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Glycaemic control and hypoglycaemia during basal insulin initiation in type 2 diabetes

This promotional meeting is organised and funded by Sanofi. Prescribing Information and Adverse event reporting can be found at the end of this presentation.

MAT-GB-2001383 (v2.0) Date of preparation Dec-22

Toujeo indication: Treatment of diabetes mellitus in adults, adolescents and children from the age of 6 years.

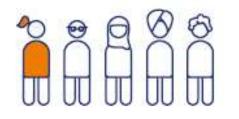
Speaker Disclosure





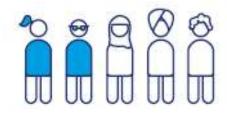
### 4.9 million

people in UK have diabetes<sup>1</sup>



#### Fewer than one in five

people with **Type 1** diabetes are meeting the recommended treatment targets that will reduce their risk of complications<sup>1</sup>

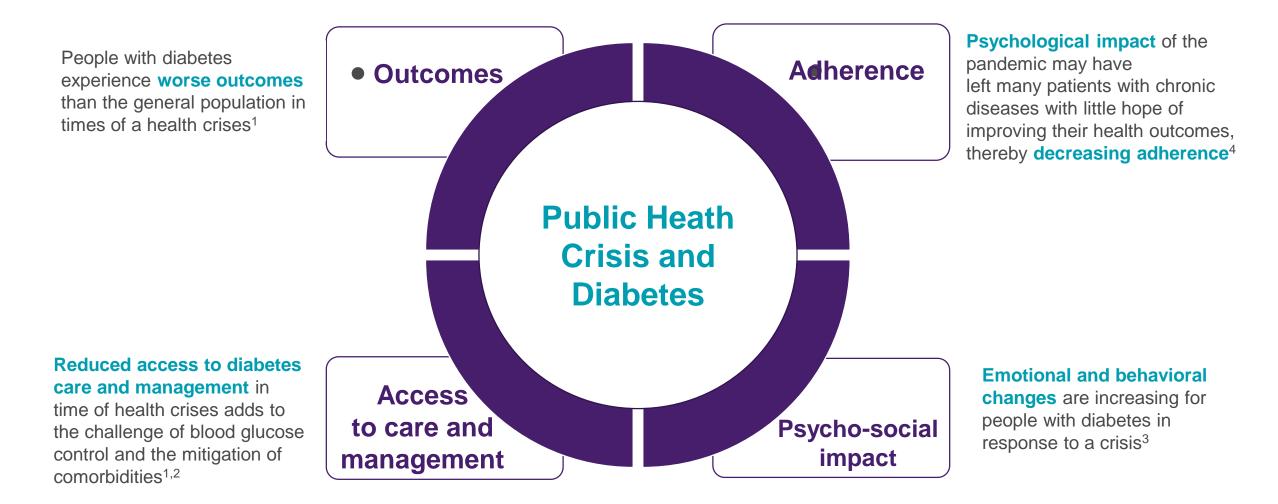


#### **Two in five**

people with **Type 2** diabetes are meeting the recommended treatment targets that will reduce their risk of complications<sup>1</sup>



#### Public health crises pose both direct and indirect risks to people with diabetes



- 1. ADA Diabetes Care 201:30(9)2395
- 2. Kocurek B et al. Information for Health Care Professionals. Switching between insulin products in Disaster Response Situatios, 2018
- 3. Dubey S et al. DMSCRR 2020; 14:779-88
- 4. Kretchy I A. et al. Research in Social and Administrative Pharmacy, https://doi.org/10.1016/j.sapharm.2020.04.007

### The majority of $HbA_{1c}$ reduction with insulin is achieved in the first 12 weeks

Pooled data of treatment arms of 15 treat-to-target RCTs in T2DM (n=2837)

#### Mean HbA<sub>1c</sub> decrease from baseline -1.4% -1.6% 12 108 HbA<sub>1c</sub> (mmol/mol) Х $\mathsf{HbA}_{1c}$ (%) 42 6 0 0 **Baseline** Week 24 **Week 12** Adapted from Owens DR, et al. (2014)

Box and whisker plot description: lower whisker represents the minimum value; bottom of lower box rests on the first quartile; midline of box represents median value; x represents mean value; top of upper box represents the third quartile; upper whisker represents the maximum value.

FPG, fasting plasma glucose; RCT, randomised controlled trial; T2DM, type 2 diabetes mellitus



Owens DR, et al. Diabetes Res Clin Pract. 2014;106:264-74.

