Effectiveness and safety of avatrombopag for treatment of immune thrombocytopenia in older patients and those with comorbidities or prior TPO-RA exposure: Interim results from the phase 4 ADOPT study

María Eva Mingot-Castellano, MD, PhD,[1] María Teresa Álvarez Román, MD, PhD,[2] María Luisa Lozano, MD, PhD,[3] Wolfgang Miesbach, MD, PhD,[4] Hafiz Qureshi, MD,[5] Vickie McDonald, PhD,[6] Jessica Zhang, MS,[7] Viridiana Cano Garcia, MD,[7] Nina Skuban, MD,[7] Waleed Ghanima, MD[8]

[1]Hematology Department, Hospital Universitario Virgen del Rocío, Instituto de Biomedicina de Sevilla (IBIS), Sevilla, Spain; [2]Thrombosis and Haemostasis Unit, University Hospital La Paz, Madrid, Spain; [3]Department of Hematology, Hospital General Universitario José María Morales Meseguer, Centro Regional de Hemodonación, Universidad de Murcia, IMIB-Pascual Parrilla, Centro de Investigación Biomédica en Red de Enfermedades Raras-Instituto de Salud Carlos III, Murcia, Spain; [4]Department of Haemostaseology and Haemophilia Centre, Medical Clinic 2, Institute of Transfusion Medicine, University Hospital Frankfurt, Frankfurt, Germany; [5]Leicester University Hospital, Leicester, UK; [6]Department of Clinical Haematology, Guy's and St Thomas' NHS Foundation Trust, London, UK; [7]Sobi, Waltham, MA, USA; [8]Department of Hemato-oncology, Østfold Hospital, and Institute of Clinical Medicine, University of Oslo, Oslo, Norway

PS2242

CONCLUSIONS

- In this interim analysis of real-world data from ADOPT, avatrombopag for the treatment of ITP was effective across patients aged ≥65 years and those with comorbidities or prior TPO-RA exposure
- No new safety concerns have been identified to date
- Understanding avatrombopag's profile among these patient subgroups that may have increased TEE risk will provide valuable insights for optimizing treatment strategies in diverse real-world populations, which often differ from those enrolled in clinical trials

BACKGROUND

- Avatrombopag is a thrombopoietin receptor agonist (TPO-RA) approved for the treatment of chronic immune thrombocytopenia (ITP) in adults with insufficient response to a previous treatment[1]
- The efficacy and safety of avatrombopag have been established in phase 3 clinical trials[2,3]; however, data on real-world usage are limited, particularly among patient subpopulations that may have increased risk for thromboembolic events (TEEs)
- ADOPT (NCT04943042) is an ongoing phase 4, multicenter, observational study designed to examine real-world outcomes with avatrombopag in clinical practice

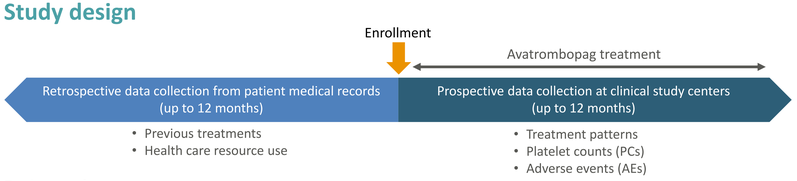
AIMS

- To examine interim efficacy and safety results from ADOPT among patients aged ≥65 years and those with comorbidities or prior TPO-RA exposure

METHODS

- **Setting:** 60 clinical study centers across 9 European countries
- **Patients:** Adults (aged ≥18 years) with an established ITP diagnosis who were initiating or already being treated with avatrombopag
  - Patients with ITP secondary to other conditions were excluded
- **Statistical analysis:** Results were analyzed descriptively by subgroups, including patients aged ≥65 years, those with comorbidities considered to be TEE risk factors, and those with prior TPO-RA exposure

Study design



Patient subgroups

Aged ≥65 years

Comorbidities with increased TEE risk[a]

Prior TPO-RA exposure

[a]Includes obesity/overweight, cardiovascular disease, chronic renal disease, smoking/alcohol use, oral contraceptive use, personal/family history of TEE, recent major surgery, and cancer.
TEE, thromboembolic event; TPO-RA, thrombopoietin receptor agonist.

