

## REVIEWER'S REPORT

**Manuscript No.:** IJAR-53477

**Date:** 21/08/2025

**Title:** *Platelet Indices: Indicators of Diabetic Retinopathy*

### Recommendation:

- ✓ Accept as it is .....
- Accept after minor revision.....
- Accept after major revision .....
- Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity		✓		
Significance	✓			

**Reviewer Name:** Dr. S. K. Nath

**Date:** 22/08/2025

### Reviewer's Comment for Publication:

Based on the information provided, the study suggests that platelet indices could serve as biomarkers for diabetic retinopathy. Elevated MPV and other platelet parameters might be associated with the presence of retinopathy, reflecting the underlying pathophysiological mechanisms involving platelet activation and inflammation. However, further large-scale, multicenter, and longitudinal studies are needed to confirm these findings and determine their clinical utility.

### *Reviewer's Comment / Report*

#### Strengths:

- Clear Objective and Focus:** The study aims to explore specific platelet indices as potential biomarkers for diabetic retinopathy, which is a significant complication of diabetes.
- Appropriate Study Design:** A prospective case-control approach allows for comparison among groups and helps establish associations.
- Well-Defined Sample Size:** Inclusion of 50 participants in each group provides a balanced comparison.
- Multidisciplinary Collaboration:** The integration of pathology and ophthalmology enhances thoroughness, including detailed ophthalmological examinations and blood analyses.
- Comprehensive Data Collection:** Use of advanced equipment like automated blood analyzers, OCT, fundus fluorescein angiography, and HPLC for HbA1c ensures precise measurements.
- Standardized Blood Sample Collection:** Using the same vial for HbA1c and platelet indices minimizes variability.

#### Weaknesses:

- Limited Sample Size and Geographic Scope:** The sample is relatively small and from a single geographic area, which may limit generalizability.
- Potential Selection Bias:** Controls were selected from healthy volunteers such as students and staff, which might not fully represent the general population.
- Cross-Sectional Nature:** Being a case-control study, it captures associations but cannot establish causation between platelet indices and diabetic retinopathy.
- Incomplete Data in Provided Extracts:** While the references hint at significant findings (e.g., mean HbA1c, age distribution), detailed statistical analyses, p-values, and the actual differences in platelet indices are not provided here.
- Lack of Longitudinal Follow-Up:** The study does not assess how platelet indices change over time with disease progression or treatment.