The impact of vildagliptin on the daily glucose profle and coronary plaque stability in impaired glucose tolerance patients with coronary artery disease: VOGUE – A multicenter randomized controlled trial Yamamoto et al. BMC Cardiovasc Disord (2021) 21:92

- This study aimed to elucidate whether a DPP-4 inhibitor could reduce the glycemic excursion & stabilize the coronary plaques compared with conventional management in coronary artery disease (CAD) patients with impaired glucose tolerance (IGT).
- Multicenter, randomized controlled trial including 20 CAD patients with IGT under lipid-lowering therapy receiving either vildagliptin (50 mg once a day) or no medication (control group) regarding glycemic treatment.
- Significant difference of mean changes between the groups was -18.8 mg/dl (p=0.0064) for the mean amplitude of glycemic excursion (MAGE) and 42.7 μ m (p=0.0022) for the minimum fibrous cap thickness (FCT).
- Vildagliptin could reduce the MAGE at 6 months & may be associated with increased minimum FCT of the coronary plaques in CAD patients with IGT as compared with the control group

These findings may represent the potential stabilization effect of Vildagliptin on coronary plaques.