Study endpoints

Primary endpoint: Cumulative weeks with PC ≥30×10^9/L

Key secondary endpoints

- Cumulative weeks with PC ≥50×10^9/L
- PC ≥30×10^9/L for ≥8 consecutive weeks
- PC ≥50×10^9/L for ≥8 consecutive weeks
- Rescue medication use

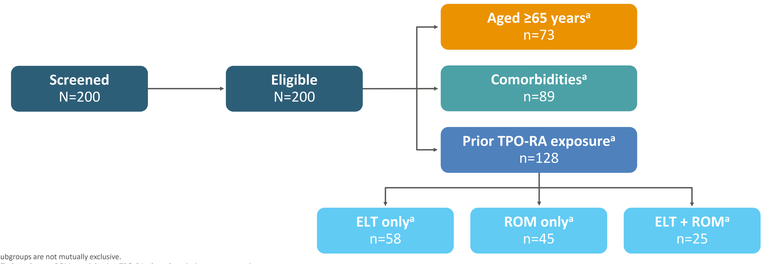
Safety endpoints

- Serious AEs (SAEs)
- AEs of special interest (AESIs; thromboembolic events, bleeding events of WHO grade ≥3)
- AEs leading to avatrombopag discontinuation

RESULTS

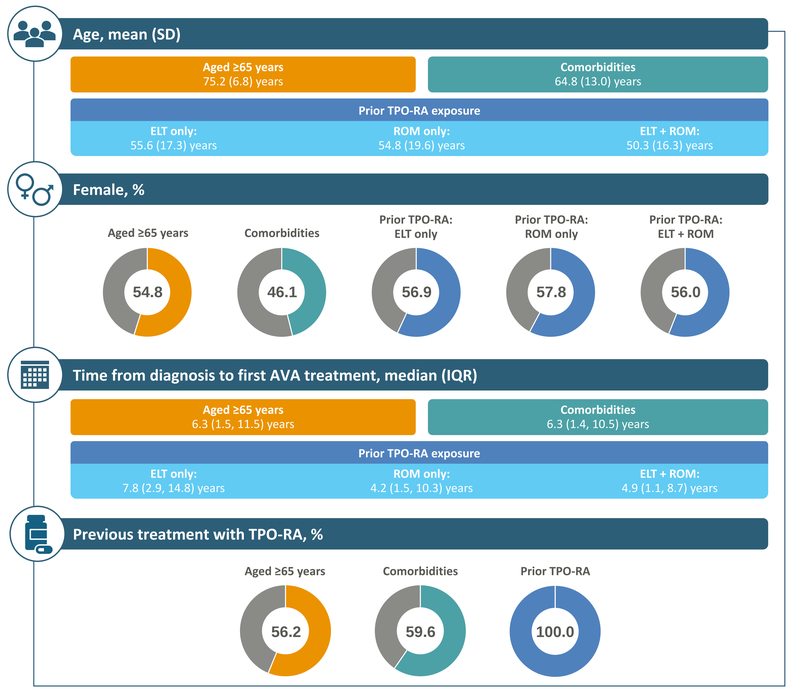
- As of November 12, 2024, 200 patients were enrolled and 51 (25.5%) had completed the study overall; the patient distribution across subgroups is shown in **Figure 1**
- The majority of patients had been previously treated with a TPO-RA (**Figure 2**)
- The median cumulative number of weeks with PC ≥30×10^9/L or PC ≥50×10^9/L was high across groups (**Figure 3**), and all patients with ≥8 weeks of follow-up data had ≥8 consecutive weeks with PC ≥50×10^9/L
- Use of rescue therapy was ≤20% in all groups (**Figure 4**)
- The prevalences of AEs, SAEs, and AESIs were comparable across groups (**Table 1**); reported AESIs (6.7%–8.0% of patients in subgroups) included atheroembolism, deep vein thrombosis, pulmonary embolism, and cerebral venous thrombosis
- Three deaths were reported, none of which were determined to be avatrombopag related (**Table 1**)

