Spleen Australia
Vaccines recommended for adults (>18 years) with asplenia/hyposplenism who have not previously been immunised MAY 2015

Give 1st dose 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

### Organism prevented

- **Pneumococcus**
  - Primary immunisation: Conjugate @ (Prevenar 13) 0.5mL IM
  - Revaccinations: Polysaccharide (Pneumovax 23) 0.5mL IM/SC

- **Meningococcus**
  - AND
  - Primary immunisation: Conjugate ACWY (Menveo, Menactra, Nimenrix) 0.5mL IM
  - Revaccinations: Conjugate ACWY (Menveo, Menactra, Nimenrix) 0.5mL IM

- **Haemophilus influenzae type b**
  - Primary immunisation: Conjugate Hib (Liquid PedvaxHIB, Hiberix) 0.5mL IM

- **Influenza**
  - Primary immunisation: Trivalent Influenza vaccine
  - Revaccinations: Each year (April/May) Trivalent Influenza vaccine

### Vaccine Abbreviations

<table>
<thead>
<tr>
<th>Vaccine Brand name</th>
<th>Type of vaccine</th>
<th>Abbreviation</th>
</tr>
</thead>
<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>7v 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 conjugate vaccine</td>
<td>4vMenCV</td>
</tr>
<tr>
<td>Menjugate or NeisVac-C or Meningitec</td>
<td>Meningococcal C conjugate vaccine</td>
<td>MenCv</td>
</tr>
<tr>
<td>Menomune or Menomune</td>
<td>(Polysaccharide ACWY) Quadrivalent meningococcal polysaccharide vaccine</td>
<td>4vMenPV</td>
</tr>
<tr>
<td>Bexsero</td>
<td>Meningococcal B recombinant vaccine</td>
<td>4CMenB</td>
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For more information on @, #, ø and + please refer to page 3 of this document
Vaccines recommended for adults (>18 years) with asplenia/hyposplenism who have previously been immunised

Give 1st dose 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

Organism prevented

- Pneumococcus
  - Polysaccharide (Pneumovax 23)
  - Conjugate (7 or 10 valent)(Prevenar 13, Synflorix)
- Meningococcus
  - Conjugate C (NeisVac-C, Menjugate, Meningitec)
  - Polysaccharide ACWY (Mencevax, Menomune)
- Haemophilus influenzae type b
  - Hib (Liquid PedvaxHIB, Hiberix)
- Influenza
  - Trivalent Influenza vaccine

Previous vaccines

- No prior vaccine: See PAGE 1
- Conjugate @ (Prevenar 13)
- Conjugate @ (Prevenar 7, Synflorix)
- Conjugate @ (Prevenar 13)
- Conjugate ACWY (Mencevax, Menactra, Nimenrix)

Follow up vaccines

- Polysaccharide # (Pneumovax 23) 0.5mL IM or SC
- Conjugate ACWY ø (Mencevax, Menactra, Nimenrix)

Revaccinations

- Polysaccharide # (Pneumovax 23) 0.5mL IM or SC

- Conjugate ACWY ø (Mencevax, Menactra, Nimenrix)

No prior vaccine:

- See PAGE 1

Verbal consent should be obtained prior to administration of vaccines
Antibiotic Prophylaxis

1. Oral amoxicillin 250mg once daily OR phenoxymethyl penicillin (penicillin V) 250mg twice daily
2. Penicillin allergy – roxithromycin 150mg once daily or erythromycin 250mg once daily
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) amoxicillin 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 or contact Spleen Australia or a haematology registrar.

- The newer vaccines (Prevenar 13, Menevo/Menactra/Nimenrix & Bexsero) are expensive, so compare costs with local pharmacies to get best price

@ # 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

- Menactra/Menevo/Nimenrix are only 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 this vaccine have been recommended every 5 years and these vaccines are replacing the meningococcal polysaccharide ACWY and C conjugate vaccines. 4vMenCV - Conjugate ACWY (Menevo/Menactra/Nimenrix) is 0.5mL and administered IM.

- The new 4CMenB vaccine (Bexsero) can be given at the same time as the 4vMenCV vaccine but is not funded by the government. 4CMenB (Bexsero) is 0.5mL and given IM.

Chemo/Radiotherapy

Immunosuppression

As a guide, immunisation 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 need to be discussed with GP

6. Spleen Australia dispenses "education kits" that contains many items including immunisation cards & alerts. All registered patients & their GPs receive an annual newsletter that contains medical updates and the latest information on staying healthy.

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 – contact Spleen Australia

Travel Recommendations

1. Seek medical advice before travel. Contact your GP or seek advice from a registered 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 (Menevo/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 Royal Children's Hospital Melbourne (Vaccine Education Centre) for guideline [www.mvec.vic.edu.au/immunisation-references/aspleniahypospleniala](http://www.mvec.vic.edu.au/immunisation-references/aspleniahypospleniala)