



The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

901.HEALTH SERVICES AND QUALITY IMPROVEMENT - NON-MALIGNANT CONDITIONS

A Novel Online Decision Support Tool to Determine Practice Patterns and Concordance with Experts in the Treatment of Patients with Immune Thrombocytopenia

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Background: Immune thrombocytopenia (ITP) is a complex disease involving dysregulation of the immune system with inadequate platelet production and increased platelet destruction. When treatment is warranted, corticosteroids are frequently used as first-line therapy. Steroid-refractory patients eventually require alternative treatments, of which there are several approved and well-studied options. However, these second-line treatments have not been rigorously compared in clinical trials. To assist healthcare professionals (HCPs) in managing patients with ITP, we developed an online interactive decision support tool to provide expert recommendations for treatment. Here we report an analysis of practice patterns among HCPs and experts for ITP cases after initial therapy failure and the impact of expert recommendations on HCP decisions.

Methods: An online tool was developed with 4 experts providing recommendations on management of 332 unique patient cases based on patient- and disease-specific factors that the experts considered relevant to making treatment decisions. HCPs entered patient case details including age, treatment setting, platelet count, current presentation, and presence of risk factors for bleeding, along with their intended management approach, before being shown the expert recommendations for their specific scenario.

Results: Between October 2022 and July 2023, 311 patient cases were entered by 256 HCPs, including 194 (62.4%) cases of treatment-exposed patients (Table). Of the treatment-exposed cases, 72.1% were submitted by physicians, and 23.2% were submitted by HCPs in North America. There was strong alignment between HCP treatment selection and at least 1 expert recommendation (69%; $P = .0001$). There was consensus among experts for 94.4% of cases with patients ≥ 21 years of age who were treatment exposed. In these cases, experts recommended thrombopoietin receptor agonists (TPO-RA) for 83.5% of cases in contrast to HCPs recommending them in 38.2% of cases. Alternatives for TPO-RA chosen by HCPs in cases with patients ≥ 21 years of age who were treatment exposed included rituximab (29.6%), immunoglobulin (23.5%), fostamatinib (12.5%), splenectomy (9.8%), observation (8.6%), or unsure (16%). There was consensus among experts for 72% of cases with patients < 21 years of age who were treatment exposed. For cases with patients < 21 years of age who were treatment exposed, HCPs chose immunoglobulin (28.6%), observation (28.6%), rituximab (14.3%), splenectomy (4.7%), or unsure (23.8%). In 47.6% of cases where HCPs indicated an alternative selection, they indicated that expert recommendations changed their treatment choice. HCPs indicated there were barriers to implementation in 7% of indicated cases.

Conclusion: Based on our analysis of an online treatment decision tool, practice patterns for the management of patients with ITP aligned between HCPs and at least 1 tool expert in 69% of treatment-experienced cases. For previously treated patients, HCPs were less likely to choose a TPO-RA compared with tool experts, although very few identified barriers to implementation. Although specific treatment utilization patterns differed between HCPs and experts based on data from this tool, HCPs appeared amenable to practice changes based on expert recommendations. Online decision support tools can offer opportunities for HCPs to receive education and expert guidance in choosing optimal treatment regimens for ITP, a condition where treatment guidelines may not address every unique patient scenario.

Disclosures Broome: Alexion: Honoraria; Sanofi: Honoraria; Apellis: Honoraria; Argenx: Honoraria. **Panch:** Sanofi: Consultancy, Other: Advisory Board; Sobi: Consultancy, Speakers Bureau. **Shimano:** Principia: Consultancy, Research Funding; Pfizer: Consultancy, Research Funding; Novartis: Consultancy, Research Funding; Sobi: Consultancy, Research Funding; Daiichi Sankyo: Consultancy, Research Funding. **Al-Samkari:** Moderna: Consultancy; Pharmacosmos: Consultancy; argenx: Consultancy; Amgen: Research Funding; Novartis: Consultancy; Sobi: Consultancy, Research Funding; Agios: Consultancy, Research Funding.

Table. Treatment Choices by Experts and HCPs for Patients Receiving Any Prior Treatment

n (%)	Patient Aged <21 Years		Patient Aged ≥21 Years	
	Expert Consensus	HCPs	Expert Consensus	HCPs
<i>All cases, n</i>	50		144	
Thrombopoietin receptor agonists	30 (60)	16 (32)	132 (91.6)	55 (38.2)
Rituximab*	0	7 (14)	0	24 (16.6)
Corticosteroids	1 (2)	0	0	0
Observation	5 (10)	9 (18)	4 (2.8)	10 (7)
Anti-D immunoglobulin or IVIG	0	9 (18)	0	19 (13.2)
Splenectomy	0	3 (6)	0	9 (6.3)
Fostamatinib	0	1 (2)	0	13 (9)
No consensus [†] /uncertain	14 (28)	5 (10)	8 (5.6)	14 (9.7)
n (%)	At Least 1 Expert	HCPs	At Least 1 Expert	HCPs
<i>Discordant treatment cases, n (%)</i>	21 (42)		53 (36.8)	
Thrombopoietin receptor agonists	15 (71.4)	0	50 (94.3)	0
Corticosteroids	1 (4.8)	0	0	0
Observation	1 (4.8)	1 (4.8)	2 (3.8)	4 (7.5)
Anti-D immunoglobulin or IVIG	0	9 (42.8)	0	18 (34)
Rituximab	0	2 (9.5)	0	2 (3.8)
Splenectomy	0	3 (14.3)	0	9 (17)
Fostamatinib	0	1 (4.8)	0	6 (11.3)
No consensus [†] /uncertain	4 (19.0)	5 (23.8)	1 (1.9)	14 (26.4)

*In 19 cases for patients aged ≥21 years, experts indicated “TPO-RA or rituximab.”

[†]No consensus on expert panel.

Figure 1

<https://doi.org/10.1182/blood-2023-182029>