A Modelling Framework for Evaluating MFN Price Risk: A Counterfactual Analysis of High-Volume and Rare Disease Medicines

Igenbek A[1], Satherley A,[1], McDonald C,[2]
[1]Lightning Health, London, United Kingdom, [2]Symaptics, Leeds, United Kinddom

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Introduction

The Most Favoured Nation (MFN) policy links US drug prices to those in economically comparable countries. CMS has introduced three MFN models: GENEROUS (Medicaid), GLOBE (Medicare Part B), and GUARD (Medicare Part D).[1-3] Finalised in October 2026, GLOBE will run from April 2027 to March 2032 and cover 25% of Medicare beneficiaries. Benchmarks are based on the lowest PPP-adjusted list price (Method I) or an optional manufacturer-disclosed weighted average of net prices (Method II) across 19 reference markets.[4]

Objective

This study uses a modelling framework to evaluate two key strategic decisions under GLOBE: (1) whether manufacturers would benefit from disclosing confidential net prices under Method II; and (2) whether to delay launches in MFN reference markets to protect US pricing or accept a lower US benchmark in exchange for maximising ex-US revenue.

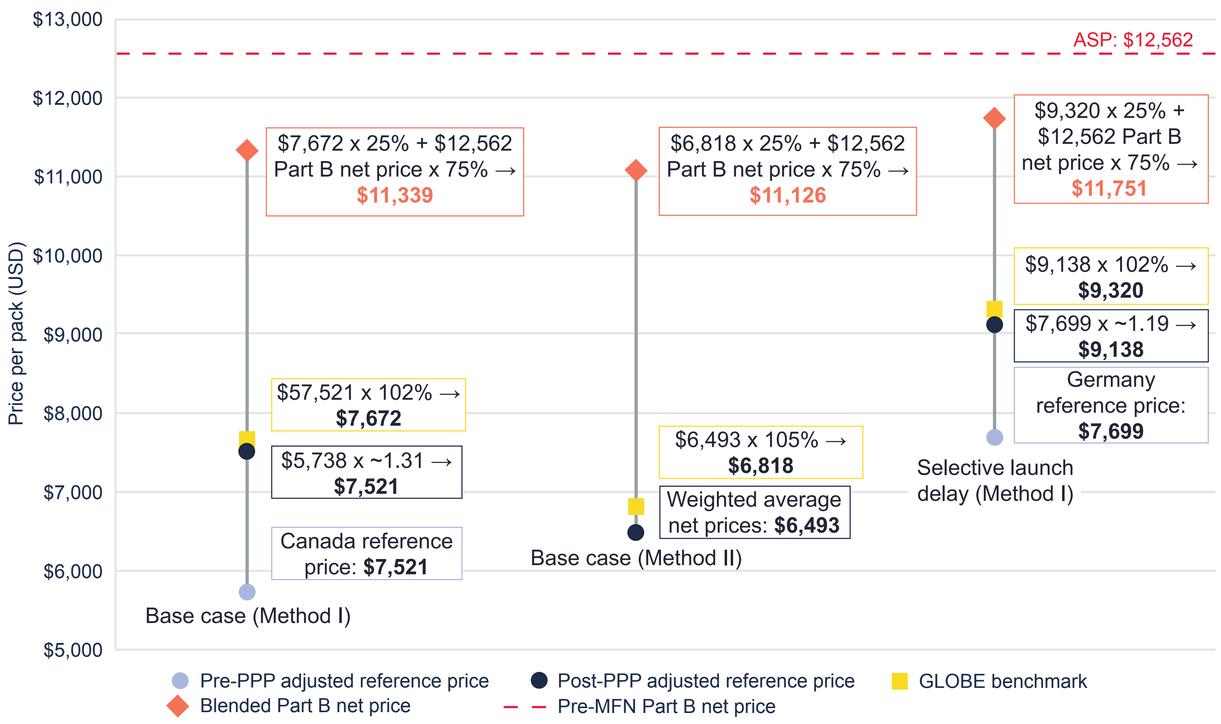
Methodology

Historical counterfactual case studies were developed for Ocrevus® (ocrelizumab), a high-volume multiple sclerosis therapy, and Poteligeo® (mogamulizumab-kpkc), a higher priced, low-volume orphan therapy for cutaneous T-cell lymphoma. As the final GLOBE framework excludes orphan drugs[4], Poteligeo was included as a hypothetical analysis of the potential MFN implications for an orphan medicine. The modelling framework simulated two strategic choices: Method I versus net price disclosure under Method II and launch across reference markets versus selective delay. Historical launches were shifted to 2027 onwards while preserving their sequence and list prices.