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## Current evidence on the effect of DPP-4 inhibitor drugs on mortality in type 2 diabetic (T2D) patients: A meta-analysis

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This meta-analysis throws light on the current understanding from concluded randomized controlled trials (RCTs) before 2014 on the extent of impact of dipeptidyl peptidase-4 inhibitor (DPP-4 I) drugs on overall mortality in patients of type 2 diabetes mellitus. The DPP-4 inhibitor class represents a relatively newer class of oral antidiabetic agents that facilitate improved glycemic control and improvement in glycosylated haemoglobin levels (HbA1c) in patients with type 2 diabetes mellitus. The present meta-analysis is aimed at all randomized controlled trials involving that were published before February 2014 was carried out. Published articles in bibliographic and abstracting electronic databases such as Pubmed central, Cochrane reviews and other medical journals served as the data sources for the present study. The article selection criteria included all randomized placebo-controlled trials of at least one year duration and those which measured at least one of the following clinical endpoints: risk ratio, coronary artery disease mortality, cardio-vascular mortality or all-cause mortality. Information on sample size, follow up period, drug used, and clinical outcomes was abstracted independently by the authors. The present meta-analysis compiled pooled data from 18 randomised controlled trials (RCTs) fulfilling the inclusion criteria of the study (18 trials, 5903 patients) showed a significant relative risk reduction of coronary artery disease mortality, cardiovascular disease mortality and on all-cause mortality without any significant heterogeneity and inconsistency between the trials. From these findings was inferred from the findings from this meta-analysis that the dipeptidyl peptidase-4 inhibitors are indeed effective medicines that confer benefit to patients, in terms of affording optimal glycemic control in T2 DM patients and disease control.

### Biography

Raja Chakraverty has pursued his B Pharm from GNIPST, Kolkata under West Bengal University of Technology and his M Pharm in Pharmacology from Gupta College of Technological Sciences, Asansol. He has also pursued his masters' project work from the Department of Clinical & Experimental Pharmacology at Calcutta School of Tropical Medicine, Kolkata. He has to his credit published ten (10) original research articles in various indexed national and international journals in Pharmaceutical Sciences. His research interest lies in the comprehensive preclinical studies of polyherbal formulations, particularly in the pharmacological screening of anti diabetic drugs in animal models, data mining and meta-analysis, clinical research of pharmaceuticals and biologicals, in pharmacovigilance of herbal medicines and toxicological studies.

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