Ibrutinib, a once-daily Bruton’s tyrosine kinase (BTK) inhibitor, is the only targeted therapy to
be approved for treatment of chronic lymphocytic leukemia (CLL) and small lymphocytic
lymphoma (SLL).1–7

These findings demonstrate that PSPs have the potential to address gaps in patient care and mitigate preventable discontinuations and/or non-adherence to optimize
treatment outcomes.8–10 Additional studies evaluating other PSP programs with larger sample sizes and longer follow-up are needed to comprehensively understand the effects of a PSP on
treatment adherence in patients with CLL/SLL.

To assess the impact of a bi-directional text-messaging PSP implemented by a specialty pharmacy
on ibrutinib refill adherence, we conducted a non-randomized controlled study to evaluate
patients prescribed ibrutinib between November 2017 and April 2018. Data were obtained from
a single specialty pharmacy (PSP) and a large national specialty pharmacy. The PSP
enrolled patients into the program at any time between 1 February 2018 and 30 April 2018;
the control group was identified from patients who did not enroll in the PSP. The
median follow-up period was 9 months.

METHODS (CONT.)

PDC was calculated by dividing the total number of days covered for ibrutinib by the total number of days in the treatment period.

<table>
<thead>
<tr>
<th></th>
<th>PSP Enrollees</th>
<th>Non-Enrollees Before</th>
<th>Non-Enrollees After</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDC at 3 months</td>
<td>66.9 (9.2)</td>
<td>35.0 (0.0 to 1.0)</td>
<td>66.2 (9.2)</td>
<td>0.0 (0.0 to 1.0)</td>
</tr>
<tr>
<td>PDC at 6 months</td>
<td>67.0 (61.0 to 71.0)</td>
<td>35.0 (0.0 to 1.0)</td>
<td>66.2 (9.2)</td>
<td>0.0 (0.0 to 1.0)</td>
</tr>
<tr>
<td>PDC at 9 months</td>
<td>67.0 (61.0 to 71.0)</td>
<td>35.0 (0.0 to 1.0)</td>
<td>66.2 (9.2)</td>
<td>0.0 (0.0 to 1.0)</td>
</tr>
</tbody>
</table>

DISCUSSION & CONCLUSIONS

• The medium PDC was significantly higher for PSP enrollees versus non-enrollees at 3, 6, and 9 months; this statistically significant difference in
medium PDC was observed between the two groups at 3 months (Table 1).

• With a medium follow-up of approximately 9 months, the proportion of patients adherent to
ibrutinib was significantly higher in PSP enrollees versus non-enrollees at 3, 6, and 9 months (Figure 2).

Strengthes and Limitations

• Strength — This study used claims data from a specialty pharmacy rather than
self-reported adherence data from a survey-based study.

• Strength — Data from this specialty pharmacy include a claims database of
commercial and Medicare Part D members, which is generalizable to
multiple payer types and across demographics.

• Limitations — The pharmacy claims data used in this study do not contain clinical
information such as patient stage, prior therapy status, disease status, or
clinical events. The accuracy of refill adherence is limited by potential
under reporting of medications, which may have been underestimated,
éven in patients with ongoing treatment. Length of patient follow-up was limited,
which may not accurately capture a patient's adherence over the course of their treatment.

• Limitation — Resource for non-adherence could not be ascertained in this study
and could include disease progression or other causes. Calculation of
refill adherence assumes "a pill in hand is a pill taken." 

• Result from previous data analysis found that refill adherence alone is not a
sufficient metric for evaluating the benefit of a PSP on adherence. Additional studies using
other outcomes such as patient satisfaction may be more relevant for assessing the
effectiveness of a PSP on refill adherence.

1Pharmacyclics LLC, an AbbVie Company, Sunnyvale, CA, USA; 2Optum Specialty Pharmacy, Phoenix, AZ, USA; 3OPEN Health Evidence and Access, Bethesda, MD, USA

September 27–30, 2021; Washington, DC
Poster prepared for the National Association of Specialty Pharmacy Annual Meeting & Expo