# Insights from EHA and ISTH 2024: How can we optimize care for patients with chronic ITP?

Data updates January 2025



Date of preparation: 08 January 2025

#### • New data on the burden of ITP

Patients (N)	Study information	Outcomes
Adults ≥18 years with persistent/chronic primary ITP initiating advanced therapies between October 2016 and April 2022 (n=1,140) matched to non-ITP patients (n=5,657)*	<ul> <li>Observational retrospective matched cohort study in the USA to assess clinical burden of disease in patients with ITP</li> </ul>	<ul> <li>During average follow-up (2.3 vs 2.6 years), compared with matched population, the ITP cohort had a higher rate of:</li> <li>Bleed-related hospitalization (aRR 4.2 [95% CI 3.5–4.9])</li> <li>Venous TE (aRR 1.7 [95% CI 1.4–2.1])</li> <li>CNS arterial TEs (aRR 1.2 [95% CI 1.0–1.5])</li> <li>Non-CNS arterial TEs (aRR 1.5 [95% CI 1.1–1.9])</li> <li>Malignancies (RR 1.6 [95% CI 1.3–2.1])</li> <li>Autoimmune conditions (RR 4.0 [95% CI 2.3–7.1])</li> <li>Infections (RR 3.1 [95% CI 2.6–3.8])</li> <li>New onset cognitive impairment/dementia (RR 1.7 [95% CI 1.3–2.2])</li> <li>Death: 21% ITP vs 10% matched population. HR for death 1.5 (95% CI 1.2–1.7) after adjusting for potential confounders</li> </ul>

\*At baseline, ITP cohort had higher prevalence of solid tumours (15.4% vs 6.3%); infections (14.1% vs 2.7%); TEs (18.1% vs 5.5%); cardiovascular risk factors, i.e. smoking (31.6% vs 14.5%), obesity (26.8% vs 12.8%), diabetes (30.2% vs 14.3%), hypertension (65.4% vs 48.2%), CAD (25.2% vs 13.9%), and cerebrovascular disease (7.5% vs 2.6%); mental health issues (e.g. anxiety [19.7% vs 11.9%] and depression [17.7% vs 10.9%]) vs non-ITP cohort. aRR, adjusted RR; CAD, coronary artery disease; CI, confidence interval; CNS, central nervous system; HR, hazard ratio; ITP, immune thrombocytopenia; RR, rate ratio; TE, thromboembolism. Kuter DJ, et al. Presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA. Abstr 3944.

HAEMATOLOGY

#### New data on first-line treatments for ITP

Treatment (N)	Study information	Outcomes
8 RCTs with participants ≥16 years receiving <b>dexamethasone</b> (n=427) and <b>prednisolone</b> (n=404)	<ul> <li>Systematic review and meta-analysis</li> <li>Search of RCTs comparing dexamethasone 40 mg/d for 4 days per cycle to prednisolone 0.5–2.0 mg/kg/d for 4 weeks</li> </ul>	<ul> <li>Dexamethasone yielded higher IR rates vs prednisolone (RR 1.21, 95% Cl 1.09–1.34; l<sup>2</sup>=52%, n=5 studies)</li> <li>No improvement in ER, DR and PR</li> <li>No significant difference in IR, DR or PR observed between 1–2 vs 3 cycles of dexamethasone</li> <li>Higher frequency of AEs in dexamethasone vs prednisolone arm (n=141 vs n=71 events)</li> <li>n=20 grade ≥3 AEs (dexamethasone n=7; prednisolone n=13)</li> <li>Dexamethasone was discontinued in n=4 patients; prednisolone was discontinued in n=5 patients</li> </ul>

Treatment response defined as platelet counts of  $\geq 30 \times 10^9$ /L with at least a twofold increase of the baseline count in the absence of clinical bleeding. ER at 1 week; IR at 1 month; DR at 6 months; PR at 12 months. AE, adverse event; CI, confidence interval; DR, durable R; ER, early R; ITP, immune thrombocytopenia; IR, initial R; PR, persistent R; R, response; RCT, randomized controlled trial; RR, risk ratio. Srisurapanont K, et al. Presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA. Abstr 2568.



