



The ABCD Nationwide Exenatide QW Audit - Objectives

Using modern technologies on the NHS N3 computer network to facilitate easy gathering of anonymised data, ABCD is setting up a nationwide audit of exenatide QW (Bydureon) in real clinical use in the UK. The aim will be to ascertain whether the experience in real clinical use matches the data from phase 3 clinical trials. Clinicians using exenatide QW will be invited to submit the data that they routinely collect as they monitor the progress of their patients (HbA1c, weight etc) to the nationwide audit. An IT tool has been developed on the NHS computer network, N3, to make this process as easy and user friendly as possible. It will also facilitate easy analysis of locally collected data by the local clinicians. ABCD hopes to gain insight into both the safety and efficacy of exenatide QW. ABCD hopes that the data from the nationwide audit will inform future practice and guidelines.

From the data submitted in the audit ABCD hopes it might be able to quantify and analyse in detail:

- How much **weight loss** occurs with exenatide QW in real clinical use. Is weight loss durable over time?
- How much **HbA1c reduction** occurs with exenatide QW in real clinical use. Is this reduction durable over time in the real world?
- What is the real world experience of **progression to insulin treatment** in patients treated with exenatide QW ?
- What is the impact on **lipids** of exenatide QW in real clinical use
- What is the impact on alanine aminotransferase (ALT) of exenatide QW – through weight loss and impact on lipids might exenatide QW improve non-alcoholic fatty liver disease (**NAFLD**).
- Who are the patients **who respond** especially well to exenatide QW in real clinical use – does it relate to initial HbA1c, weight, body mass index, duration of diabetes, initial age or sex, or particular other medications being used etc. Is it possible to predict the patients who are more likely to respond to exenatide QW .
- Similarly, who are the patients **who don't respond** to exenatide QW ?
- Currently exenatide QW **usage with insulin** is off license but, as with exenatide and liraglutide, some diabetologists have been trying it with insulin, in certain clinical situations, where such a usage seems to be best for the patient. The nationwide audit affords an opportunity to pool experience of usage of exenatide QW with insulin across the nation, find out how useful this approach is, the extent to which control is

improved, insulin dose is reduced or insulin is even stopped. The data may help bring forward the licensing of usage of exenatide QW with insulin, if the combination does prove to be a good one

- What are the **side effects**? The possibility of pancreatic damage has been considered in relation to Glucagon-like peptide-1 (GLP-1) based therapies usage but there does not seem to be any signal for this in the phase 3 clinical trials of exenatide QW. Nevertheless worries continue in the minds of many clinicians who will feel reassured that there is a robust reporting system for adverse events in place through the audit. The audit provides a vehicle for further reassurance with regard to these side effects to compliment the phase 3 trials. Are there any important side effects that have not yet been identified?
- If there are **safety issues** with exenatide QW which may come out in due course, we hope to get some forewarning of these now through pooling the national experience.
- To what extent does exenatide QW allow avoidance of insulin and continuation in their jobs for **professional drivers**, or regaining of their jobs for such workers who have lost them through insulin?
- What is the size of the problem of **hypoglycaemia** with exenatide QW and insulin, or exenatide QW and sulphonylureas. Is there a problem of worsening hyperglycaemia if insulin is stopped and exenatide QW started? Are there guidelines that can be deduced from the nationwide experience with regard to how to add exenatide QW to insulin and how to add exenatide QW to sulphonylureas without inducing hypoglycaemia or hyperglycaemia.
- What percentage of patients **cannot tolerate exenatide QW** in real clinical use?
- Is the clinical efficacy of exenatide QW sustained in real clinical use? Does the weight loss continue with time or does it plateau off?
- Are there benefits, or otherwise, in combining **thiazolidinediones** and exenatide QW