

Cost-Savings Analysis of Fitusiran Prophylaxis: Reducing Breakthrough Bleeding Treatment Expenditure in the Kingdom of Saudi Arabia

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OBJECTIVE



To estimate the cost-savings associated with reduction in clotting factor concentrates (CFCs)/bypassing agents (BPAs) consumption for breakthrough bleeds management, when using fitusiran antithrombin (AT)-based dosing regimen (AT-DR) prophylaxis in the Kingdom of Saudi Arabia (KSA), using data from the ATLAS-OLE trial (NCT03754790).

BACKGROUND

- Fitusiran is a subcutaneous AT-lowering therapeutic that increases thrombin generation to restore haemostasis in people with haemophilia (PwH).¹
- Fitusiran received approval from the United States Food and Drug Administration (FDA) in March 2025 as a prophylactic treatment for people with haemophilia A or B (PwHA or PwHB) aged ≥12 years, irrespective of their inhibitor status.¹ This was followed by regulatory approval in United Arab Emirates in April 2025.²
- The findings from the ATLAS-OLE trial demonstrated that the fitusiran's AT-DR (targeting AT levels of 15%–35%) reduces the use of CFCs/BPAs in breakthrough bleed management compared with the use of CFCs/BPAs as prophylaxis in haemophilia.³

METHODS

A cost analysis model was developed in Microsoft Excel.

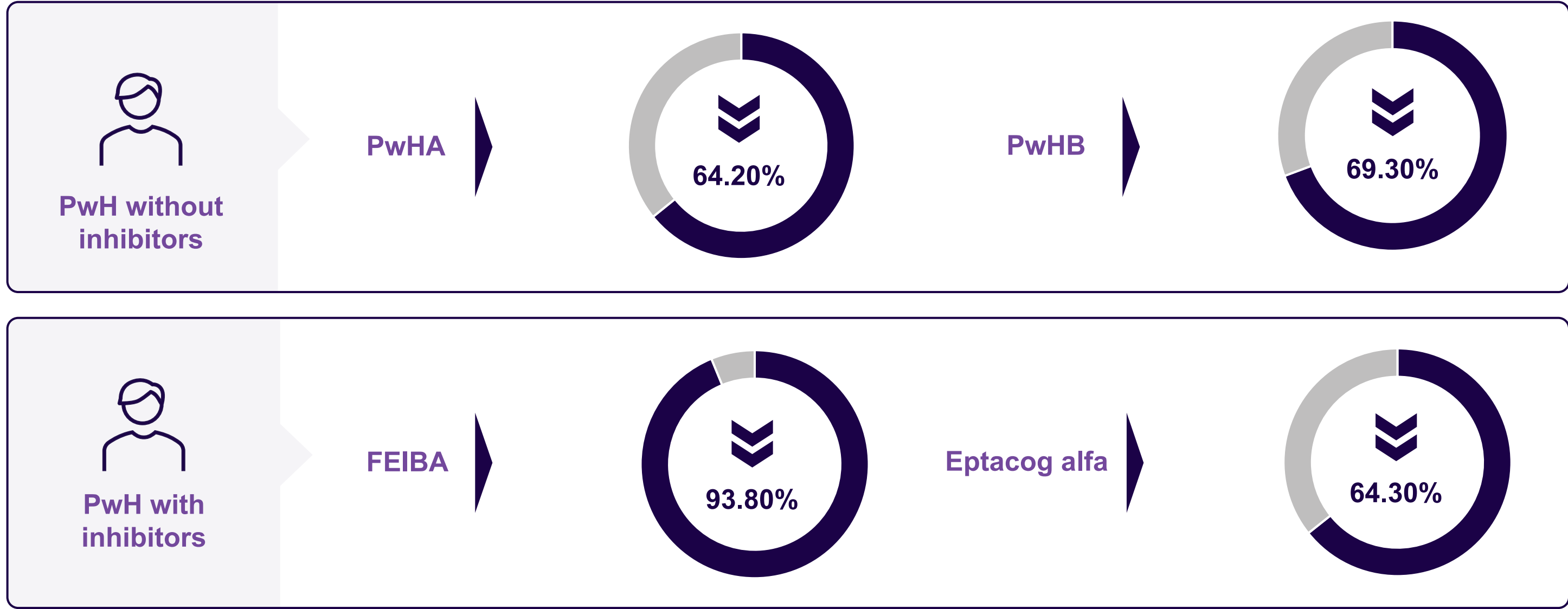
- CFC/BPA episodic treatments used during breakthrough bleeds considered**
 - For PwHA without inhibitors: octocog alfa, efmorotocog alfa, and ruriotocog alfa pegol
 - For PwHB without inhibitors: nonacog alfa, albutrepenonacog alfa, and eftrenonacog alfa
 - For PwH with inhibitors: factor VIII inhibitor bypassing activity (FEIBA) and eptacog alfa
- Model inputs and assumptions**
 - Key inputs used for the calculation are presented in **Table 1**.
 - An average patient weight of 70.00 kg was included.⁴
 - The administration cost used was the cost of 500 Saudi riyal (SAR) per an intravenous drip session.⁵
 - Published drug prices in the KSA were used in the analysis.⁶
 - No vial sharing was assumed in the base case analysis.
 - The reduction in CFC/BPA consumption with fitusiran AT-DR prophylaxis was derived directly from the ATLAS-OLE trial data (**Figure 1**).³

