cutaneous rash develops within 4–6 weeks of the first or second dose:

- varicella-susceptible pregnant women;
- individuals at high risk of severe varicella, including those with immunodeficiency or those receiving immunosuppressive therapy.

Healthcare workers who develop a generalised papular or vesicular rash on vaccination should avoid contact with patients until the lesions have crusted. Those who develop a localised rash after vaccination should cover the lesions and be allowed to continue working unless in contact with patients at high risk of severe varicella.

▸ **Administration with MMR vaccine** Varicella–zoster and MMR vaccines can be given on the same day or separated by a 4-week minimum interval. When protection is rapidly required, the vaccines can be given at any interval and an additional dose of the vaccine given second may be considered.

- **INTERACTIONS** → Appendix 1: live vaccines
- **SIDE-EFFECTS**

▸ **Uncommon** Cough · drowsiness · increased risk of infection

▸ **Rare or very rare** Abdominal pain · conjunctivitis · Kawasaki disease · seizure · stroke · thrombocytopenia · vasculitis

- **CONCEPTION AND CONTRACEPTION** Avoid pregnancy for 3 months after vaccination.
- **PRESCRIBING AND DISPENSING INFORMATION**

ZOSTAVAX ® Advice in the BNF may differ from that in product literature.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

Powder and solvent for suspension for injection

EXCIPIENTS: May contain Gelatin, neomycin

▸ **Varivax** (Merck Sharp & Dohme Ltd)
Varivax vaccine powder and solvent for suspension for injection 0.5ml vials | 1 vial PoM £30.28 DT = £30.28

▸ **Zostavax** (Merck Sharp & Dohme Ltd)
Zostavax vaccine powder and solvent for suspension for injection 0.65ml pre-filled syringes | 1 pre-filled disposable injection PoM £99.96 DT = £99.96

Powder and solvent for solution for injection

EXCIPIENTS: May contain Neomycin

▸ **Varilrix** (GlaxoSmithKline UK Ltd)
Varilrix vaccine powder and solvent for solution for injection 0.5ml vials | 1 vial PoM £27.31 DT = £27.31

F 1379

Yellow fever vaccine, live

22-May-2019

- **INDICATIONS AND DOSE**

Immunisation against yellow fever

▸ BY DEEP SUBCUTANEOUS INJECTION

▸ Child 6–8 months (administered on expert advice): Infants under 9 months should be vaccinated only if the risk of yellow fever is high and unavoidable (consult product literature or local protocols)

▸ Child 9 months–17 years: 0.5 mL for 1 dose

▸ Adult: 0.5 mL for 1 dose

IMPORTANT SAFETY INFORMATION

MHRA/CHM ADVICE (UPDATED NOVEMBER 2019): YELLOW FEVER VACCINE: STRONGER PRECAUTIONS IN PEOPLE WITH WEAKENED IMMUNITY AND IN THOSE AGED 60 YEARS OR OLDER

The yellow fever vaccine (*Stamaril*®) has been associated with the very rare, life-threatening reactions viscerotropic disease (YEL-AVD) and neurotropic disease (YEL-AND), which both resemble yellow fever infection. It must not be given to patients who have had a thymectomy, who are taking immunosuppressive or immunomodulating biological drugs, or who have a first-degree family history of YEL-AVD or YEL-AND following vaccination that was unrelated to a known medical risk factor. In patients aged 60 years and older, the vaccine should only be administered when there is a significant and unavoidable risk of acquiring yellow fever infection. It must only be administered by healthcare professionals specifically trained in the benefit-risk evaluation of yellow fever vaccine. Healthcare professionals must inform patients and carers about the early signs and symptoms of YEL-AVD and YEL-AND, and advise them to seek urgent medical attention if they occur; the manufacturer's patient information leaflet should also be provided. Healthcare professionals administering vaccines should consult information in the YF Vaccine Centre code of practice and strengthen protocols and checklists to avoid inappropriate administration.

- **CONTRA-INDICATIONS** Children under 6 months · history of thymus dysfunction
- **CAUTIONS** Individuals over 60 years—greater risk of vaccine-associated adverse effects

CAUTIONS, FURTHER INFORMATION

▸ **Administration with MMR vaccine** Yellow fever and MMR vaccines should not be administered on the same day; there should be a 4-week minimum interval between the vaccines. When protection is rapidly required, the vaccines can be given at any interval and an additional dose of MMR may be considered.

- **INTERACTIONS** → Appendix 1: live vaccines
- **SIDE-EFFECTS**

▸ **Common or very common** Asthenia · crying (in children) · drowsiness (in children)

▸ **Uncommon** Abdominal pain

▸ **Rare or very rare** Rhinitis · yellow fever vaccine-associated neurotropic disease · yellow fever vaccine-associated viscerotropic disease

▸ **Frequency not known** Angioedema · influenza like illness · paraesthesia

SIDE-EFFECTS, FURTHER INFORMATION Very rare vaccine-associated adverse effects may occur, such as viscerotropic disease (yellow-fever vaccine-associated viscerotropic disease, YEL-AVD), a syndrome which may include metabolic acidosis, muscle and liver cirrhosis, and multi-organ failure. Neurological disorders (yellow fever vaccine-associated neurotropic disease, YEL-AND) such as encephalitis have also been reported. These very rare adverse effects usually occur after the first dose of yellow fever vaccine in those with no previous immunity. Increased risk of fatal reactions reported in patients aged 60 years and older and those who are immunosuppressed.

- **ALLERGY AND CROSS-SENSITIVITY** Yellow fever vaccine should only be considered under the guidance of a specialist in individuals with evidence of previous anaphylactic reaction to egg.
- **PREGNANCY** Live yellow fever vaccine should not be given during pregnancy because there is a theoretical risk of fetal infection. Pregnant women should be advised not to travel to areas at high risk of yellow fever. If exposure cannot be avoided during pregnancy, then the vaccine should be given if the risk from disease in the mother outweighs the risk to the fetus from vaccination.
- **BREAST FEEDING** Avoid; seek specialist advice if exposure to virus cannot be avoided.

- **MEDICINAL FORMS** There can be variation in the licensing of different medicines containing the same drug.

Powder and solvent for suspension for injection

▸ **Stamaril** (Sanofi Pasteur)
Stamaril vaccine powder and solvent for suspension for injection 0.5ml vials | 1 vial PoM £39.72 DT = £39.72