

Table S2: Childhood Bacterial Pneumonia: Participant Characteristics

Author; Year	Total Number of Participants; Enrolled/Analyzed	Age (Mean ± SD) [Median; Range]; Males: Number (%)	Definition of Pneumonia	Inclusion Criteria
Bettenay; 1988	107 patients reviewed; 58 patients with complete information; formed study group	NR ; NR	Atypical (Mycoplasma) and Typical (Streptococcus)	Previously healthy children older than 100 days with strong clinical evidence of pneumonia.
Blackmore; 1995	203 patients admitted; 99 patients entered in study; 46 were children	Under 16 yrs; Further Information not given for children as a group	Atypical (Mycoplasma)	Patients admitted to hospital and investigated serologically for M. pneumoniae infection during the study period.
Castriota-Scanderberg; 1995	120 charts reviewed for x-ray and clinical data; 76 children /adolescents charts included; ; M. pneumonia = 38; Viral pneumonia = 22; Bacterial pneumonia = 13; Mixed etiology = 3	Median: 10.4; SD 1.3; Range: 4.2-16.4 yrs Male: 42 (55.2%)	Atypical (Mycoplasma)	Children and adolescents with a radiographic diagnosis of pneumonia (showing pulmonary infiltration).
Don; 2007	125 evaluated (25 excluded: appropriate serum samples or chest radiograph not available; not diagnosed with pneumonia); 100 included	Median: 3.7 yrs; Male: 49 (49%)	Atypical (Mycoplasma; Chlamydia) and Typical (Streptococcus)	Previously healthy children; clinical suspicion of pneumonia.
Esposito; 2002	Enrolled = 196; Analyzed = 110	Mean ± SD: 3.707 ± 0.870 yrs; Male: 50.5%	Typical (Streptococcus) and atypical bacteria alone and combined	Previously healthy children 2-5 yrs of age with signs; symptoms; and chest radiograph findings consistent with community acquired pneumonia.; No concomitant disease; nosocomially acquired infection or antibiotics in past 48 hours.
Esteban; 1995	87 patients enrolled; ; upper RTI = 19; Laryngitis = 3; Bronchitis = 18; Bronchiolitis = 18; Pneumonia = 29	Mean: 2 yrs; Range: 1 month to 14 yrs; Males: 64%	Atypical (Mycoplasma)	Diagnosis of acute RTI with no other baseline conditions; diagnosis based on signs and symptoms at entry and chest radiograph.
Gambert; 1993	M. pneumonia = 19; Other types of pneumonia = 21; NR; NR	Median: 6 yrs; Range: 3-12 yrs; Males: 8 (42.1%) those with M. pneumonia	Atypical (Mycoplasma)	Children with a diagnosis of Mycoplasma pneumonia; as diagnosed with the serological criteria.

Gendrel; 2002	Enrolled = 88; Analyzed = 72	Range: 2 months – 13 yrs; NR	Bacterial pneumonia	Children free of chronic disease; and who had not received antibiotics 2 weeks prior to admission.; All patients had fever over 38.5°C; and chest x-ray showing clear signs of pneumonia with alveolar infiltration.
Hardy; 2003	Enrolled = 154; Underwent both tests = 62	NR; NR	Atypical (Mycoplasma)	Immunocompetent children with radiographically-confirmed community acquired pneumonia.
Jimenez; 1997	56 inpatients enrolled and diagnosed with pneumonia; Viral = 20; Bacterial = 16; Unknown = 20	Mean: 3 yrs; Range: 2 months – 14 yrs; Male: 54%; NR	Atypical (Mycoplasma; Chlamydia) and Typical (Streptococcus; H influenzae; M. tuberculosis)	Clinical history.
Liu; 2007	Available for inclusion = 307; Patients included = 256; Serological tests performed and included = 140	Range: 3 months - 16 yrs (based on 307 available for inclusion); Males: 130 (50.8%) (based on 256 included in study)	Atypical (Mycoplasma)	Hospitalized children with RTI.
Mayoral; 2005	Group A = 24; Group B = 75	Range: 3 months – 5 yrs; None reported	Typical (Streptococcus)	Pediatric patients 3 months to 5 yrs.; Group A: children with definitive diagnosis of pneumococcal pneumonia confirmed by blood-culture.; Group B: children with clinical and radiological evidence of bacterial pneumonia.
Moulin; 2001	Admitted for community acquired pneumonia = 88; Had no pathogen identified and excluded = 16; Analyzed for bacterial or viral pathogen = 72	<u>S. Pneumonia (n=10)</u> : Mean 1.9 yrs; Range 0.4-5 yrs; <u>Bacterial Pneumonia (n=15)</u> : Mean 3.9 yrs; Range 0.5-14 yrs; <u>Viral Pneumonia (n=29)</u> : Mean 1.7 yrs; Range 0.5-7 yrs; <u>Viral by Serology (n=8)</u> : Mean 1.3 yrs; Range 0.5-5 yrs; <u>M. Pneumonia (n=10)</u> : Mean 6.2 yrs; Range 3-10 yrs	Atypical (Mycoplasma; Chlamydia)	Immunocompetent children without chronic disease; pulmonary or otherwise; and who had not received antibiotics in the 10 days before admission.
Nadal; 1999	Enrolled = 168; Analyzed as paired sera available = 108	Mean: 4.2 yrs; Range: 0.2-14.9 yrs; None reported	Atypical (Mycoplasma)	Radiologically confirmed community acquired pneumonia.
Nagayama; 1988	Tested 1485 isolates for M. pneumoniae	Range: 0 – 14 yrs; None reported	Atypical (Mycoplasma)	Infants and children <=14 yrs of age with lower RTI manifestations were selected.

