



**1<sup>ST</sup>**  
**European Research  
Consortium on ITP Meeting**

# **INNOVATIONS IN IMMUNE THROMBOCYTOPENIA**

Venice Monaco & Grand Canal Hotel

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**Introduction: Why do we need new definitions and  
guidelines?**

## Disclosures of Cindy Neunert

Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
Sanofi			X			X	
Sobi			X				
Novartis	X					X	
Janssen			X				
Argenx						X	



# Standardization of terminology, definitions and outcome criteria in immune thrombocytopenic purpura of adults and children: report from an international working group

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Rodeghiero et al. Blood 2009



# Terminology, Definitions, and Outcomes

- Provided clinical context for communication between medical care teams
- Established the importance of disease severity in decision making
- Some gaps still exist
  - Newer therapies have shifted practice and influenced relevance
  - Usage of definitions in medication access and clinical trial enrollment
  - Wide differences in application of outcomes in clinical trials



# Refractory ITP

## Table 4. Refractory ITP

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### Definition (all should be met)

- Failure to achieve at least R or loss of R after splenectomy\*
- Need of treatment(s) (including, but not limited to, low dose of corticosteroids) to minimize the risk of clinically significant bleeding.† Need of on-demand or adjunctive therapy alone does not qualify the patient as refractory.
- Primary ITP confirmed by excluding other supervened causes of thrombocytopenia

Rodighiero et al. Blood 2009





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Rodighiero et al. Blood 2009

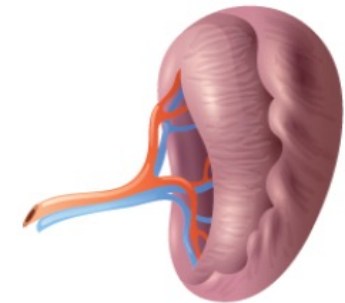


# Splenectomy

- Relevance to modern treatment: Nationwide Inpatient Sample
  - 2007-2017
  - Stable hospitalization rates for ITP
  - Splenectomy rate declined over time
    - 16% in 2007 to 8% in 2017 ( $p < 0.01$ )
- Highly dependent on patient values and preferences
  - Themes about splenectomy decision making:
    - Perceived impact of ITP on quality of life
    - Patients' view of splenectomy as a last resort treatment
    - Patients' interpretations of the rates of treatment success and failure
    - Perceived lack of familiarity about ITP

1916

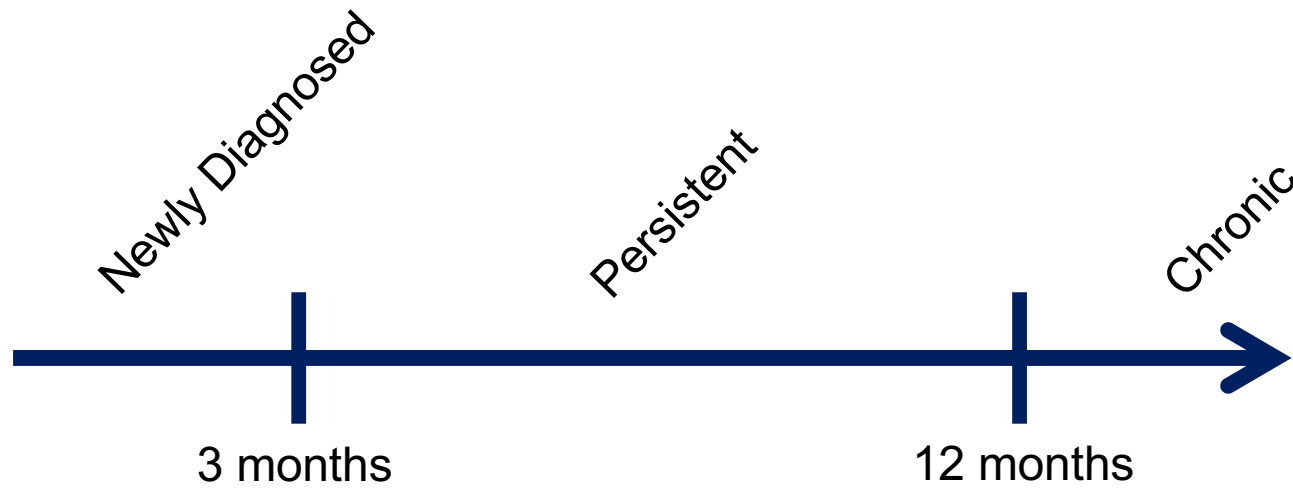
First splenectomy  
conducted



Finianos et al. Annals of Hematology 2021, Wang et al. Health Exp 2014



# Disease Duration





### -----INDICATIONS AND USAGE-----

**TAVALISSE** is a kinase inhibitor indicated for the treatment of thrombocytopenia in adult patients with chronic immune thrombocytopenia (ITP) who have had an insufficient response to a previous treatment.

