Letters

RESEARCH LETTER

Drug Pricing Trends for Orally Administered Anticancer Medications Reimbursed by Commercial Health Plans, 2000-2014

Prescription drug pricing and changes in prices for existing drugs have been under intense scrutiny recently. For anticancer medications, high drug prices have the potential to affect access and adherence to therapies and increase financial burden for patients. Given the rapidly evolving drug pricing landscape, it is important to evaluate recent pricing for anticancer medications. This study’s objectives were to estimate changes in reimbursements for orally administered anticancer drugs paid by commercial health plans from 2000 through 2014, focusing on reimbursements during the year of product launch and changes in reimbursements over time.

Methods | TruvenHealth MarketScan outpatient prescription drug data from January 1, 2000, through December 31, 2014, were used to identify claims for dispensed orally administered anticancer medications approved in 2000 or after, excluding any claims for which the total paid was $0 or less or greater than $250,000. To ensure comparable estimates over time, only fills for a single month of therapy were included for all products. There were 483,587 drug fills included in this analysis. Because this was a secondary analysis of deidentified health plan claims, this study received an institutional review board waiver from the University of North Carolina at Chapel Hill.

Measures | Mean per-fill payments to the pharmacy for a single month of supply of each product were summarized by calendar year (monthly spending). These payments included contributions made by the health plan and patient but do not include rebates received from manufacturers.

Analysis | First, mean monthly spending was summarized for products during the year of initial approval from January 1, 2000, through December 31, 2014. Second, for products available since 2011, changes in monthly spending were estimated and product-specific monthly spending was compared between the launch year and 2014. For all analyses, generalized estimating equations with log links and normal distributions were used, and means and 95% CIs are presented. All dollars were inflation adjusted to 2014 US dollars using the medical component of the Consumer Price Index. In sensitivity analyses, the top 5% of spending for each drug was excluded to evaluate the influence of outliers on estimates. There were no substantive differences between these results and the primary analysis.

Results | Since 2000 there were 32 orally administered anticancer therapies introduced and observed in the data set (Figure). Over time there was an increase in the number of products coming to market, with 17 products launched from 2011 to 2013. New approvals were observed in most calendar years, aside from 2002, 2008, and 2010. Mean monthly spending during the year of product launch increased substantially from $1869 (95% CI, $1648-$2121) in 2000 to $11,325 (95% CI,
$10 989-$11 671 in 2014. When comparing products launched from 2000 to 2010 with those launched after 2010, mean monthly spending on the market increased by 63% from $5529 (95% CI, $5444-$5615) to $9013 (95% CI, $8917-$9110) across all products. When comparing changes in spending by year from product launch to 2014, there were increases in most products studied (Table). The products with the largest increases in monthly spending were thalidomide ($5695 increase, from $1869 to $7564) and imatinib ($5133 increase, from $3346 to $8479). Two products, lenalidomide and vorinostat, decreased in mean monthly spending between launch and 2014 by $469 and $2163, respectively. Year-to-year price changes varied widely from −15% to 30%.

Discussion | There are several limitations to note. First, data include fills for orally administered anticancer medications reimbursed by commercial health plans. Amounts may differ for other payers (Medicaid and Medicare) or for infused or injectable anticancer therapies. Second, products could only be included if they were dispensed and reimbursed by a commercial health plan, which may exclude rarely used or recently approved products.

Mean monthly spending by commercial health plans and patients has increased for most orally administered anticancer therapies in recent years. In addition to higher launch prices, most existing therapies have had substantial price increases since product launch. Monitoring changes in spending on anticancer medications may help to identify excessive price changes and highlight potential affordability challenges for patients.

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Author Contributions: Dr Dusetzina had full access to the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

Conflict of Interest Disclosures: None reported.

Funding/Support: Dr Dusetzina is supported by the National Institutes of Health Building Interdisciplinary Research Careers in Women’s Health K12 Program and grant UL1TR001111 from the North Carolina Translational and Clinical Sciences Institute.

Role of the Funder/Sponsor: The funding sources had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.