[5] Analyses used SyMAP's monthly simulation framework, linking launch timing, prices and volumes to GLOBE benchmark calculations, Medicare Part B rebates and revenue projections. Public list prices informed proxy net prices, estimated by applying Germany's free-price-to-post-AMNOG percentage discount, scaled according to each country's list-price ratio to Germany's free price. Statutory deductions were applied where relevant, while Japanese net prices were assumed equal to list prices. Annual volumes were estimated by dividing country-allocated revenue by unit price, with revenue apportioned by population across available markets.[5-23] The launch sequence, pricing and channel split assumptions are provided in the appendix, accessible via the QR code. Draft-rule PPP adjusters were applied; CMS will use the latest available data. A 10-year commercial forecast was modelled from 2027 to 2036, with GLOBE benchmark effects applied only during the statutory model period ending in March 2032.

Results

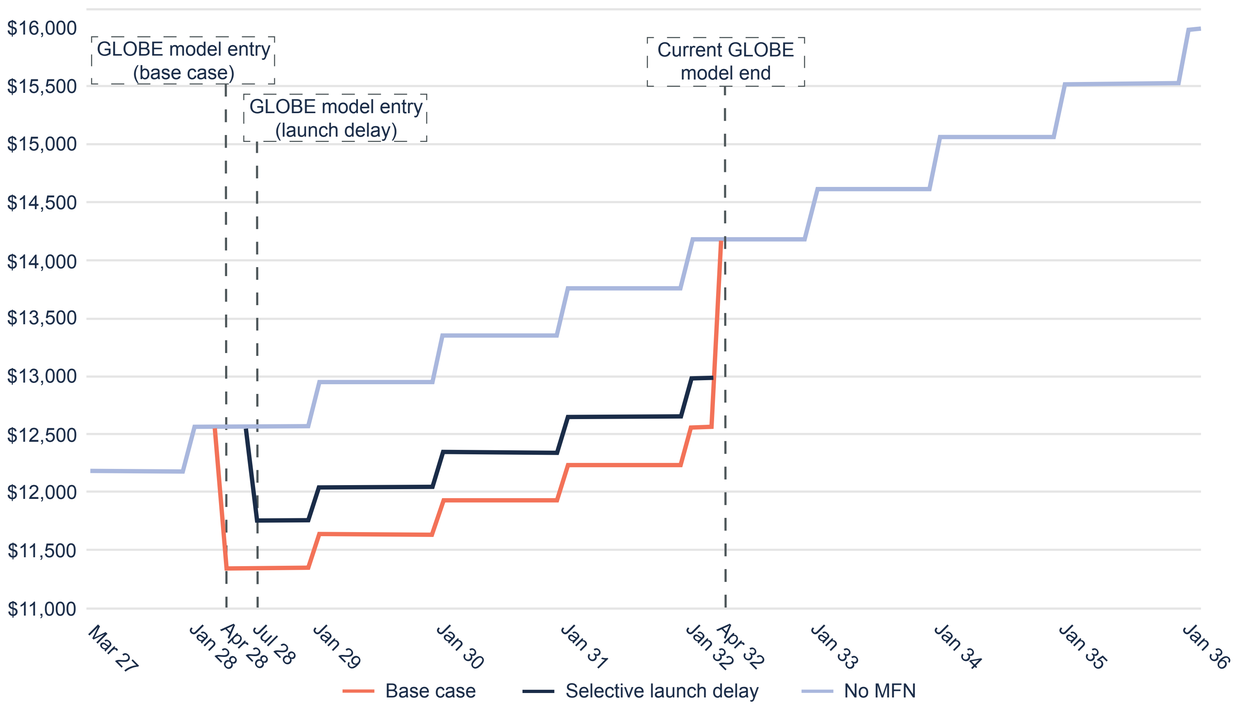
Section 1: Ocrevus: Method I remains favourable, while selective launch delay reduces MFN exposure

Figure 1. Ocrevus GLOBE benchmark and Part B blended net price calculations (at GLOBE model entry)



Legend: Base case applies current GLOBE rule to Ocrevus, retaining the historical launch sequence and list prices. Selective launch delay retains Germany Q1 2028 launch, delaying all other markets to 6 months post-German launch, with volumes reduced pro-rata. ASP = 84% of WAC.

