# Patients With Immune Thrombocytopenia Frequently Experience Severe Fatigue But it is Under-Recognized by Physicians: Results from the ITP World Impact Survey (I-WISh)

Caroline Kruse,¹ Alexandra Kruse,¹ Shirley Watson,² Mervyn Morgan,² Nichola Cooper,³ Waleed Ghanima,⁴ Drew Provan,⁵ Donald Arnold,⁶ Cristina Santoro,⁷ Ming Hou,⁶ Yoshiaki Tomiyama,ీ Serge Laborde,<sup>10</sup> Barbara Lovrencic,<sup>11</sup> John Waller,<sup>12</sup> Gavin Taylor-Stokes,<sup>12</sup> Tom Bailey,<sup>12</sup> Miona Stankovic<sup>13</sup> and James Bussel<sup>14</sup>

¹Platelet Disorder Support Association, Cleveland, OH, USA; ²ITP Support Association, Bolnhurst, UK; ⁴Department of Medicine, Ostfold Hospital Trust, Kalnes, Norway; <sup>5</sup>Barts and The London School of Medicine and Dentistry, London, UK; <sup>6</sup>Department of Cellular Biotechnologies and Haematology, 'Sapienza' University of Rome, Rome, Italy; <sup>8</sup>Department of Hematology, Shandong University, Jinan, China; Osaka University Hospital, Osaka, Japan; Osaka, Os <sup>12</sup>Bespoke Team, Adelphi Real World, Macclesfield, UK; <sup>13</sup>Novartis Pharma AG, Basel, Switzerland; <sup>14</sup>Division of Hematology/Oncology, Weill Cornell Medical College, New York, NY, USA

- Immune thrombocytopenia (ITP) has a multifaceted impact on patients' quality of life (QoL);1 in particular, as in many chronic autoimmune diseases, fatigue can significantly affect QoL.<sup>2</sup>
- However, there are limited data on which signs and symptoms physicians and patients perceive as having the greatest impact, especially on patients' QoL.
- The I-WISh survey was performed to evaluate the burden of ITP and its impact on QoL, especially fatigue, using a global patient and physician sampling frame.
- The data reported here analyze and compare patient and physician perceptions of occurrence and severity of signs and symptoms.

# Methods

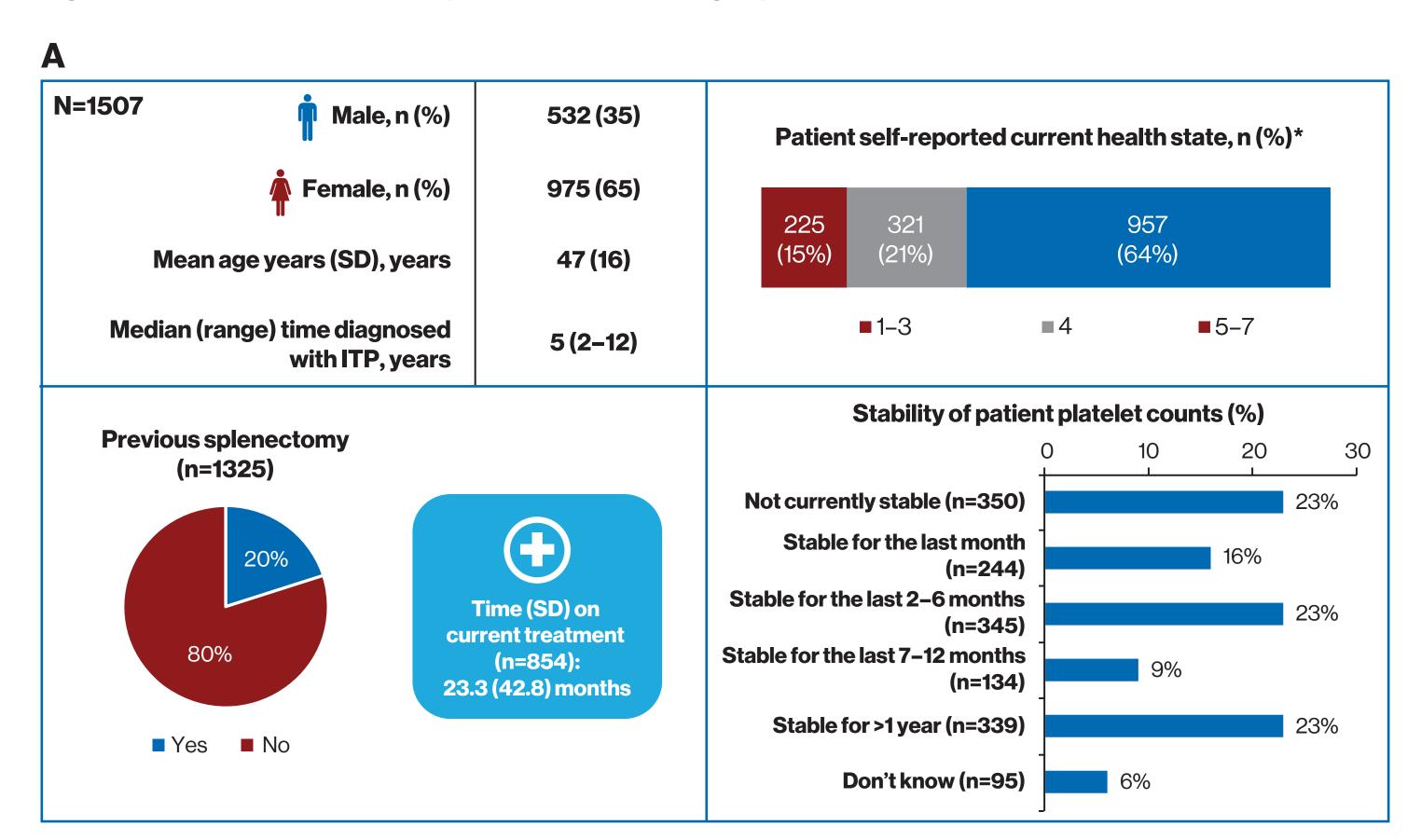
- I-WISh was an international cross-sectional survey of ITP patients aged ≥18 years, recruited via physicians and patient support groups, and physicians, recruited via local fieldwork agencies.
- Patients and physicians completed a 30-minute online survey that included demographics, signs and symptoms, impact of symptoms, and patient-physician relationship.
- A steering committee of expert physicians and patient advocacy ITP specialists designed and endorsed the survey materials.