Table 1. Cost-calculation model inputs.

On-demand treatment	Cost per pack (SAR)	CFC/BPA dose per kg	CFC/BPA doses to resolve one bleed	Total CFC/BPA dose per bleed with CFC/BPA prophylaxis	Total CFC/BPA dose per bleed with fitusiran AT-DR prophylaxis
PwHA without inhibitors					
Octocog alfa	618.20	30	1.5	3,150.00	1,127.70
Efmorotocog alfa	739.30	20	1.5	2,100.00	751.80
Ruriotocog alfa pegol	752.35	30	1.5	3,150.00	1,127.70
PwHB without inhibitors					
Nonacog alfa	1,333.85	30	1.7	3,570.00	1,095.99
Albutrepenonacog alfa	2,323.55	30	1.7	3,570.00	1,095.99
Eftrenonacog alfa	1,549.05	30	1.7	3,570.00	1,095.99
PwH with inhibitors					
FEIBA	1,645.30	75	3.7	19,425.00	1,204.35
Eptacog alfa	3,168.00	90	6.0	37,800.00	13,494.60

AT-DR, antithrombin-based dosing regimen; BPA, bypassing agent; CFC, clotting factor concentrate; FEIBA, factor VIII inhibitor bypassing activity; PwH, people with haemophilia; PwHA, people with haemophilia A; PwHB, people with haemophilia B; SAR, Saudi riyal; USPI: United States prescribing information. The dose per kg for PwH on CFC/BPA prophylaxis was sourced from USPI⁷⁻¹⁴. The percentage reductions considered in factor consumption for PwH on fitusiran AT-DR prophylaxis are based on ATLAS-OLE data.³

Figure 1. Potential reduction in the mean annualised weight-adjusted consumption of on-demand CFC/BPA with fitusiran AT-DR prophylaxis compared with that with CFC/BPA prophylaxis for breakthrough bleeds management.



■ Reduction in CFC/BPA consumption for breakthrough bleeds management with fitusiran AT-DR compared with CFC/BPA prophylaxis
AT-DR, antithrombin-based dosing regimen; BPA, bypassing agent; CFC, clotting factor concentrate; FEIBA, factor VIII inhibitor bypassing activity; PwH, people with haemophilia; PwHA, people with haemophilia A; PwHB, people with haemophilia B.

- Analysis**
 - The analysis calculated the total cost per bleed (including both medication and administration expenses) for patients on CFC/BPA prophylaxis compared with those on fitusiran AT-DR.
 - The cost difference between these approaches represents the potential savings for people receiving fitusiran AT-DR.
 - A scenario analysis assessed the impact of vial sharing.

