



Title: The Role of Exenatide in Managing Cardiovascular Risks and Complications in Patients with Type 2 Diabetes

Name: Dr Omorogieva Ojo

University of Greenwich, Faculty of Health and Social Care, Avery Hill Campus, Avery Hill Road, London. SE9 2UG.

Aim: The aim of this systematic review is to examine the role of exenatide BID in managing cardiovascular risks and complications in patients with type 2 diabetes.

Method: This involved a literature search including a general scoping of the data bases which found previous reviews relevant to the population and intervention of interest, but these were either more than 4 years old, were narrative reviews or included liraglutide and studies which were not randomised. The current systematic review is based only on randomised controlled studies.

The literature search strategy for the review relied on previously published guidelines for reviews and was based on the Population (P), the Interventions (I), Comparative interventions (C) and Outcomes (O) (PICO) framework. A number of databases including EBSCO host, encompassing Academic search premier, Medline, Psychology and Behavioural sciences collection, PSYCINFO, SPORTDISCUSS and Cumulative Index to Nursing and Allied Health Literature (CINAHL) Plus were accessed.

In addition, 'Boolean' search strategy allowing the combination of search terms such as 'Exenatide' AND 'Diabetes' AND 'cardiovascular diseases'; 'Exenatide' AND 'Diabetes' AND 'glycaemic control'; 'GLP-1' AND 'Diabetes'; 'GLP-1' AND 'Diabetes' AND 'cardiovascular diseases'; 'GLP-1' AND 'Diabetes' AND 'macrovascular diseases'; 'Exenatide' AND 'Cardiovascular risks'; 'Exenatide' AND 'Cardiovascular complications'; Exenatide' AND ' glycaemic control' was used.

The quality of the studies selected were evaluated using the checklists for quantitative studies. Ten (10) randomised controlled studies which met the inclusion criteria were selected for the current review.

The outcome measures included in the search were; Cardiovascular risks, Cardiovascular complications, glycaemic control.

All the studies reviewed except one showed that the use of exenatide BID as a monotherapy or in combination with other medications was associated with reduction in most cardiovascular risks and complications such as weight, blood pressure, glycated haemoglobin which are associated with type 2 diabetes compared with control.