(2.16 mm). The reduction was statistically different versus placebo for both doses (400 mg p=0.0001; 95% CI, (-19.95 to -8.04) and 200 mg p=0.0008; 95% CI, (-17.64 to -4.12). There was no effect on the WOMAC subscale of pain.

Conclusion: Rubus idaeus leaf extract, even at the low dose of 200 mg, was effective to relieve pain at short-term in patient with knee OA. As Rubus idaeus leaf extract is well tolerated, it could be an alternative to nonsteroidal anti-inflammatory drugs and paracetamol to relieve knee joint pain in OA patients.

REFERENCES:


### Table 1. Changes in VAS and WOMAC scores, expressed as mean values

<table>
<thead>
<tr>
<th>SCORE</th>
<th>Baseline</th>
<th>6 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>value</td>
<td>value</td>
<td>value</td>
</tr>
<tr>
<td></td>
<td>(95% CI)</td>
<td>(95% CI)</td>
<td>(95% CI)</td>
</tr>
<tr>
<td>VAS pain WOMAC total</td>
<td>63.57</td>
<td>37.59</td>
<td>-39.74* (-49.23; -30.25)</td>
</tr>
<tr>
<td>pain</td>
<td>50.19</td>
<td>31.88</td>
<td>-37.96* (-46.83; -29.09)</td>
</tr>
<tr>
<td>stiffness</td>
<td>49.37</td>
<td>32.01</td>
<td>-32.92* (-43.37; -22.46)</td>
</tr>
<tr>
<td>function</td>
<td>62.07</td>
<td>35.30</td>
<td>-33.95* (-43.45; -24.40)</td>
</tr>
</tbody>
</table>

*p-value: 0.0001; **p-value: 0.0002. Student test

The MCI was achieved by 66.3% of patients at 6m and 62.2% at 12m. Regarding PGA mean score was 2.44 at baseline, 1.35 at 6m and 1.48 at 12m (Wilcoxon, p-value <0.05). As for the IGA mean score was 2.29 at baseline, 1.06 at 6m and 1.48 at 12m (Wilcoxon, p-value <0.05).

Fourteen patients received a second injection at 6m and 50% of them achieved at 12m a significant and clinically relevant improvement compared to baseline, above the 20% established for the MCI.

In total, 12 adverse events (8 patients) were reported, all of them local, non-serious, and of mild-moderate intensity.

Conclusion: Viscosupplementation with a single intra-articular injection of MPS-HA2% has proven to be effective and well tolerated up to 12 months after treatment. The re-infiltration of the joint in appropriate cases has proven to be effective in a significant number of patients. The acceptability of the treatment by the patient was optimal.

REFERENCES:
tNSAIDs had the most patients with emergency department visits (20.8% vs. 16.7% in both COX-2s and oral tNSAIDs), and COX-2 had the most patients with inpatient visits (18.1% vs. 15.4% for topical tNSAIDs and 11.8% for oral tNSAIDs). Oral tNSAIDs had the lowest total all-cause cost ($6,504), and the topical tNSAIDs cohort had the highest costs ($8,455), but fairly comparable with COX-2s ($8,289). During follow-up, oral tNSAIDs patients stayed mostly on topical tNSAIDs as less than 15% of oral tNSAIDs patients later had a prescription for COX-2s or topical tNSAIDs. 37% of COX-2 patients and 56% of topical tNSAIDs patients later took oral tNSAIDs. Topical tNSAIDs patients had an average of 184.4 days of supply for the topical tNSAIDs yet also extensively used oral tNSAIDs during follow-up (average days of supply for oral tNSAIDs was 315.5 days and for COX-2s was 383.5 days).

Conclusion: This study suggests that patients with more complex comorbidity profiles, including higher rates of adverse events, often start pharmacological treatment with topical tNSAIDs. However, patients who start treatment with topical NSAIDs switch to other types of NSAIDs; oral NSAIDs were the most frequently prescribed treatment across the cohorts. Thus, despite the safety concerns with oral tNSAIDs and COX-2s, patients are still on these treatments to manage their OA pain. There is a need for new innovative treatments as there is currently a lack of other options.