REFERENCES

- QFILTIA® (fitusiran) Subcutaneous Injection Prescribing Information. Sanofi. 2025. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2025/219019s000lbl.pdf. Accessed 30 May 2025.
- Registered medical product directory, United Arab Emirates Ministry of Health & Prevention. Available at: <https://mhapp.gov.ae/en/registered-medical-product-directory?keyword=Fitusiran>. Accessed 15 October 2025.
- Pipe SW, Kavakli K, Matsushita T, et al. *Blood*. 2024;144(Supplement 1):128-128.
- Anan I, Taha S, Sedrak AS, et al. *Value in Health*. 2022;25(12):S94.
- Your Health, Our Priority - Experience the Benefits of IV Drip Therapy in Riyadh. Available at: [https://www.enfieldroyalsaudia.com/iv-drip/#:~:text=In%20Riyadh%2C%20Saudi%20Arabia%2C%20the,real%20cost%20may%20differ%20significantly](https://www.enfieldroyalsaudia.com/iv-drip/#:~:text=In%20Riyadh%2C%20Saudi%20Arabia%2C%20the,real%20cost%20may%20differ%20significantly.). Accessed 30 May 2025.
- Drugs List. Saudi Food & Drug Authority. Available at: <https://www.sfda.gov.sa/en/drugs-list?pg=1>. Accessed 30 May 2025.
- ELOCATE® Prescribing Information. Available at: <https://www.fda.gov/media/88746/download?attachment>. Accessed 30 May 2025.
- ADYNOVATE® Prescribing Information. Available at: https://www.shirecontent.com/PI/PDFs/ADYNOVATE_USA_ENG.pdf. Accessed on 30 May 2025.
- ADVATE® Prescribing Information. Available at: <https://www.fda.gov/media/78852/download?attachment>. Accessed on 30 May 2025.
- FEIBA® Prescribing Information. Takeda Pharmaceuticals USA, Inc. Available at: <https://www.fda.gov/media/78552/download?attachment>. Accessed 30 May 2025.
- BeneFIX® Prescribing Information. Pfizer Inc. Available at: <https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&od=&cad=rja&uact=8&ved=2ahUKEwjcsdl94KPAxW98DgGH5VPPSKQFnoECBcQAQ&url=https%3A%2F%2Fwww.fda.gov%2Fmedia%2F73556%2Fdownload&usg=AOvVaw2MIN3ir1apAXphVBwccw&opi=89978449>. Accessed 30 May 2025.
- NovoSeven® Prescribing Information. Novo Nordisk Inc. Available at: https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&od=&cad=rja&uact=8&ved=2ahUKEwjiuNZ89KPAXUHyDgGHWINLEKQFnoECBcQAQ&url=https%3A%2F%2Fwww.fda.gov%2Fmedia%2F70435%2Fdownload&usg=AOvVaw1qC2j6DJyML_IJ0o5oe&opi=89978449. Accessed 30 May 2025.
- IDELVION® Prescribing Information. CSL Behring LLC. Available at: https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiPII9jB4KPAXWLIZMGHV_FGpUQFnoECBcQAQ&url=https%3A%2F%2Fwww.fda.gov%2Fmedia%2F96526%2Fdownload&usg=AOvVaw04YSD4Q_vzIHSaIDxhc1UD&opi=89978449. Accessed 30 May 2025.
- ALPROLIX® Prescribing Information. Sanofi. Available at: <https://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwiY4qXC94KPAXVpxzgGHXl6FZ4QFnoECBQQAQ&url=https%3A%2F%2Fwww.fda.gov%2Fmedia%2F288119%2Fdownload&usg=AOvVaw3gGKICKETIZwYXh3PZyclI&opi=89978449>. Accessed 30 May 2025.

FUNDING

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CONFLICT OF INTERESTS

Daisy Ng-Mak, Marion Afonso, Yuqian Shen, Shariq Ali, Amy Chen, Ahmed Mekky, Wedad Alnemari, and Ion Agirrezabal are employees of Sanofi and may hold stock and/or stock options in Sanofi.

