



IRISH MEDICINES BOARD

**UPDATE ON NATIONAL MONITORING EXPERIENCE WITH
PANDEMIC H1N1 VACCINES**

Suspected Adverse Reactions to Pandemic (H1N1) 2009 Vaccines occurring in Ireland

26 November 2009

The H1N1 vaccines in use in Ireland are Pandemrix and Celvapan. Approximately one million doses of H1N1 vaccines have been distributed in Ireland and an estimated minimum of 200,000 doses have been administered.

Suspected adverse reaction reporting rates are highly variable and are dependent on many factors. Therefore these data cannot be used to determine the frequency of occurrence of adverse reactions to the H1N1 vaccines. Additionally, the use of the two H1N1 vaccines available in Ireland may differ in terms of the extent of use and the patient populations exposed. For these reasons, the data provided in this update should not be used to draw comparisons on the safety of the vaccines.

As of 12 noon on Wednesday 25th November 2009, 368 reports of suspected adverse reactions to the Pandemic H1N1 vaccines (Pandemrix and Celvapan) have been received by the Irish Medicines Board (IMB). A single report may include more than one suspected reaction.

The reports received to date remain consistent with the expected pattern of adverse effects for the pandemic vaccines. The balance of risks and benefits for Celvapan and Pandemrix remains positive.

Pandemrix

The IMB has received 149 adverse reaction reports for Pandemrix. The most frequently reported suspected adverse reactions were injection site reactions (e.g. pain, swelling, redness), gastrointestinal symptoms (e.g. nausea, vomiting, diarrhoea) and flu-like symptoms (e.g. pain, fever, fatigue and swollen glands).

Among the commonly reported reactions were other vaccination-related events which were generally non-serious and resolved without treatment. These included dizziness, syncope (fainting episodes), headache, paraesthesia (pins and needles) and transient limb weakness in the vaccinated limb.

There have been two reports of facial palsy occurring post-vaccination. A causal relationship with vaccination has not been established and investigation of these cases is ongoing.

There have been two reports of seizures, one of which occurred in a patient receiving treatment for epilepsy. The second case was a febrile convulsion in a child with a history of previous febrile convulsions.

The IMB has received fourteen reports of allergic reactions to Pandemrix. Reported symptoms have included rash and dyspnoea (difficulty with breathing) and less frequently urticaria (hives), hypotension (low blood pressure), tachycardia (increased heart rate) and wheezing. Some of the allergic reactions occurred in patients without a history of anaphylactic reactions or known drug/food allergies. Allergic reactions are a recognised

potential adverse reaction. The reports of allergic reactions indicate that not only allergy to substances in the vaccine such as egg may give rise to reactions, but also other forms of allergic tendency appears to contribute to the development of an allergic reaction.

The IMB has received eleven adverse reaction reports associated with the use of Pandemrix in pregnant women. The reactions reported are consistent with those expected with the vaccine and include local injection-site reactions, gastrointestinal symptoms, flu-like symptoms (e.g. fever) and vaccination-related events such as syncope (fainting episodes) and dizziness. All of these reports described adverse effects which only occurred in the mother.

Thirty five suspected adverse reaction reports were associated with use in children and these included injection site reactions, flu-like symptoms and vaccination related events (including pallor and syncope). To date, the IMB has received five reports of allergic reactions in children, including one report of an anaphylactic reaction.

Celvapan

The IMB has received 205 adverse reaction reports for Celvapan. These include injection site reactions, flu-like illness and allergic-type reactions. There have been reports of other recognised potential vaccination-related events which were generally non-serious and included headache, dizziness, syncope (fainting episodes), pins and needles and transient limb weakness in the vaccinated limb. There have also been reports of gastrointestinal symptoms, particularly nausea and vomiting, some of which were serious and required treatment.

The IMB has been made aware of the death of a patient ten days post vaccination with Celvapan. The patient had a number of underlying conditions including complex cardiac disorders and insulin dependent diabetes. There is no evidence of a causal relationship between vaccination and the patient's death. Most people receiving the vaccine have serious and/or chronic underlying medical conditions which put them at greater risk of developing serious complications of swine flu. This is why it is important for these people to be vaccinated as a priority. Over the next few months, many of these patients will naturally suffer an exacerbation of their underlying illness and as a result some may subsequently die from their illness. Such events may coincidentally occur around the time of vaccination and as such, may be reported to the IMB. It is important to bear in mind that this temporal association does not in itself mean that the vaccine was responsible for the event and that the timing may be purely coincidental. All such reports will be fully evaluated by the IMB.

There have been three reports of seizures associated with the use of Celvapan, two of which occurred in patients receiving treatment for epilepsy. The other case was a report of seizure in a patient who experienced pallor and felt faint after vaccination but recovered fully without treatment.

Seventeen reports were associated with the use of Celvapan in pregnant women and included gastrointestinal symptoms, flu-like symptoms (including fever), syncope and other vaccination related events (e. g. anxiety, palpitations, dizziness) and allergic-type reactions. All of these reports describe adverse effects which only occurred in the mother.

Ninety three reports were associated with the use of Celvapan in children and these primarily included non-serious expected reactions such as injection site reactions, gastrointestinal symptoms, flu-like symptoms, skin rashes and vaccination related events (e.g. feeling faint, pallor and syncope). The IMB has received eleven reports of allergic-type reactions in children. There have also been four reports of transient hypotonia in some cases with other symptoms (i.e. post-vaccination events e.g. syncope and/or allergic type reactions).

There have been twenty two reports of suspected allergic reaction to Celvapan. The reported symptomology most commonly included rash, urticaria and pruritis and in a smaller number of cases hypotension, tachycardia and respiratory effects. Serious allergic reactions have been reported in patients without a known history of allergy as well as in patients with a history of allergies or chronic conditions such as asthma and eczema. The IMB has received two reports of suspected anaphylactic reaction to Celvapan. In both cases, symptoms resolved following treatment.

Brand unknown

The vaccine brand was not reported in fourteen cases and follow up to establish which product was used is underway. These include reports of flu-like symptoms, injection site reactions and vaccination-related events (e.g. dizziness).

Advice to Healthcare Professionals

The IMB wishes to remind healthcare professionals that, as with all injectable vaccines, appropriate medical treatment and supervision should always be readily available in case of a serious allergic reaction and possibly a rare anaphylactic event following the administration of the vaccine. An appropriate post-vaccination monitoring period should be observed in line with local guidance and recommendations on vaccination.

Understanding the Data Reported to the IMB

These adverse reaction reports have been submitted to the IMB on a voluntary basis by healthcare professionals and members of the public, either through the online reporting tool available on the IMB website (www.imb.ie), or by post or telephone. This report also contains any Irish reports notified to the IMB by the Marketing Authorisation holders for Pandemrix (GSK) and for Celvapan (Baxter).

Reporters are encouraged to report *suspected* adverse reactions. In other words, the reporter does not have to be sure that the vaccine caused the reaction, a mere suspicion will suffice. Therefore the reports received may be true adverse reactions to the vaccine, they may be events related to the process of vaccination rather than to the specific vaccine itself, or they may be coincidental events which have occurred post-vaccination but which would have occurred anyway even if vaccination had not taken place (e.g. they may be due to an underlying medical condition). More information on Pandemrix and Celvapan, including information on recognised adverse effects, is provided in the production information, copies of which are available on the European Medicines Agency website (<http://www.emea.europa.eu>).