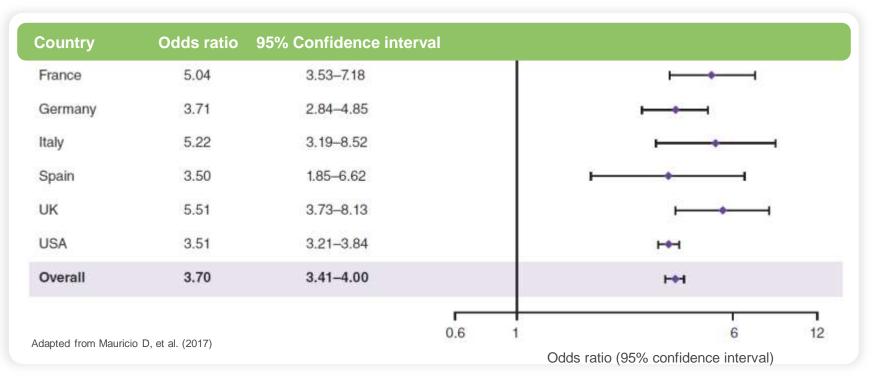
Insulin glargine 100 U/mL
was added to metformin, SU, or both

Target FPG was 5.6 mmol/L

#### Early glycaemic response in first 12 weeks predicted long-term glycaemia

Real-world retrospective data of basal insulin initiation in type 2 diabetes (n=40,627)

Risk of not reaching target HbA<sub>1c</sub> ≤53 mmol/mol (7.0%) after 24 months if patient does not achieve target in first 3 months



**3.7x** more likely to have HbA<sub>1c</sub> >53 mmol/mol (7%) at 24 months<sup>1</sup>

(OR, 3.70, 95% CI: 3.41-4.00)

A multivariable logistic regression model assessed baseline and short-term (0-3 months post insulin initiation) factors associated with long-term (3-24 months) glycaemic control and hypoglycaemia. Overall OR was derived from a meta-analysis of results from all 6 countries, using an inverse-variance weighted method.

### The impact of hypoglycaemia early in basal insulin initiation



#### Future hypoglycaemia risk

Early hypoglycaemia within the first 3 months after basal insulin initiation in type 2 diabetes is associated with an increase in long-term hypoglycaemia risk<sup>1</sup>



## Future treatment discontinuation

Early hypoglycaemia within the first 6 months after basal insulin initiation in type 2 diabetes is associated with an increased risk of treatment discontinuation<sup>2</sup>





Hypoglycaemia within the first 6 months after basal insulin initiation in type 2 diabetes is associated with an increased risk of hospitalisation<sup>2</sup>



Impact on quality of life

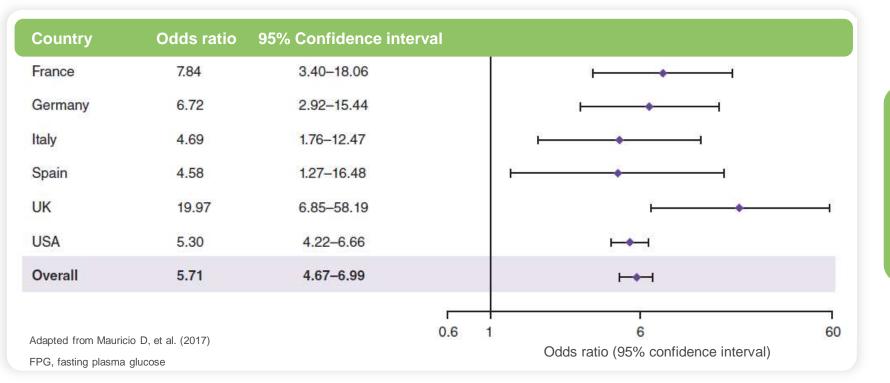
Experience of hypoglycaemia on basal insulin in type 2 diabetes may impair quality of life<sup>3</sup>

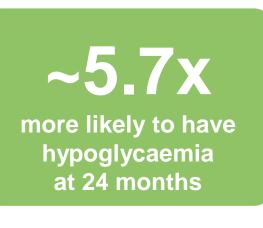


#### Early hypoglycaemia after basal insulin initiation increases the long-term risk

Real-world retrospective data of basal insulin initiation in type 2 diabetes (n=40,627)

Risk of hypoglycaemia (any reported hypoglycaemia or FPG ≤3.9 mmol/L) after 24 months if hypoglycaemia in first 3 months





(OR, 5.71, 95% CI: 4.67–6.99)

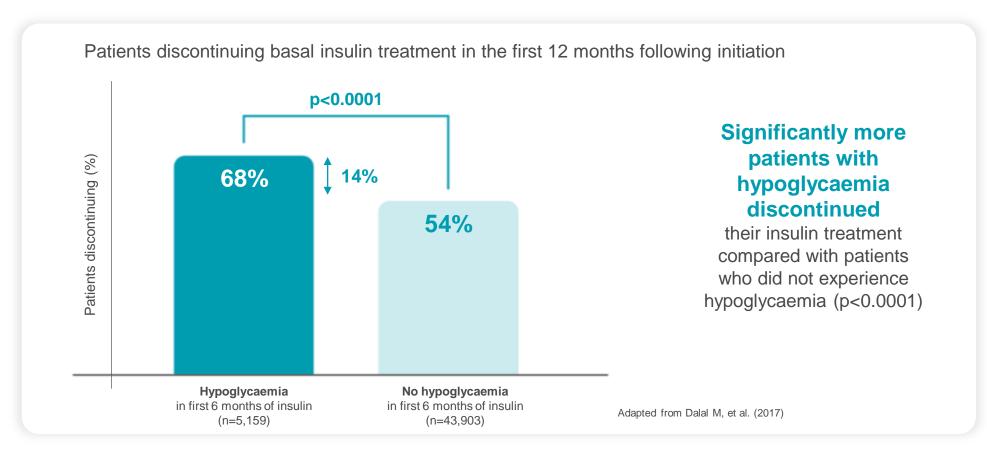
A multivariable logistic regression model assessed baseline and short-term (0-3 months post insulin initiation) factors associated with long-term (3-24 months) glycaemic control and hypoglycaemia. Overall OR was derived from a meta-analysis of results from all 6 countries, using an inverse-variance weighted method.