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CONCLUSIONS

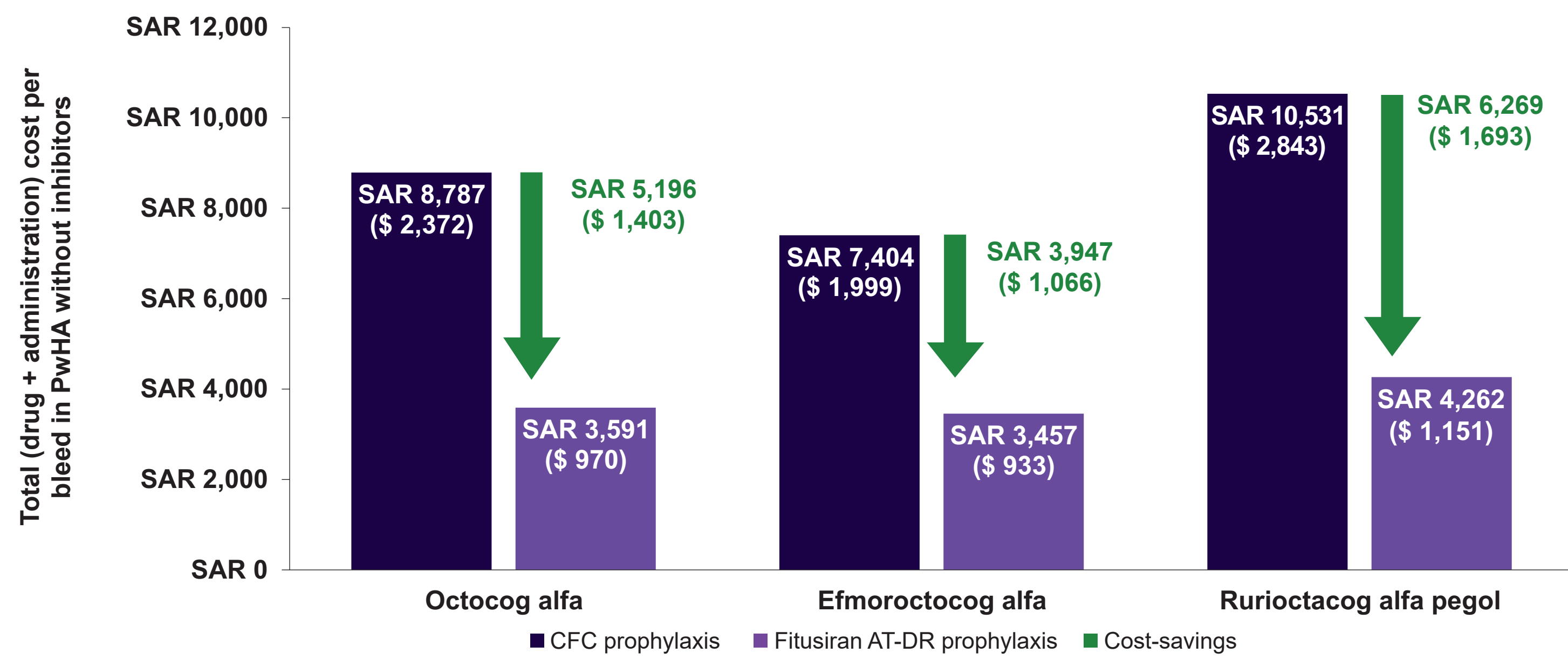
- In the KSA, fitusiran AT-DR prophylaxis may considerably reduce breakthrough bleed management costs for PwH compared with those with CFC/BPA prophylaxis.
- Cost-savings are anticipated to be more substantial (SAR 60,581 [\$ 16,357] to SAR 77,961 [\$ 21,049]) for PwH with inhibitors than for those without inhibitors.
- For payers and healthcare systems, fitusiran may substantially reduce annual haemophilia bleed management budgets in the KSA.

RESULTS

PwH without inhibitors

- For PwHA without inhibitors, fitusiran AT-DR prophylaxis resulted in savings ranging from SAR 3,947 (\$ 1,006) to SAR 6,269 (\$ 1,693) per bleed (**Figure 2**).

