

## Supplementary material

### Evidence categories and strength of recommendations

| Category | Evidence  |
|----------|---|
| Ia       | Meta-analysis of randomised controlled trials   |
| Ib       | Randomised controlled trials  |
| II       | Prospective controlled intervention study without randomization                             |
| III      | Descriptive/analytic study (including case-control, cross-sectional, case series)           |
| IV       | Expert committee reports or opinion or clinical experience of respected authorities or both |
| Strength | Based on  |
| A        | Category I evidence   |
| B        | Category II evidence or extrapolated recommendations from category I evidence               |
| C        | Category III evidence or extrapolated recommendations from category I or II evidence        |
| D        | Category IV evidence or extrapolated recommendations from category II or III evidence       |

### Search strategy

#### Pubmed MeSH

("Lupus Erythematosus, Systemic" [Mesh] OR "Antiphospholipid Syndrome" [Mesh] OR "Arthritis, Rheumatoid" [Mesh] OR "Still's Disease, Adult-Onset" [Mesh] OR "Scleroderma, Systemic" [Mesh] OR "Sjogren's Syndrome" [Mesh] OR "Mixed Connective Tissue Disease" [Mesh] OR "Polychondritis, Relapsing" [Mesh] OR "Giant Cell Arteritis" [Mesh] OR "Polymyalgia Rheumatica" [Mesh] OR "Takayasu Arteritis" [Mesh] OR "Polyarteritis Nodosa" [Mesh] OR "microscopic polyangiitis" OR "Granulomatosis with Polyangiitis" [Mesh] OR "Churg-Strauss Syndrome" [Mesh] OR "Behcet Syndrome" [Mesh] OR "Anti-Glomerular Basement Membrane Disease" [Mesh] OR "Cryoglobulinemia" [Mesh] OR "Polymyositis" [Mesh] OR "Dermatomyositis" [Mesh] OR "Myositis, Inclusion Body" [Mesh] OR "anti-synthetase syndrome" OR "eosinophilic myositis" OR "Fasciitis" [Mesh] OR "Spondylarthropathies" [Mesh] OR "periodic fever syndrome") AND ("BCG Vaccine" [Mesh] OR "Cholera Vaccines" [Mesh] OR "Diphtheria-Tetanus-Pertussis Vaccine" [Mesh] OR "Diphtheria-Tetanus-acellular Pertussis Vaccines" [Mesh] OR "Diphtheria Toxoid" [Mesh] OR "Diphtheria-Tetanus Vaccine" [Mesh] OR "Hepatitis A Vaccines" [Mesh] OR "Hepatitis B Vaccines" [Mesh] OR "Haemophilus influenzae type b polysaccharide vaccine" [Substance] OR "Haemophilus influenzae type b-polysaccharide vaccine-diphtheria toxoid conjugate" [Substance] OR "DTPa-HBV-IPV combined vaccine" [Substance] OR "Hib-MenCY-TT vaccine" [Substance] OR "Haemophilus

influenzae-type b polysaccharide-Neisseria meningitidis outer membrane protein conjugate vaccine" [Substance] OR "Haemophilus influenzae type-b polysaccharide-pertussis vaccine" [Substance] OR "Papillomavirus Vaccines" [Mesh] OR "Influenza Vaccines" [Mesh] OR "Japanese Encephalitis Vaccines" [Mesh] OR "Measles Vaccine" [Mesh] OR "Mumps Vaccine" [Mesh] OR "Meningococcal Vaccines" [Mesh] OR "Pertussis Vaccine" [Mesh] OR "Pneumococcal Vaccines" [Mesh] OR "Rubella Vaccine" [Mesh] OR "Tetanus Toxoid" [Mesh] OR "Diphtheria-Tetanus Vaccine" [Mesh] OR "Diphtheria-Tetanus-Pertussis Vaccine" [Mesh] OR "Tick-Borne Encephalitis vaccine" [All Fields] OR "Typhoid-Paratyphoid Vaccines" [Mesh] OR "Herpes Zoster Vaccine" [Mesh] OR "Yellow Fever Vaccine" [Mesh] OR "Mycobacterium tuberculosis" [Mesh] OR "Tuberculosis" [Mesh] OR "Vibrio cholerae" [Mesh] OR "Cholera" [Mesh] OR "Corynebacterium diphtheriae" [Mesh] OR "Diphtheria" [Mesh] OR "Hepatitis A" [Mesh] OR "Hepatitis A virus" [Mesh] OR "Hepatitis B" [Mesh] OR "Hepatitis B virus" [Mesh] OR "Haemophilus influenzae type b" [Mesh] OR "Human papillomavirus 6" [Mesh] AND [All Fields] OR "Human papillomavirus 18" [Mesh] OR "Human papillomavirus 11" [Mesh] OR "Human papillomavirus 16" [Mesh] OR "Influenza, Human" [Mesh] OR "Influenza A Virus, H1N1 Subtype" [Mesh] OR "Influenza B virus" [Mesh] OR "Influenza A virus" [Mesh] OR "Influenza A Virus, H3N2 Subtype" [Mesh] OR "Encephalitis,

