ThromboStep® (2nd generation)
Use in patients receiving steroids or IVIg – Technical note

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.