SAFETY AND EFFECTIVENESS OF SWITCHING ONCE-DAILY BASAL INSULIN (NPH OR GLARGINE) TO ONCE-DAILY BIPHASIC INSULIN ASPART 30: RESULTS FROM THE A1CHIEVE STUDY

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The safety and effectiveness of insulin analogues was investigated in A1chieve, a 24-week, observational study conducted across 28 countries in 66,726 people with type 2 diabetes. This sub-group analysis examined outcomes in those poorly controlled with once-daily neutral protamine Hagedorn (NPH) insulin or insulin glargine ± oral glucose-lowering drugs (OGLDs) and switched to once-daily biphasic insulin aspart (BIAsp) 30 ± OGLDs (n=230). The mean (SD) age of this cohort was 59.4 (11.0) years, BMI 25.5 (4.9) kg/m² and diabetes duration 11.4 (7.1) years. 24 weeks after switching to BIAsp 30, glycaemic control improved significantly from baseline: HbA1c −1.2 (1.8) % [baseline 9.2 (1.8) %]; fasting plasma glucose −2.4 (4.5) mmol/l [−43 (81) mg/dl] [baseline: 9.7 (3.9) mmol/l {175 (70) mg/dl}]; and postprandial breakfast glucose −5.3 (5.3) mmol/l [−95 (95) mg/dl] [baseline: 14.7 (4.4) mmol/l {265 (79) mg/dl}]; all p<0.001. There was no significant change from baseline to 24 weeks in body weight [from 67.0 (14.1) kg to 67.0 (13.5) kg], nor overall (from 3.11 to 1.94 events/patient/year) nor nocturnal hypoglycaemia (from 0.79 to 0.74 events/patient/year). Daily insulin dose was 0.29 (0.14) U/kg prior to switching, 0.29 (0.13) U/kg at baseline and 0.37 (0.18) U/kg after 24 weeks. No serious adverse drug reactions were reported. Quality of life (QoL, visual analogue score) improved significantly from 67.5 (15.3) at baseline to 73.5 (14.4) at study end (p<0.001). Switching to once-daily BIAsp 30 from once-daily basal insulin was associated with improvements in glycaemic control and QoL, and no change in weight or hypoglycaemia.