Spleen Australia
Vaccines recommended for adults (>18 years) with asplenia/hyposplenism
who have not previously been vaccinated

***May 2016***

**Give initial vaccines 7 – 14 days prior to elective splenectomy or at least 7 days after emergency splenectomy.**

Verbal consent should be obtained prior to administration of vaccines.

### Vaccine Abbreviations

<table>
<thead>
<tr>
<th>Vaccine Brand name</th>
<th>Type of vaccine</th>
<th>Abbreviation</th>
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<tbody>
<tr>
<td>Synflorix</td>
<td>10 valent pneumococcal conjugate vaccine</td>
<td>10vPCV</td>
</tr>
<tr>
<td>Prevenar 7 or 13</td>
<td>7 or 13 valent pneumococcal conjugate vaccine</td>
<td>7vPCV or 13vPCV</td>
</tr>
<tr>
<td>Pneumovax 23</td>
<td>23 valent pneumococcal polysaccharide vaccine</td>
<td>23vPPV</td>
</tr>
<tr>
<td>Menveo or Menactra or Nimenrix</td>
<td>(Conjugate ACWY) Quadrivalent meningococcal vaccine</td>
<td>4MenCV</td>
</tr>
<tr>
<td>Menjugate or NeisVac-C or Meningitec</td>
<td>Meningococcal C conjugate vaccine</td>
<td>MenCCV</td>
</tr>
<tr>
<td>Merck or Menomune</td>
<td>(Polysaccharide ACWY) Quadrivalent meningococcal vaccine</td>
<td>4MenPV</td>
</tr>
<tr>
<td>Bexsero</td>
<td>Meningococcal B-conjugate vaccine</td>
<td>MenB</td>
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For more information on @, #, ø and + please refer to page 3 of this document.

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- **Organism prevented**
  - Pneumococcus
  - Meningococcus
  - Haemophilus influenzae type b
  - Influenza

- **Previous vaccines**
  - No prior vaccine: See PAGE 1
  - Polysaccharide (Pneumovax 23)
  - Conjugate (7 or 10 valent) (Prevenar 7, Synflorix)

- **Follow up vaccines**
  - Conjugate @ (Prevenar 13) 5 years from previous 23vPPV #
  - Conjugate ACWY (Menveo, Menactra, Nimenrix) 8 weeks
  - Polysaccharide (Pneumovax 23) 5 years

- **Revaccinations**
  - Polysaccharide # (Pneumovax 23) 0.5mL IM or SC
  - Conjugate ACWY ø (Menveo, Menactra, Nimenrix) 0.5mL IM (Every 5 years)

- **No prior vaccine (including no prior *meningococcal B* vaccine) see PAGE 1**
  - Conjugate C (NeisVac-C, Menjugate, Meningitec) > 8 weeks
  - Polysaccharide ACWY (Mencevax, Menomune) > 2 years
  - Conjugate ACWY (Menveo, Menactra, Nimenrix) 8 weeks

- **No revaccination required**
  - Hib (Liquid PedvaxHIB, Hiberix)
  - Quadrivalent Influenza vaccine

- **Revaccinations**
  - Hib (Liquid PedvaxHIB, Hiberix) No revaccination required

**Antibiotic Prophylaxis**

1. Oral amoxycillin 250mg once daily OR phenoxymethyl penicillin (penicillin V) 250mg twice daily
2. Penicillin allergy* – roxithromycin 150 mg once daily or erythromycin 250 mg once daily (*If penicillin allergy not confirmed seek specialist advice)
3. Duration - Immunocompromised patients - lifelong; otherwise healthy patients - recommend daily antibiotics for at least three years, or lifelong
4. Provide emergency antibiotics (see below) irrespective of prophylaxis

**Emergency plan**

Emergency supply of antibiotic - all patients (except if penicillin allergic) amoxycillin 3 gram (6 X 500 mg capsules) have at home and take all capsules at once if signs of bacterial infection occur especially if not able to receive prompt medical review.

Penicillin allergy – increase roxithromycin to 300 mg a day or erythromycin 1 gram four times a day

Possible symptoms of serious bacterial infection include fever, shivers, shakes, chills and/or vomiting/diarrhoea. Patients with these symptoms should take emergency antibiotics and consult a doctor or present at local hospital emergency department as soon as possible.