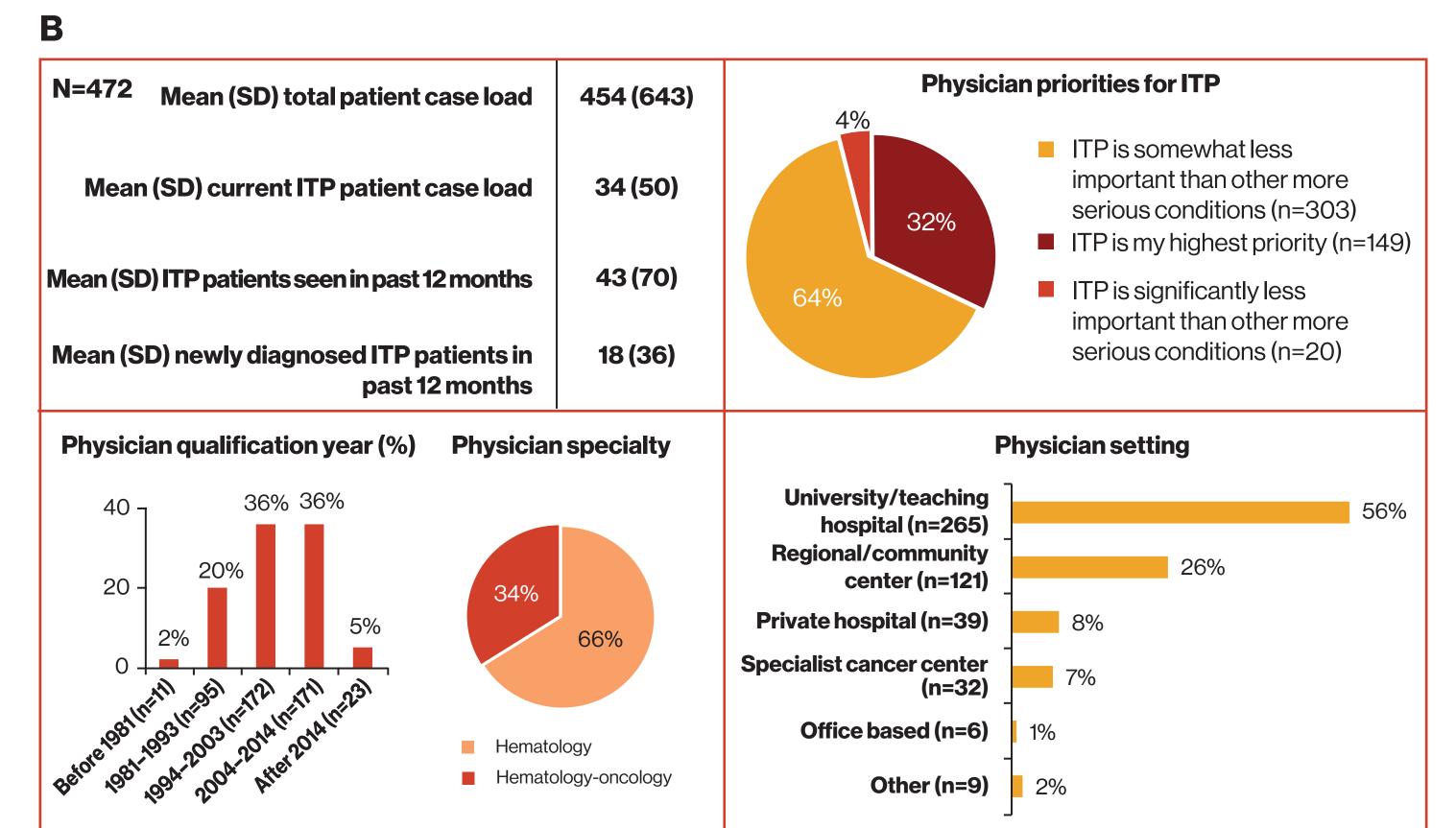
# Results

#### Patient and Physician Demographics and Baseline Characteristics

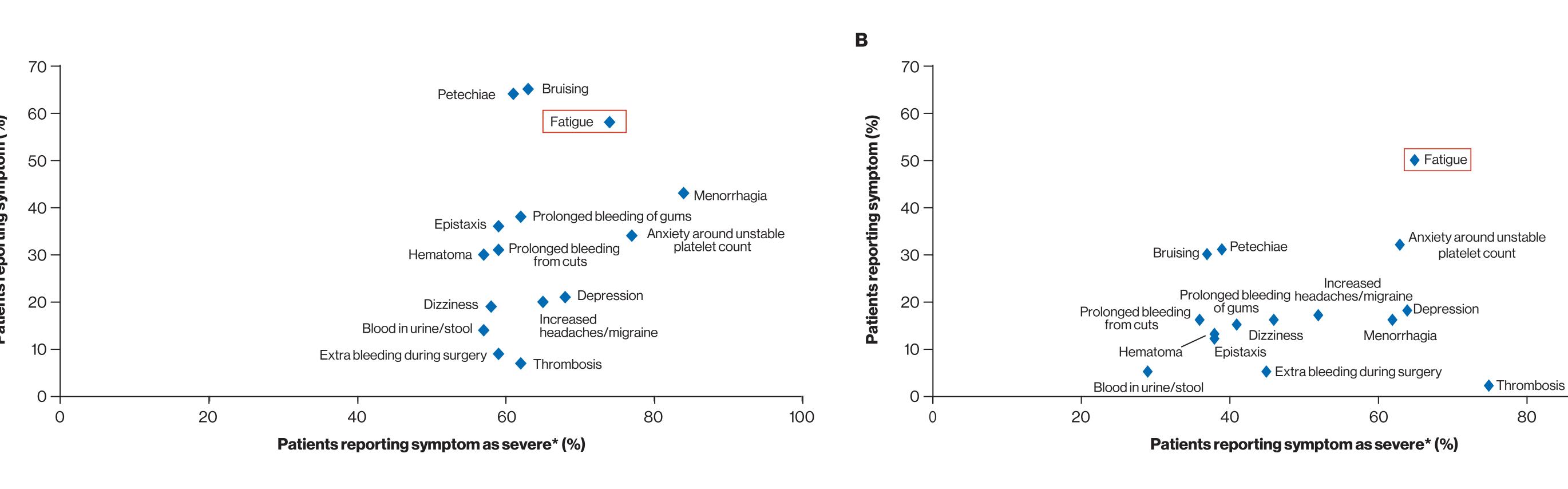
- 1507 patients from 13 countries (Canada, China, Colombia, Egypt, France, Germany, India, Italy, Japan, Spain, Turkey, UK, and USA) completed the survey (Figure 1A).
- 472 physicians from the same 13 countries completed the survey (**Figure 1B**).

