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Updating definitions and outcome criteria in ITP: an ERCI IWG initiative

### **Disclosures of Francesco Rodeghiero**

Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
Takeda			х				
Argenx						x	

## **Chronology of Terminology and Guidelines in ITP**



**Evolution of Guidelines and new drugs availability** 

George et al: 1<sup>st</sup> tentative to rank evidence

Rituximab - Stasi et al, 2001

Romiplostim - FDA August 2008 EMA November 2008

Eltrombopag - FDA November 2008 EMA December 2008

IWG consensus on terminology, definitions and outcome criteria Rodeghiero et al, 2009

2009

1996

2001

2008

2010

2011

1<sup>st</sup> International Consensus Report - Provan et al, 2010

ASH guidelines based on GRADE - Neunert et al, 2011



## **Chronology of Terminology and Guidelines in ITP**

Consensus on Terminology
Definitions and Outcome criteria

**Evolution of Guidelines and new drugs availability** 

2018

Fostamatinib -

FDA April 2018

**EMA November 2019** 

2019

Avatrombopag - FDA June 2019

EMA December 2020

2019

Updated International consensus report

Provan et al, Sept 2019

Preliminary ERCI/IWG consensus 2024

ERCI/IWG consensus 2025

ASH guidelines – Neunert et al, Dec 2019 (updated in 2024, focused review up to 2022)

2025/26 +

New drugs on the horizon

**Updated ASH guidelines** 

EHA/ERCI guidelines

## Lack of impact of 2009 IWG consensus

### Unfavorable timing:

Efficacy of romiplostim in patients with chronic immune thrombocytopenic purpura: a double-blind randomised controlled trial. Kuter DJ, et al. Lancet. 2008

### Emulation effect:

- ✓ **Eltrombopag** for management of *chronic* immune thrombocytopenia (RAISE): a 6-month, randomised, phase 3 study. Cheng G, et al. *Lancet*. 2011
- ✓ Fostamatinib for the treatment of adult persistent and chronic immune thrombocytopenia: results of two phase 3, randomized, placebo-controlled trials. Bussel J, et al. Am J Hematol. 2018.
- ✓ Phase 3 randomised study of **avatrombopag**, a novel thrombopoietin receptor agonist for the treatment of *chronic* immune thrombocytopenia. Jurczak W, et al. *Br J Haematol*. 2018

# **Old and New agents**

‡Can be used as an emergency treatment, but is considered a class for the purpose of defining multi-drug refractory ITP, not primary refractoriness.

Drug Class		
Initial/Emergency Therapies		
Glucocorticoids	Prednisone and its derivatives,	
	Dexamethasone	
Intravenous immunoglobulins		
Anti-RhD immune globulin		
Maintenance Therapies		
Thrombopoietic agents	Includes thrombopoietin receptor	
	agonists (TPO-RAs) and recombinant	
	human thrombopoietin (rhTPO)	
SYK inhibitors	Fostamatinib, Sovleplenib*,	
	Sevidoplenib*	
Anti-CD20 monoclonal antibodies	Rituximab†	
B-cell activating factor pathway	lanalumab*, Belimumab*	
antagonists		
BTK inhibitors	Rilzabrutinib*	
Neonatal Fc receptor antagonists	Efgartigimod*	
Complement inhibitors	Sutimlimab <sup>†</sup>	
Anti-CD38 monoclonal antibodies	Daratumumab <sup>†</sup> , mezagitamab <sup>*</sup> ,	
	CM313*	
Salvage Therapies		
Other	Mycophenolate mofetil, azathioprine,	
immunosuppressants/immunomodulat	cyclosporine, vincristine‡, vinblastine‡,	
ors†	danazol, progestins, dapsone, sirolimus	
Splenectomy‡		
	I .	

<sup>\*</sup>Investigational for ITP at the time of publication.

<sup>†</sup>Approved for other indications, but off-label for ITP.

# A common language for ITP: task not yet accomplished!

- Heterogeneity of terminology and clinical definitions in adult idiopathic thrombocytopenic purpura: a critical appraisal from a systematic review of the literature. Ruggeri M, ... Rodeghiero F. Haematologica. 2008
- Standardization of terminology, definitions and outcome criteria in immune thrombocytopenic purpura of adults and children: report from an international working group. Rodeghiero F, et al. *Blood*. 2009
- Extensive variability in platelet, bleeding, and QOL outcome measures in adult and pediatric ITP: Communication from the ISTH SSC subcommittee on platelet immunology. Al-Samkari H, et al. J Thromb Haemost. 2021

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Definition of Critical Bleed endorsed by ISTH. Sirotich E, et al. J Thromb Haemost. 2021

## Two sides of a coin?

## Guidelines



Provide **Evidence** grading and **Recommendation**Strength (statistical approach may be required)

- PICO model
   (Population/Patient Intervention
   Comparator Outcome)
- In a specific Population does Intervention or Comparator result in better Outcome?

