

## **Summary of risk management plan for VARIVAX™ (varicella virus vaccine live [Oka/Merck])**

This is a summary of the risk management plan (RMP) for VARIVAX™. The RMP details important risks of VARIVAX™, how these risks can be minimised, and how more information will be obtained about VARIVAX™'s risks and uncertainties (missing information).

VARIVAX™'s summary of product characteristics (SmPC) and its package leaflet give essential information to healthcare professionals and patients on how VARIVAX™ should be used.

Important new concerns or changes to the current ones will be included in updates of VARIVAX™'s RMP.

### **I. The Medicine and What It Is Used For**

VARIVAX™ is authorised for vaccination against varicella in individuals from 12 months of age (see SmPC for the full indication). It contains varicella virus vaccine live (Oka/Merck) as the active substance and it is given by intramuscular (IM) or subcutaneous (SC) injection.

### **II. Risks Associated with the Medicine and Activities to Minimise or Further Characterise the Risks**

Important risks of VARIVAX™, together with measures to minimise such risks and the proposed studies for learning more about VARIVAX™'s risks, are outlined below.

Measures to minimise the risks identified for medicinal products can be:

- Specific information, such as warnings, precautions, and advice on correct use, in the package leaflet and SmPC addressed to patients and healthcare professionals;
- Important advice on the medicine's packaging;
- The authorised pack size — the amount of medicine in a pack is chosen so to ensure that the medicine is used correctly;
- The medicine's legal status — the way a medicine is supplied to the patient (e.g. with or without prescription) can help to minimise its risks.

Together, these measures constitute *routine risk minimisation* measures.

In addition to these measures, information about adverse reactions is collected continuously and regularly analysed including PSUR assessment so that immediate action can be taken as necessary. These measures constitute *routine pharmacovigilance activities*.

## II.A List of Important Risks and Missing Information

Important risks of VARIVAX™ are risks that need special risk management activities to further investigate or minimise the risk, so that the medicinal product can be safely administered. Important risks can be regarded as identified or potential. Identified risks are concerns for which there is sufficient proof of a link with the use of VARIVAX™. Potential risks are concerns for which an association with the use of this medicine is possible based on available data, but this association has not been established yet and needs further evaluation. Missing information refers to information on the safety of the medicinal product that is currently missing and needs to be collected (e.g. on the long-term use of the medicine);

**Table II.A.1: List of Important Risks and Missing Information**

<b>List of Important Risks and Missing Information</b>	
Important identified risks	<ul style="list-style-type: none"><li>Disseminated disease caused by Oka/Merck vaccine virus strain</li><li>Secondary transmission of Oka/Merck varicella vaccine virus strain in susceptible individuals leading to disseminated disease</li></ul>
Important potential risks	<ul style="list-style-type: none"><li>Congenital varicella syndrome among susceptible women exposed to varicella vaccine</li></ul>
Missing information	None

## II.B Summary of Important Risks

**Table II.B.1: Important Identified Risk: Disseminated Disease Caused by Oka/Merck Vaccine Virus Strain**

Evidence for linking the risk to the medicine	The evidence from the literature and from spontaneous post-marketing reports supports a causal relationship between vaccination with varicella virus vaccine live (Oka/Merck) and disseminated Oka/Merck VZV in immunocompromised or immunocompetent individuals.
Risk factors and risk groups	Immunocompromised patients are at greater risk of disseminated disease caused by vaccination with Oka/Merck varicella virus; however, it has been documented that cases of disseminated disease can also occur in immunocompetent patients. Administration of VARIVAX™ is contraindicated in patients with primary or acquired immunodeficiency states.
Risk minimisation measures	Routine risk minimisation measures Contraindications section, Special Warnings and Precautions for use section and Undesirable Effects section of the Product Information

**Table II.B.2: Important Identified Risk: Secondary Transmission of Oka/Merck Varicella Vaccine Virus Strain in Susceptible Individuals Leading to Disseminated Disease**

Evidence for linking the risk to the medicine	The evidence from the literature and spontaneous post-marketing reports supports a causal relationship between varicella virus vaccine live (Oka/Merck) and secondary transmission of varicella vaccine virus strain in susceptible individuals leading to disseminated disease.
Risk factors and risk groups	Subjects who are theoretically most at risk for secondary transmission of Oka/Merck vaccine-strain VZV leading to disseminated disease are susceptible high-risk individuals including: immunocompromised individuals; pregnant women without documented positive history of chickenpox or laboratory evidence of prior infection; and newborns of mothers without documented positive history of chickenpox or laboratory evidence of prior infection.
Risk minimisation measures	Routine risk minimisation measures Special Warnings and Precautions for use section of the Product Information

**Table II.B.3: Important Potential Risk: Congenital Varicella Syndrome Among Susceptible Women Exposed to Varicella Vaccine**

Evidence for linking the risk to the medicine	The evidence from literature supports a theoretical risk between varicella vaccine and congenital varicella syndrome among susceptible women exposed to varicella vaccine. After 19 years of Registry experience with VARIVAX™ and 8 years of experience with ProQuad™ and ZOSTAVAX™, no cases with features consistent with congenital varicella syndrome have been identified in the cohort of women who received a VZV-containing vaccine during or shortly before pregnancy [Ref. 5.4: 04GJZW]. Secondary transmission to susceptible pregnant women has been discussed above and the characterization of the risk of exposure discussed below will focus on inadvertent VARIVAX™ vaccination of pregnant women.
Risk factors and risk groups	Women inadvertently vaccinated with varicella vaccine 1 month prior to conception or at any time during pregnancy are at risk. CVS may occur in offspring of women who experience varicella following infection with wild-type varicella-zoster virus (VZV) during pregnancy [Ref. 5.4: 03NWFN, 03NWFR]. The risk of CVS is estimated to be approximately 0.4% when maternal infection occurs from conception through the 12th week of gestation, and 2% when infection occurs between the 13-20th week of gestation [Ref. 5.4: 03NWFN]. Case reports of newborns with defects consistent with congenital varicella syndrome have been described with infections as late as the 28th week of gestation [Ref. 5.4: 03RMQG, 04GSLJ].
Risk minimisation measures	Routine risk minimisation measures Contraindications section, Special Warnings and Precautions for use section, and Fertility, Pregnancy and Lactation section of the Product Information

## **II.C Post-Authorisation Development Plan**

### **II.C.1 Studies Which are Conditions of the Marketing Authorisation**

There are no studies which are conditions of the marketing authorisation or specific obligation of VARIVAX™.

### **II.C.2 Other Studies in Post-Authorisation Development Plan**

There are no studies required for VARIVAX™.