Disclosure of Interests: Stuart Silverman Consultant of: Stuart Silverman is a paid consultant to Pfizer and Eli Lilly and Company in connection with this study. Patricia Schepman Shareholder of: Patricia Schepman is an employee of Pfizer with stock and/or stock options. Employee of: Pfizer. James B Rice Consultant of: Brad Rice is an employee of Analysis Group, who were paid consultants to Pfizer and Eli Lilly and Company for this study. Craig Beck Shareholder of: Craig Beck is an employee of Pfizer with stock and/or stock options. Employee of: Pfizer. Alan White Consultant of: Alan White is an employee of Analysis Group, who were paid consultants to Pfizer and Eli Lilly and Company for this study. Sheena Thakkar Shareholder of: Sheena Thakkar is an employee of Pfizer with stock and/or stock options. Employee of: Pfizer. Michaela Johnson Consultant of: Michaela Johnson is an employee of Analysis Group, who were paid consultants to Pfizer and Eli Lilly and Company for this study. Rebecca Robinson Consultant of: Rebecca Robinson is an employee and minor stockholder of Eli Lilly and Company. Birdi Erim Shareholder of: Birdi Erim is an employee of Pfizer with stock and/or stock options. Employee of: Pfizer.

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POS0285

ARE RACIAL DISPARITIES IN REVISION TKA OUTCOMES ASSOCIATED WITH HOSPITAL OR SURGEON VOLUME?

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Background: Total knee arthroplasty (TKA) outcomes are linked to surgical volume, despite the increase in TKA utilization, racial disparities in TKA outcomes persist. Blacks in the US are at a higher risk of aseptic revision of TKA (R-TKA) than when compared to Whites, yet the reasons for this are not understood.

Objectives: The objective of this study is to examine the relationship between hospital and surgeon annual TKA volume and R-TKA outcomes by race.

Methods: This is an observational cohort study. New York Statewide Planning and Research Cooperative System data for 2004 – 2013 was used to identify patients who underwent primary TKA. Data through 2015 was used to identify R-TKA within 2 years of the index TKA. Hospital characteristics were obtained from the AHA Annual Survey. Surgeon data was collected from New York State Education Department and New York State Physician Profile. Surgeon annual TKA volume was categorized based on cutoffs established by Wilson et al. as ≤12, 13-59, 60-145 or ≥146, and hospital TKA volume as ≤89, 90-235, 236-644 and ≥645. We calculated the odds of R-TKA in Whites and Blacks separately and generated crude odds ratios (OR) comparing Blacks to Whites to examine trends across volume categories. A multivariate logistic regression model adjusted for known R-TKA risk factors was also performed.

Results: A total of 163,576 patients were included. Mean (SD) age was 66.4 (10.4) years, 107,233 (65.6%) were female, 124,277 (76.6%) were White and 15,990 (9.8%) were Black. 2925 patients underwent aseptic R-TKA. In logistic regression analysis, Blacks had a higher risk of R-TKA (OR 1.42, 95%CI 1.26-1.6) (Table 1). Risk of R-TKA was also higher when surgeon annual volume was ≥146 (OR 1.5, 95%CI 1.25-1.8) or 13-59 (OR 1.16, 95%CI 1.04-1.29) TKA compared to the highest volume surgeons (>146). Patients who had surgery at a hospital with annual volume of 236-634 TKA were less likely to undergo R-TKA compared to the highest volume hospitals (>645) (OR 0.88, 95%CI 0.79-0.98). Other risk factors for R-TKA were younger age and worker’s compensation patients. The patient with inflammatory arthritis had a lower risk. Figures 1A and 1B show the odds of R-TKA in Whites and Blacks, respectively, by hospital and surgeon volume. Figure 1C shows the crude OR for Blacks to Whites for each category pair. The OR ranged from 0.9 to 2.5, with the largest disparity found in patients who have TKA performed by surgeons with 60-145 annual TKA volume at the highest volume hospitals (>645).

Conclusion: Patients having TKA by a surgeon performing 60 TKA per year have higher risk of R-TKA, Racial disparities in R-TKA risk are higher for TKA by surgeons performing 60-145 TKA per year at hospitals performing ≥645 TKA per year. Future studies should examine factors, such as whether trainees are involved the surgery, that may vary based on social determinants of health, such as patient race and payer.

REFERENCES: