MPN - 204

Projected Healthcare Resource Use and Budget Impact of Once-Daily Extended-Release vs Twice-Daily Immediate-Release Ruxolitinib in Myelofibrosis

Presented at the
Society of Hematologic Oncology (SOHO) 2026 Annual Meeting
Houston, TX, USA • September 9–12, 2026

Sumit Verma,[1] Jordan Fortunato,[1] Yijia Sun,[2] Precious Nchekwube,[2] Jialu He,[2] Samuel Wagner,[2] Shreekant Parasuraman[1]

[1]Incyte Corporation, HEOR Oncology, Wilmington, DE, USA; [2]Columbia Data Analytics, New York, NY, USA

Introduction

- Maintaining long-term treatment continuity is central to symptom control in myelofibrosis (MF), but regimen complexity may adversely affect adherence[1,2]
- A once-daily extended-release (XR) formulation of ruxolitinib may reduce healthcare resource utilization (HCRU) relative to twice-daily immediate-release (IR) treatment[3-6]

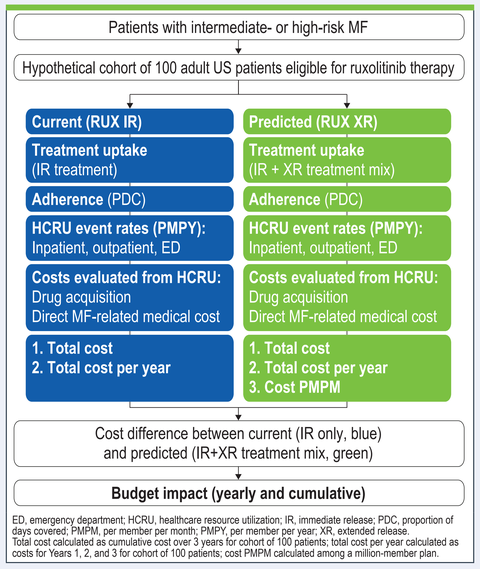
Objective

- Estimate the projected budget impact associated with adherence-related changes in HCRU following adoption of once-daily XR vs twice-daily IR ruxolitinib in MF

Methods

- A US budget impact model assessed a hypothetical million-member plan including 100 patients with MF over 1-, 2-, and 3-year horizons (**Figure 1**)
  - The market share of ruxolitinib XR was assumed to increase from 50% of total ruxolitinib use in Year 1 to 80% in Year 3, reflecting an illustrative uptake scenario
  - The model assumed a 10-point absolute increase in adherence (proportion of days covered) for XR vs IR based on published evidence demonstrating improved adherence with reduced dosing frequency in chronic diseases, together with evidence linking higher adherence to lower hospitalization risk[5]
  - Consistent with a conservative modeling approach, improved adherence with ruxolitinib XR was assumed to reduce inpatient visits by 5%, with no impact on outpatient or emergency department visits

Figure 1. Budget Impact Model Structure



ED, emergency department; HCRU, healthcare resource utilization; IR, immediate release; PDC, proportion of days covered; PMPM, per member per month; PMPY, per member per year; XR, extended release.
Total cost calculated as cumulative cost over 3 years for cohort of 100 patients; total cost per year calculated as costs for Years 1, 2, and 3 for cohort of 100 patients; cost PMPM calculated among a million-member plan.

- Adherence-associated HCRU changes were informed by targeted literature review prioritizing MF-specific evidence and supplemented by analogous chronic disease data (**Table 1**)

Table 1. Base Case Model Inputs

Model Element	Input Value
MF eligible population	Hypothetical cohort of 100 patients with MF within a US commercial payer plan
Event horizon	Base case modeled on a 1-year horizon for each of 3 years
Treatment mix (% market share: IR, XR)*	Year 1: 50, 50 Year 2: 35, 65 Year 3: 20, 80
Adherence†	Ruxolitinib IR PDC: 75% Ruxolitinib XR PDC: 85%
HCRU, mean MF-related event rate PMPY‡,7	
Inpatient	1.5
Outpatient	12.8
ED	1.7
Drug acquisition costs, USD per bottle§,8	Ruxolitinib IR: $17,600 Ruxolitinib XR: $17,600
Direct MF-related medical costs, mean PMPY¶,1	
Inpatient	$46,265
Outpatient	$19,936
ED	$371
Impact of 10-point absolute increase in adherence‖,5	
Inpatient	5% reduction (1.425 visits/year)
Outpatient	No impact
ED	No impact
Drug acquisition costs	No impact