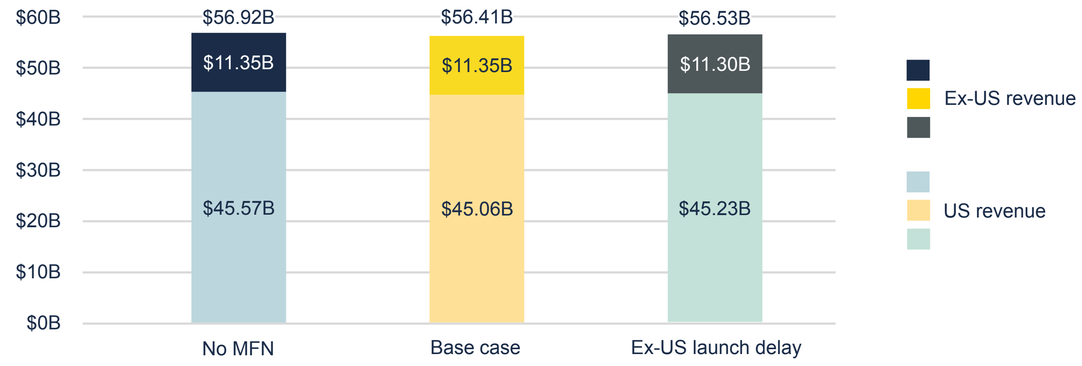
Figure 2. Ocrevus Part B blended net price evolution (2027-2036)



Section 1.1. Base case and Method I vs Method II

The base case applies the final GLOBE rule to Ocrevus. At model entry, Canada is the sole Method I reference country; its PPP-adjusted list price exceeds the Method II weighted-average net price, establishing Method I as the higher benchmark (Figure 1). Under GLOBE, the Method I benchmark is locked in throughout the GLOBE period.[4] This prevents subsequent launches in lower-priced markets from reducing the Method I benchmark, which remains above the Method II benchmark throughout the GLOBE period. From GLOBE entry in Q2 2028, the $7,672 benchmark reduces the blended net Part B price (weighted across GLOBE-covered and unaffected populations) by ~9.2%, resulting in a $507.7M net revenue loss (Figures 1–3). GLOBE's 25% Medicare coverage and five-year model period limit US revenue exposure, resulting in a global net revenue loss of approximately 0.9%. Forecast ex-US revenue exceeds the MFN-associated loss (Figure 3).

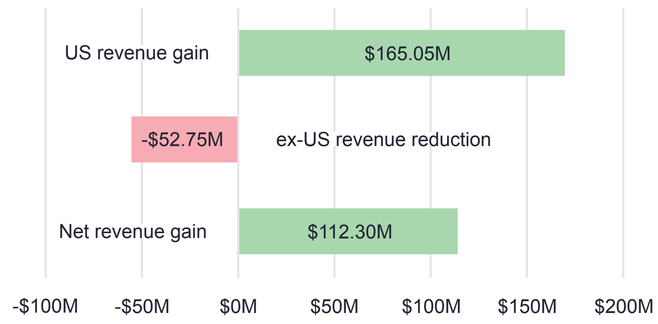
Figure 3: (a) Ocrevus Cumulative net revenue (2027-2036); (b) net MFN loss vs no MFN (2027-2036)



Scenario	Base Case	Ex-US launch delay
US revenue loss vs no MFN	$507.7M (1.1%)	$342.6M (0.8%)
Ex-US revenue loss vs no MFN	$	$52.8M (0.5%)
Net revenue loss vs no MFN	**$507.7M (0.9%)**	**$395.4M (0.7%)**

