examine the effectiveness of sequential vs. initial combination therapy. Selected patients had HbA1C ≥7 at initiation of combination therapy (baseline) and no prior insulin or anti-diabetic therapy, higher persistence, similar A1C reduction and low hypoglycemia rates, and lower diabetes drug costs compared to LIRA. These results should be considered exploratory, owing to small sample sizes and lack of weight data, and await confirmation by data from the full-phase INITIATOR study.

**PD7**

**CLINICAL AND RESOURCE UTILIZATION OUTCOMES: ELDERLY TYPE 2 DIABETES PATIENTS INITIATING INSULIN PENS VERSUS VIALS**

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**OBJECTIVES:** To assess clinical and resource utilization outcomes between elderly type 2 diabetes patients initiating basal insulin analog administered via pens vs. vials.

**METHODS:** An online survey of 352 U.S. primary care physicians was used to determine the prescribing practices of 500 elderly patients who initiated on basal insulin analog in 2009. Information on glycemic control, severe hypoglycemic events, and diabetes-related health care resource utilization was collected prior to initiation and over a 12-month study period following insulin initiation. Information on adherence, both objective (measured via proportion of days covered [PDC] and physician-reviewed [based on a revision of the objective measure] PDC) was also collected for the study period. Multivariable regression analyses were used to control for confounding factors. **RESULTS:** Over the study period, initiation on pens, compared to vials, was associated with HbA1C levels 0.14 points lower (P = 0.0027). No differences were seen in the likelihood of reaching an HbA1C thresholds of 7% (hazard ratio [HR] = 1.05, P = 0.738), though the likelihood was 27% and 55% higher for pen initiators for HbA1C thresholds of 5.5% (HR = 1.27, P = 0.041) and 8% (HR = 1.55, P = 0.001), respectively. Rates of severe hypoglycemic events, inpatients, hospital emergency room and hospital inpatient visits were similar between cohorts, but rates of emergency room visits were 68% lower for the pen cohort (P = 0.032).

**CONCLUSIONS:** Results from this study suggest that initiation on insulin pens, as compared to vials, may be associated with better glycemic control, fewer emergency room visits, and higher adherence levels (based on physician assessments) without an impact to the incidence of severe hypoglycemic events. Objective adherence and other resource utilization categories were not significantly different between the two cohorts.

**PD8**

**WEIGHT LOSS OF ≥3% OF BODY WEIGHT AFTER INITIATING NEW ANTI-DIABETIC THERAPY IS ASSOCIATED WITH GLYCEMIC CONTROL AT 6 MONTHS IN PATIENTS WITH TYPE 2 DIABETES**

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**OBJECTIVES:** We previously identified a correlation between weight loss and glycemic control in patients with type 2 diabetes (T2DM) newly treated with oral or GLP-1 inhibitor therapy in the real-world setting. This study expands on those findings by including previously treated patients and patients initiating insulin.

**METHODS:** This cohort study included T2DM patients aged ≥18 years in an electronic medical record database from 2008-2011 prescribed a class of anti-diabetic not previously used (index date), and with a baseline HbA1C ≥7.0%. Weight and HbA1C were measured from baseline to month 6. The weight loss ≥3% of body weight and attained HbA1c goal (≤7.0%) were identified. Logistic regression was used to describe the association between weight loss and glycemic control for confounding factors, including initiation of insulin or other therapies. **RESULTS:** The study included 861 patients. Mean (SD) age was 58.7 ± 12.3 years; 54.8% were male. Most patients (85.9%) were prescribed a non-insulin agent. Baseline HbA1c was 8.7% (16.6); weight was 103.6 kg (23.6). At 6 months, mean weight change was -1.6 (±3.9) kg (p = 0.01) and 31.8% lost weight. Mean change in HbA1c was -1.2% (±1.8) (p = 0.001). Overall, 42.9% attained HbA1c goal while 64.2% of patients who lost ≥3% of their weight and attained HbA1c goal (≤7.0%) were identified. Logistic regression was used to describe the association between weight loss and glycemic control for confounding factors, including initiation of insulin or other therapies.

**CONCLUSIONS:** We retrospectively reviewed the records of 20 hypothyroid patients treated with radioactive iodine to determine response rate of hyperthyroidism to two fixed doses of RAI therapy was carried out. Twelve (12) and 8 patients received 370MBq (10mCi) and 185MBq (5mCi) Radioactive iodine (RAI) therapy, and 2 the incidence of hypothyroidism at 6months post RAI therapy. **METHODS:** A retrospective review of the records of 20 hyperthyroid patients treated with radioactive iodine to determine response rate of hyperthyroidism to two fixed doses of RAI therapy was carried out.

**PD9**

**TIME-DOSING OF FIXED DOSE RADIOACTIVE IODINE FOR THE TREATMENT OF HYPERthyroidISM**

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**OBJECTIVES:** To determine: 1) the response or cure rate of hyperthyroidism to fixed doses of 370MBq (10mCi) and 555MBq (15mCi) Radioactive iodine (RAI) therapy, and 2) the incidence of hypothyroidism at 6months post RAI therapy. **METHODS:** A prospective review of the records of 20 hyperthyroid patients treated with radioactive iodine to determine response rate of hyperthyroidism to two fixed doses of RAI therapy was carried out. Twelve (12) and 8 patients received 370MBq (10mCi) and 555MBq (15mCi) Radioactive iodine (RAI) therapy, and 2 the incidence of hypothyroidism at 6months post RAI therapy.