### -----INDICATIONS AND USAGE-----

**Nplate** is a thrombopoietin receptor agonist indicated for the treatment of thrombocytopenia in patients with chronic immune thrombocytopenia (ITP) who have had an insufficient response to corticosteroids, immunoglobulins, or splenectomy.

### -----INDICATIONS AND USAGE-----

**DOPTELET** is a thrombopoietin receptor agonist indicated for the treatment of:

- Thrombocytopenia in adult patients with chronic liver disease who are scheduled to undergo a procedure. (1.1)
- Thrombocytopenia in adult patients with chronic immune thrombocytopenia who have had an insufficient response to a previous treatment. (1.2)

**PROMACTA** is a thrombopoietin receptor agonist indicated for the treatment of thrombocytopenia in patients with chronic immune (idiopathic) thrombocytopenic purpura who have had an insufficient response to corticosteroids, immunoglobulins, or splenectomy.

**PROMACTA** should be used only in patients with ITP whose degree of thrombocytopenia and clinical condition increase the risk for bleeding.

**PROMACTA** should not be used in an attempt to normalize platelet counts. (1)



# Outcome Criteria

**Table 2. Proposed criteria for assessing response to ITP treatments**

**Quality of response\*†**

- CR: platelet count  $\geq 100 \times 10^9/L$  and absence of bleeding
- R: platelet count  $\geq 30 \times 10^9/L$  and at least 2-fold increase the baseline count and absence of bleeding
- Time to response: time from starting treatment to time of achievement of CR or R‡
- NR: platelet count  $< 30 \times 10^9/L$  or less than 2-fold increase of baseline platelet count or bleeding
- Loss of CR or R: platelet count below  $100 \times 10^9/L$  or bleeding (from CR) or below  $30 \times 10^9/L$  or less than 2-fold increase of baseline platelet count or bleeding (from R)

**Timing of assessment of response to ITP treatments**

- Variable, depends on the type of treatment (see Table 3)

**Duration of response§**

- Measured from the achievement of CR or R to loss of CR or R
- Measured as the proportion of the cumulative time spent in CR or R during the period under examination as well as the total time observed from which the proportion is derived

**Corticosteroid-dependence**

- The need for ongoing or repeated doses administration of corticosteroids for at least 2 months to maintain a platelet count at or above  $30 \times 10^9/L$  and/or to avoid bleeding (patients with corticosteroid dependence are considered nonresponders)

**Supplemental outcomes (whenever possible)**

- Bleeding symptoms measured by a validated scale (requires additional studies)
- Health-related quality of life assessment measured by a validated instrument (requires additional studies)

