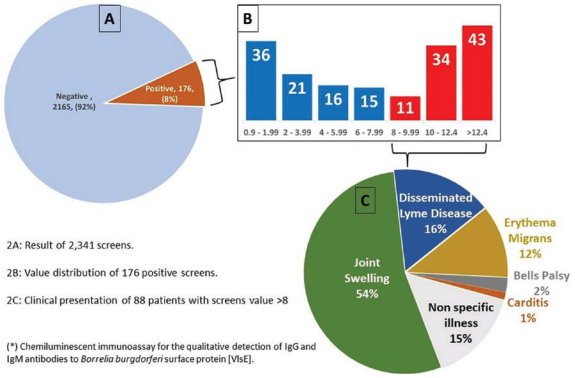

Figure 2. Lyme [anti-VlsE] CLIA screen (*)

Disclosures. **All authors:** No reported disclosures.

287. The Attributable Mortality of Prosthetic Joint Infection After Primary Hip and Knee Arthroplasty Among Medicare Beneficiaries, 2005–2012

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Background. Total hip (THA) and total knee (TKA) arthroplasty are the most common elective surgical procedures performed in the USA. Most are performed in older adults and lead to improved quality of life; however, complications such as prosthetic joint infection (PJI) can occur. Little is known regarding the mortality attributable to PJI after THA or TKA.

Methods. Claims data from the 2004 to 2012 Medicare 5% sample Standard Analytic Files were used to find eligible beneficiaries, with ICD-9-CM procedure codes identifying primary THA (81.51) or primary TKA (81.54), and diagnosis code 996.66 indicating PJI during the year following the procedure. Inclusion criteria included traditional Medicare coverage during the year prior and two years following the procedure and original reason for entitlement due to age. Exclusion criteria included missing surgery date, additional primary procedures within 1 year, and PJI diagnosis prior or during index stay. The attributable mortality of PJI during the 2 years following primary hip and knee arthroplasty among Medicare beneficiaries was calculated by fitting Kaplan–Meier survival curves and performing a time-dependent analysis based on PJI timing using an Extended Cox Proportion Hazard model.

Results. A total of 248,340 hip and knee arthroplasties were performed on 5% Medicare sample beneficiaries between 2005 and 2012. The final cohort included 117,515 arthroplasties: 37,098 (32%) hip and 80,429 (68%) knee, of which 80,377 (68%) were performed in women and 61,807 (53%) in patients greater than 75 years of age. PJI was diagnosed in one percent of hip (n = 338) and knee (n = 726) arthroplasties, of which 112 (11%) died. The crude mortality rate was 3.2 (95% CI: 2.3,4.2) and 3.7 (95% CI: 2.9,4.8) times greater in patients with PJI than without PJI following THA and TKA, respectively. Controlling for comorbid conditions and the time-dependent nature of PJI, the risk of death with PJI was 2.5 (95% CI: 1.9,3.3) times higher following THA and 2.6 (95% CI: 2.0,4.3) times higher following TKA than for non-PJI.

Conclusion. Medicare beneficiaries who develop PJI after THA or TKA have an increased risk of death during the first 2 years following the procedure, supporting the importance of better understanding risk factors and preventing PJI following these elective procedures.

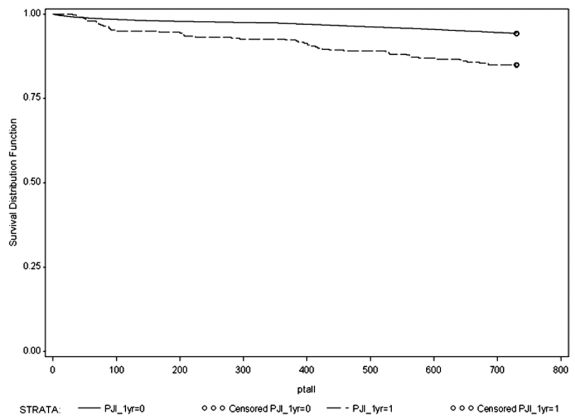

Figure 1: Kaplan-Meier survival curve indicating a higher crude mortality rate in Medicare beneficiaries who develop a prosthetic joint infection compared to those who do not, following total hip arthroplasty.

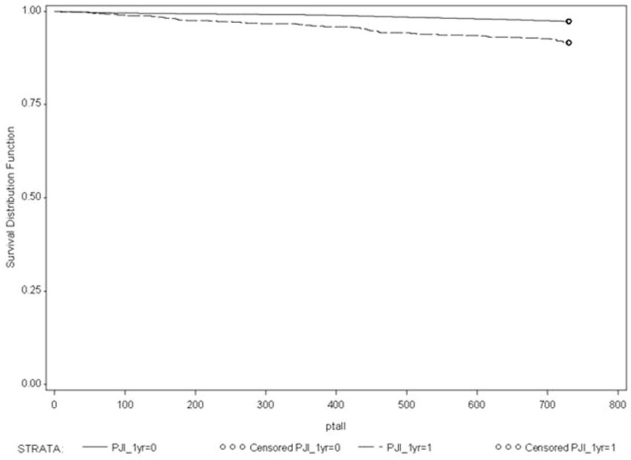

Figure 2: Kaplan-Meier survival curve indicating a higher crude mortality rate in Medicare beneficiaries who develop a prosthetic joint infection compared to those who do not, following total knee arthroplasty.

Disclosures. **All authors:** No reported disclosures.

288. Expediting Discharge in Acute Bacterial Skin and Skin Structure Infections: A Clinical and Economic Comparison Between Vancomycin and Oritavancin

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Background. Acute bacterial skin and skin structure infections (ABSSSI) have a high economic burden secondary to prolonged hospitalizations and high rates of recurrent infections. Utilizing oritavancin rather than vancomycin, select inpatients may be discharged earlier in their hospitalization with anticipated decreased infection recurrences and cost avoidance.

Methods. All inpatients administered oritavancin to expedite discharge and/or vancomycin for the treatment of ABSSSI between May 2017 and January 2018 were included in this retrospective evaluation. The primary endpoint was to determine the 30-day ABSSSI recurrence rate between treatment arms. The secondary endpoints were to evaluate financial expenditures associated with utilization of oritavancin when compared with vancomycin, and to assess for potential risk factors associated with poor outcomes. A financial analysis was performed for patients based on their DRG (diagnosis-related group) applying hospital-specific expenditures provided by the finance department. Data were analyzed using Fisher's exact test, χ^2 test, or t-test as appropriate.

Results. A total of 51 patients receiving oritavancin and 50 patients receiving vancomycin were identified as meeting inclusion criteria. Nine of 50 patients (18%) returned for recurrent infections in the vancomycin arm while only 2 of 51 (4%) returned in the oritavancin arm (P = 0.0279). Out of the 11 patients with recurrent infections, 6 were current intravenous drug users (55%), 3 left against medical advice at their initial visit (27%) and 7 had an emergency department visit in the prior 30 days for the same infection (64%). Overall, there were 111.7 hospitalization days avoided in 51 patients receiving oritavancin, resulting in an estimated cost avoidance of $217,206 compared with conventional treatment with vancomycin.

Conclusion. Utilizing oritavancin to expedite discharge in hospitalized patients appears to be an effective and financially beneficial treatment for ABSSSI.

Disclosures. **All authors:** No reported disclosures.

289. International Validation of a Methicillin-Resistant *Staphylococcus aureus* (MRSA) Risk Assessment Tool for Acute Bacterial Skin and Skin Structure Infections (ABSSSI)

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