Section 1.2: Germany-first launch sequence

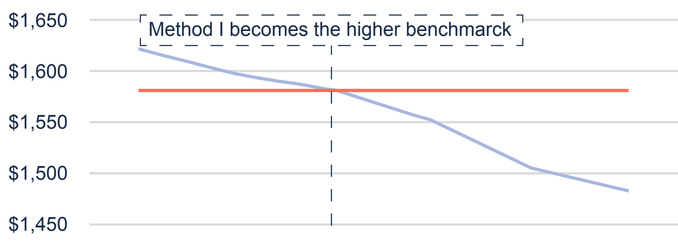
Figure 4. Ocrevus: regional and global revenue impact of selective launch delay vs the base case



This scenario retains the Q1 2028 German launch and delays all other markets until six months later, reducing volumes proportionally. Model entry shifts to Q3 2028, establishing a higher Method I benchmark ($11,751) vs the base case ($11,339) and reducing the blended Part B net price under GLOBE by only 6.4% vs 9.2% in the base case (Figures 1 and 2). Ensuring that Germany (with the highest list price at launch) is the only market with a published list price at GLOBE entry protects US net revenue, outweighing the potential reduction in ex-US revenue associated with the delayed launches. The launch-delay scenario still produces a $395.4M reduction in global revenue versus no MFN but improves net revenue by $112.3M relative to the base case. Method I lock-in remains a key driver of the impact of launch sequencing.

Section 2: Poteligeo sensitivity analysis: benchmark preferences change over time

Figure 5. Evolution of Poteligeo Method I and Method II benchmarks (Apr 2027-Mar 2032)



	2027	2028	2029	2030	2031	2032
Method I benchmark	$1,581	$1,581	$1,581	$1,581	$1,581	$1,581
Method II benchmark	$1,621	$1,597	$1,581	$1,551	$1,505	$1,482

Table 1. Comparison of MFN impact: Ocrevus vs Poteligeo

Metric	Ocrevus	Poteligeo
Preferred method at model entry	Method I	Method II
Price benchmark evolution	Method I remains higher	Method II higher for first two years; Method I thereafter
Blended Part B net price reduction	9%	13-15%
Global net revenue reduction vs no MFN	$507.7M	$52.1M
Net revenue reduction %	0.9%	1.6%
Ex-US revenue vs MFN impact	Exceeds MFN impact	Exceeds MFN impact

Poteligeo was assessed as a hypothetical example of potential MFN exposure for a higher priced, low-volume therapy. Method II initially sets the favourable MFN price benchmark but declines as lower-priced markets enter the weighted-average calculation, after which the locked Method I benchmark becomes higher (Figure 5). Compared with Ocrevus, Poteligeo incurs a lower absolute revenue reduction due to MFN but a greater proportional global revenue impact of 1.6%, reflecting its smaller revenue base and the higher Medicare exposure assumed for its indicated patient population. Nevertheless, forecast ex-US revenue exceeds the MFN-associated reduction in US revenue, indicating that broad ex-US launch avoidance would not maximise global net revenue under the modelled assumptions.

Conclusion

The modelling framework provided a structured basis for comparing MFN exposure across products, price benchmark methods and launch scenarios. Across the 10-year forecast period, MFN reduced cumulative net global revenue by only 0.9% for Ocrevus and 1.6% for Poteligeo, partly reflecting GLOBE's 25% Medicare coverage and the five-year model period. Method I lock-in was a key determinant of impact. For Ocrevus, the scenario in which only Germany, the highest-priced ex-US reference market, was included at model entry resulted in lower MFN exposure than the base case. In the modelled Ocrevus case study, Method II did not exceed the locked Method I benchmark; however, the Poteligeo analysis demonstrated that the higher benchmark may vary by product and over time. Overall, MFN exposure was shaped by launch sequence, ex-US pricing corridor, expected volumes, and Medicare exposure. Product-specific scenario modelling can therefore support an objective assessment of net price disclosure and international launch decisions. Further research could assess GENEROUS participation and the associated GLOBE exemption, alongside potential changes in GLOBE duration or beneficiary coverage.[4]

Scan for abbreviations and reference list