Poster EE140

Budget Impact Analysis of Improved Safety and Efficacy with Acalabrutinib, Bendamustine, and Rituximab in Transplant-Ineligible, Previously Untreated MCL

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Objective

- The recently approved ABR combination demonstrated improved PFS versus BR in patients with previously untreated, HSCT-ineligible, MCL. However, its financial impact remains uncertain; to address this, a BIM was developed.

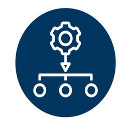
Conclusions

- The introduction of ABR resulted in significant savings in Years 1 and 2, primarily driven by a reduced need for subsequent therapies.
- Increased costs in Year 3 reflect improved survival outcomes and prolonged ABR treatment duration.
- Overall, ABR demonstrated a manageable budget impact alongside clinical benefit, together with clinical evidence, these findings can help inform optimal 1L treatment options for clinicians and payers.

Plain language summary

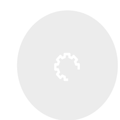
Why did we perform this research?
- MCL is a fast-growing cancer that often requires multiple treatments
- Many patients, especially older adults, are not eligible for stem cell transplant
- A new treatment, ABR, has shown improved disease control for transplant-ineligible, previously untreated patients in the ECHO trial

How did we perform this research?
- We developed a model to compare healthcare costs with and without ABR
- The analysis used a US Medicare perspective over 3 years
- Costs included treatment, side effects, and future therapies



What were the findings of this research?
- Introducing ABR reduced healthcare costs in the first two years by delaying the progression of disease and reducing the need for further treatment
- Costs increased in the third year because patients lived longer and remained on treatment for more time
- The treatment also reduced costs related to drug administration and side effects
- Overall, early cost savings were partially offset by higher long-term treatment costs

What are the implications of this research?
- ABR may improve patient outcomes while maintaining a manageable impact on healthcare costs



Where can I access more information?
- Information about the ECHO trial, including the study design can be found at: ClinicalTrials.gov
- Additional information may be available in published studies and conference abstracts

This study was funded by AstraZeneca
Poster presented at ISPOR 2026: May 17–20, 2026 | Philadelphia, PA, USA by Victor Genestier

The materials listed are for example only and may be replaced with other materials

Poster | Plain language summary | Supplementary material | Narrated poster video

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Introduction

- Mantle cell lymphoma (MCL) is an aggressive subtype of non-Hodgkin lymphoma characterized by high rates of disease progression[1]
- Management often requires multiple lines of therapy and frequent healthcare utilization, leading to substantial economic burden, particularly in elderly patients (≥65 years) with comorbidities[2]
- In the Phase III Echo trial, acalabrutinib (A) + bendamustine and rituximab (BR) has demonstrated improved progression-free survival (PFS) versus BR alone[3]
- However, the financial impact of introducing ABR into clinical practice remains uncertain