Figure 1: Patient disposition as of November 12, 2024



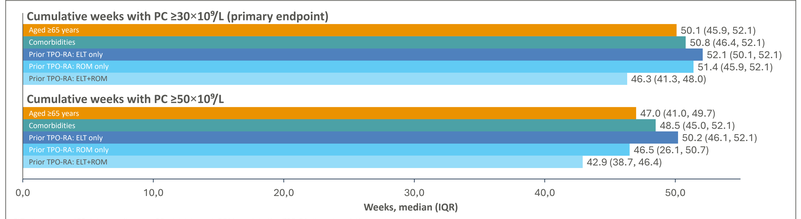
[a]Subgroups are not mutually exclusive.
ELT, eltrombopag; ROM, romiplostim; TPO-RA, thrombopoietin receptor agonist.

Figure 2: Baseline patient demographic and clinical characteristics



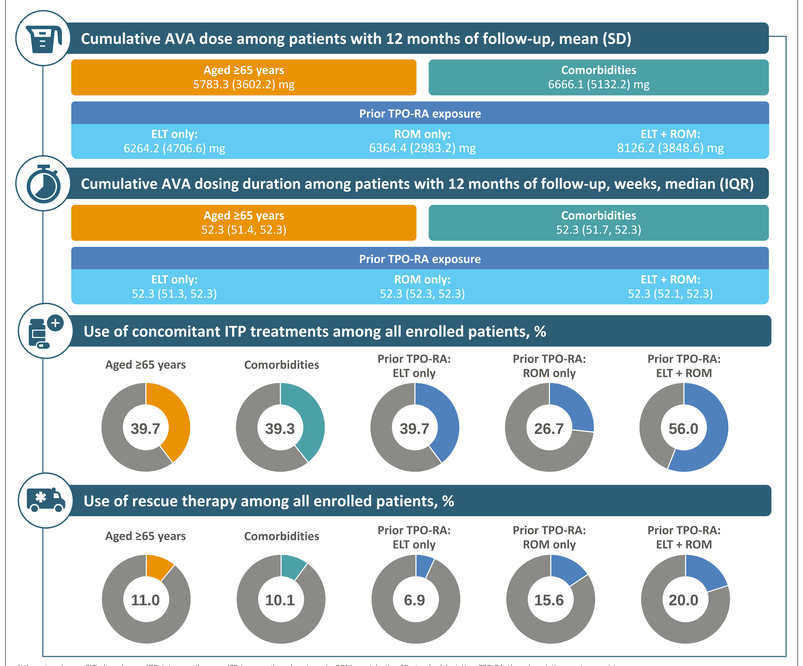
AVA, avatrombopag; ELT, eltrombopag; IQR, interquartile range; ROM, romiplostim; SD, standard deviation; TPO-RA, thrombopoietin receptor agonist.

Figure 3: Interim effectiveness outcomes among patients with 12 months of follow-up



ELT, eltrombopag; IQR, interquartile range; PC, platelet count; ROM, romiplostim; TPO-RA, thrombopoietin receptor agonist.

Figure 4: Interim treatment characteristics from enrollment to 12 months



AVA, avatrombopag; ELT, eltrombopag; IQR, interquartile range; ITP, immune thrombocytopenia; ROM, romiplostim; SD, standard deviation; TPO-RA, thrombopoietin receptor agonist.

Table 1: Interim safety outcomes

	Total (N=200)	Aged ≥65 years (n=73)	Comorbidities[a] (n=89)	Prior TPO-RA exposure (n=128)		
				ELT only (n=58)	ROM only (n=45)	ELT+ROM (n=25)
Patients with AEs, n (%)[b]	34 (17.0)	17 (23.3)	18 (20.2)	11 (19.0)	8 (17.8)	4 (16.0)
Treatment-related AEs	11 (5.5)	6 (8.2)	4 (4.5)	3 (5.2)	2 (4.4)	1 (4.0)
AEs resulting in discontinuation	3 (1.5)	2 (2.7)	0	1 (1.7)	1 (2.2)	0
Patients with SAEs, n (%)[b]	22 (11.0)	10 (13.7)	15 (16.9)	6 (10.3)	7 (15.6)	4 (16.0)
Deaths[c]	3 (1.5)	1 (1.4)	2 (2.2)	1 (1.7)	0	1 (4.0)
Patients with AESIs, n (%)[b]	10 (5.0)	5 (6.8)[d]	6 (6.7)[e]	4 (6.9)[f]	3 (6.7)[g]	2 (8.0)[h]

