Supplementary Material – Serious Infection Categorised According to Medical Dictionary for Regulatory Activities terminology

**Lower Respiratory Tract Infections**
- Aspergilloma
- Aspergillosis
- Bronchopulmonary aspergillosis allergic
- Mycobacterial infection
- Bronchitis
- Bronchopneumonia
- Infective exacerbation of chronic obstructive airways disease
- Lobar pneumonia
- Lower respiratory tract infection
- Lung abscess
- Lung infection
- Pneumonia
- Pneumonia pneumococcal
- Pyopneumothorax
- Pyothorax
- H1N1 influenza
- Influenza
- Pleurisy
- Disseminated tuberculosis
- Tuberculosis

**Skin and Soft Tissue Infections**
- Catheter site cellulitis
- Cellulitis
- Cellulitis orbital
- Breast abscess
- Breast infection
Periorbital abscess
Bartholin's abscess
Muscle abscess
Necrotising fasciitis
Perineal abscess
Penile abscess
Scrotal abscess
Scrotal infection
Infected sebaceous cyst
Infected skin ulcer
Nail bed infection
Nail infection
Paronychia
Pilonidal cyst
Post procedural cellulitis
Skin infection
Soft tissue infection
Subcutaneous abscess
Erysipelas
Herpes zoster
Herpes zoster oticus
Carbuncle
Eczema infected
Impetigo
Infected bunion
Varicella
Anal abscess
Psoas abscess
Vaginal abscess
Vaginal infection
Vulval abscess
MSK Infections
Arthritis infective
Bone abscess
Bursitis infective
Intervertebral discitis
Joint abscess
Osteomyelitis
Osteomyelitis acute
Purulent synovitis

Genito-urinary infections
Cystitis
Genitourinary tract infection
Kidney infection
Perinephric abscess
Pyelonephritis
Pyelonephritis acute
Pyelonephritis chronic
Renal abscess
Urinary tract infection
Urosepsis
Cystitis glandularis

Sepsis/Bacteraemia
Bacteraemia
Bacterial sepsis
Device related sepsis
Neutropenic sepsis
Post procedural sepsis
Sepsis
Septic necrosis
Septic shock

**Other Infections**

Brain abscess
Central nervous system infection
Encephalitic infection
Extradural abscess
Intraspinal abscess
Meningitis
Neurological infection
Subdural empyema
Meningococcal infection
Progressive multifocal leukoencephalopathy
Encephalitis herpes
Meningitis bacterial
Meningitis viral
Endocarditis
Pericarditis infective
Purulent pericarditis
Subacute endocarditis
Myopericarditis
Viral myocarditis
Arteriovenous graft site infection
Arteritis infective
Haematoma infection
Conjunctivitis
Corneal infection
Endophthalmitis
Eye infection
Abscess of salivary gland
Abscess oral
Gingival abscess
Gingival infection
Oral infection
Parotitis
Tooth infection
Ear infection
Labyrinthitis
Mastoid abscess
Mastoiditis
Otitis externa
Otitis media
Auricular perichondritis
Sialoadenitis
Chronic sinusitis
Chronic tonsillitis
Epiglottitis
Laryngitis
Nasal abscess
Nasal vestibulitis
Nasopharyngitis
Peritonsillar abscess
Pharyngitis
Rhinitis
Sinusitis
Tonsillitis
Tracheitis
Tracheobronchitis
Upper respiratory tract infection
Viral labyrinthitis
Fallopian tube abscess
Pelvic inflammatory disease
Salpingitis
Uterine infection
Orchitis
Orchitis mumps
Acute HIV infection
Epididymitis
Fungal infection
Viral infection
Cytomegalovirus infection
Tinea pedis
Viral rash
Hepatitis B
Hepatitis E
Supplementary Figure 1: Biologic Drug Treatment Decision Tree

BSRBR-RA recruited patient on TNFi therapy suffers a SI

60 day censor period between index SI and consideration of biologic drug treatment decision

Biologic drug decision

Drug switched – at day 60 post index SI, the patient has switched biologic drug to either rituximab or tocilizumab

Drug stopped – at day 60 post index SI, the patient is still off biologic drug

Drug continued – at day 60 post index SI, the patient has restarted TNFi

12 month follow up period outcomes:
  Patient death
  Recurrent SI
  No further SI

Legend: BSRBR = British Society for Rheumatology Biologics Register, RA = Rheumatoid Arthritis, TNFi = Tumour Necrosis Factor Inhibitor therapy, SI = serious infection