# Figure 1. Patient (A) and Physician (B) Demographics and Baseline Characteristics





# Figure 2. Patient Perception of Occurrence and Severity of ITP Signs and Symptoms at Diagnosis (A), and Time of Survey Completion (B)

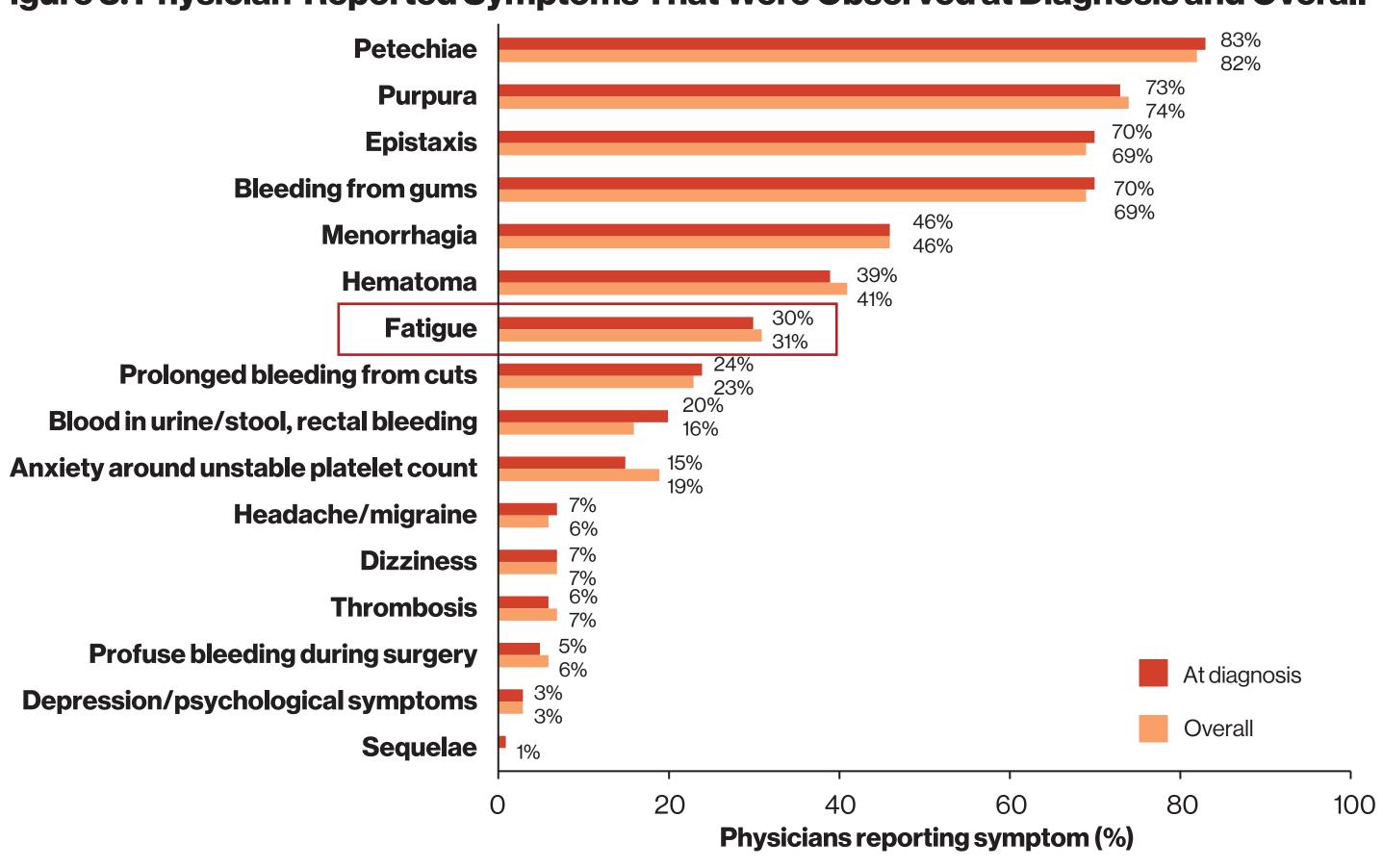


Patients reported all signs and symptoms and the proportion of patients shown is based on n=1017. n values (diagnosis/survey completion) for symptom severity rating: bruising (972/457), petechiae (970/462), hematoma (450/191), thrombosis (102/35), epistaxis (533/188), prolonged bleeding from cuts (460/239), extra bleeding due to surgery (140/78), blood in urine/stool (209/71), menorrhagia (438/161), fatigue (870/752), increased headaches/migraine (302/260), dizziness (293/238), depression (323/270), anxiety around unstable platelet count (517/474). \*Patients reported symptom severity on a 7-point Likert scale where 1=not severe at all and 7=worst imaginable. The data presented are for 'severe' based on scores ≥5. Severity of each symptom was only rated if patients stated that they had experienced it at the time of ITP diagnosis and survey completion

