biosimilars policy

Patient characteristics

234 (32.6)

193 (26.9)

Transition to biosimilar

BRAND

60.0

52.8 (16.8)

rituximab had a large proportion of patients starting their biologic therapy with biosimilar. was the biologic therapy where the majority of patients transitioned to biosimilar while 85.2% (N=612 patients) distributed by biologic therapy according to Figure 2. Etanercept

Figure 1 shows the percentage of patients who start their treatment with biosimilar and those who transition to biosimilar by disease diagnosis. A total of 84.9% of rheumatic disease patients had transitioned to biosimilar over the study period while 66.3% of hematologic patients started their treatment with biosimilar.

The current overall proportion of patients who start with or transition to biosimilars was 85.2%, (N=612 patients) distributed by biologic therapy according to Figure 2. Etanercept was the biologic therapy where the majority of patients transitioned to biosimilar while rituximab had a large proportion of patients starting their biologic therapy with biosimilar.

Figure 2 Percentage of patients in biosimilar and reference product according to biologic therapy

The objective of this study is to assess the effectiveness of hospital pharmacy management in the biosimilars policy at Centro Hospitalar e Universitário de Coimbra (CHUC) Portugal and compare it to other similar public hospitals.

This analysis included all 718 patients using biologic therapy since October 25th, 2017 when biosimilars for etanercept, infliximab and rituximab became available until the date cut-off of September 11th, 2018. Table 1 illustrates the characteristics the patients. The median follow-up time since FIBS implementation was 7.3 months.

Table 1 Patient characteristics

Table 1 Patient characteristics

<table>
<thead>
<tr>
<th>Diagnostic Disease, n(%)</th>
<th>Etanercept</th>
<th>Infliximab</th>
<th>Rituximab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatic disease</td>
<td>225 (31.3)</td>
<td>234 (32.6)</td>
<td>300 (41.8)</td>
</tr>
<tr>
<td>Hematologic disease</td>
<td>193 (26.9)</td>
<td></td>
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<tr>
<td>Gastrointestinal disease</td>
<td>190 (26.5)</td>
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<tr>
<td>Nervous system</td>
<td>80 (11.1)</td>
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<tr>
<td>Other</td>
<td>30 (4.2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Age in years, mean (SD)

52.8 (16.8)

330 (46.0)

Figure 4 Effectiveness of FIBS implementation according to biologic therapy

CHUC

SIMILAR PUBLIC HOSPITALS*

Rituximab

35.1% 75.7%

Infliximab

51.3% 91.9%

Etanercept

27.6% 92.4%


Figure 5 shows that our hospital presented consistently higher rates of biosimilars’ utilisation in comparison to other similar public hospitals.

The current overall proportion of patients who start with or transition to biosimilars was 85.2%, (N=612 patients) distributed by biologic therapy according to Figure 2. Etanercept was the biologic therapy where the majority of patients transitioned to biosimilar while rituximab had a large proportion of patients starting their biologic therapy with biosimilar.

When assessing FIBS implementation over the study period, the proportion of patients being treated with biosimilar reached 50% just after 2 months of FIBS implementation (Figure 3). Two months later, this proportion suffered a rapid increase up to 70%. Since then, the proportion of patients continues increasing gradually reaching the value of 85.5% at the end of the follow-up (September/2018).

After one year of FIBS, etanercept and infliximab had almost depleted the biological market at CHUC (92.4% and 91.9% of patients in biosimilar, respectively) while the process for rituximab has been less pronounced (75.7% of the patients in biosimilar).