

## ThromboStep® (2nd generation) Use in patients receiving steroids or IVIg

### Scope

Flow cytometry-based detection of platelet-associated immunoglobulins (PAIg) is a well-established complementary tool in the evaluation and follow-up of immune thrombocytopenia (ITP). ThromboStep is intended to support immunological interpretation and does not replace platelet count or clinical assessment.

### Use during treatment

Serial measurements can provide clinically relevant information when baseline (pre-treatment) samples are available. Changes in the amount or class of platelet-associated immunoglobulins over time may reflect modulation of the immune response.

### Timing considerations

Following IVIg administration, circulating exogenous immunoglobulins may transiently influence assay readouts. For follow-up purposes, post-treatment sampling is generally recommended at least 1–2 weeks after IVIg infusion, rather than during the immediate post-infusion phase.

### Interpretation principles

- Decreasing PAIgG levels or changes in Ig class distribution are commonly associated with favorable immunological response.
- Transient increases in PAIgG shortly after IVIg may reflect infused Ig rather than persistent immune-mediated platelet destruction.
- Results should always be interpreted relative to a parallel healthy control and within locally validated reference ranges.

### Technical robustness

The ThromboStep protocol, including platelet isolation and strict washing steps, is designed to minimize interference from circulating immunoglobulins. There is no evidence that steric hindrance invalidates the assay; however, local validation in treated patient cohorts is recommended, in line with good laboratory practice.