# ITP Signs and Symptoms

- The most common patient-reported signs and symptoms at diagnosis and at survey completion, respectively, were bruising (65%, n=973; 30%, n=457), petechiae (64%, n=972; 31%, n=463), fatigue (58%, n=870; 50%, n=754), menorrhagia (43%, n=439; 16%, n=161), and anxiety around unstable platelet count (34%, n=517; 32%, n=483) (**Figure 2**)
- The proportion of patients reporting each sign or symptom decreased from diagnosis to survey completion, apart from fatigue, increased headaches/migraine, dizziness, depression, and anxiety around unstable platelet count.
- The most common signs and symptoms physicians reported at diagnosis and overall (ie at any stage) were generally similar to those reported by patients themselves, with petechiae (82%, n=386 overall; 83%, n=390 at diagnosis), purpura (74%, n=348; 73%, n=345), bleeding of the gums (69%, n=328; 70%, n=329), and epistaxis (69%, n=325; 70%, n=329) being the most common (**Figure 3**)
- There were few differences between signs and symptoms at diagnosis and overall.
- By contrast, fatigue was under-reported by physicians (31%, n=147 overall; 30%, n=140 at diagnosis) compared with patient-reported data.

# Figure 3. Physician-Reported Symptoms That Were Observed at Diagnosis and Overall



Physicians (n=472) reported the top-five symptoms they most frequently heard from patients

# **Severity of ITP Symptoms**

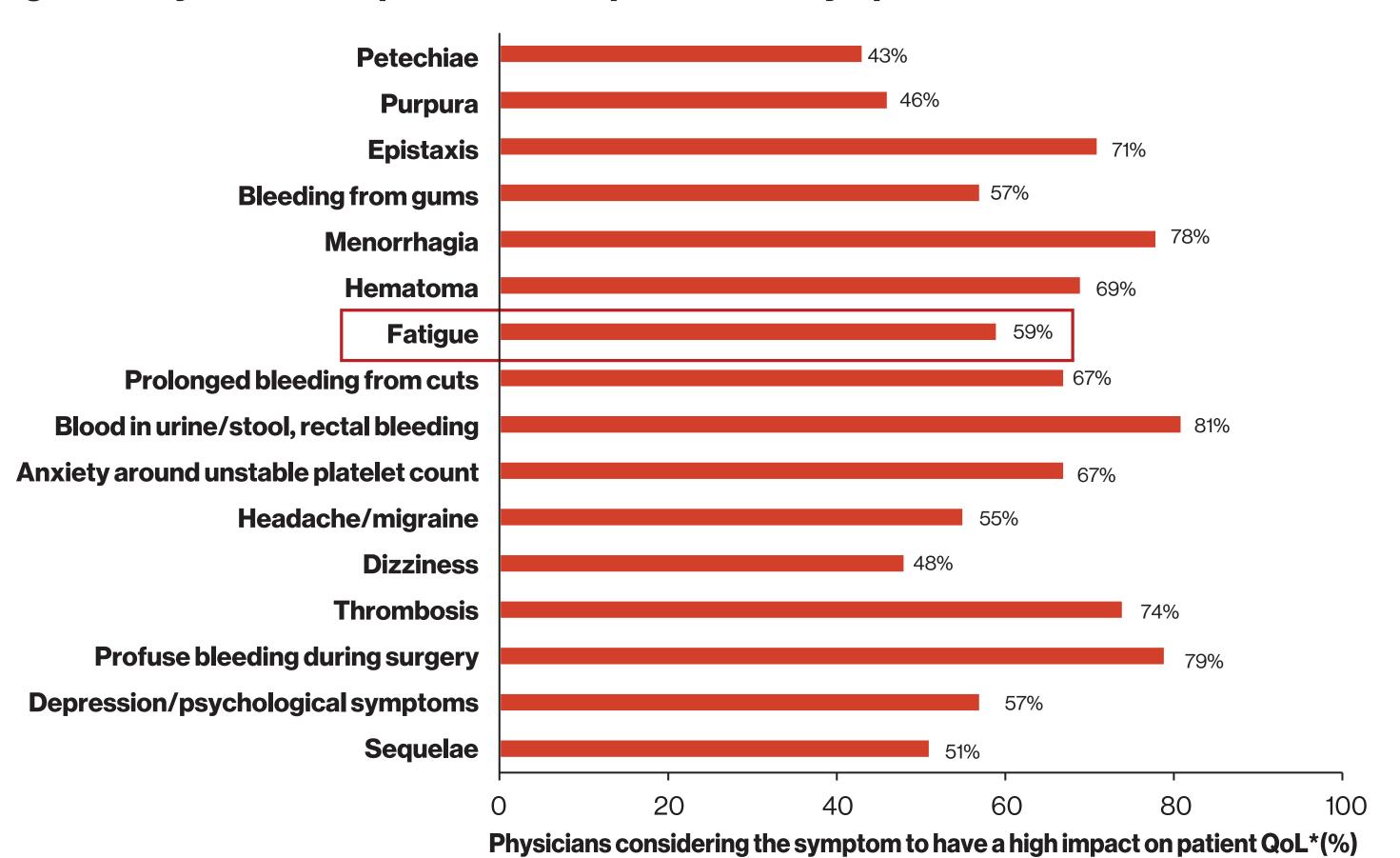
- At diagnosis, 73% (n=637/870) of patients with fatigue reported fatigue to be their most severe symptom, which was consistent over time, with 65% (n=487/752) of patients still reporting fatigue as most severe at survey completion (Figure 2).
- At diagnosis, menorrhagia (83%, n=364/438) and anxiety surrounding unstable platelet count (77%, n=400/517) were also among the most severe patient-reported symptoms, although fewer patients reported them as severe by survey completion (62%, n=100/161 and 64%, n=303/474, respectively) (**Figure 2**).