Statistical approach may be required

# **Terminology**



### Provide **general definitions** on:

- Patient characteristics
- Distinct goals of treatment
- Distinct outcomes
- Type of interventions
- Class of drugs
- Aspects of the disease

Consensus reached through progressive agreements among experts

# Terminology wide relevance

- Real life studies and comparative trials based on PICO model are relevant for good clinical practice.
- Systematic reviews, meta-analysis, general reviews ...
- A common terminology is desirable for all approaches

#### **PICO MODEL**

Patient/Population	Intervention	Comparison	Outcomes
Who is your patient?	What do you plan on doing for the patient?	What alternative are you considering?	What do wish to accomplish?
<ul> <li>Age, sex, race or patient</li> <li>Primary problem</li> <li>Health status</li> </ul>	<ul><li>Diagnostic test</li><li>Medication</li><li>Procedure</li></ul>	<ul> <li>Another test, medication or procedure</li> <li>Watchful waiting</li> </ul>	<ul> <li>Accurate diagnosis</li> <li>Relieve or improve symptoms</li> <li>Maintain function</li> </ul>

#### **Medical College of Wisconsin Libraries**

https://mcw.libquides.com/EBM

# Flow of ERCI/IWG consensus project

Increased awareness for revising terminology and definitions

Steering committee: F. Rodeghiero, C. Neunert (co-chairs), H. Al-Samkari, D. Arnold, J. Bussel, N. Cooper, W. Ghanima, T.J González-López, R. Grace, M.L. Lozano, T. Kühne, M. Michel, G. Moulis, D. Provan, F. Zaja

Selection of new terms requiring definition and reevaluation of 2009 definitions

2024: Production of many progressive draft documents

Latest draft to be proposed to the Expanded Expert Group (18 members) and 5 Patients' Representatives

Interaction with Regulatory Agencies

# A view on topics in ERCI/IWG consensus

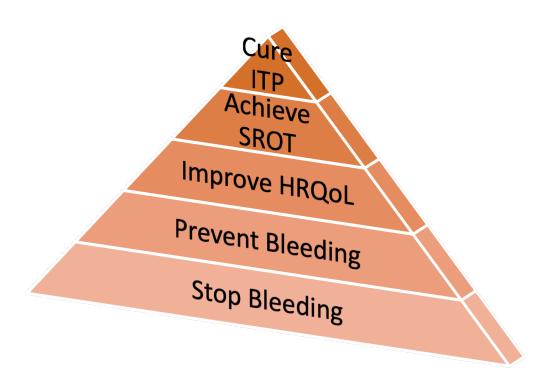
#### **Summary**

ı.	Treatment Goals	V.
	Primary Treatment Goal	
	Secondary Treatment Goals	
	Future Directions	
II.	Phases of disease	
	Duration	
	Recurrence	
	Remission	
	Exacerbation	VI.
III.	Severity of disease	VI.
	Severe ITP	
	Mild ITP	
	Persistent Isolated Mild Thrombocytopenia (PIMT)	VII
IV.	Treatment types	
	Initial/Emergency Treatments	
	Maintenance Treatment	
	Splenectomy	
	Treatments requiring episodic administration	VII
	Treatments requiring ongoing drug administration	IX.

	Criteria for inclusion in clinical trials
II.	Primary and Secondary ITP
	Minor Bleeding
	Relevant Bleeding
	Major Bleeding
	Critical bleeding
ı.	Classification of Bleedings
	Multi-drug refractory
	ITP refractory to initial/emergency therapies
	Refractory ITP
	Time to response and response duration
	Sustained Response Off-Treatment (SROT)
	Spontaneous Response
	Loss of Response
	Transient Response
	Non-response to a specific agent
	Response and Complete Response

Response Criteria	X.	Outcomes for clinical trials in ITP
esponse and Complete Response	XI.	Reporting of bleeding outcome in clinical trials
on-response to a specific agent		Bleeding in Adult ITP
ansient Response		Bleeding in Pediatric ITP
oss of Response	XII.	Recommendations for HRQoL measures
pontaneous Response		HRQoL Measures for Adult Patients
•		HRQoL Measures for Pediatric Patients
ustained Response Off-Treatment (SROT)		queauau u

# **Main Goals in ITP management**

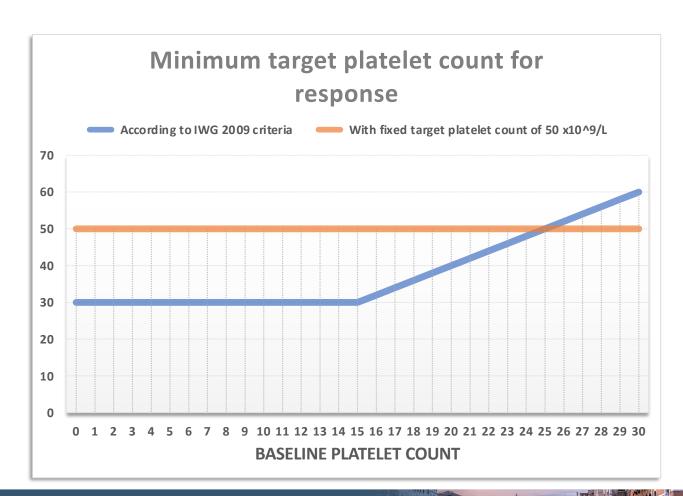


**Pyramid of goals:** This structure highlights the progression from essential treatment goals, like stopping bleeding, to more comprehensive and long-term objectives, culminating in the aspirational goal of curing ITP. Each level builds upon the previous one, showing how immediate treatment priorities support more sustained and comprehensive health outcomes.

# Response achievement according to baseline platelet count

- IWG: plt  $>30 \times 10^9/L$  and doubling of the baseline count
- Pharma companies/ clinical trials:  $>50 \times 10^9/1$

More severe patients are favored with IWG criteria



# **Looking ahead**

### **Excerpt from IWG 2009 standardization paper**

- Consensus criteria and definitions could be used by investigational clinical trials or cohort studies or real life studies.
- Adoption of these recommendations would serve
  - to improve communication among investigators and between physicians and patients
  - to enhance comparability among clinical trials,
  - to facilitate meta-analyses and development of therapeutic guidelines
  - to provide a standardized framework for regulatory agencies

### To reach our goal

- It is of primary importance to avoid any ambiguity.
- Revision of previous definitions and terminology should be justified by the correction of existing ambiguity and/or by new evidence
- Revision of definition should result in a clear benefit for the patients.