Nunes; 2004	Cases = 45; Controls = 62	All Range: 2-12 yrs; <u>Cases</u> : Mean \pm SD: 4.9 ± 2.9 yrs Males = 25 (56%) ; <u>Controls</u> : Mean \pm SD: 5.6 ± 2.5 yrs Males = 27 (44%)	Detecting the capsular polysaccharide antigens of typical (Streptococcus; H influenzae)	Patients excluded if they had pleural effusion; pulmonary abscess; concomitant chronic pulmonary diseases or urinary tract infection; and clinical or radiological features suggesting viral and/or atypical pneumonia; such as interstitial and/or reticulonodular infiltrates.
Prat; 2003	Clinically; radiologically; and microbiologically diagnosed with lower RTI = 85; Pneumococcal pneumonia = 31; Atypical pneumonia = 20; Viral pneumonia or bronchiolitis = 34; Control = 38	Range between 6 months and 10 yrs; NR	Typical (Pneumococcal; Streptococcus) and Atypical (Mycoplasma; Chlamydia)	Children with clinical signs of lower RTI (fever; difficulty in breathing; or a pneumonic infiltrate in a chest radiograph).
Requejo; 2007	Children included = 550	Not stated; Not stated	Typical (Pneumococcal; Streptococcus)	Clinical diagnosis of bacterial pneumonia.
Saha; 2006	Healthy children = 201; Pneumonia = 974; Meningitis = 127	Mean: 9.5 months (pneumonia/ meningitis group)	Haemophilus influenzae type b	Diagnosis of pneumonia was based on World Health Organization definition of acute lower RTI (respiratory rate of at least 50/min for children 2-12 months and 40/min for those aged 12-23 months; and chest indrawings).
Swischuk; 1986	Enrolled = 110; Excluded due to conflicting concurrent infections and poor clinical documentation = 26; Analyzed = 84	Range: 2 months – 15 yrs; “approximately equal”	Atypical (Mycoplasma)	Roentgenographic evidence of pulmonary infiltrates.
Toikka; 2000	Initially enrolled = 254; Included and analyzed based on availability of serum samples = 126	Median: 2.6 yrs; Range: 1 month to 17 yrs; Male: 52%	Community acquired pneumonia included: Atypical (Mycoplasma; Chlamydia) and Typical (Streptococcus; Moraxella Catarrhalis; H influenzae; S. pyogenes)	Availability of serum samples; signs and symptoms; chest x-rays; not immunocompromised.; Diagnosis of pneumonia based on simultaneous finding of fever and/or respiratory symptoms and infiltrates compatible with pneumonia on chest radiographs.
Tsai; 2004	Enrolled with community acquired pneumonia = 209; Chlamydial infection = 26	Range: 12 months -14 yrs 4 months ; Median: 3.5 yrs; Males: 14 (54%)	Atypical (Chlamydia)	Previously healthy children 3 months to 18 yrs admitted to hospital due to community acquired pneumonia.
Tzeng; 2005	Adults and children enrolled = 1334; Children = 91	Pts were <15 yrs of age.; No further demographic info provided	Typical (Streptococcus)	Met study criteria for RTI: Fever >38°C; and one of the following conditions; cough; sore throat; otalgia; radiological signs of pulmonary involvement.

Virkki; 2002	Children enrolled = 296; Children entered in study = 254; Analyzed = 215	37 = < 1 year; 71 = 1-2 yrs; 84 = 2-5 yrs; 62 = ≥ 5 yrs; NR; No data	Atypical (Mycoplasma; Chlamydia) and Typical (Streptococcus; Moraxella Catarrhalis; H influenzae)	Children with community acquired pneumonia; based on simultaneous finding of an infiltrate on the chest x-ray and fever ≥ 37.5°C and/or respiratory symptoms.
Vuori-Holopainen; 2002	47 asked to participate; 13 refused; Aspiration fluid sample obtained from 26 patients; analyses performed for 34 children.	Based on 34 children with pneumonia; Mean: 5.1 yrs (0.8-14.0 range); Males: 20 (59%)	Typical (Streptococcus)	Hospitalized children with pneumonia (respiratory symptoms and signs with a history of fever and consolidation in the chest radiograph at admission); Patients not immunocompromised; postoperative; did not have bleeding diathesis; were not treated in oncology or intensive care unit.

NR, not reported; RTI, respiratory tract infection; SD, standard deviation; yrs, yrs