Methods

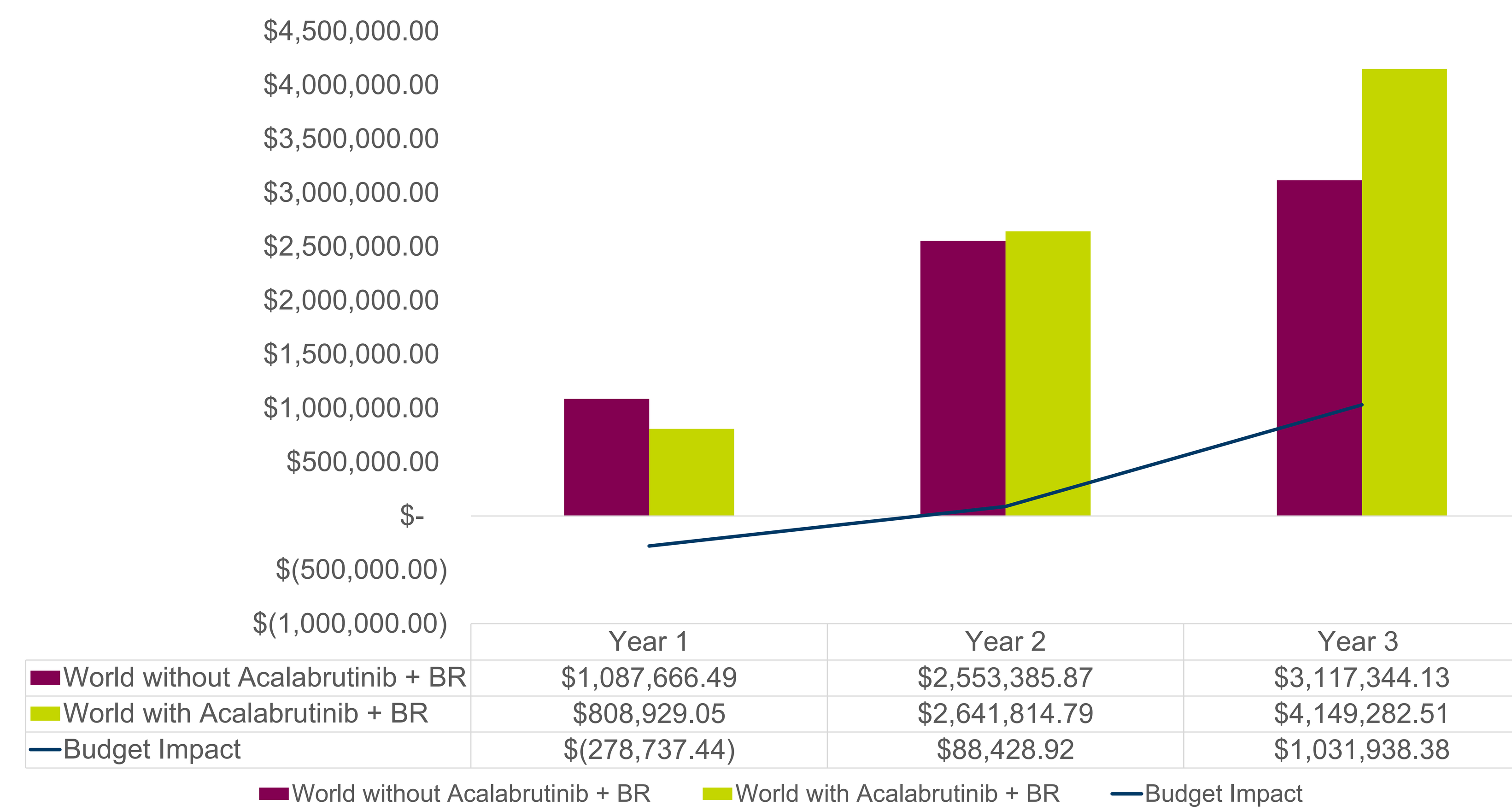
- A budget impact model (BIM) was developed from a US Medicare payer perspective over a 3-year time horizon (2025-2027)
- The model compared two scenarios: a world in which ABR was available and a world without ABR, where patients received standard-of-care (SoC) first-line regimens.
- Market uptake of ABR was assumed to increase from 8% in Year 1 to 43% in Year 3, with corresponding reductions in comparator treatments.
- Clinical efficacy, epidemiological inputs, and cost data were derived from published literature and US-specific sources.
- The model captured costs associated with drug acquisition, administration, adverse events and subsequent lines of therapy.

Estimated total population in the US
1,000,000
NHL incidence in the US
108
Proportion with MCL
6
Watch and wait patients
1
Incident patients eligible for ECHO indication
6
Watch and wait patients eligible for ECHO indication
1
MCL Patients eligible ECHO indication in year 1 (2025)
7

