Exploring Utilization Trends of Recent Physician-Administered Biosimilar Launches

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BACKGROUND

- The introduction of biosimilars is projected to reduce healthcare costs through increased competition and decreased unit cost.[1]
- As additional biologics begin to come off-patent, it is estimated that the rise in biosimilars may generate $38.4 billion in savings from 2021 to 2025.[1,2]
- To date, 40 biosimilars have been FDA-approved and 26 biosimilars have launched.[3]
- In future years, additional biosimilars in the autoimmune and oncology space are expected to enter the US market, according to the Center for Biosimilars.[3]

OBJECTIVE

- To observe historical utilization trends of physician-administered biosimilar agents to provide insight into the potential impact of future biosimilar launches

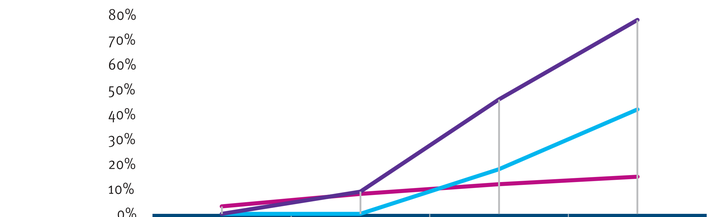
METHODS

- Administrative claims data from a nationally representative commercial database of 27 million lives between January 2018 to December 2021 was considered for this study.
- Continuously enrolled patients (n=43,778) with paid claims for reference products and/or biosimilars of interest were identified using Healthcare Common Procedure Coding System codes or HICL Sequence Number.
- Patient count was extracted for each year to calculate a series of metrics: overall utilization, biosimilar new starts, and conversions to biosimilars.
- Three physician-administered biosimilars launched in the US market between January 2018 and December 2021 and were selected for analysis due to the large market share of their reference products in the oncology and autoimmune space.

RESULTS

- Biosimilars in the oncology and autoimmune space displayed varying utilization trends.
- Historically, oncology biosimilars displayed a faster rate of uptake after launch in comparison to the autoimmune biosimilars analyzed.
- Trastuzumab saw the largest uptake among biosimilars, comprising 78% of the US market several years after launch, while rituximab and infliximab experienced slower uptake among their respective biosimilars (Figure 1).

FIGURE 1. BIOSIMILAR UTILIZATION BY YEAR



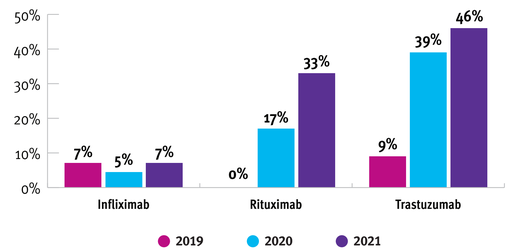
	2018	2019	2020	2021
Infliximab	3%	8%	12%	15%
Rituximab	0%	0%	18%	42%
Trastuzumab	0%	9%	46%	78%

Recent biosimilar launches have shown a **wide range of utilization trends.**

RESULTS (continued)

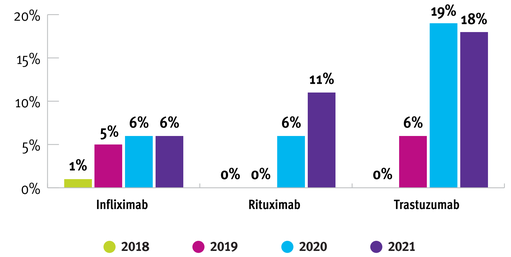
- New starts for rituximab and trastuzumab biosimilars increased in a stepwise fashion year-to-year, while infliximab biosimilar new starts remained relatively stable (Figure 2).

FIGURE 2. BIOSIMILAR NEW STARTS STRATIFIED BY YEAR



- Trastuzumab saw the greatest rate of conversion to biosimilars from reference products, in addition to the increasing number of biosimilar new starts (Figure 3).
- Infliximab and rituximab showed slow and steady rates of conversion to biosimilar competitors (Figure 3).

FIGURE 3. REFERENCE BIOLOGIC CONVERSIONS TO BIOSIMILARS STRATIFIED BY YEAR



RESULTS (continued)

- Trastuzumab had five biosimilars launch between 2019 and 2020 and displayed the fastest rate of biosimilar uptake and conversions of the agents included in this analysis.
- Rituximab had three biosimilars launch in 2019, 2020, and 2021. There was moderate uptake of rituximab biosimilars, achieving 42% overall utilization and an 11% biosimilar conversion rate by 2021.
- Within the lookback period, infliximab had three biosimilars that launched in 2016, 2017, and 2020. Infliximab biosimilars showed slow and steady growth in overall utilization and conversion rates. Historically, additional competition resulted in higher rates of biosimilar utilization. The figure below displays a timeline of analyzed biosimilar launch dates, color-coded by drug (Figure 4).

FIGURE 4. TIMELINE OF BIOSIMILAR LAUNCHES

DISCUSSION

- Differences in overall utilization, biosimilar new starts, and conversion rates exist among reference biologics and their biosimilars in the marketplace.
- In this analysis, oncology biosimilars saw greater overall utilization and faster rates of uptake and conversions from reference biologics when compared to biosimilars in the autoimmune space.

LIMITATIONS

- The lookback period for data extraction was limited to claims from January 2018 to December 2021. This evaluation period does not encompass all biosimilars that have entered the market and places limitations on the historical patterns observed.
- This analysis looks at the uptake of physician-administered biosimilars across a wide variety of plans and formulary design and should not be generalized as the impact for every individual plan.
- Despite being an oncology biologic, bevacizumab was not included in the analysis since its generic became available during the period of interest, which may have resulted in skewed results.
- Analysis of infliximab biosimilars included two agents approved prior to 2018, while all other biosimilars were approved within the set lookback period.

CONCLUSIONS

- Biosimilars will remain a point of interest to payers, providers, and patients.
- As additional biosimilar competition enters the marketplace, utilization for the reference biologic will modulate over time.
- Recent biosimilar launches have shown varying utilization trends; therefore, forecasting the potential utilization and uptake rate for future biosimilar launches will require individual analysis, as there will not be a single, all-encompassing approach.

REFERENCES

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