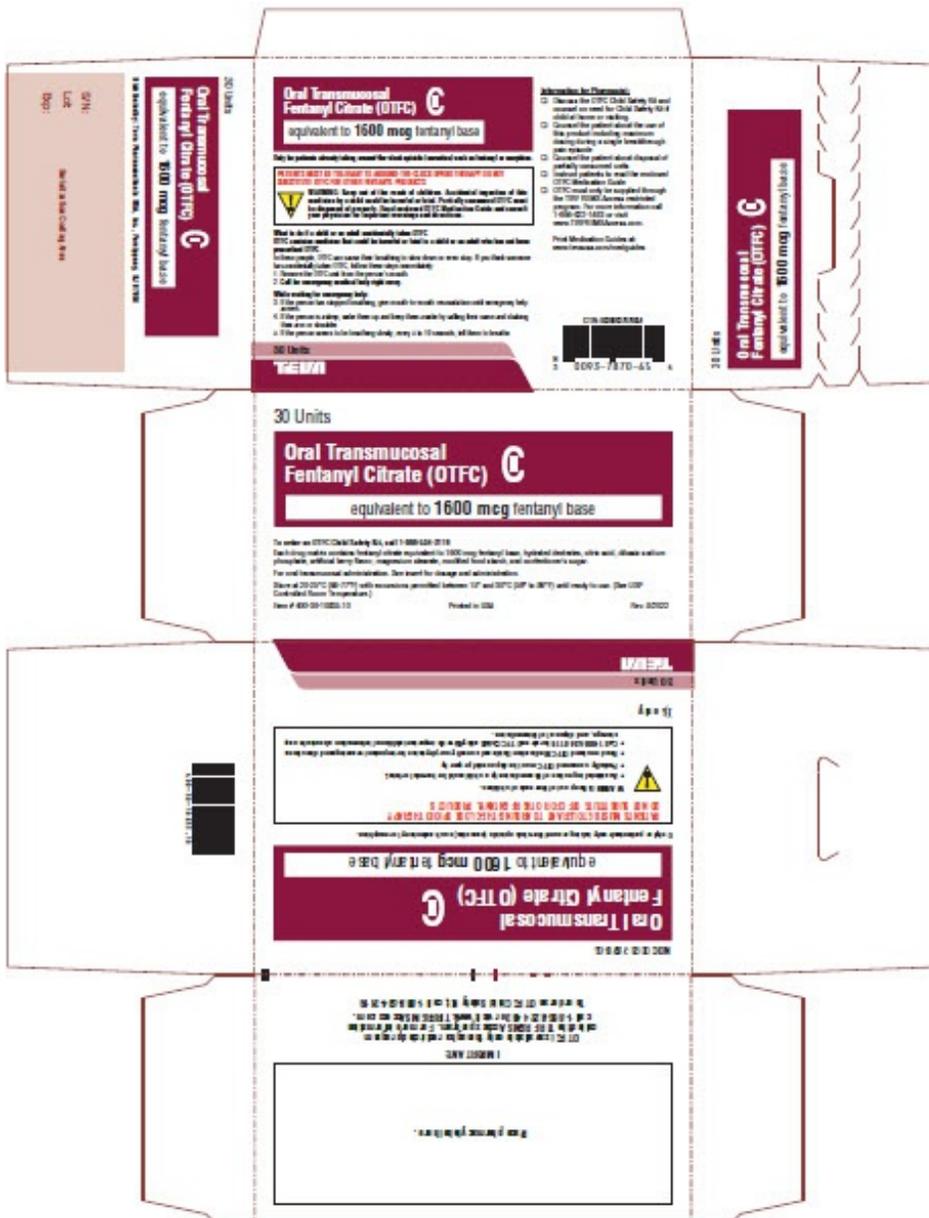
**Only for patients already taking around-the-clock opioids (narcotics) such as fentanyl or morphine.**

**PATIENTS MUST BE TOLERANT TO AROUND-THE-CLOCK OPIOID THERAPY  
DO NOT SUBSTITUTE OTFC FOR OTHER FENTANYL PRODUCTS**

**WARNING: Keep out of the reach of children.**

- Accidental ingestion of this medicine by a child could be harmful or fatal.
- Partially consumed OTFC must be disposed of properly.
- Read enclosed OTFC Medication Guide and consult your physician for important warnings and directions.
- Call 1-888-534-3119 for a free OTFC Child Safety Kit with important additional information about safe use, storage, and disposal of this medicine.