Results and interpretation

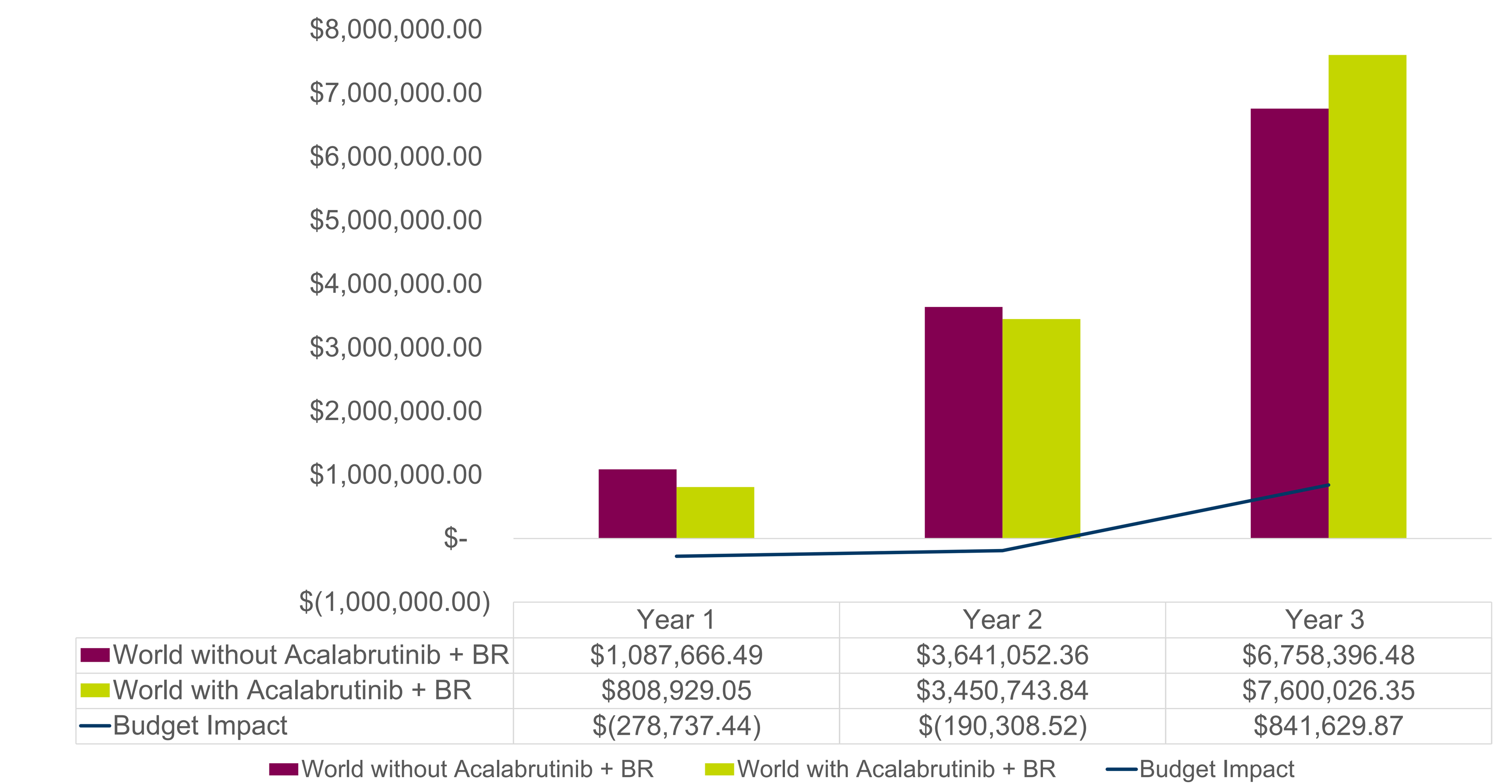
- The introduction of ABR was associated with cost savings in Years 1 and 2, followed by a cost increase in Year 3 from a US Medicare perspective. Early savings were primarily driven by reduced need for subsequent therapies, reflecting improved progression-free survival and delayed disease progression.
- In later years, total costs increased as more patients remained progression-free and continued treatment, resulting in higher first-line drug acquisition costs. Despite this, ABR demonstrated lower administration costs due to its oral formulation and reduced adverse event burden, contributing to overall cost offsets.
- At the patient and plan level, these findings indicate that initial savings are partially offset by longer-term treatment costs, reflecting a trade-off between improved clinical outcomes and increased treatment duration. Overall, ABR represents a clinically beneficial option with a manageable and predictable budget impact trajectory.

Figure. Yearly budget impact results (current vs new environment)



- The introduction of ABR resulted in cost savings of -$278,737.44 in Year 1, $88,428.92 in Year 2 but identified a cost increase of $1,031,938.38 in Year 3.
- The cost increase in Year 3 is due to prolonged treatment duration and improved survival outcomes. Overall survival data trends in favor of ABR (HR: 0.86; 95% 0.65-1.13; P=0.27), led to more patients remaining progression-free and continuing ABR treatment into Year 3.
- Additional cost savings were seen consistently over the 3-Year period in first line drug administration and AE management, attributable to the oral administration route of acalabrutinib, which incurs no administration cost, and a lower incidence of AEs relative to SoC

Figure. Cumulative budget impact results (current vs new environment)



- The cumulative budget impact by gradually replacing existing key 1L comparators over the 3 years was estimated to be -$278,737.44 in Year 1, $190,406 in Year 2 and $841,629.87 in Year 3.
- The most substantial cost-saving was observed in subsequent drug acquisition due to improved PFS in patients receiving ABR.
- These savings from reduced need for subsequent therapy largely offset the increase in 1L acquisition costs observed in Year 3.
- In Year 3, savings from subsequent therapy were more modest, partially offsetting the increase in 1L cost.

Table X. Budget Impact Results

	World without Acalabrutinib + BR	World with Acalabrutinib + BR	Budget Impact
Per member per month	$0.56	$0.63	$0.07
Per treated patient per month	$28,352	$31,883	$3,531
Per member per year	$6.76	$7.60	$0.84
Per treated patient per year	$340,225	$382,594	$42,369

- Per member per month costs increased slightly with ABR reflecting higher long-term treatment costs
- Per treated patient per month costs were higher with ABR driven by increased treatment duration
- Annual per member costs increased modestly with ABR
- Per treated patient annual costs were higher with ABR reflecting improved survival and continued therapy

Disclosures

This study was sponsored by AstraZeneca.
Dr. Ibrahim is an employee of AstraZeneca and Dr. Teschemaker was an employee of AstraZeneca.
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References

1. Vose JM. Mantle cell lymphoma: 2017 update. *Am J Hematol.* 2017;92(8):806–813.
2. Anglin P, Elia-Pacitti J, Eberg M, et al. Burden of illness and healthcare utilization in patients ≥65 with mantle cell lymphoma in Ontario. *Curr Oncol.* 2023;30(6):5529–5545.
3. Wang M, Salek D, Belada D, et al. Acalabrutinib plus bendamustine-rituximab in untreated mantle cell lymphoma. *J Clin Oncol.* 2025;43(20):2276–2284.