

Supplementary Appendix

The German competence network for community-acquired pneumonia (CAPNETZ; <http://www.capnetz.de>) which is funded by the German Ministry of Education and Research (BMBF) recruits nationwide prospectively CAP-patients with the goal to study and eventually to improve patient care, as preventive strategies are needed to reduce both costs and incidence.

Study population

For in- and exclusion criteria please see main text.

Data collection

Data were collected in a multi-centre prospective cohort study initiated by the German Competence network for community acquired pneumonia (CAPNETZ)¹⁹. In this prospective study, all demographic, clinical and diagnostic data of the patients were recorded using standardized web-based data sheets created by 2mt® Ulm, Germany.

Data validity and consistency checks were performed by an independent party prior to data analysis.

The network comprises several clinical centres throughout Germany. These centres represent hospitals and out-patient departments at all levels of health-care provision involved in research and therapy of CAP. A total of 670 private practitioners, physicians and respiratory specialists as well as >30 hospitals cooperate within CAPNETZ. The decision where to treat the patient with pneumonia was left to the discretion of the attending physician. No attempt was made to implement standardized criteria or rules neither for the assessment of pneumonia severity nor for the decision to hospitalize. Data collection started in March 2003 and was analysed in 2010. All consecutive and non-selected patients presenting with CAP were prospectively recorded. The study design was approved by the central (Otto-

von-Guericke University, Magdeburg, Germany in 2001) and all local Ethics Committees. All patients gave written informed consent and received a pseudonym from an independent third party to ensure data safety.

Evaluation

Baseline socio-demographic characteristics and clinical data at the time of presentation were assessed by direct patient or patient-proxy interview and review of medical records. All patients were assessed at first presentation and during follow-up according to a standardized data sheet. The following parameters were recorded: date of presentation, age, gender, alcohol and smoking habits, co-morbidity, residence in nursing home; duration of symptoms, clinical symptoms (body temperature, respiratory rate, heart rate, arterial systolic and diastolic blood pressure, pneumonia-associated confusion, i.e. disorientation with regard to person, place or time that is not known to be chronic); blood gas analysis (pH, PaO₂, PaCO₂ and oxygen saturation); chest radiography (number of lobes affected, pleural effusion); laboratory parameters (haemoglobin, haematocrit, leukocyte count, band forms, serum-creatinine, urea (BUN), sodium and blood glucose). All patients or relatives were contacted 14 days after first contact either personally or via telephone (if patient was already discharged), for a structured interview on outcome parameters (e.g. resolution of symptoms, length of antibiotic therapy and death). This interview was repeated for patients without improvement to assess 90-day mortality and mortality for all patients after 180 days.

CRB-65

CRB-65 is derived from CURB-65 index suggested by Lim and Macfarlane³⁷. CURB-65 is comprised of: confusion, urea (>7 mmol/L), respiratory rate (>30/min), blood pressure (systolic blood pressure <90 mmHg or diastolic pressure ≤60 mmHg) and age ≥ 65 years. CURB-65 ranges from 0 to 5. CRB-65 excludes urea (“U”) and ranges from 0 to 4²⁰.