HCRU, healthcare resource utilization; ED, emergency department; IR, immediate release; MF, myelofibrosis; PDC, proportion of days covered; PMPY, per member per year; XR, extended release.
* Market share is an illustrative uptake scenario and does not reflect expected real-world adoption.
† Causal spine of model: daily oral administration improves adherence; adherence on therapy improves disease control and reduces HCRU and total medical costs, of which inpatient stays are the largest cost driver for MF.
‡ Event rates sourced from Mascarenhas J, et al. *HemaSphere*. 2023;7(S3):2031-2032.
§ Wholesale acquisition costs (2025) for either ruxolitinib XR or ruxolitinib IR of any strength.
¶ Costs sourced from Copher R, et al. *Oncologist*. 2022;27:228-235 and adjusted to annual costs in 2025 USD.
‖ In absence of MF-specific data, a conservative 5% adherence per 10-point PDC increase was sourced from Shani M, et al. *J Gen Intern Med*. 2021;37(5):1060-1064.

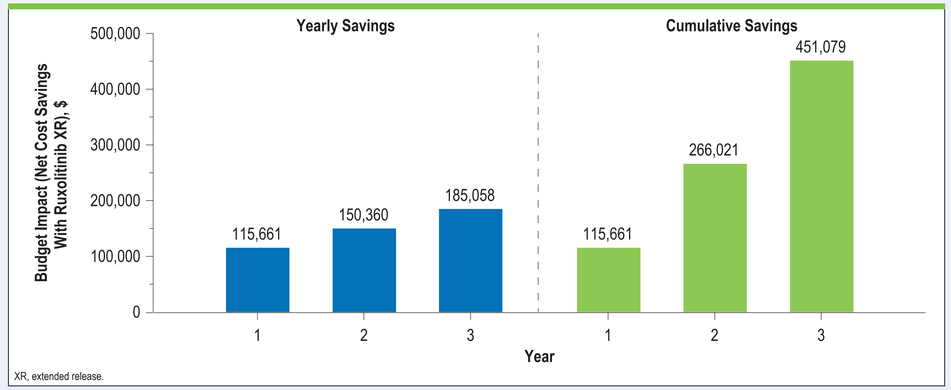
- Scenario analyses varied adherence improvement, ruxolitinib XR price premium, rapidity of XR market uptake, and MF severity
- Outcomes included total budget impact and per-member-per-month (PMPM) impact
- All costs are represented in 2025 US dollars; costs were either published as 2025 US dollars or inflated using consumer price index data

Results

Base Case

- The base case model estimated net cost savings to increase each year, resulting in $451,079 cumulative savings over 3 years, driven primarily by reductions in inpatient hospitalizations (**Figure 2**)
- When cost savings from the 100-member cohort were applied to a million-member plan, PMPM cost savings were $0.010, $0.013, and $0.015 for Years 1, 2, and 3, respectively
- Total projected costs after XR introduction were $8,301,536, $8,266,837, and $8,232,139 at Years 1, 2, and 3, respectively

Figure 2. Base Case Budget Impact of Ruxolitinib XR (Yearly and Cumulative Savings)



XR, extended release.