### New data on approved TPO-RAs for ITP (1)

Treatment (N)	Study information	Outcomes
Eltrombopag (N=103) <sup>1</sup>	<ul> <li>Retrospective study in China<sup>1</sup></li> <li>Children with primary ITP with ≥12 weeks of eltrombopag treatment and follow-up, receiving study drug between January 2020 and December 2022<sup>1</sup></li> </ul>	<ul> <li>OR rate*: 67%; CR rate: 55.3%; R rate: 11.7%; DR rate*: 56.3%; TFR rate*: 60.0%; relapse rate<sup>§</sup>: 36.2%; NR rate<sup>II</sup>: 33.0%<sup>1</sup></li> <li>DR and TFR rate were significantly higher in patients with newly diagnosed vs persistent/chronic ITP: DR, 68.8% vs 45.5% (p=0.017); TFR, 76.7% vs 35% (p=0.003)<sup>1</sup></li> <li>Relapse rate significantly higher in patients with persistent/chronic vs newly diagnosed ITP: 57.6% vs 16.7% (p=0.000)<sup>1</sup></li> <li>AEs in n=14 patients; no SAEs reported; no AEs led to treatment discontinuation<sup>1</sup></li> <li>Patients aged 2–6 months (n=5): CR, DR and TFR rates 100%; no patients relapsed; AEs in n=3 patients<sup>1</sup></li> </ul>
Eltrombopag (n=78) vs SOC <sup>¶</sup> (n=40) <sup>2</sup>	<ul> <li>Prospective PINES trial in the USA (phase III)<sup>2</sup></li> <li>Children aged 1–&lt;18 years with ITP &lt;3 months and PC &lt;30 x 10<sup>9</sup>/L followed for 1 year<sup>2</sup></li> <li>Data collected May 2019 to January 2024<sup>2</sup></li> </ul>	<ul> <li>Primary outcome: platelet response** achieved by 63% in eltrombopag arm vs 35% in SOC arm (n=108; p=0.0054)<sup>2</sup></li> <li>Rescue therapy received by 18% vs 38% in eltrombopag arm vs SOC arm (n=117; p=0.02)<sup>2</sup></li> <li>Composite endpoint*** at 12 weeks achieved by 66% vs 44% in eltrombopag vs SOC arms (n=117; p=0.03)<sup>2</sup></li> <li>Grade ≥3 AEs at 12 weeks: Eltrombopag, n=9 AEs and n=6 SAEs; SOC, n=3 AEs and n=3 SAEs<sup>2</sup></li> </ul>

\*Total of patients who have achieved CR and R; <sup>†</sup>PC ≥30 x 10<sup>9</sup>/L and at least doubling of the baseline count at 6 months; <sup>‡</sup>PC ≥50 x 10<sup>9</sup>/L and the maintenance time ≥6 months after discontinuation of eltrombopag and its accompanying treatment; <sup>§</sup>Patients need rescue treatment including the infusion of platelet and IVIG infusion, and using glucocorticoid either during or after discontinuation of eltrombopag treatment; <sup>¶</sup>PC <30 x 10<sup>9</sup>/L, or less than a twofold increase in the baseline count, or bleeding events when the patient had received an appropriate dose of eltrombopag for 8 weeks. <sup>¶</sup>Investigators choice of one of three standard therapies (prednisone, IVIG or anti-D); \*\*≥3 of 4 PCs >50 x 10<sup>9</sup>/L during weeks 6–12 without rescue treatment; \*\*PC ≥30 x 10<sup>9</sup>/L and two-fold increase and no bleeding. AE, adverse event; CR, complete R; DR, durable R; ITP, immune thrombocytopenia; NR, no R; OR, overall R; PC, platelet count; PR, persistent R; R, response; SAE, serious AE; SOC, standard of care; TFR, treatment-free remission.

1. Yang L, et al. Ann Hematol. 2024;103:2721–7; 2. Shimano KA, et al. Presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA. Abstr 709.



#### New data on approved TPO-RAs for ITP (2)

Treatment (N)	Study information	Outcomes
Switch from eltrombopag or romiplostim to <b>avatrombopag</b> (N=60; n=38 switched from eltrombopag and n=22 switched from romiplostim) <sup>1,2</sup>	<ul> <li>Prospective study in the USA (phase IV)<sup>1,2</sup></li> <li>Patients receiving prior TPO-RA for ≥90 days with any PC response<sup>1,2</sup></li> <li>Patients switched due to ineffectiveness (28%), convenience (63%) and AEs (13%)<sup>1,2</sup></li> </ul>	<ul> <li>TEAEs in 25% (n=15/60); serious TEAE in 10% (n=6/60)<sup>1</sup></li> <li>PCs improved or maintained at 90 days<sup>1</sup></li> <li>Significant improvement in satisfaction (TSQM domain score mean difference from baseline to day 90/EOS): for effectiveness, convenience and global satisfaction (all p&lt;0.001); for side effects (p=0.01)<sup>1</sup></li> <li>Post hoc analysis (n=55): Median TSQM scores increased for convenience, effectiveness and global satisfaction for eltrombopag switchers, and for convenience and global satisfaction for romiplostim switchers at Day 90 regardless of baseline dose<sup>2</sup></li> </ul>