- Thrombosis, while not common, was considered severe (60%, n=62/103 at diagnosis; 74%, n=26/35 at survey completion) (Figure 2).
- Patient-reported severity generally decreased for all signs and symptoms from diagnosis to survey completion, apart from thrombosis, fatigue, and depression.

# Impact of ITP Symptoms on QoL

- When asked to consider their current symptoms, the three symptoms patients most wanted to resolve were fatigue (46%, n=682), anxiety around unstable platelet count (24%, n=359), and bruising (22%, n=330).
- Physicians perceived several signs and symptoms as having a high impact on patients' QoL (scored ≥5 on a 7-point Likert scale; 7=a great deal), with blood in urine/stool (81%, n=383), profuse bleeding during surgery (79%, n=371), and menorrhagia (78%, n=370) considered the most impactful; fewer (59%, n=280) believed that fatigue had a high impact (Figure 4).
- Overall, 80% (n=376) of physicians felt that ITP symptoms reduce QoL (scored ≥5 on a 7-point Likert scale; 7=a great deal).

# Figure 4. Physician Perceptions of the Impact of Each Symptom on Patients' QoL



n=472. \*Physicians reported symptom effect on patients' QoL on a 7-point Likert scale where 1=not at all and 7=a great deal. Data presented are for scores ≥5