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Mauricio D, et al. Diabetes Obes Metab. 2017;19:1155-64.

# Hypoglycaemia within the first 6 months increases the risk of treatment discontinuation

Retrospective cohort study of insulin-naïve patients with type 2 diabetes (n=49,062)

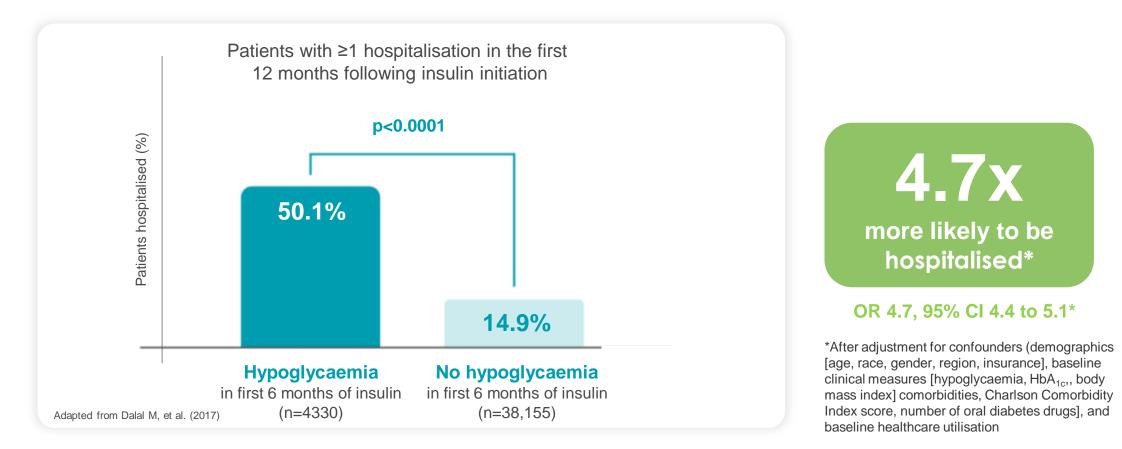


Study of patient-level data using electronic medical records of adult patients initiating basal insulin glargine, insulin detemir, or NPH. Patients were assigned to cohorts by experience of hypoglycaemia (ICD-9-CM code or laboratory glucose value ≤3.9 mmol/L) in the first 6 months following index date.

#### Dalal M, et al. Curr Med Res Opin. 2017;33:209-14.

#### Hypoglycaemia within the first 6 months increases the risk of hospitalisation

Retrospective cohort study of insulin-naïve patients with type 2 diabetes



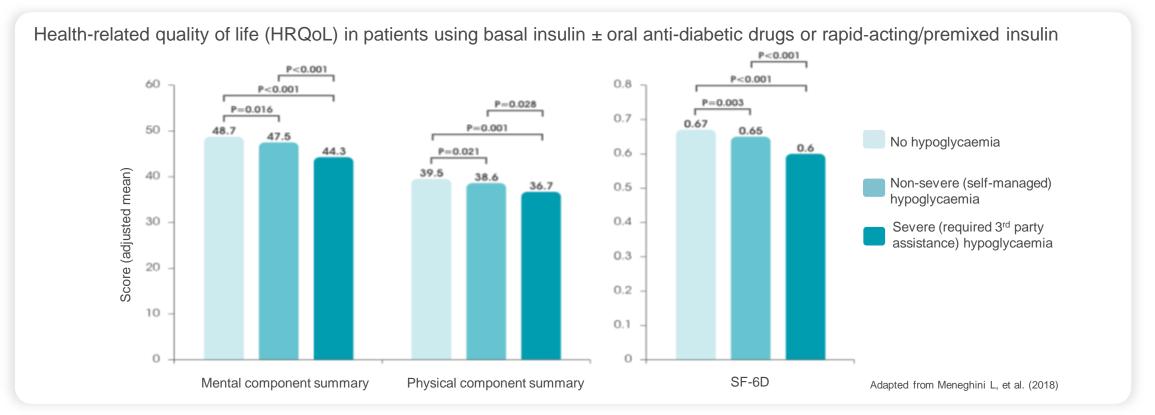
Study of patient-level data using electronic medical records of adult patients initiating basal insulin glargine, insulin detemir, or NPH. Patients were assigned to cohorts by experience of hypoglycaemia (ICD-9-CM code or laboratory glucose value ≤3.9 mmol/L) in the first 6 months following index date.

