REAL LIFE TREATMENT COST OF RHEUMATOID ARTHRITIS, PSORIASIS, CROHN’S DISEASE AND ULCERATIVE COLITIS IN THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM

OBJECTIVE:
To estimate the treatment costs of rheumatoid arthritis, psoriasis, Crohn’s disease and ulcerative colitis in the Brazilian private healthcare system.

METHODS:
Treatment costs were gathered from a claims database with over 4 million beneficiaries for rheumatoid arthritis (RA), psoriasis (PsO), Crohn’s disease (CD) and ulcerative colitis (UC). Patients were identified according to ICD10 codes and observed between June 2009 and August 2011. Treatment costs included hospitalization, drug, procedures, exams, equipment and other costs. RESULTS: In total 269 patients received treatment for AR, PsO, CD and UC in the Brazilian healthcare system, with an expenditure of about R$ 13 million. Over 78% of expenditure was due to drug spending, followed by hospitalization (8%), and materials (6%). Over R$ 8.2 million (63%) were spent with 116 CD and UC patients, resulting in an average cost of R$ 70,939.84 per patient. For 144 AR patients, expenditure totaled R$ 4.4 million (34%) with an average cost per patient of R$ 30,834.06. Nine patients were identified with psoriasis, with a total spending of R$ 334,756 (2.57%), an average of R$ 37,195.11 per patient. On average, AR patients were hospitalized for 17 days with a total cost of R$ 181,422, followed by CD and UC patients hospitalized for 15 days on average with a total cost of R$ 965,507. Psoriasis patients were hospitalized on average for 4 days, with R$ 15,903 spend on average.

CONCLUSIONS:
Drug spending is the main driver behind healthcare spending in AR, PsO, CD and UC in the Brazilian private healthcare system. Despite the lowest hospital stay, on average psoriasis patients spend more than RA patients in the hospital. Psoriasis represents the lowest share of total costs due to a low number of patients observed with this disease, indicating these patients might not have access to treatment.

INTRODUCTION
The Brazilian Private Healthcare System (SS) is supplementary to the public healthcare system in Brazil, covering over 47 million people, about 25% of the Brazilian population. Minimum coverage by health plans is defined by a national regulatory body (ANS) within the ministry of health. Up to January 2012, coverage of the SS was limited to inpatient care, with a focus on oncology procedures. As a result, coverage of treatment for diseases such as rheumatoid arthritis (RA), psoriasis (PsO), crohn’s disease (CD) and ulcerative colitis (UC) was limited drugs marketed in inpatient settings. There are a wide variety of treatment options for these illnesses that include oral immunosuppressants, non-steroidal anti-inflammatory drugs and biologics. All are well established in the treatment guidelines as defined by the European League of Associations for Rheumatology (EULAR) or the American College of Rheumatology (ACR). The aim of this study was to determine the treatment costs of RA, PsO, CD and UC in the SS in Brazil.

METHODS
Treatment costs were gathered from a claims database with over 4 million beneficiaries for RA, PsO, CD and UC. Patients were identified according to ICD10 codes and observed between June 2009 and August 2011.

RESULTS
In total 269 patients received treatment for AR, PsO, CD and UC in the Brazilian private healthcare system, with an expenditure of about R$ 13 million. Over 78% of expenditure was due to drug spending, followed by hospitalization (8%), and materials (6%).

Table 1. Total treatment cost according to expenditure

<table>
<thead>
<tr>
<th>Cost</th>
<th>Total [R$]</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicines</td>
<td>10,198,952.91</td>
<td>78.43%</td>
</tr>
<tr>
<td>Hospitalization costs</td>
<td>1,162,883.61</td>
<td>8.94%</td>
</tr>
<tr>
<td>Materials</td>
<td>780,928.40</td>
<td>6.01%</td>
</tr>
<tr>
<td>Exams</td>
<td>425,562.59</td>
<td>3.27%</td>
</tr>
<tr>
<td>Medical procedures</td>
<td>245,316.44</td>
<td>1.89%</td>
</tr>
<tr>
<td>Food</td>
<td>189,878.67</td>
<td>1.46%</td>
</tr>
<tr>
<td>Other</td>
<td>359.88</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total</td>
<td>13,003,882.50</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

CONCLUSIONS
Drug spending is the main driver behind healthcare spending in AR, PsO, CD and UC in the Brazilian private healthcare system, with biologic drugs accounting between 88 and 99% of these costs. New biologic drugs with lower treatment costs, therefore, will have the potential to lower the costs of treatment for these diseases. Despite the lowest hospital stay, on average psoriasis patients spend more than RA patients in the hospital. Psoriasis represents the lowest share of total costs due to a low number of patients observed with this disease, indicating these patients might not have access to treatment.

Presented at the ISPOR 17th Annual International Meeting, June 2-6, 2012, Washington, DC, USA