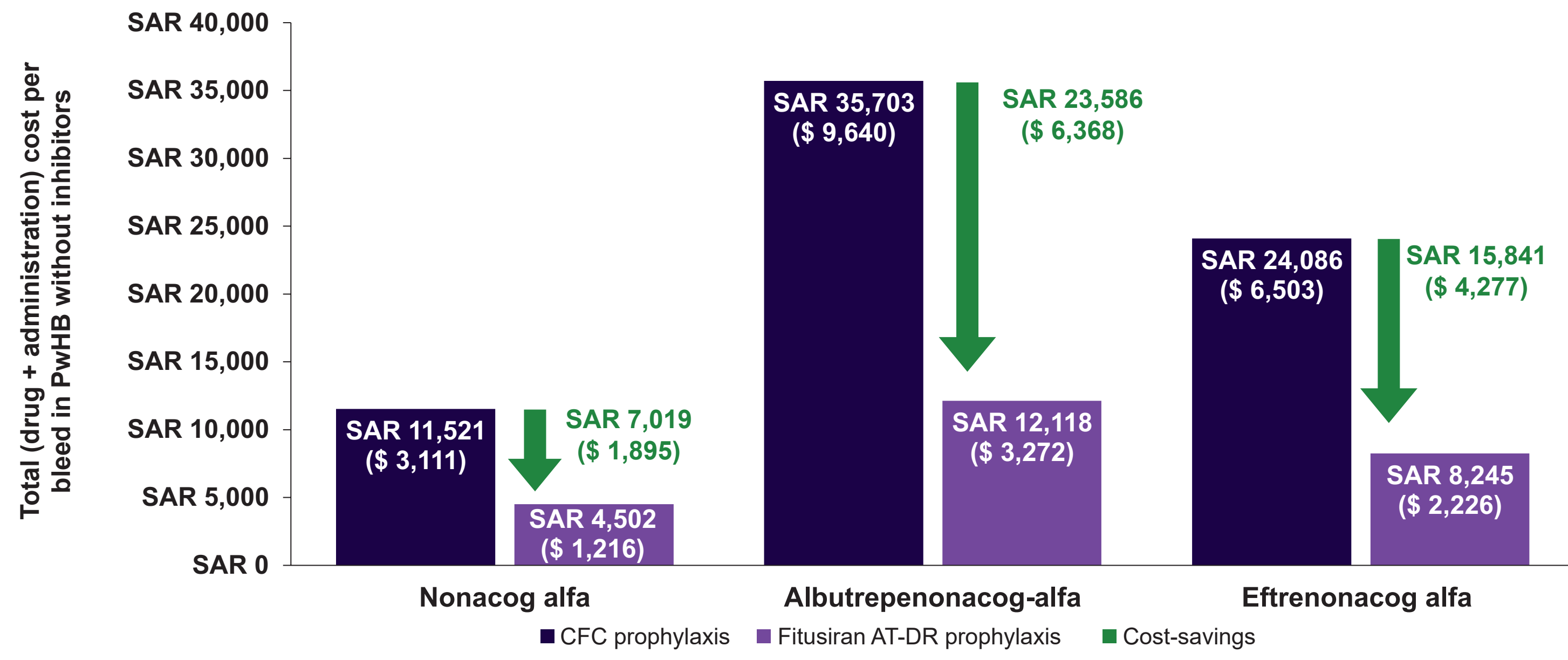
Figure 2. Treatment cost of breakthrough bleeds management with CFC prophylaxis and fitusiran AT-DR prophylaxis among PwHA without inhibitors.



AT-DR, antithrombin-based dosing regimen; CFC, clotting factor concentrate; PwHA, people with haemophilia A; SAR, Saudi riyal.

- In PwHB without inhibitors, the savings ranged from SAR 7,019 (\$ 1,895) to SAR 23,586 (\$ 6,368) per bleed (**Figure 3**).

Figure 3. Treatment cost of breakthrough bleeds management with CFC prophylaxis and fitusiran AT-DR prophylaxis among PwHB without inhibitors.

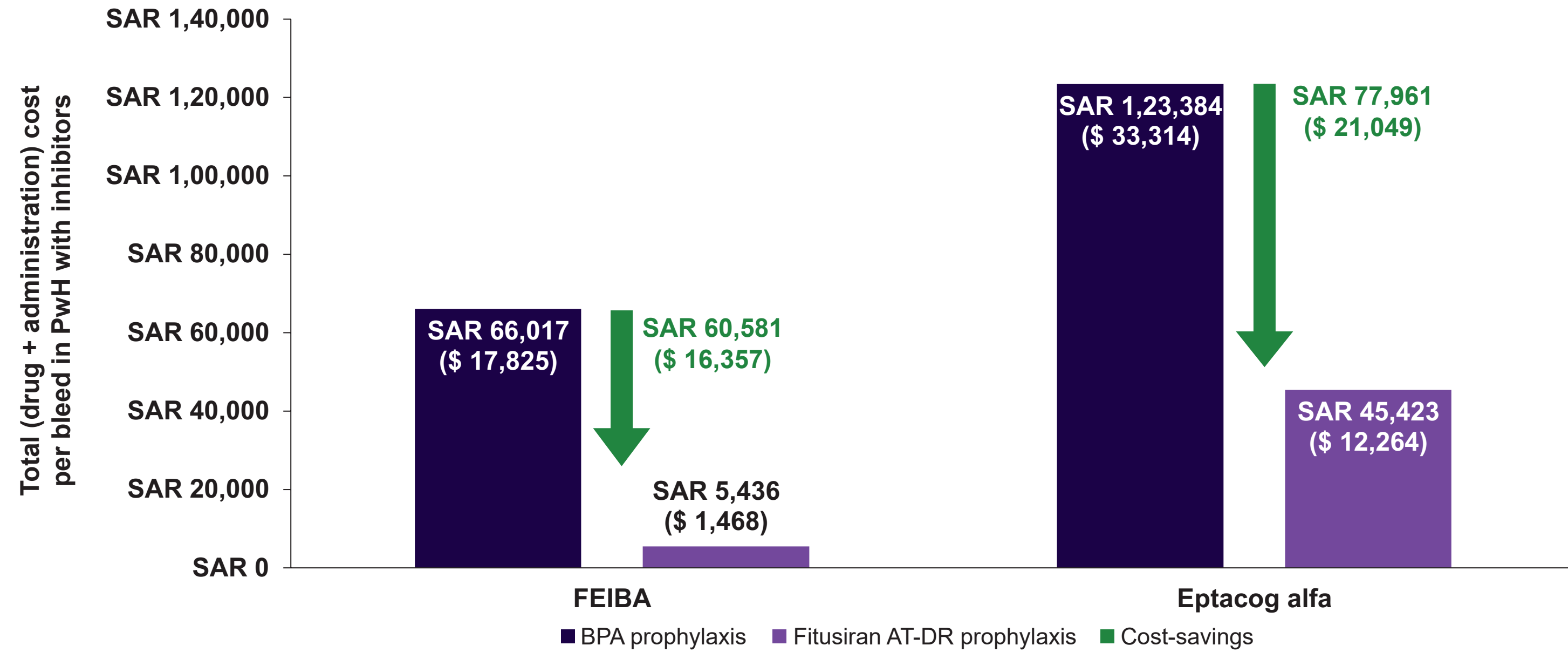


AT-DR, antithrombin-based dosing regimen; CFC, clotting factor concentrate; PwHB, people with haemophilia B; SAR, Saudi riyal.

PwH with inhibitors

- Notably, most substantial savings were observed among PwH with inhibitors, ranging from SAR 60,581 (\$ 16,357) to SAR 77,961 (\$ 21,049) per bleed (**Figure 4**).

Figure 4. Treatment cost of breakthrough bleeds management with BPA prophylaxis and fitusiran AT-DR prophylaxis among PwH with inhibitors.



AT-DR, antithrombin-based dosing regimen; BPA, bypassing agent; FEIBA, factor VIII inhibitor bypassing activity; PwH, people with haemophilia; SAR, Saudi riyal.

Scenario analysis considering vial sharing

- The cost-savings associated with fitusiran AT-DR prophylaxis remained substantial.
 - For PwH without inhibitors, the cost savings per bleed ranged from SAR 4,237 (\$ 1,144) to SAR 6,336 (\$ 1,711) in PwHA and from SAR 6,950 (\$ 1,877) to SAR 23,344 (\$ 6,303) for PwHB.
 - For PwH with inhibitors, the savings per bleed ranged from SAR 61,307 (\$ 16,553) to SAR 78,929 (\$ 21,311).