OR, odds ratio; CI, confidence interval



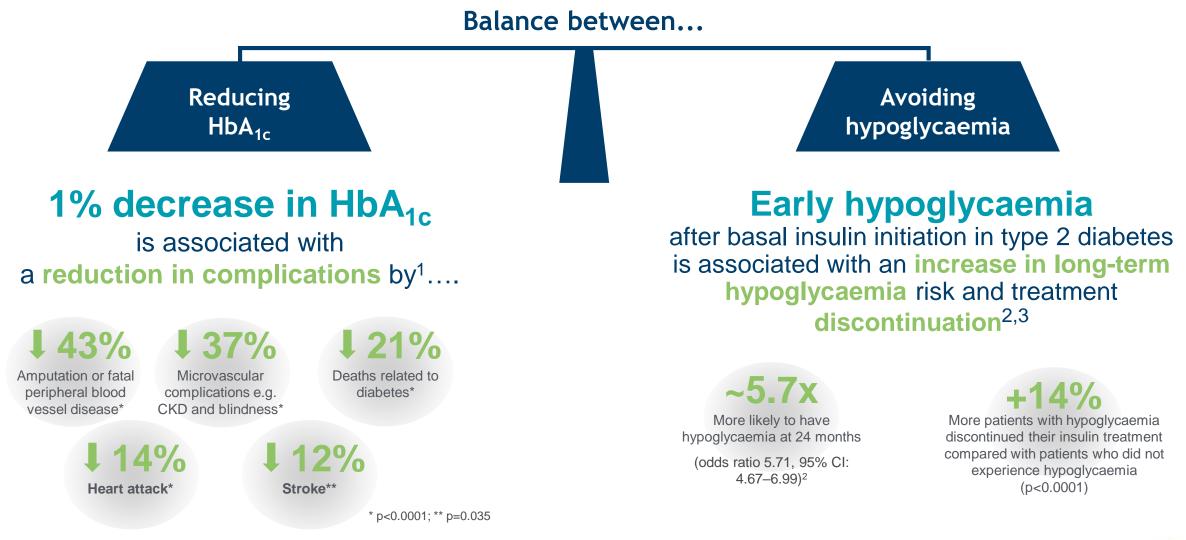
### Hypoglycaemia in the previous year reduces a person's quality of life

Observational survey study of basal insulin-using patients with type 2 diabetes (n=2,423)



HRQoL was assessed using the Medical Outcomes 12-item Short-Form Survey Instrument version 2 (SF-12v2) for the year 2011 and the 36-item Short-Form Survey Instrument version 2 (SF-36v2) for 2012 and 2013. SF-36v2 reports on health status in 8 domains, from which 2 summary scores are calculated: the Physical Component Summary and the Mental Component Summary, which are normed to a mean of 50 for the general US population; a higher score indicates better health status. SF-36v2 was used to generate health state utilities by applying the SF-6D algorithm, which takes items from the domains of the SF-36v2, and yields summary scores on a theoretical scale of 0 to 1. Higher scores indicate better health status.

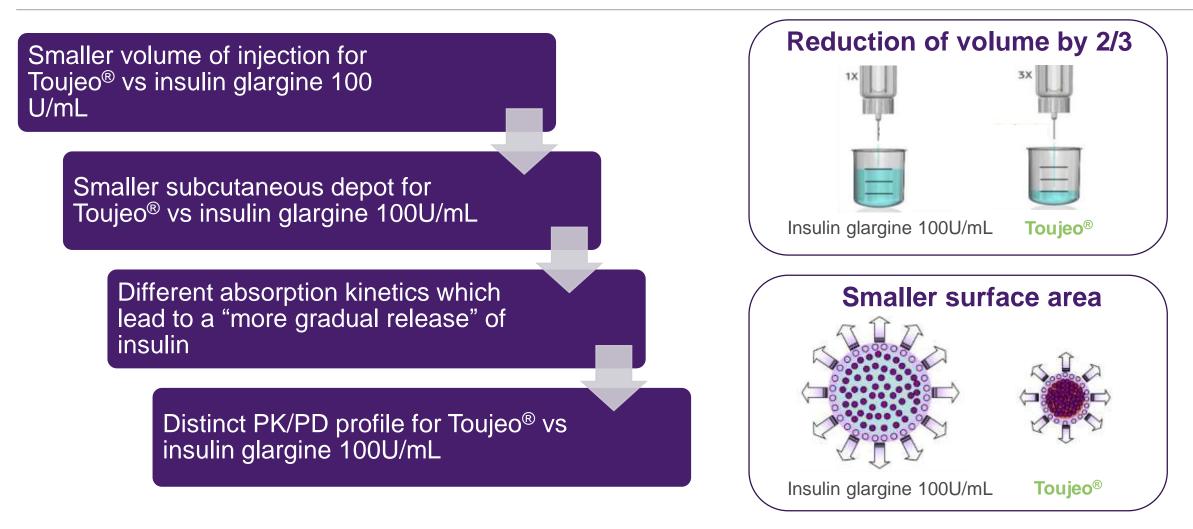
Balancing between HbA<sub>1c</sub> reduction and avoidance of hypoglycaemia is key to reducing the risk of diabetes-related complications and improving adherence





