## R.I. Using e-Prescribing Data to Track H1N1

## BY MARY ELLEN SCHNEIDER

Public health officials in Rhode Island are using electronic pharmacy data to track the use of oseltamivir and other antiviral medications being used to treat patients infected with the pandemic influenza A(H1N1) virus.

As part of an ongoing partnership with Surescripts, an electronic prescribing network, all 181 pharmacies in Rhode Island now can send and receive prescription information over a secure network. As a result, pharmacies are able to transmit information to the Rhode Island Department of Health on all antiviral prescriptions written in the state.

At a press briefing, Dr. David Gifford, director of the Rhode Island Department of Health, said prescriptions for antiviral medications provide a good proxy measure for infection with H1N1 virus and are a complement to other surveillance systems such as school absenteeism and emergency department visits.

Additionally, if there are reports of a large volume of H1N1 illness in a community, but not a lot of prescribing of antiviral medication, that could indicate the need for more physician education, Dr. Gifford said. Conversely, if the pharmacy data show a large amount of antiviral prescribing in areas where there is not a lot of H1N1 activity, it could indicate inappropriate prescribing of oseltamivir (Tamiflu) for seasonal influenza, he said.

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The statewide initiative, believed to be the first in the nation, lets pharmacies send data that have been stripped of personal information (other than age and zip code) to the health department on a weekly basis, allowing health officials to track the progress of the outbreak in communities.

## Important Safety Information (contd)

- EMBEDA<sup>™</sup> may impair the mental and/or physical abilities needed to perform potentially hazardous activities such as driving a car or operating machinery. Patients must be cautioned accordingly. Patients should also be warned about the potential combined effects of EMBEDA<sup>™</sup> with other CNS depressants, including other opioids, phenothiazines, sedative/hypnotics, and alcohol
- Agonist/antagonist analgesics (i.e., pentazocine, nalbuphine, butorphanol) should be administered with caution to a patient who has received or is receiving a course of therapy with EMBEDA<sup>™</sup>. In this situation, mixed agonist/antagonist analgesics may reduce the analgesic effect of EMBEDA<sup>™</sup> and/or may precipitate withdrawal symptoms in these patients
- Consuming EMBEDA<sup>™</sup> that has been tampered with by crushing, chewing, or dissolving the extended-release formulation
  can release sufficient naltrexone to precipitate withdrawal in opioid-dependent individuals. Symptoms of withdrawal usually
  appear within five minutes of ingestion of naltrexone and can last for up to 48 hours. Mental status changes can include
  confusion, somnolence, and visual hallucinations. Significant fluid losses from vomiting and diarrhea can require
  intravenous fluid administration. Patients should be closely monitored and therapy with non-opioid medications tailored to
  meet individual requirements
- Care should be taken to use low initial doses of EMBEDA<sup>™</sup> in patients who are not already opioid-tolerant, especially those who are receiving concurrent treatment with muscle relaxants, sedatives, or other CNS active medications
- EMBEDA<sup>™</sup> should not be abruptly discontinued
- Serious adverse reactions that may be associated with EMBEDA<sup>™</sup> therapy in clinical use include: respiratory depression, respiratory arrest, apnea, circulatory depression, cardiac arrest, hypotension, and/or shock
- The common adverse events seen on initiation of therapy with EMBEDA<sup>™</sup> are dose dependent, and their frequency depends on the clinical setting, the patient's level of opioid tolerance, and host factors specific to the individual. They should be expected and managed as part of opioid analgesia. The most frequent of these include drowsiness, dizziness, constipation, and nausea
- Additional common adverse events reported during clinical studies include constipation, nausea, and somnolence
- EMBEDA<sup>™</sup> should be used with great caution and in reduced dosage in patients who are concurrently receiving other central nervous system (CNS) depressants including sedatives, hypnotics, general anesthetics, antiemetics, phenothiazines, other tranquilizers, and alcohol because of the risk of respiratory depression, hypotension, and profound sedation or coma. When such combined therapy is contemplated, the initial dose of one or both agents should be reduced by at least 50%
- EMBEDA<sup>™</sup> may enhance the neuromuscular blocking action of skeletal relaxants and produce an increased degree of respiratory depression
- Monoamine oxidase inhibitors (MAOIs) have been reported to potentiate the effects of morphine anxiety, confusion, and significant depression of respiration or coma. EMBEDA<sup>™</sup> should not be used in patients taking MAOIs or within 14 days of stopping such treatment
- There is an isolated report of confusion and severe respiratory depression when a hemodialysis patient was concurrently administered morphine and cimetidine
- Morphine can reduce the efficacy of diuretics by inducing the release of antidiuretic hormone. Morphine may also lead to acute retention of urine by causing spasm of the sphincter of the bladder, particularly in men with prostatism
- Anticholinergics or other medications with anticholinergic activity when used concurrently with opioid analgesics may result in increased risk of urinary retention and/or severe constipation, which may lead to paralytic ileus

## Indications and Usage

- EMBEDA<sup>™</sup> is an extended-release oral formulation of morphine sulfate and naltrexone hydrochloride indicated for the management of moderate to severe pain when a continuous, around-the-clock opioid analgesic is needed for an extended period of time
- EMBEDA<sup>™</sup> is NOT intended for use as a prn analgesic
- EMBEDA<sup>™</sup> is not indicated for acute/postoperative pain or if the pain is mild or not expected to persist for an extended period of time. EMBEDA<sup>™</sup> is only indicated for postoperative use if the patient is already receiving chronic opioid therapy prior to surgery or if the postoperative pain is expected to be moderate to severe and persist for an extended period of time

Please see Brief Summary of full Prescribing Information, including boxed warning, on the following pages.

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