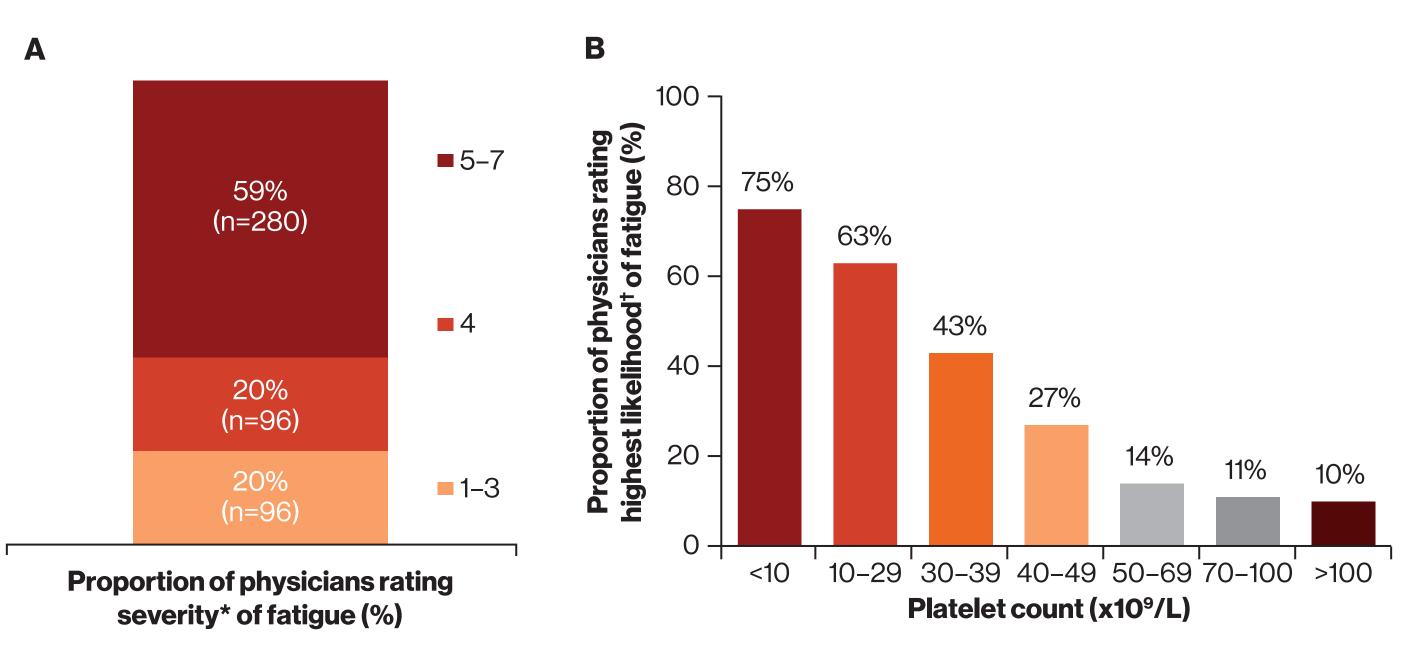
# Physician View of ITP-Related Fatigue and Impact on Patients' QoL

• 66% (n=313) of physicians believed that ITP-related fatigue reduces QoL (scored ≥5 on a 7-point Likert

scale; 7=a great deal).

- 59% (n=280) of physicians believed that fatigue is severe (scored ≥5 on a 7-point Likert scale; 7=completely fatigued) (Figure 5A).
- Physicians believed that the severity of fatigue increases as platelet levels decrease (**Figure 5B**).

#### Figure 5. Physician-Perceived Severity of Fatigue (A), and Likelihood of Fatigue by Platelet Group (B)



\*Physicians reported perceived severity of fatigue on a 7-point Likert scale where 1=low level and 7=completely; <sup>†</sup>Physicians reported likelihood of fatigue on a 7-point Likert scale where 1=not at all and 7=very likely

### Patient-Physician Relationship

- 79% (n=1180) of patients were generally satisfied with their physician's management of their disease.
- Most patients and physicians reported high satisfaction regarding communication (79%, n=1198 vs 88%, n=417), management (79%, n=1180 vs 86%, n=410), and understanding of treatment goals (76%, n=1148 vs 90%, n=442).
- A higher proportion of physicians (87%, n=415) believed that they understood how much ITP impacts patients' lives compared with the proportion of patients that believed their physician understood the impact of ITP on their lives (69%, n=1041).

# Conclusions

- The patient-reported symptom that was most common and had the greatest severity both at diagnosis and at survey completion was fatigue
- Patients also frequently reported anxiety about platelet count stability and menorrhagia; thrombosis was less common but was reported as most severe.
- · Patients indicated that the top-three symptoms they would most like to be resolved were fatigue, anxiety around unstable platelet count, and bruising.
- Although participating physicians were experienced in ITP management and believed that fatigue greatly affects patients, they did not consider fatigue to be as substantial a problem as patients did.
- Physicians believed the likelihood of fatigue would increase as platelet count decreased - It has been suggested that fatigue may be intrinsically related to disease activity and, therefore, could be
- alleviated by increasing the platelet count. • These results indicate that patients and physicians agree on the overall symptom burden in ITP but highlight that improved understanding and awareness of the relationships between fatigue, platelet count, and QoL are needed.

# References

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\*7-point Likert scale: 7=excellent health, 1=very poor health. SD, standard deviation