## How does Toujeo<sup>®</sup> differ from insulin glargine 100 U/mL and insulin degludec?

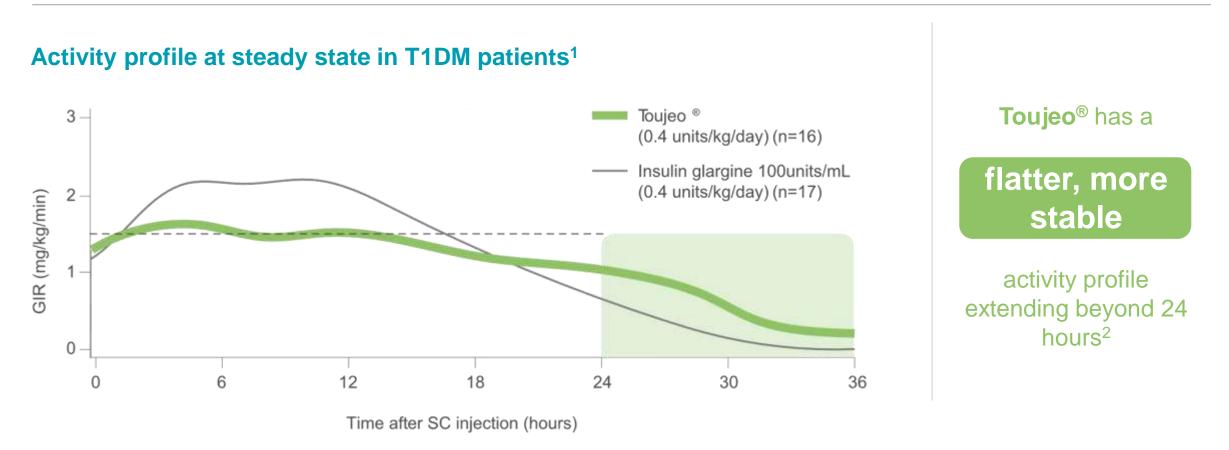
#### What's the difference between Toujeo® and insulin glargine 100U/mL?



Toujeo<sup>®</sup> has the same mode of protraction (forming precipitates) and metabolism (main circulating moiety is M1) as insulin glargine 100U/mL

Dalley G, Lavernia F. Diabetes Obes Metab. 2015 Jul 3. doi: 10.1111/dom.12531.; Steinstrasser A et al. Diabetes Obes Metab, 2014;16:873-6; Becker RH et al. Diabetes Care. 2015;38:637-43

## Toujeo<sup>®</sup> is associated with a more stable & prolonged activity profile than insulin glargine 100 U/mL



## The clinical implications of PK/PD data require further evaluation including CGM studies and larger clinical studies

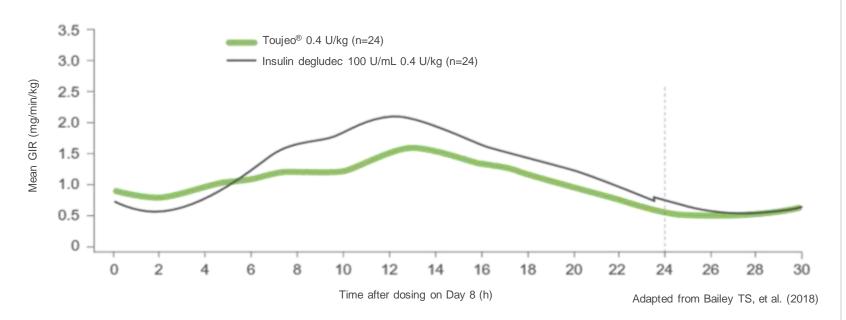
The results of euglycaemic clamp studies do not necessarily predict clinical outcomes in all patients

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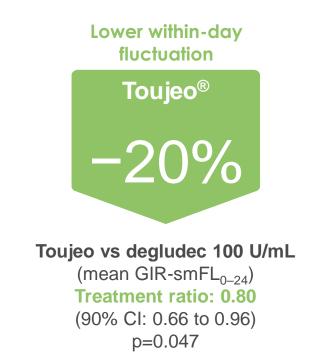
CGM, continous glucose monitoring; GIR, glucose infusion rate; LOESS, locally weighted scatter plot smoother; PD, pharmacodynamic; PK, pharmacokinetic; SC, subcutaneous; T1DM, type 1 diabetes mellitus. 1. Becker R et al. Diabetes Care 2015;38:637–643. 2. Toujeo<sup>®</sup> Summary of Product Characteristics. Available at: https://www.medicines.org.uk/emc/product/6938/smpc [Accessed December 2022].