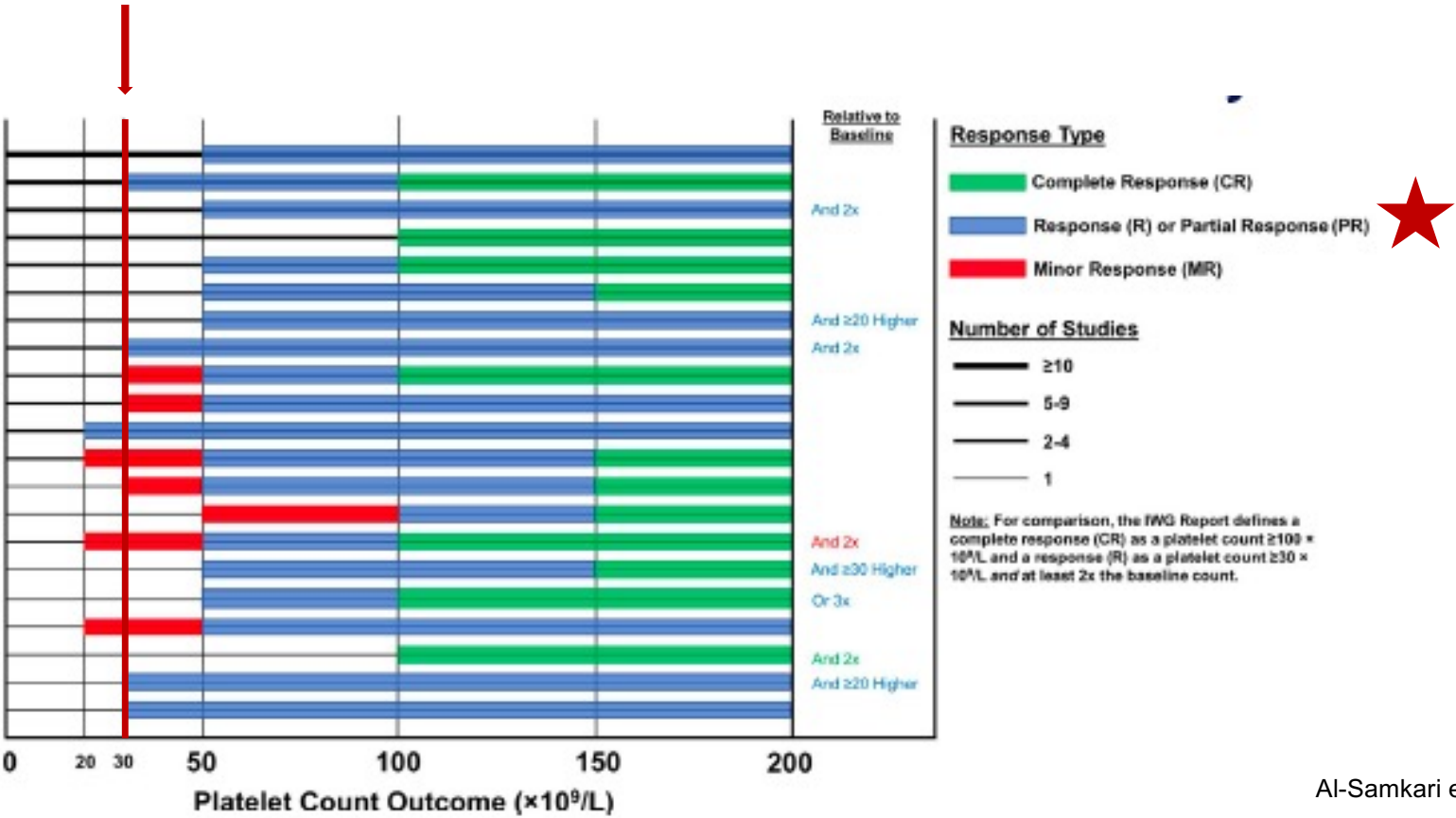


Rodiegghiero et al. Blood 2009





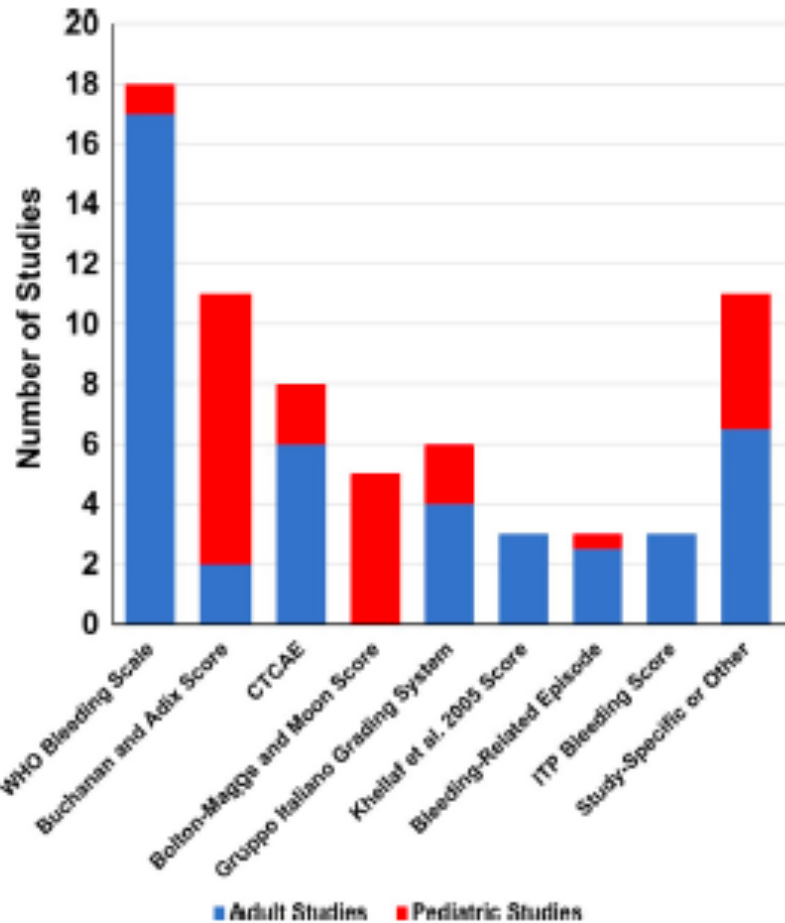
# Platelet Count Response Criteria



Al-Samkari et al. JTH 2021



# Additional Outcomes



Instrument	No. Studies
<b>Adult Instruments</b>	
Medical Outcomes Study Short Form 36 (SF-36v2)	3
Immune Thrombocytopenic Purpura Patient Questionnaire (ITP-PAQ)	2
Motivation and Energy Inventory (MEI-SF)	2
Functional Assessment of Chronic Illness Therapy-Fatigue (FACIT-F)	2
Functional Assessment of Cancer Therapy-Thrombocytopenia Subset (FACT-Th6)	2
EuroQol-5 Dimension (EQ-5D)	1
<b>Pediatric Instruments</b>	
Kids ITP Tool (KIT)	7
Pediatric Quality of Life Inventory 4.0 (PedsQL 4.0)	2

Al-Samkari et al. JTH 2021





# Need for Revision

- Refine terminology for modern treatment landscape
- Align terminology with clinical trial design in industry
- Incorporate meaningful patient related outcomes with increased guidance on implementation
- Ensure that terminology best serves the needs of patients and allows for seamless communication among physicians