AE, adverse event; EOS, end of study; ITP, immune thrombocytopenia; PC, platelet count; TEAE, treatment-emergent AE; TPO-RA, thrombopoietin receptor agonist; TSQM, Treatment Satisfaction Questionnaire for Medication.

1. Tarantino M, et al. Abstr 2560; 2. Tarantino M, et al. Abstr 2559. All data presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA.



## New data on approved TPO-RAs for ITP (3)

Treatment (N)	Study information	Outcomes
Avatrombopag (N=190 safety; n=18 effectiveness) <sup>1</sup>	<ul> <li>ADOPT study (phase IV)<sup>1</sup></li> <li>Adult patients ≥18 years with primary ITP in Europe<sup>1</sup></li> <li>Data cutoff 2 May 2024<sup>1</sup></li> </ul>	<ul> <li>Primary outcome: Cumulative number of weeks with PC ≥30 x 10<sup>9</sup>/L: mean (SD) 45.9 (10.8) weeks; median (min, max) 50.4 (5.9, 51.4) weeks<sup>1</sup></li> <li>Cumulative number of weeks with PC ≥50 x 10<sup>9</sup>/L: mean (SD) 43.5 (12.7) weeks; median (min, max) 47.2 (0.0, 51.4) weeks<sup>1</sup></li> <li>PC ≥30 x 10<sup>9</sup>/L and PC ≥50 x 10<sup>9</sup>/L for ≥8 consecutive weeks: n=17<sup>1</sup></li> <li>All AEs / SAEs: n=29 patients / n=15 patients (n=2 discontinued treatment)<sup>1</sup></li> <li>TRAEs: n=10 patients</li> <li>Improvement in HRQoL associated with treatment: Mean change in FACIT-F score at month 12 of -4.0<sup>1</sup></li> </ul>
Avatrombopag (N=72) <sup>2</sup>	<ul> <li>REAL-AVA 2.0 retrospective chart review study<sup>2</sup></li> <li>Adult patients with primary persistent (n=21) or chronic ITP (n=51) in the USA who initiated treatment with avatrombopag between July 2019 and June 2024<sup>2</sup></li> <li>Data cutoff 11 October 2024<sup>2</sup></li> </ul>	<ul> <li>Primary outcome: 90% of patients achieved or maintained a PC ≥30 x 10<sup>9</sup>/L (median time to response 9.0 days) or ≥50 x 10<sup>9</sup>/L (median time to response 13.0<sup>2</sup> days); 85% achieved or maintained a PC ≥100 x 10<sup>9</sup>/L (median time to response 21.0 days)<sup>2</sup></li> <li>Mean duration of response for all patients was &gt;1 year at each PC threshold<sup>2</sup></li> <li>Mean (SD) durability of response for all patients was 90% (17%) at PC ≥30 x 10<sup>9</sup>/L, 85% (22%) PC at ≥50 x 10<sup>9</sup>/L and 71% (29%) at PC ≥100 x 10<sup>9</sup>/L<sup>2</sup></li> <li>79% of patients on concomitant steroids at study initiation (n=15/19) discontinued their use after avatrombopag initiation; n=2/3 patients receiving concomitant immunosuppressants discontinued their use after avatrombopag initiation<sup>2</sup></li> </ul>

AE, adverse event; FACIT-F, Functional Assessment of Chronic Illness Therapy-Fatigue; HRQoL, health-related quality of life; PC, platelet count; ITP, immune thrombocytopenia; SAE, serious AE; SD, standard deviation; TRAE, treatment-related AE.

1. Mingot-Castellano ME, et al. Abstr 714; 2. Nagalla S, et al. Abstr 3700. All data presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA.