#### Less within-day fluctuation with Toujeo® vs insulin degludec 100 U/mL

#### GIR profiles at a 0.4 U/kg/day dose level in steady state\*1



**Primary endpoint:** fluctuation of smoothed GIR curve over 24-hour dosing period in steady state.



#### Primary endpoint:

Mean GIR-smFL<sub>0-24</sub>, was significantly lower with Toujeo<sup>®</sup> (mean of 0.38 mg/min/kg) vs degludec 100 U/mL mean of (0.46 mg/min/kg) at the 0.4 U/kg/day dose level (treatment ratio: 0.80 [90% CI: 0.66 to 0.96]; p=0.047).

Mean GIR-smFL<sub>0-24</sub>, was numerically lower with Toujeo<sup>®</sup> (0.45 mg/min/kg) than with degludec 100 U/mL (0.48 mg/min/kg) at the 0.6 U/kg/day dose level (treatment ratio: 0.96 [90% CI: 0.83 to 1.11]; p=0.603).

## The clinical implications of PK/PD data require further evaluation including CGM studies and larger clinical studies

Bailey TS, et al. These results; of 5 euglycaemic clamp studies do not necessarily predict clinical outcomes in all p

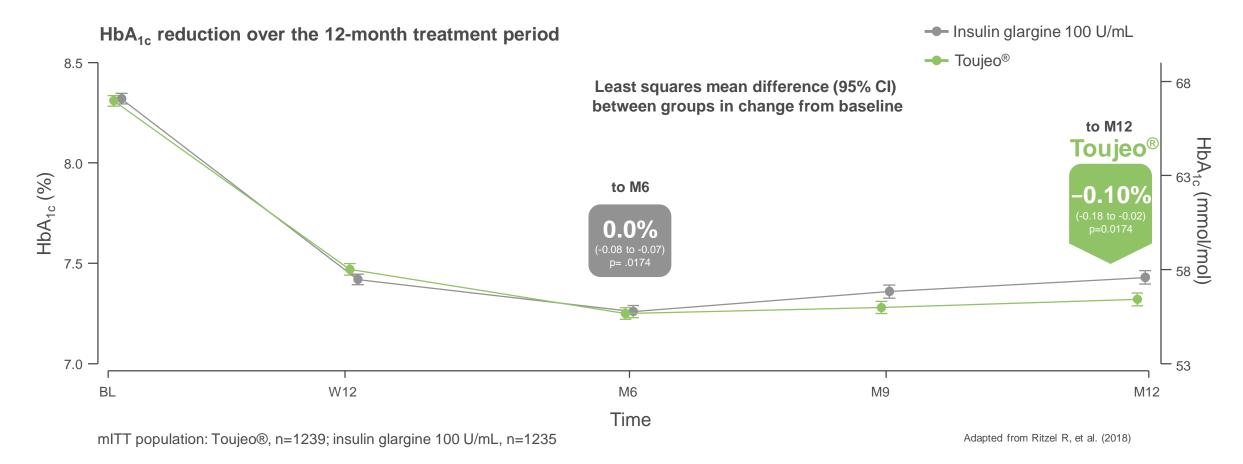


## Can Toujeo<sup>®</sup> help to find the right balance between effective HbA<sub>1c</sub> reductions and the risk of hypoglycaemia?

# Better glycaemic control with Toujeo® (insulin glargine 300 U/mL) vs insulin glargine 100 U/mL at 12 months

Patient-level meta-analysis

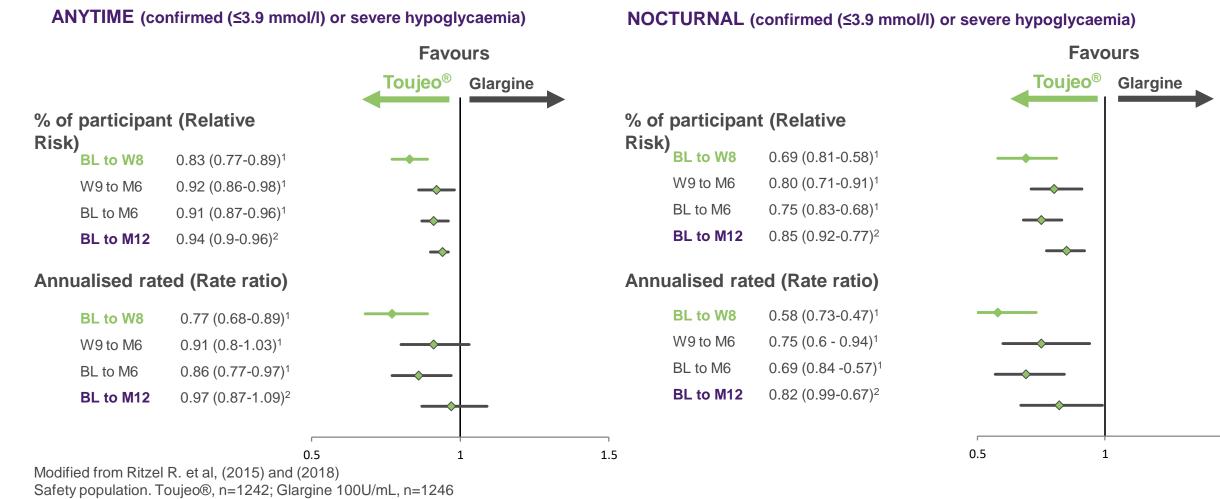
Patient-level meta-analysis of EDITION 1, 2 and 3 in a large population with type 2 diabetes





