nal disease (9% vs 4%; p=0.0003). Proportion of health care-associated IE was higher in the bioprosthesis group (26% vs 17%; p=0.001). Intraocular abscesses were more frequent in the bioprosthesis group (30% vs 23%; p=0.044). Both in-hospital and year death rates were higher in the bioprosthesis group, 20.5% vs 14.0% (p=0.0009) and 25.3% vs 16.6% (p=0.001), respectively. Only 3 variables were independently associated with the type of prosthesis implanted: basal prostheses were less commonly implanted in older patients (odds ratio: 0.64 for every 10 years; 0.56 - 0.73), and in patients with a history of cancer (0.72; 0.53 - 0.98), but were more commonly implanted in mitral position (1.60; 1.29 - 2.00). In the multivariable analysis, bioprosthesis was independently associated with 1-year mortality (hazard ratio: 1.298; 1.011-1.665; p=0.041). Through multivariate regression test following variables were independently associated with 1-year mortality in patients less than 65 years old, but not in older patients.

Conclusion: Patients with IE who receive a biologic valve replacement have significant differences in clinical characteristics compared to patients who receive a mechanical prosthesis. Biologic valve replacement is independently associated with a higher in-hospital and 1-year mortality, a result which is likely related to patient characteristics rather than valve dysfunction.

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Staphylococcus aureus bacteraemia and non-genetic risk factors
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Purpose: Worldwide Staphylococcus aureus (S. aureus) is the second most common microorganism isolated from blood cultures and S. aureus bacteraemia is a major cause of serious cardiac infections such as infective endocarditis and cardiac device infections. Specific non-genetic susceptibility risk factors for S. aureus bacteraemia have been demonstrated in smaller studies. Prior to their first hospitalization with S. aureus bacteraemia we compared the general risk profile of a very large cohort of S. aureus bacteraemia patients with the risk profile of the total Danish population.

Methods: To identify people, hospitalized with a first episode of S. aureus bacteraemia in the 1st of January 1996 – the 1st of January 2012, we used the Danish S. aureus bacteraemia registry. To obtain information on date of birth, sex, age, cause of death, medical status and co-morbidities we made a linkage between every patient’s personal identification number and 7 nationwide registers. Poisson regression was used to determine standardized incidence ratios (SIRs) of several co-morbidities with the Danish population as a reference.

Results: We identified 20,682 subjects (61.3% males) diagnosed with primary S. aureus bacteraemia, with a median age of 66.37 (IQR=59.77-77.51). In our study-population, we observed a significant increase of ischemic heart disease (SIR of 2.01, 95% confidence interval (CI):1.98-2.04, p<0.0001), heart failure (SIR of 2.86; CI:2.83-2.89, p<0.0001), cardiac arrhythmias (SIR of 2.88; CI:2.83-2.94, p<0.0001) and periphereal vascular disease (SIR of 2.81; CI:2.74-2.88, p<0.0001) as compared to the general Danish population. Additionally, we found an increased prevalence of diabetes (SIR of 4.44, CI:3.46-5.22, p<0.0001), kidney diseases (SIR of 8.87, CI:8.67-9.06, p<0.0001) and cancer with metastasis (SIR of 1.97, CI:1.89-2.05, p<0.0001) in our study-population prior to the verification of S. aureus bacteraemia. Finally, HIV (SIR of 8.31, CI:7.35-9.40, p<0.0001) and rheumatic disorders (SIR of 1.91, CI:1.87-1.96, p<0.0001) were also significantly more frequent in the S. aureus bacteraemia cohort, as compared to the general Danish population. However, 3452 patients did not suffer from any co-morbidities prior to the infection. Moreover, we found that 6801 subjects in the study-population had been operated 3 month prior to the S. aureus bacteraemia diagnosis, while 1009 of the patients never had an invasive procedure requiring hospitalization.

Conclusion: Multiple comorbidity including a range of cardiac diseases increased the risk of Staphylococcus aureus bacteraemia in the Danish Population.

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Fungal endocarditis: clinical predictors for early diagnosis aiming at better outcome
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Purpose: To study the clinical characteristics of patients with definite fungal endocarditis (FE) aiming at detecting clinical predictors for early diagnosis. Fungal endocarditis is a devastating disease that is associated with multiple morbilities and high mortality. Diagnosis is difficult and usually very late. Early diagnosis and treatment may result in better outcome.

Method: Retrospective analytic study that included 232 patients with definite IE in the period between February 2005 and September 2011. Results: 95.6% patients had FE. The whole cohort was relatively young with mean age of 35 (13-74) in FE and 28.5 (15-50) in non-FE group. In the FE group 22 cases had aspergillosis, 6 cases had candida (71% vs. 19.3%, p < 0.001) and 3 had other fungi. Native RHD was less prevalent in FE group (9.7% vs. 42.8%, p < 0.001; OR: 0.15; 95% CI: 0.04-0.49). The FE group had more cardiac prothseses (74.2% vs. 23.8%, p<0.001; OR: 9.18; 95% CI: 3.8-21.9). Early PVE was more prevalent among FE group (64% vs 38%, p=0.059). Late PVE was more common in non-