**The initiation of GLP-1RAs, SGLT2is and insulin therapy at a metropolitan diabetes service in contemporary times as opposed to historical controls**

**BACKGROUND**

Historically, patients with type 2 diabetes on maximal oral glucose lowering agents who were still experiencing suboptimal glycaemic control were started on insulin therapy. With the introduction of newer glucose lowering medications, it is likely that increasing numbers of patients are being initiated on these medications in preference to starting insulin. GLP-1 agonists (GLP-1RAs) first came on to pharmaceutical benefit scheme (PBS) in 2010 followed by the Sodium-Glucose Co-Transporter-2 inhibitors (SGLT2is) in 2013.

**AIM**

To document the initiation of GLP-1RAs, SGLT2is and insulin therapy at a metropolitan diabetes service within a public hospital in contemporary times as opposed to historical controls.

**METHOD**

A retrospectively chart review for patients attending the diabetes service at St Vincent’s Hospital Melbourne. Patient’s diabetes medications initiated at first presentation to our diabetes service in April/May of 2025 and 2015 were recorded. A total of 26 charts in 2025 and 21 charts in 2015 were examined.

**RESULTS**

Review of 26 consecutive charts in 2025 showed that insulin was not initiated in any patients. Whereas, GLP-1RAs or SGLT2is were initiated on 14 patients. In comparison, in 2015, 2 patients were initiated on SGLT2is or GLP-1RAs and insulin was initiated in 11 patients. The clinical profile of patients was similar in 2015 and 2025 (HbA1c: 8.4% versus 8.8%, respectively, NS), despite a significant change in prescribing patterns (Χ2, p < 0.001).

**CONCLUSION**

There has been an increase in the use of new non-insulin glucose lowering medications compared with insulin for patients with type 2 diabetes in recent times. This is not an unexpected finding given that these newer agents have significant glucose lowering effects but also offer a risk for lower hypoglycaemia, induce weight loss and improve cardiovascular and kidney outcomes compared to insulin.