pre-operative severity/loss of function. Unadjusted and adjusted minor and major in-hospital complications, including mortality were compared using chi-square and multivariate logistic regression. **RESULTS:** Exact matches were identified for 3,846 (97.6%) CDA patients, with a mean age of 46.5 years. The major in-hospital complication rate for CDA patients was 2.4% (92 of 3,846) versus 2.7% (102 of 3,846) for CSF patients (p=.47). The minor complication rate for CDA was 2.2% (85 of 3,846) compared to 2.6% (99 of 3,846) for CSF (p=0.30). Fewer than 10 patients in either group died (p=1.00). When adjusted for case-mix, there were no significant differences in the risk of major in-hospital complications between groups [OR: 0.91 (95% CI: 0.68-1.22), p=0.51]. There were also no significant differences in minor complication risks between the groups [OR: 0.76 (95% CI 0.55-1.05); p=0.10]. **CONCLUSIONS:** After adjusting for patient factors, there was no difference in the rate of major or minor complications or mortality between patient groups.

PMS8

IMPACT OF BUPIVACAINE LIPOSOMAL INJECTABLE SUSPENSION ON HOSPITAL LENGTH OF STAY AND HOME DISCHARGE AMONG MEDICARE PATIENTS UNDERGOING TOTAL KNEE ARTHROPLASTY

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OBJECTIVES: Under the Medicare Comprehensive Care for Joint Replacement (CJR), hospitals will receive a bundled payment to cover services from admission to 90 days for TKA; reducing hospital LOS and increasing home discharge are known to decrease total costs. This study examined the impact of using BLIS on LOS and home discharge in Medicare patients undergoing TKA. **METHODS:** This analysis used hospital chargemaster data from Premier, focusing on hospitals with >500 Medicare primary TKA patients who received BLIS from 7/1/2013 to 3/31/2015; controls without BLIS from the same hospitals were included from 1/1/2011 to 3/31/2015. Descriptive, univariate, and multivariate analyses were conducted to compare outcomes; log transformation was applied to LOS with gamma distribution, while logit link with binary distribution was used for home discharge. Independent variables were age, gender, race, and Charlson Comorbidity Index (CCI), with hospital for random effects. **RESULTS:** The analysis included five hospitals (urban: n=5, 101-500 beds: n=5, academic: n=2); two were in the Northeast, and one each in the Midwest, South, and West. The study included 3,359 patients with BLIS and 5,785 controls, with no differences between groups in age, gender, or CCI, but more whites in the BLIS group. In univariate analyses, the BLIS group had a lower LOS (mean 2.5 vs. 2.9 days; Wilcoxon p<0.001), higher discharge within 2.0 days (58.1% vs. 32.2%; chi-square p<0.001), and higher home discharge (68.1% vs. 56.7%; chi-square p<0.001). In multivariate analyses, use of BLIS reduced LOS by 0.5 days (p<0.001) and increased the odds of home discharge by 1.57 (95% confidence interval 1.43-1.73). **CONCLUSIONS:** At midsize urban hospitals, Medicare patients undergoing TKA had a shorter LOS and were more likely to be discharged home when receiving BLIS. These differences could materially impact total hospital costs for TKA at 90 days under CJR.

PMS9

EXAMINING LENGTH OF STAY AND HOME DISCHARGE WHEN USING BUPIVACAINE LIPOSOMAL INJECTABLE SUSPENSION IN MEDICARE PATIENTS UNDERGOING TOTAL HIP ARTHROPLASTY

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OBJECTIVES: Both LOS and home discharge are known to impact perioperative costs for THA. The goal of this study was to examine differences in LOS and home discharge when using BLIS to control postsurgical pain in Medicare patients undergoing THA. **METHODS:** A retrospective study using Premier Database chargemaster data focused on Medicare patients undergoing primary THA (ICD-9 procedure code 81.51) at the five hospitals with the highest BLIS use from 7/1/2013 to 3/31/2015; patients from the same hospitals who did not receive BLIS were included as controls. The primary outcomes were hospital LOS and home discharge status, controlling for potential confounders such as age, gender, race, and Charlson Comorbidity Index (CCI). Univariate analyses including Wilcoxon and Chi-square were used to compare outcomes between groups. Generalized linear mixed models (GLMM) were developed with log link and gamma distribution for LOS and logit link with binary distribution for home discharge. **RESULTS:** Hospitals were mainly urban (n=4), had 101-500 beds (n=4), and non-academic (n=4), in the Northeast (n=2), South (n=2), and West (n=1). The BLIS group included 1,534 patients vs. 2,295 in the control group; groups were similar in gender and CCI but patients in the BLIS group were younger (72.0 vs. 73.1) and more likely to be white (82.5% vs. 57.3%). In univariate analyses, the BLIS group was more likely to have LOS<2.0 days (65.3% vs 42.4%; p<0.001) and be discharged home (68.3% vs. 59.8%; p<0.001). In GLMM, use of BLIS reduced LOS by 0.6 days (p<0.001) and increased the odds of home discharge by 1.48 (95% confidence interval 1.27-1.73). **CONCLUSIONS:** Use of BLIS among Medicare patients undergoing THA was associated with a reduction in LOS and increased likelihood of home discharge, two perioperative outcomes of interest for hospitals attempting to manage their total costs under Medicare bundled payment programs.

