

Considerations on Study Population - Immune Thrombocytopenia -

Walter Johannes Beiersdorf PhD

Austrian Medicines and Medical Devices Agency

Institute Assessment & Analytics

Department Clinical Assessment of Safety & Efficacy

Classified as public by the European Medicines Agency

Disclaimer

The information presented here is based on the data available at the time of preparation and is intended for general informational purposes only. While every effort has been made to ensure accuracy, no guarantee is given regarding completeness or reliability.

Importance of Study Population Selection in ITP

- **Target population:** all ITP or a specific (well defined) subgroup of ITP (common traits)
- **Study population:** sample of target population used to draw conclusion on the target population
 - should be in support of clear study conclusions and representative of target population
- Balance between **homogenous study population** and **external validity**
 - Heterogeneity in functional (aetiology) and symptomatic aspects of ITP
- Well-defined study population: variability ↓ assay sensitivity and validity ↑
- Appropriate study population is **crucial for clinical trial success**

Guidelines as harmonised framework

- **Consistency and scientific validity**

e.g. standardize population definitions across chronic ITP clinical trials

- **Homogeneity in study populations across trials via harmonized criteria**

(regulatory/scientific/practical GLs)

Core Population Definition According to EMA-GL

Key inclusion

- Platelet count $<30 \times 10^9/L$ (up to $<50 \times 10^9/L$ under specific conditions and stratification).
- Typically with prior/concomitant treatment (corticosteroids, IvIg, splenectomy, second-line therapies); Dose, duration, and response to be documented

Key exclusion criteria

- Secondary ITP cases and significant comorbidities to avoid confounding

Stratification

- Splenectomy status, baseline platelet count, concomitant therapies, refractory or unresponsive to prior treatment

Diagnostic Considerations for Study Population

- **Full blood count:** isolated thrombocytopenia, with bleeding symptoms at least Hb >9 g/dL
- **Helicobacter pylori:** testing encouraged as association currently unclear
- **Screening for anti-nuclear antibodies (ANA) and anti-phospholipid antibodies (APLA):**
positive test does not as qualify for secondary ITP
- **Bone marrow examination:** not required (e.g. for non-typical ITP, lack of response to treatments)
- **Biomarkers:** to be considered to describe and explore patient characterization

Inclusion based on time since diagnosis

Newly diagnosed: 0-3 months

Persistent: 3-12 months

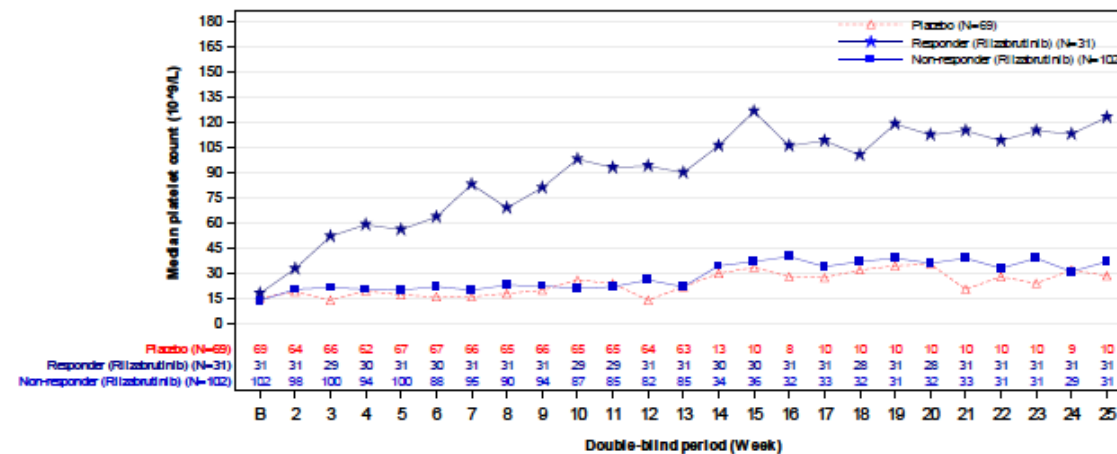
Chronic: ≥ 12 months since diagnosis

- Longer time since diagnosis linked to less likely spontaneous remission
- Mechanistically no difference in response to treatment expected based on these categories
- Representativeness of study population for target ITP population
- Assay sensitivity might be reduced, stratification to be considered

Heterogeneity in treatment response

- High rate of patients without substantial platelet response
- Exploration and identification of **predictive factors/traits**
- Comprehensive diagnostic profile could support such identification of factors/traits

Figure: Median platelet count by visit during the 24-week blinded treatment period



B: Baseline

Baseline platelet count is defined as average of 1st, 2nd qualifying screening platelet counts, and Week 1 (Study day 1) platelet count

Durable platelet response is defined as the proportion of participants able to achieve platelet counts at or above 50,000/ μ L for $\geq$ two-thirds of at least 8 non-missing weekly scheduled platelet measurements during the last 12 weeks of the 24-week blinded treatment period in the absence of rescue therapy, provided that at least 2 non-missing weekly scheduled platelet measurements are at or above 50,000/ μ L during the last 6 weeks of the 24-week blinded treatment period

Based on all available platelet counts

- Rate of non-response ↓
- Target population ↓
- Precision in treatment ↑
- Study success ↑

Special population

- **Pediatric Cohorts:** often self-limiting (in ~2/3), persistent/chronic form more likely with increasing age – later-line treatment options also required (rarely splenectomy)
- **Elderly:** Comorbidities and concomitant medications, closely monitor thrombotic events

Encouraged to be included and adequately reflected in clinical studies

Summary Regulatory Perspective on Study Population

- Clear definition of target and study population
- Platelet threshold typically $<30 \times 10^9/L$
- Exclusion of secondary causes and confounders
- Stratification (splenectomy, baseline platelets, concomitant therapy)
- **Balance between internal and external validity**

Future Considerations:

- Relevance of characterisation based on time since diagnosis
- Exploration of potential prognostic factors to link response to specific mechanisms

THANK YOU!



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Austrian
Federal Office for
Safety in Health Care
BASG

Walter Johannes Beiersdorf PhD

Senior Expert - Clinical Assessor

BASG -

Austrian Federal Office for Safety in Health Care

Traisengasse 5

1200 Vienna

walter-johannes.beiersdorf@ages.at

www.basg.gv.at