# New data on approved TPO-RAs for ITP (4)

Treatment (N)	Study information	Outcomes
<b>TPO-RA</b> (N=48) <sup>1</sup>	<ul> <li>Open prospective, multicentre trial in France<sup>1</sup></li> <li>Adult patients with persistent/chronic primary ITP who achieved CR* for &gt;3 months on a TPO-RA<sup>1</sup></li> <li>Enrolment between September 2017 and February 2020<sup>1</sup></li> </ul>	<ul> <li>Achieved SROT<sup>+</sup> at 12 months: n=25/48<sup>1</sup></li> <li>Followed-up for a median of 5 years (range 4–6.3 years)<sup>1</sup></li> <li>Achieved SROT<sup>+</sup> and SCROT<sup>‡</sup> at the end of follow-up: 47.9% (n=23/48) and 39.6% (n=19/48), respectively, in the ITT group<sup>1</sup></li> <li>Relapsed during extended follow-up: n=2 (no bleeds)<sup>1</sup></li> </ul>
Romiplostim for 1 year, followed by tapering and follow-up for ≤1 year (N=39)	<ul> <li>Prospective STIP trial in the Netherlands to determine rate of SROT<sup>§2</sup></li> <li>Adults with persistent/chronic ITP (77% with chronic ITP; 41% received ≥2 prior treatment lines)<sup>2</sup></li> </ul>	<ul> <li>Primary outcome: SROT at 1 year after tapering (n=25): 23.6%<sup>2</sup></li> <li>Patients with SROT had higher PCs and received lower doses of romiplostim<sup>2</sup></li> <li>Median time to relapse 58 days<sup>2</sup></li> <li>Only mild bleeding reported during/after tapering in 41.2% (n=7/17) in patients who relapsed<sup>2</sup></li> </ul>

\*PC >100 x  $10^9/L$  for >2 months; <sup>†</sup>PC >30 x  $10^9/L$ , no bleeding without ITP-specific medications; <sup>‡</sup>PC >100 x  $10^9/L$ , no bleeding without ITP-specific medications; <sup>§</sup>PC >30 x  $10^9/L$ , no bleeding symptoms and no need for treatment. CR, complete response; ITP, immune thrombocytopenia; ITT, intent-to-treat; PC, platelet count; SCROT, sustained CR off-treatment; SROT, sustained rate of remission off-treatment; TPO-RA, thrombopoietin receptor agonist.

1. Cottu A, et al. *Blood*. 2024. DOI: 10.1182/blood.2024025707. Epub ahead of print; 2. Nelson VS, et al. Presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA. Abstr 2554.



#### New data on emerging ITP treatments (1)

Treatment (N)	Study information	Outcomes
Rilzabrutinib n=133; placebo n=69 <sup>1,2</sup>	<ul> <li>LUNA 3 trial (phase III)<sup>1,2</sup></li> <li>Data from patients ≥18 years with persistent/chronic primary ITP<sup>1,2</sup></li> <li>Data cutoff 14 March 2024<sup>1,2</sup></li> </ul>	<ul> <li>Primary outcome: Durable response* at week 25 was met (23% difference between rilza vs placebo (95% Cl 16–30%; p&lt;0.0001))<sup>1</sup></li> <li>Duration of PR†: significantly longer all patients and responders receiving rilza vs placebo (p&lt;0.0001 for both)<sup>1</sup></li> <li>Significantly less rescue therapy use associated with rilzabrutinib vs placebo (p=0.0007)<sup>1</sup></li> <li>Similar proportion of AEs and SAEs<sup>1</sup></li> </ul>
		<ul> <li>Significant improvement in physical fatigue from baseline to week 13 (p=0.0114) and week 25 (p=0.0003) with rilza vs placebo (assessed by LS mean change)<sup>2</sup></li> <li>Improvements in multiple measures of ITP-specific HRQoL at week 25 observed with rilza vs placebo (symptoms, bother-physical health, activity, psychological health, social activity and overall HRQoL)<sup>2</sup></li> </ul>
All <b>sovleplenib</b> (N=179) vs crossover from placebo (n=53) <sup>3</sup>	<ul> <li>Long-term extension of ESLIM-01 (phase III)<sup>3</sup></li> <li>Adult patients<sup>3</sup></li> <li>Data cutoff 31 January 2024<sup>3</sup></li> </ul>	<ul> <li>Overall response rate<sup>‡</sup>: 81.0% vs 83.0% (all sovleplenib vs crossover)<sup>3</sup></li> <li>Durable response rate<sup>§</sup>: 51.4% vs 43.4% (all sovleplenib vs crossover)<sup>3</sup></li> <li>Long-term durable response<sup>§</sup>: 59.8% vs 64.2% (all sovleplenib vs crossover)<sup>3</sup></li> <li>Most common TRAEs (≥grade 3): ↑ ALT (2.2%); ↓ neutrophil count (1.7%); ↑ GGT (1.7%)<sup>3</sup></li> </ul>