PMS10

PSORIATIC ARTHRITIS RESPONSE CRITERIA SCORES: RESULTS FROM A PLACEBO-RESPONSE ADJUSTED NETWORK META-ANALYSIS WITH SECUKINUMAB

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OBJECTIVES: Secukinumab (SEC) has European approval for the treatment of active psoriatic arthritis (PsA) in adults who had inadequate response to previous disease-modifying anti-rheumatic drug (DMARD) therapy. Psoriatic Arthritis Response Criteria (PsARC) responses are useful for economic modelling, although clinical utility is limited. As no trials directly compare SEC against biologics, we used network meta-analysis (NMA) to compare short-term differences in PsARC response. **METHODS:** A systematic literature review (November 2015) identified randomised controlled trials of licensed biologics in adults with active PsA who had failed conventional DMARD therapy. Twelve trials were identified for the PsARC network. An NMA was developed in accordance with health technology assessment guidance using a Bayesian random effects model. Because of differences in placebo response across trials, which could bias the NMA, placebo adjustments were considered. Deviance information criteria were similar but leverage plots suggested a better fit with placebo adjustment. Results at 12–16 weeks are presented as probability of response (95% credible interval [CrI]) and relative risk (RR) (CrI) from pairwise comparison for the placebo-adjusted model. **RESULTS:** In the mixed population of biologic-naïve and experienced patients, SEC 150 mg QM (79.6% [52–94], RR, 1.81 [1.18–2.38]) and SEC 300 mg QM (82.8% [47–97], RR, 1.88 [1.07–2.48]) were statistically significantly superior to apremilast (APR) 20 mg BID, and SEC 150 mg was statistically significantly superior to APR 30 mg BID (RR, 1.50 [1.04–1.97]). There was no statistically significant difference between either SEC dose and APR 40 mg BID, adalimumab 40 mg Q2W, etanercept 25 mg BIW, golimumab 50/100 mg QM or infliximab 5 mg/kg Q2M. **CONCLUSIONS:** This placebo-response adjusted NMA showed that SEC has at least comparable efficacy against all licensed biologics in PsARC and superiority over APR at some doses.

PMS11

SAFETY, EFFICACY, AND PHARMACOKINETIC BIOEQUIVALENCE OF BIOSIMILAR TUMOR NECROSIS FACTOR-ALPHA INHIBITORS COMPARED WITH THEIR REFERENCE BIOLOGICS: A SYSTEMATIC REVIEW

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OBJECTIVES: Biosimilars are of growing regulatory and commercial importance, yet there is uncertainty about their safety and efficacy relative to their reference products. We summarized the evidence comparing biosimilar and reference tumor necrosis factor-alpha (TNF-α) inhibitors. **METHODS:** We searched PubMed, EMBASE, Cochrane Collaboration Clinical Trials, and LILACS through September 15, 2015 for English-language trials and observational studies comparing the safety, efficacy, or pharmacokinetic profiles of biosimilar and reference TNF-α inhibitors. No restrictions were applied regarding study population, size, or design. Two reviewers assessed titles and abstracts and a third resolved discordances. A single reviewer completed the full text review and data extraction. We narratively synthesized the included studies. Strength of trial evidence was assessed using the Cochrane Collaboration instrument. Public registries of clinical trials were searched for unpublished trials. Our systematic review registration number on PROSPERO is #CRD42015025262. **RESULTS:** Of 3,365 publications identified, 15 were included: 8 randomized controlled trials (RCTs), 4 abstracts describing trial extensions, 2 retrospective case series and 1 cross-sectional study. Of the RCTs, two Phase 1 crossover trials were in healthy volunteers, one Phase 1 parallel-group study was in patients with ankylosing spondylitis, one Phase 1 parallel-group study was in patients with rheumatoid arthritis (RA), and four Phase 3 studies were in patients with RA. In the Phase 1 trials, biosimilars and reference biologics were equivalent in relevant pharmacokinetic parameters. In Phase 3 trials, treatment-emergent adverse events and serious adverse events were comparable across treatment arms. For all Phase 3 trials, patients receiving biosimilars and reference biologics showed similar American College of Rheumatology Remission Criteria (ACR20) responses. The risk of bias was generally low for all trials; incomplete follow-up was the most common bias. **CONCLUSIONS:** The existing published studies support the biosimilarity and interchangeability of these products.

PMS12

CLINICAL EVALUATION OF GUDUCHI SADHITA SNEHA IN THE MANAGEMENT OF GOUT

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OBJECTIVES: To evaluate the clinical effectiveness of Guduchi Sadhita Sneha in Gouty Arthritis. The drugs like Uricoseuric and NSAIDs are used to treat the Gouty Arthritis have many adverse effects. **METHODS:** A randomized single blind clinical study with pretest and posttest design in 2 groups' standard and trail were adopted, where the patients were given treatment with specific duration with follow up. In total 462 diagnosed Gouty Arthritis patients were selected irrespective of their sex and age group of 20-60 from the OPD and IPD of Muniyal Institute of Ayurveda Medical Sciences Manipal enrolled for the present study out of which 22 were dropped out. Routine hematological, bio-chemical, urine analysis and X-Ray were recorded. The main signs and symptoms pain, swelling, stiffness of the joints were taken for the assessment as symptoms grade parameters. Serum Uric acid, ESR, Hb% also taken for the assessment as Laboratory parameters. Data obtained from the above mentioned study was statistically analyzed by using the Z test. **RESULTS:** In group A-Guduchi Sadhita Sneha, 86% of patients were assessed under Marked improved, in group B-Kaishora Guggulu, 33% of patients were assessed under marked improved category. The study reveals 69.28% relief in pain, 51.81% relief in swelling, 66.25% relief in stiffness, 69.61% reduction in serum uric acid level which were statistically highly significant result p<0.001. **CONCLUSIONS:** Study concluded both the groups are effective treatment in Gouty Arthritis and Group A Guduchi Sadhita Sneha was more effective than group B Kaishora Guggulu.

PMS13

ASSESSMENT OF CLINICAL EFFECTIVENESS OF TEMPORARY EPIPHYSIODESIS OF LONG TUBULAR BONES GROWTH PLATES USING METAL PLATES