press release

New Xultophy® (insulin degludec/liraglutide; IDegLira) data show glycaemic improvements with increased predictability in glycaemic control within one day in people with type 2 diabetes[1,2]

- *First once-daily, single injection basal insulin (insulin degludec) and GLP-1 receptor agonist (liraglutide) in one pen for adults with type 2 diabetes*
- *Data from the 52-week DUAL™ I and the 26-week DUAL™ II clinical trials were presented at the 50th European Association for the Study of Diabetes (EASD) annual meeting today*

50th EASD Annual Meeting, Vienna, Austria, 2014 – New analyses of Phase 3a Xultophy® (insulin degludec /liraglutide; IDegLira) DUAL™ study data show an early and substantial improvement in glycaemic control, and a beneficial weight profile in type 2 diabetes patients compared to insulin degludec. These benefits were demonstrated from as early as four weeks after treatment initiation in both insulin-naïve and insulin-treated patients.[1] Novo Nordisk was granted marketing authorisation for Xultophy® by the European Commission for all 27 European Union member states on 18 September 2014.

Xultophy® treated patients also had a greater likelihood of reaching both pre- (before meal) and post-prandial (after meal) blood glucose targets, compared with either insulin degludec or liraglutide, suggesting increased predictability with treatment.[2]

"Many people with type 2 diabetes in the UK fail to reach their blood glucose targets. The progressive nature of this condition often requires patients to initiate and then intensify insulin treatment. Patients and clinicians may be hesitant to do this due to the increased risk of hypoglycaemia and weight gain," commented Professor Jiten Vora, Consultant Endocrinologist at The Royal Liverpool and Broadgreen University Hospital NHS Trust.

He continued: "New treatments that demonstrate the ability to reach glycaemic targets with better predictability and tolerability are of vital importance in the management of type 2 diabetes as they offer the potential to increase adherence, reduce diabetes-related complications and improve patient outcomes."

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Gwen Hall, Diabetes Specialist Nurse, Portsmouth Community Diabetes Service noted: "Type 2 diabetes is progressive, yet many people who live with it are reluctant to increase their medication as their care team advise. This may be due to unwarranted side effects such as weight gain and hypoglycaemia (low blood sugar), or the need for an increasing number of injections. The DUAL™ data show promise in addressing all those concerns, providing health care professionals, and people with diabetes, with a novel approach to managing their condition while minimising the impact of diabetes on their day-to-day lives."

In the DUAL™ I clinical trial, the proportion of people achieving fasting plasma glucose ≤7.2 mmol/L at week 4 was greater with Xultophy® (76%) than with insulin degludec (62%; $p<0.0001$) or with liraglutide (62%; $p<0.0001$). At week 8 the proportion of people achieving glycated haemoglobin (HbA_{1c}) <7% was greater with Xultophy® (57%) than with insulin degludec (38%; $p<0.0001$) or with liraglutide (47%; $p<0.0001$). At weeks 4, 8 and 12 in DUAL™ I, treatment with Xultophy® also resulted in significant weight reduction compared with insulin degludec, which was associated with an overall weight gain ($p<0.0001$ at weeks 4, 8 and 12). Weight reduction with Xultophy® was less than that achieved with liraglutide 1.8 mg alone. Results from DUAL™ II were consistent with DUAL™ I findings for Xultophy® and insulin degludec.[1]

Results showed Xultophy® enabled more patients to reach the recommended pre- and post-prandial target ranges, compared with administration of its individual components. The proportion of people with type 2 diabetes at the end of the trials with breakfast, lunch and dinner post-prandial blood glucose values within the target of <9 mmol/L was significantly higher with Xultophy® treatment (DUAL™ I: 51%; DUAL™ II: 37%), than with insulin degludec treatment (DUAL™ I: 38%; $p<0.0001$; DUAL™ II: 25%; $p=0.0093$) or with liraglutide (DUAL™ I: 36%; $p<0.0001$). The likelihood of achieving all four pre-prandial blood glucose values (before meals and bedtime), within the recommended range of ≥3.9 to ≤7.2 mmol/L, was significantly greater with Xultophy® treatment (DUAL™ I: 48%; DUAL™II: 44%) than with insulin degludec treatment (DUAL™ I: 41%; $p=0.0204$; DUAL™ II: 27%; $p=0.0008$) or with liraglutide treatment (DUAL™ I: 32%; $p<0.0001$). Improved pre- and post-prandial blood glucose levels suggest that the predictability of glycaemic control within one day, is increased with Xultophy®.[2]

In the clinical trial programme there were no apparent differences between Xultophy®, insulin degludec and liraglutide with respect to adverse events. As expected, Xultophy® had a similar tolerability and safety profile to each of its mono-components.[3,4]

About Xultophy® (insulin degludec/liraglutide; IDegLira)

Xultophy® is a combination of Tresiba® (insulin degludec), a once-daily basal insulin analogue with a long duration of action,[5] and Victoza® (liraglutide), a once-daily GLP-1 receptor agonist,[6] which is used to treat adults with type 2 diabetes.

Xultophy® was approved in Switzerland on 12 September 2014 and granted marketing authorisation by the European Commission for all 27 European Union member states on 18 September 2014.

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About the DUAL™ programme
DUAL™ (DUal Action of Liraglutide and insulin degludec in type 2 diabetes) consists of two Phase 3a trials encompassing around 2,000 adults with type 2 diabetes and three Phase 3b trials (DUAL™ III, IV and V).

DUAL™ I (1,663 people) – a 26-week, randomised, parallel, three-arm, open-label, multicentre trial conducted at 271 sites across 19 countries. The trial compared the efficacy and safety of Xultophy® versus insulin degludec and liraglutide alone, in insulin naïve adults with type 2 diabetes uncontrolled with metformin with or without pioglitazone.

DUAL™ I Extension – 26-week extension phase of the main trial was conducted to generate longer-term safety and efficacy data. The results confirmed that the benefits seen in the DUAL™ I trial were sustained up to 52 weeks.[7]

DUAL™ II (398 people) – a 26-week, randomised, parallel, two-arm, double-blinded, multicentre trial conducted at 75 sites across seven countries. The trial compared the efficacy and safety of Xultophy® and insulin degludec once daily, both added on to metformin in adults with type 2 diabetes uncontrolled on basal insulin (20–40 units) in combination with metformin with or without sulphonylureas/glinides. Sulphonylureas and glinides were discontinued at randomisation. In this trial, the allowed maximum dose of insulin degludec in the treatment arms was 50 units, so as to be able to demonstrate the contribution of the liraglutide component of Xultophy® on blood glucose control (maximum dose for Xultophy® is 50 dose steps).[4]

In DUAL™ II Xultophy® demonstrated:
- 1.9% HbA_{1c} reduction (-1.9% vs -0.89%; $p<0.0001$)[4]
- Weight loss of 2.7kg (-2.7kg vs 0.0kg; $p<0.001$)[4]
- Low rate of hypoglycaemia comparable to insulin degludec (1.5 episodes/year vs 2.6 episodes per year; $p=0.13$)[4]

About Novo Nordisk
Headquartered in Denmark, Novo Nordisk is a global healthcare company with more than 90 years of innovation and leadership in diabetes care. The company also has leading positions within haemophilia care, growth hormone therapy and hormone replacement therapy. Novo Nordisk employs approximately 40,700 employees in 75 countries, and markets its products in more than 180 countries. For more information, visit novonordisk.co.uk.

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