



MEDICAL TIPS

TENEBLU Tablets

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Teneligliptin, a DPP-4 Inhibitor, Improves Vascular Endothelial Function via Divergent Actions Including Changes in Circulating Endothelial Progenitor Cells

Akashi N et al. Diabetes Metab Syndr Obes 2023; 16: 1043-1054.

- DPP-4 inhibitors increase the endothelial progenitor cells (EPCs) and whether an improvement in the flow-mediated dilatation (FMD) is through the inhibition of stromal derived factor 1 α (SDF-1 α) in T2D patients with acute coronary syndrome (ACS) was evaluated.
- A single centre, open-label, prospective RCT evaluated 17 patients with ACS or history of ACS either on teneligliptin or control were evaluated for glucose, lipids, circulating EPCs, plasma DPP-4 activity and SDF-1 α levels and FMD at baseline and 28 weeks .
- The DPP-4 activity and SDF-1 α levels decreased significantly in the teneligliptin group with the EPCs showing an increasing trend which was not statistically significant.
- However, the FMD showed a significant improvement in the teneligliptin group.

Teneligliptin improved FMD through a mechanism other than increasing the number of circulating EPCs.