**Administering vaccines and costs**

- It is safe to give all vaccines at the same time, in different injection sites. If a patient has a bleeding disorder and there is a concern about giving vaccinations delay administration until corrected consult with treating physician or contact Spleen Australia.
- The newer vaccines (Prevenar 13, Menveo/Menactra/Nimenrix & Bexsero) are expensive and not funded by the government, so compare costs with local pharmacies to get best price

**ο Pneumococcal vaccinations**

- **13vPCV (Prevenar 13)** is a once only vaccine, currently no boosters of this vaccine is required. 13vPCV (Prevenar 13) is 0.5mL and administered IM.
- **THREE (3) doses of 23vPPV in total is recommended in adulthood. A second dose (first revaccination) of 23vPPV is recommended at 5 years, and a third dose (second revaccination) of 23vPPV is to be given at age 65 years (age ≥50 years for Indigenous adults). If asplenia is newly diagnosed at age ≥65 years (age ≥50 years for Indigenous adults) patients should receive three vaccines 5 years apart. 23vPPV (Pneumovax 23) is 0.5mL and administered IM or SC.
- If 23vPPV is due and patient not had a 13vPCV, give 13vPCV and then 8 weeks later give 23vPPV.

**ο Meningococcal ACWY CONJUGATE and B Recombinant vaccines**

- **Menveo, Menactra, Nimenrix** are licensed in patients up to 55 years. Despite the lack of studies, Spleen Australia recommends the use of these vaccines for patients >55 years due to the increased risk of meningococcal disease. Booster doses of these vaccines have been recommended every 5 years. These vaccines replace the meningococcal polysaccharide ACWY and C conjugate vaccines. 4vMenCV - Conjugate ACWY (Menveo/Menactra/Nimenrix) is 0.5mL and administered IM.
- **MenBV** (Bexsero) can be given at the same time as the 4vMenCV vaccine. **MenBV (Bexsero)** is 0.5mL and given IM. Spleen Australia supports the use of Bexsero in patients > 50 years

**Chemo/Radiotherapy Immunosuppression**

As a guide, vaccination should be undertaken no later than 2 weeks before immunosuppressive therapy and delayed at least 3 to 6 months after chemotherapy or radiotherapy or until adequate immunological function. Contact patient's specialist physician or Spleen Australia to discuss specific individual scenarios.

**Patient education**

1. Patient and family/friends should know about increased lifelong risk of bacterial infections and prevention strategies (antibiotics/vaccinations/doctor review)
2. Patients should not worry about minor viral infections (eg cold symptoms without fever or other systemic symptoms)
3. Animal bites/scratches - should be reviewed by a doctor. Animals carry some bacteria on their claws and teeth; a course of antibiotics may be required.
4. Dental procedures do not require additional antibiotic cover unless they have an associated condition
5. Pregnancy or breastfeeding - underlying risk for overwhelming sepsis is not increased but timing of recommended vaccinations for asplenia/hyposplenism need to be discussed with GP

6. Spleen Australia dispenses an "education kit" with many items including vaccination cards & alerts. Patients & their GPs receive an annual newsletter that contains medical updates.

**Blood tests**

(i) FBE & film – can demonstrate lack of splenic function as shown by Howell-Jolly bodies on film, (ii) IgM memory B cell marker tests are available in Victoria & QLD – contact Spleen Australia

**Travel Recommendations**

1. Seek medical advice before travel. Contact your GP or seek advice from a travel doctor.
2. Where malaria is endemic, anti-malarials, insect repellent and barrier precautions should be recommended
3. Ensure meningococcal vaccination is current for travel to high incidence countries. For travellers over 9 months of age meningococcal ACWY conjugate vaccine (Menveo/Menactra) is the preferred vaccine (Travel Medicine 3rd Edition, Melbourne 2011)

**Alerts**

Patient should be encouraged to wear or carry a medi-alert medallion or wallet card at all times. Patient's medical notes should display a medical alert sticker.

**Children**

Please refer to Spleen Australia website https://spleen.org.au/VSR/information.html