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The Association of British Clinical Diabetologists nationwide exenatide and liraglutide audits suggest a low incidence of acute pancreatitis. Response to Robson. Incretins and pancreatitis—what happens next? A personal viewpoint

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We are concerned that Dr Robson [1] has concluded erroneously that rates of acute pancreatitis from the Association of British Clinical Diabetologists (ABCD) nationwide exenatide and liraglutide audits are 'higher than expected' [1]. For the exenatide audit, the pancreatitis rate was 12/10 000 person years [2] and, for the liraglutide audit, 10.8/10 000 person years [3]. These audits combined contain data on 12 727 'real-world' UK patients with Type 2 diabetes treated with the respective glucagon-like peptide 1 (GLP-1) receptor agonist. In interpreting acute pancreatitis rates as he has, Dr Robson has failed to acknowledge that people with Type 2 diabetes in general (i.e. not on GLP-1-based therapies) are at greater risk of acute pancreatitis (hazard ratio between 1.5 and 2.8 [4–6]) than people without diabetes. The rates of acute pancreatitis in people with Type 2 diabetes not on GLP-1-based therapies are between 5 and 56/10 000 person years [4–7]. Thus, the rates of acute pancreatitis in the ABCD exenatide and liraglutide audits are at the low end of the rates expected for people with Type 2 diabetes in general. Hence, there is no evidence from the ABCD nationwide GLP-1 receptor agonist audits for any additional acute pancreatitis risk attributable to exenatide or liraglutide over and above what would be expected for people with Type 2 diabetes in general.

Obesity is surely implicated in the higher rates of acute pancreatitis seen in patients with Type 2 diabetes, particularly contributing to the gallstone and hypertriglyceridaemic aetiology of the condition. We know that there are other non-diabetic, non-GLP-1-based therapy, causes of acute pancreatitis, with gallstones or alcohol being the most frequent [8–10]. It is noteworthy that 75% of the cases of acute pancreatitis in the ABCD exenatide and liraglutide audits had these other causes demonstrated for acute pancreatitis [2,3], such that exenatide or liraglutide were not implicated. Furthermore, it is worth pointing out again that many cases of acute pancreatitis are 'idiopathic' [8–10] and hence exenatide or liraglutide may not be the actual cause even if no other cause is found.

Dr Robson concluded: 'If confirmed, rates of pancreatitis of 11/10 000 per year such as reported in the Association of British Clinical Diabetologists audit would be of concern. Adverse event rates of 6/10 000 per year are comparable with that of the highest estimates of rhabdomyolysis in high-intensity statins, or the risk of deep vein thrombosis with third-generation oral contraceptives'. We believe that Dr Robson's conclusion is highly misleading, given that the rate of 11–12/10 000 person years is in fact low for people with Type 2 diabetes.

Finally, Dr Robson mentions increased hypoglycaemia amongst patients treated with exenatide in the ABCD exenatide audit [1]. This hypoglycaemia was testimony to the glycaemic efficacy of exenatide when added to insulin or sulphonylureas. It is attributable to the insulin and sulphonylureas, and resolves as the latter agents are reduced or stopped.

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Competing interests

REJR has received speaker fees, consultancy fees and/or educational sponsorships from a number of companies, including Bristol Myers Squibb/Astra Zeneca Alliance, Eli Lilly, GlaxoSmithKline, Novo Nordisk, Sanofi-Aventis and Takeda. PSG has received speaker fees from Eli Lilly and educational sponsorship from Bristol Myers Squibb,

*The exenatide audit contributors are listed in reference 2.
†The liraglutide audit contributors are listed in reference 3.

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