**Rx only**  
**30 Units**  
**TEVA**



**FENTANYL CITRATE**

fentanyl citrate lozenge

**Product Information**

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:0093-7865
<b>Route of Administration</b>	ORAL, TRANSMUCOSAL	<b>DEA Schedule</b>	CII

**Active Ingredient/Active Moiety**

<b>Ingredient Name</b>	<b>Basis of Strength</b>	<b>Strength</b>
<b>FENTANYL CITRATE</b> (UNII: MUN5LYG46H) (FENTANYL - UNII:UF599785JZ)	FENTANYL	200 ug

**Inactive Ingredients**

<b>Ingredient Name</b>	<b>Strength</b>
<b>DEXTRATES</b> (UNII: G263MI44RU)	
<b>ANHYDROUS CITRIC ACID</b> (UNII: XF417D3PSL)	
<b>SODIUM PHOSPHATE, DIBASIC, ANHYDROUS</b> (UNII: 22ADO53M6F)	
<b>MAGNESIUM STEARATE</b> (UNII: 70097M6I30)	
<b>MODIFIED CORN STARCH (1-OCTENYL SUCCINIC ANHYDRIDE)</b> (UNII: 461P5CJN6T)	
<b>SUCROSE</b> (UNII: C151H8M554)	

**Product Characteristics**

<b>Color</b>	white (white to off-white)	<b>Score</b>	no score
<b>Shape</b>	OVAL	<b>Size</b>	20mm
<b>Flavor</b>	BERRY	<b>Imprint Code</b>	FENTANYL;200
<b>Contains</b>			

**Packaging**

<b>#</b>	<b>Item Code</b>	<b>Package Description</b>	<b>Marketing Start Date</b>	<b>Marketing End Date</b>
1	NDC:0093-7865-65	30 in 1 CARTON	12/08/2015	05/31/2026
1	NDC:0093-7865-19	1 in 1 BLISTER PACK; Type 0: Not a Combination Product		

**Marketing Information**

<b>Marketing Category</b>	<b>Application Number or Monograph Citation</b>	<b>Marketing Start Date</b>	<b>Marketing End Date</b>
NDA authorized generic	NDA020747	12/08/2015	05/31/2026

**FENTANYL CITRATE**

fentanyl citrate lozenge

**Product Information**

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:0093-7866
<b>Route of Administration</b>	ORAL, TRANSMUCOSAL	<b>DEA Schedule</b>	CII

### Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
FENTANYL CITRATE (UNII: MUN5LYG46H) (FENTANYL - UNII:UF599785JZ)	FENTANYL	400 ug

### Inactive Ingredients

Ingredient Name	Strength
DEXTRATES (UNII: G263MI44RU)	
ANHYDROUS CITRIC ACID (UNII: XF417D3PSL)	
SODIUM PHOSPHATE, DIBASIC, ANHYDROUS (UNII: 22ADO53M6F)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
MODIFIED CORN STARCH (1-OCTENYL SUCCINIC ANHYDRIDE) (UNII: 461P5CJN6T)	
SUCROSE (UNII: C151H8M554)	

### Product Characteristics

<b>Color</b>	white (white to off-white)	<b>Score</b>	no score
<b>Shape</b>	OVAL	<b>Size</b>	20mm
<b>Flavor</b>	BERRY	<b>Imprint Code</b>	FENTANYL;400
<b>Contains</b>			

### Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0093-7866-65	30 in 1 CARTON	12/08/2015	08/31/2026
1	NDC:0093-7866-19	1 in 1 BLISTER PACK; Type 0: Not a Combination Product		

### Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA authorized generic	NDA020747	12/08/2015	08/31/2026

## FENTANYL CITRATE

fentanyl citrate lozenge

### Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:0093-7866
<b>Route of Administration</b>	ORAL, TRANSMUCOSAL	<b>DEA Schedule</b>	CII

## Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
FENTANYL CITRATE (UNII: MUN5LYG46H) (FENTANYL - UNII:UF599785JZ)	FENTANYL	600 ug

## Inactive Ingredients

Ingredient Name	Strength
DEXTRATES (UNII: G263MI44RU)	
ANHYDROUS CITRIC ACID (UNII: XF417D3PSL)	
SODIUM PHOSPHATE, DIBASIC, ANHYDROUS (UNII: 22ADO53M6F)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
MODIFIED CORN STARCH (1-OCTENYL SUCCINIC ANHYDRIDE) (UNII: 461P5CJN6T)	
SUCROSE (UNII: C151H8M554)	

## Product Characteristics

Color	white (white to off-white)	Score	no score
Shape	OVAL	Size	20mm
Flavor	BERRY	Imprint Code	FENTANYL;600
Contains			

## Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0093-7867-65	30 in 1 CARTON	12/08/2015	07/31/2025
1	NDC:0093-7867-19	1 in 1 BLISTER PACK; Type 0: Not a Combination Product		

## Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA authorized generic	NDA020747	12/08/2015	07/31/2025

## FENTANYL CITRATE

fentanyl citrate lozenge

### Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0093-7868
Route of Administration	ORAL, TRANSMUCOSAL	DEA Schedule	CII

**Active Ingredient/Active Moiety**

Ingredient Name	Basis of Strength	Strength
FENTANYL CITRATE (UNII: MUN5LYG46H) (FENTANYL - UNII: UF599785JZ)	FENTANYL	800 ug

**Inactive Ingredients**

Ingredient Name	Strength
DEXTRATES (UNII: G263MI44RU)	
ANHYDROUS CITRIC ACID (UNII: XF417D3PSL)	
SODIUM PHOSPHATE, DIBASIC, ANHYDROUS (UNII: 22ADO53M6F)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
MODIFIED CORN STARCH (1-OCTENYL SUCCINIC ANHYDRIDE) (UNII: 461P5CJN6T)	
SUCROSE (UNII: C151H8M554)	

**Product Characteristics**

Color	white (white to off-white)	Score	no score
Shape	OVAL	Size	20mm
Flavor	BERRY	Imprint Code	FENTANYL;800
Contains			

**Packaging**

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0093-7868-65	30 in 1 CARTON	12/08/2015	08/31/2026
1	NDC:0093-7868-19	1 in 1 BLISTER PACK; Type 0: Not a Combination Product		

**Marketing Information**

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA authorized generic	NDA020747	12/08/2015	08/31/2026

**FENTANYL CITRATE**

fentanyl citrate lozenge

**Product Information**

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0093-7869
Route of Administration	ORAL, TRANSMUCOSAL	DEA Schedule	CII

**Active Ingredient/Active Moiety**

Ingredient Name	Basis of Strength	Strength
FENTANYL CITRATE (UNII: MUN5LYG46H) (FENTANYL - UNII:UF599785JZ)	FENTANYL	1200 ug

### Inactive Ingredients

Ingredient Name	Strength
DEXTRATES (UNII: G263MI44RU)	
ANHYDROUS CITRIC ACID (UNII: XF417D3PSL)	
SODIUM PHOSPHATE, DIBASIC, ANHYDROUS (UNII: 22ADO53M6F)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
MODIFIED CORN STARCH (1-OCTENYL SUCCINIC ANHYDRIDE) (UNII: 461P5CJN6T)	
SUCROSE (UNII: C151H8M554)	

### Product Characteristics

Color	white (white to off-white)	Score	no score
Shape	OVAL	Size	20mm
Flavor	BERRY	Imprint Code	FENTANYL;1200
Contains			

### Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0093-7869-65	30 in 1 CARTON	12/08/2015	10/31/2025
1	NDC:0093-7869-19	1 in 1 BLISTER PACK; Type 0: Not a Combination Product		

### Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA authorized generic	NDA020747	12/08/2015	10/31/2025

## FENTANYL CITRATE

fentanyl citrate lozenge

### Product Information

Product Type	HUMAN PRESCRIPTION DRUG	Item Code (Source)	NDC:0093-7870
Route of Administration	ORAL, TRANSMUCOSAL	DEA Schedule	CII

### Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
FENTANYL CITRATE (UNII: MUN5LYG46H) (FENTANYL - UNII:UF599785JZ)	FENTANYL	1600 ug

## Inactive Ingredients

Ingredient Name	Strength
DEXTRATES (UNII: G263MI44RU)	
ANHYDROUS CITRIC ACID (UNII: XF417D3PSL)	
SODIUM PHOSPHATE, DIBASIC, ANHYDROUS (UNII: 22ADO53M6F)	
MAGNESIUM STEARATE (UNII: 70097M6I30)	
MODIFIED CORN STARCH (1-OCTENYL SUCCINIC ANHYDRIDE) (UNII: 461P5CJN6T)	
SUCROSE (UNII: C151H8M554)	

## Product Characteristics

Color	white (white to off-white)	Score	no score
Shape	OVAL	Size	20mm
Flavor	BERRY	Imprint Code	FENTANYL;1600
Contains			

## Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0093-7870-65	30 in 1 CARTON	12/08/2015	05/31/2026
1	NDC:0093-7870-19	1 in 1 BLISTER PACK; Type 0: Not a Combination Product		

## Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA authorized generic	NDA020747	12/08/2015	05/31/2026

**Labeler** - Teva Pharmaceuticals USA, Inc. (001627975)

Revised: 1/2026

Teva Pharmaceuticals USA, Inc.