# Less confirmed (≤3.9 mmol/l) or severe hypoglycaemia with Toujeo<sup>®</sup> vs insulin glargine 100 U/mL

Patient-level meta-analysis of EDITION 1, 2 and 3 in a large population with type 2 diabetes



Patient-level meta-analysis

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1.5

1. Ritzel R. et al. Diabetes Obes Metab.2015;17:859-867. 2. Ritzel R. et al. Diabetes Obes Metab. 2018;20:541-548

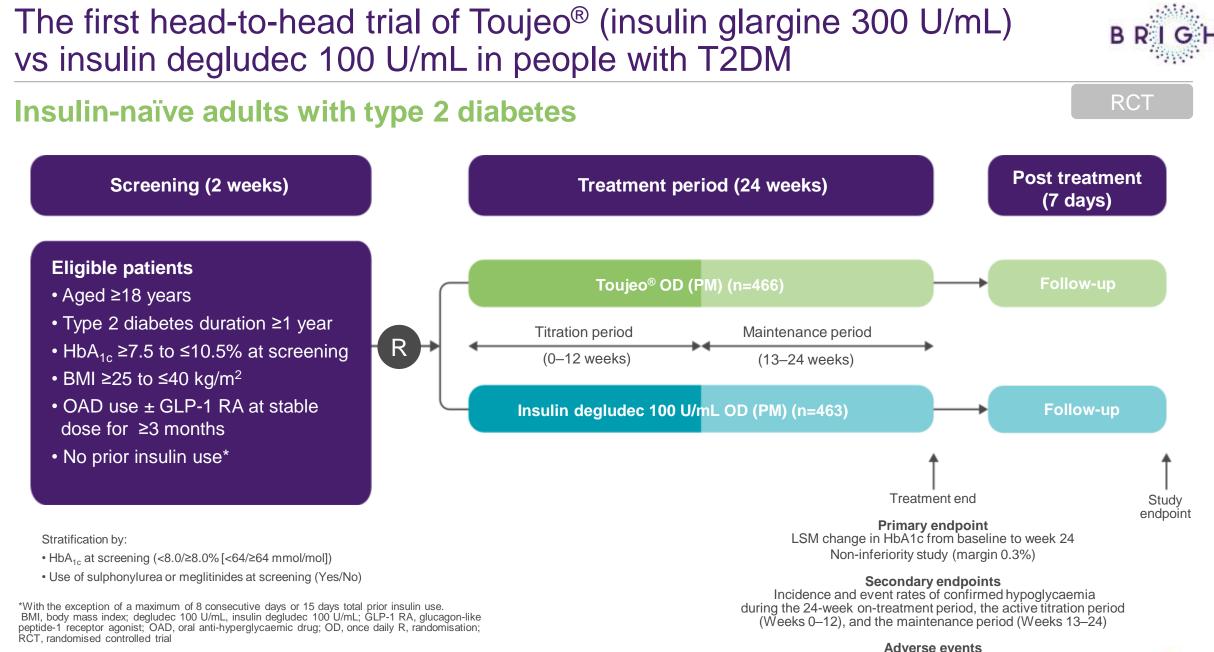
## Hypoglycaemia in RCTs comparing 1<sup>st</sup> and 2<sup>nd</sup>-generation basal insulin analogues

Anytime (24 h) or nocturnal confirmed or severe hypoglycaemia with Toujeo® & insulin degludec vs insulin glargine 100 U/mL

Insulin degludec 100 U/mL vs Insulin glargine 100 U/mL (BEGIN Trials)					Toujeo *vs Insulin glargine 100 U/mL (EDITION Trials)				
Confirmed (<3.1 mmol/L) or severe hypoglycaemia					Confirmed (<3.0 mmol/L) or severe hypoglycaemia				
	Favours Favours degludec glargine	Estimated RR (95% CI)				Favours Toujeo®			nated RR 5% CI)
Anytime (24 h)					Anytime (24 h)	•			
BEGIN Basal-Bolus Type 2		0.99	(0.92 to 1.05)		EDITION 1	н	ł	0.90	(0.77 to 1.04)
BEGIN Once Long	H <del>H</del> H	1.00	(0.86 to 1.17)		EDITION 2	⊢∳-4		0.78	(0.63 to 0.95)
<b>BEGIN Low Volume</b>	<b>⊢♦</b> −1	0.93	(0.70 to 1.23)		EDITION 3	<b>⊢</b>		0.61	(0.43 to 0.87)
BEGIN Flex (OD)	<b>⊢</b> ♦+1	0.88	(0.72 to 1.07)		EDITION JP 2	<b>⊢</b> —◆		0.91	(0.52 to 1.58)
BEGIN Once Asia	H <b>4</b> -1	0.94	(0.77 to 1.13)						
Overall (anytime)	•	0.97	(0.92 to 1.03)		Overall (anytime)	H¢H		0.81	(0.69 to 0.94)
Nocturnal (00:01–05:59 h)				Nocturnal (00:00–05:59 h)					
BEGIN Basal-Bolus Type 2		0.84	(0.72 to 0.98)		EDITION 1			0.76	(0.57 to 1.03)
BEGIN Once Long	<b>⊢</b>	0.91	(0.65 to 1.28)		EDITION 2	⊢	4	0.75	(0.51 to 1.10)
<b>BEGIN Low Volume</b>	<b>⊢</b>	0.70	(0.36 to 1.35)		EDITION 3	<b>⊢</b>		0.59	(0.33 to 1.06)
BEGIN Flex (OD)	<b>⊢_</b> ♦	0.49	(0.31 to 0.77)		EDITION JP 2			1.00	(0.47 to 2.14)
BEGIN Once Asia	<b>⊢</b> ♦	0.85	(0.59 to 1.23)						
Overall (nocturnal)	H	0.79	(0.66 to 0.94)		Overall (nocturnal)	⊢ <b>∳</b> ⊣		0.75	(0.61 to 0.92)
0.:	2 1.0 2.0					0.2 1	.0 2.0		