\*PC  $\geq$ 50 x 10<sup>9</sup>/L for  $\geq$ two-thirds of  $\geq$ 8 of the last 12 of 24 weeks without receiving rescue therapy;  $\pm$ PC  $\geq$ 50 x 10<sup>9</sup>/L or  $\geq$ 30–<50 x 10<sup>9</sup>/L and doubled from baseline;  $\pm$ 21 PC  $\geq$ 50 x10<sup>9</sup>/L with sovleplenib not impacted by rescue treatment;  $PC \geq$ 50 x10<sup>9</sup>/L at  $\geq$ 4 of 6 scheduled visits during weeks 14–24 in ESLIM-01 not impacted by rescue treatment, or PC  $\geq$ 50 x10<sup>9</sup>/L at 2 of 3 protocol-defined visits during the second 12 weeks of 24 weeks in the open-label sub-study not impacted by rescue treatment. AE, adverse event; ALT, alanine aminotransferase; CI, confidence interval; GGT, gamma-glutamyltransferase; HRQoL, health-related quality of life; ITP, immune thrombocytopenia; LS, least squares; PC, platelet count; PR, platelet response; SAE, serious AE; TRAE, treatment-related AE.

1. Kuter DJ, et al. Abstr 5; 2. Ghanima W, et al. Abstr 2552; 3. Hu Y, et al. Abstr 2558. All data presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA.



#### New data on emerging ITP treatments (2)

Treatment (N)	Study information	Outcomes
Avatrombopag (n=54) vs placebo (n=21) <sup>1</sup>	<ul> <li>AVA-PED-301 (phase III)<sup>1</sup></li> <li>Children aged 1–17 years with primary ITP ≥6 months<sup>1</sup></li> <li>Core phase data previously reported (12 weeks)<sup>1</sup></li> </ul>	<ul> <li>Primary endpoint: durable PR (previously reported)<sup>1</sup></li> <li>Clinically meaningful response (PC ≥30 x 10<sup>9</sup>/L): 92.6% vs 19.1%<sup>1</sup></li> <li>Achieving a response (PC ≥50 x 10<sup>9</sup>/L) at any point in core phase: 88.9% vs 9.5%<sup>1</sup></li> </ul>
lanalumab (N=10) <sup>2</sup>	<ul> <li>VAYHIT3 (phase II)<sup>2</sup></li> <li>Adults with primary ITP previously treated with at least a CS and a TPO-RA, with no prior splenectomy<sup>2</sup></li> <li>Data cutoff 12 June 2024<sup>2</sup></li> </ul>	<ul> <li>Primary endpoint: ConfR* achieved in n=5/10 patients<sup>2</sup></li> <li>Achieved ConfR* and stable response†: n=4<sup>2</sup></li> <li>Median best post-baseline PC in all 10 patients was 129.0 x 10<sup>9</sup>/L (range 3–709)<sup>2</sup></li> <li>Patients experiencing AEs / grade ≥3 AEs: n=10 / n=3<sup>2</sup></li> <li>Patients experiencing SAEs / grade ≥3 SAEs: n=2 / n=2<sup>2</sup></li> </ul>

\*Defined as a PC ≥50 x 10<sup>9</sup>/L at two or more consecutive assessments at least 7 days apart between week 1 and week 25, in the absence of rescue treatment for ≥4 weeks prior to PC assessment and start of new ITP treatment before reaching a ConfR. †Stable response defined as proportion of patients with ≥75% PCs collected between study days 121 and 183 ≥50 x 10<sup>9</sup>/L in the absence of rescue treatment/new ITP treatment. AE, adverse event; ConfR, confirmed response; CS, corticosteroid; ITP, immune thrombocytopenia; PC, platelet count; PR, platelet response; SAE, serious AE; TPO-RA, thrombopoietin receptor agonist. 1. Grace RF, et al. Abstr 1191; 2. Kuter DJ, et al. Abstr 710. All data presented at: 66th ASH Annual Meeting and Exposition, 7–10 December 2024, San Diego, CA, USA.