Japanese" [Mesh] OR "Encephalitis Virus, Japanese" [Mesh] OR "Measles" [Mesh] OR "Measles virus" [Mesh] OR "Mumps" [Mesh] OR "Mumps virus" [Mesh] OR "Neisseria meningitidis" [Mesh] OR "Whooping Cough" [Mesh] OR "Bordetella pertussis" [Mesh] OR "Poliomyelitis" [Mesh] OR "Poliovirus" [Mesh] OR "Rabies" [Mesh] OR "Rabies virus" [Mesh] OR "Rubella" [Mesh] OR "Rubella virus" [Mesh] OR "Streptococcus pneumoniae" [Mesh] OR "Pneumococcal Infections" [Mesh] OR "Tetanus" [Mesh] OR "Clostridium tetani" [Mesh] OR "Encephalitis Viruses, Tick-Borne" [Mesh] OR "Encephalitis, Tick-Borne" [Mesh] OR "Typhoid Fever" [Mesh] OR "Salmonella typhi" [Mesh] OR "Encephalitis, Varicella Zoster" [Mesh] OR "Herpes Zoster" [Mesh] OR "Yellow Fever" [Mesh] OR "Yellow fever virus" [Mesh] AND (("2009/10/01" [PDAT]: "2017/05/11" [PDAT]) AND "humans" [MeSH Terms] AND English [lang] AND ("adolescent" [MeSH Terms] OR "adult" [MeSH Terms]))

#### Pubmed keywords

("Lupus Erythematosus" [All Fields] AND "Systemic" [All Fields]) OR ("Antiphospholipid Syndrome" [All Fields]) OR ("Arthritis" [All Fields] AND "Rheumatoid" [All Fields]) OR ("Still's Disease, Adult-Onset" [All Fields]) OR ("Scleroderma Systemic" [All Fields]) OR ("Sjogren's Syndrome" [All Fields]) OR ("Mixed Connective Tissue Disease" [All Fields]) OR ("Polychondritis, Relapsing" [All Fields]) OR ("Giant Cell Arteritis" [All Fields]) OR ("Polymyalgia Rheumatica" [All Fields]) OR ("Takayasu Arteritis" [All Fields]) OR ("Polyarteritis Nodosa" [All Fields]) OR ("microscopic polyangiitis" [All Fields]) OR ("Granulomatosis with Polyangiitis" [All Fields]) OR ("Churg-Strauss Syndrome" [All Fields]) OR ("Behcet Syndrome" [All Fields]) OR ("Anti-Glomerular Basement Membrane Disease" [All Fields]) OR ("Cryoglobulinemia" [All Fields]) OR ("Polymyositis" [All Fields]) OR ("Dermatomyositis" [All Fields]) OR ("Myositis, Inclusion Body" [All Fields]) OR ("anti-synthetase syndrome" [All Fields]) OR ("eosinophilic myositis" [All Fields]) OR ("Fasciitis" [All Fields]) OR ("Spondylarthropathies" [All Fields]) OR ("periodic fever syndrome" [All Fields]) AND ("vaccines" [All Fields] OR "vaccine" [All Fields] OR "vaccines" [All Fields] OR "vaccination" [All Fields]) AND ("2016/01/01" [PDAT] : "2017/05/11" [PDAT])