Table 2. Scenario Analyses for Varied Adherence or Cost of Ruxolitinib XR

	Cost Savings, USD		
	Year 1	Year 2	Year 3
Alternative adherence estimates*			
5% adherence increase			
Yearly budget impact	57,831	75,181	92,530
Cumulative budget impact	57,831	133,012	225,542
15% adherence increase			
Yearly budget impact	173,494	225,542	277,590
Cumulative budget impact	173,494	399,036	676,626
Alternative ruxolitinib XR price premiums†			
2.5% price premium			
Yearly budget impact	92,925	120,803	148,680
Cumulative budget impact	92,925	213,728	362,408
5% price premium			
Yearly budget impact	70,188	91,244	112,300
Cumulative budget impact	70,188	161,431	273,731
7.5% price premium			
Yearly budget impact	47,450	61,685	75,920
Cumulative budget impact	47,450	109,135	185,055
Alternative ruxolitinib XR market uptake†‡			
30% uptake in Year 1			
Yearly budget impact	69,397	150,360	185,058
Cumulative budget impact	69,397	219,756	404,814
40% uptake in Year 1			
Yearly budget impact	92,529	150,360	185,058
Cumulative budget impact	92,529	242,889	427,947
Alternative MF population§			
HCRU and cost data from population with more anemic MF			
Yearly budget impact	345,869	449,630	553,391
Cumulative budget impact	345,869	795,500	1,348,891

ED, emergency department; HCRU, healthcare resource utilization; MF, myelofibrosis; USD, United States dollars; XR, extended release.
* Assumed 2.5% decrease in inpatient stays with 5% adherence increase (1.4625 inpatient stays per year, no impact on outpatient, ED, or drug acquisition costs); assumed 7.5% decrease in inpatient stays with 15% adherence increase (1.3875 inpatient stays per year, no impact on outpatient, ED, or drug acquisition costs).
† Using base case 10% adherence improvement.
‡ Using base case uptakes for Years 2 and 3 (65% and 80%, respectively).
§ HCRU event rate and cost data from Liu T, et al. *Ann Hematol*. 2025;104:1605-1616, which had eligibility requirements that may have selected for a population of patients with more anemic MF; specifically, the study required ruxolitinib treatment, suggesting all patients had intermediate- or high-risk MF.

Scenario Analyses

- In patients with more anemic MF, cumulative cost savings exceeded $1.3 million per 100 patients over 3 years (**Table 2**)
- In scenario analyses, net cost savings remained robust across all scenario analyses, including when ruxolitinib XR price premiums of up to 7.5% were applied, as well as across varying adherence estimates and market uptake scenarios (**Table 2**)

Limitations

- Adherence improvements were assumed, not observed; adherence to ruxolitinib once-daily XR has not yet been studied
- Limited data were available on correlations between adherence and HCRU in patients with MF, and the relationship considered here was modeled
- The anticipated market share for ruxolitinib XR is uncertain
- Mortality was not included in the model

Conclusions

- **Once-daily ruxolitinib XR was projected to remain cost-neutral or cost-saving across a range of clinically plausible assumptions**
- **Net budget impacts were primarily driven by improved adherence assumptions and associated reductions in high-cost acute patient care, particularly inpatient hospital stays**
- **These findings support further evaluation of simplified dosing as a potentially relevant strategy to reduce acute-care burden in long-term MF management**

Disclosures

SV, **JF**, and **SP** are employees and stockholders of Incyte Corporation.
YS, **PN**, **JH**, and **SW** are employees of Columbia Data Analytics, a paid consultant of Incyte.

Acknowledgments

This study was sponsored by Incyte Corporation (Wilmington, DE). Medical writing assistance was provided by Tina Lynch, PhD, an employee of ICON (Blue Bell, PA), and was funded by Incyte.

References

1. Guglielmelli P, et al. *Leuk Lymphoma*. 2022;63(1):189-198.
2. Palandri F, et al. *Ann Hematol*. 2024;103(6):1931-1940.
3. Srivastava K, et al. *Patient Prefer Adherence*. 2013;7:419-434.
4. Weeda ER, et al. *Int J Cardiol*. 2016;216:104-109.
5. Shani M, et al. *J Gen Intern Med*. 2022;37(5):1060-1064.
6. Saini SD, et al. *Am J Manag Care*. 2009;15(6):e22-e33.
7. Mascarenhas J, et al. *HemaSphere*. 2023;7(suppl):e926360f.
8. Incyte Corporation. Cost & Savings. Available at: https://www.jakafi.com/polycythemia-vera/cost. Accessed December 15, 2025.