AE, adverse event; AESI, AE of special interest (thromboembolic events, bleeding events of WHO grade ≥3); ELT, eltrombopag; ROM, romiplostim; SAE, serious AE; TEE, thromboembolic event; TPO-RA, thrombopoietin receptor agonist.
[a]Comorbidities considered to be risk factors for TEEs, including obesity/overweight, cardiovascular disease, chronic renal disease, smoking/alcohol use, oral contraceptive use, personal/family history of TEE, recent major surgery, or cancer. [b]Because patient subgroups are not mutually exclusive, a single reported AE could appear across multiple subgroups. [c]No deaths were determined to be avatrombopag-related. [d]Includes 1 report each of pulmonary embolism, deep vein thrombosis, embolism, and cerebral venous thrombosis and 1 uncoded AE. [e]Includes 1 report each of atheroembolism, deep vein thrombosis, embolism, thrombosis, pulmonary embolism, and cerebral venous thrombosis and 1 uncoded AE. [f]Includes 1 report each of atheroembolism, deep vein thrombosis, and pulmonary embolism and 2 uncoded AEs. [g]Includes 1 report of embolism and 1 uncoded AE. [h]Includes 1 report of cerebral venous thrombosis and 1 uncoded AE.

References

1. Doptelet [package insert]. Morrisville, NC: AkaRx, Inc; 2024.
2. Jurczak W, et al. *Br J Haematol*. 2018;183:479-490.
3. Mei H, et al. *Res Pract Thromb Haemost*. 2023;7:102158.

Acknowledgments

This study was funded by Sobi. The authors would like to thank the patients, caregivers, investigators, and staff for their participation in the ADOPT study. Medical writing and editorial assistance, under the guidance of the authors, were provided by Yvette Edmonds, PhD, and Jane Moore of Peloton Advantage, LLC, an OPEN Health company, funded by Sobi, in accordance with Good Publication Practice (GPP 2022) guidelines.

Disclosures

MEM-C: Research support: Amgen, Novartis, Novo Nordisk, Sanofi, and Takeda; advisory board: Amgen, Boehringer Ingelheim, Grifols, Novartis, Novo Nordisk, Sanofi, Shioni, Sobi, and Takeda; speaker bureau: Amgen, Boehringer Ingelheim, Grifols, Novartis, Novo Nordisk, Sanofi, Shioni, Sobi, and Takeda. **MTAR:** Speaker bureau, sponsored symposia, and advisory board fees: Amgen, CSL Behring, Novartis, Novo Nordisk, Octapharma, Pfizer, Roche, Sobi, and Takeda. **MLL:** Consultancy fees: Amgen, Argenx, Grifols, Novartis, Sobi, and UCB. **WM:** Advisory board: Bayer, Biomarin, Biotest, CSL Behring, Chugai, Freeline, LFB, Novo Nordisk, Octapharma, Pfizer, Regeneron, Roche, Sanofi, Sobi, Takeda/Shire, and uniQure. **HQ:** Nothing to disclose. **VM:** Consultancy: Amgen, Argenx, and Novartis; research funding: Grifols and Novartis; honoraria: Amgen, Argenx, Grifols, Novartis, and Sobi; travel expenses: Amgen. **JZ:** Current employment: Sobi. **VCG:** Current employment: Sobi. **NS:** Current employment: Sobi. **WG:** Advisory board fees: Alpine, Amgen, Argenx, Cellphire, Grifols, Hillio, Kedrion, Novartis, Pfizer, Principia Biopharma (a Sanofi Company), Sanofi, Sobi, and UCB; honoraria: Amgen, Bayer, Bristol Myers Squibb, Grifols, Novartis, Pfizer, Sanofi, and Sobi; research funding: Bayer, Bristol Myers Squibb, Pfizer, Sanofi, Sobi, and UCB.

Presented at: the European Hematology Association 2025 Congress; June 12–15, 2025; Milan, Italy