CI, confidence interval; OD, once daily; RR, rate ratio; RCT, randomised controlled trial Cheng A, et al Diabetes Metab Res Rev. 2020;e3329. Modified from Cheng A. et al, (2020)





Rosenstock J, et al. Diabetes Care. 2018;41:2147-54.

### Titration of Toujeo<sup>®</sup> in the BRIGHT study

An illustration of a titration algorithm based on the BRIGHT clinical study

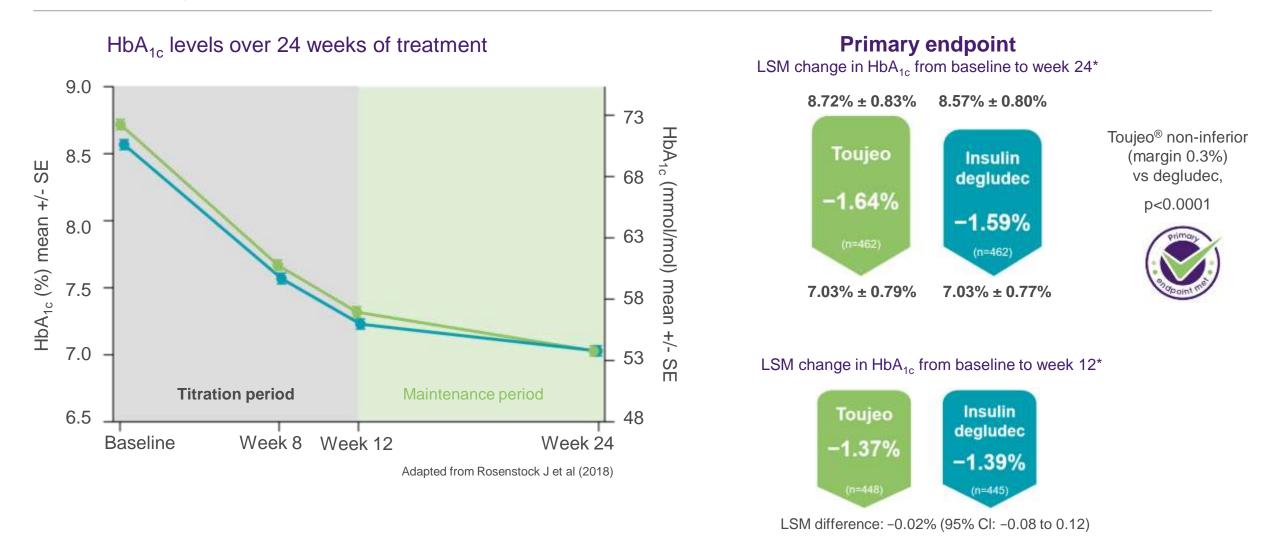
Median fasting self-monitored plasma glucose from last 3 days in range of:	Dose change*
>7.8 mmol/L	+ 6 U
>6.7 - ≤7.8 mmol/L	+ 4 U
>5.6 - ≤6.7 mmol/L	+ 2 U
≥4.4 - ≤5.6 mmol/L	No change
<4.4mmol/L or occurrence of 1 symptomatic confirmed hypoglycaemia episode documented in the preceding week	- 2 U

\*Dose adjustment should not be more often than every 3 days

Before prescribing Toujeo<sup>®</sup>, always refer to the Summary of Product Characteristics.

This is a example on how to titrate Toujeo<sup>®</sup> based on the BRIGHT study and is for illustrative purposes. In clinical practice, titration should be adapted by the treating HCP based on the needs of individual patient characteristics. Patients on multiple anti-diabetic treatments are at an increased risk of hypoglycaemia and will require careful individual dose titration.

## Comparable and effective $HbA_{1c}$ reduction at 24 weeks with Toujeo<sup>®</sup> and insulin degludec 100 units/mL<sup>1,2</sup>

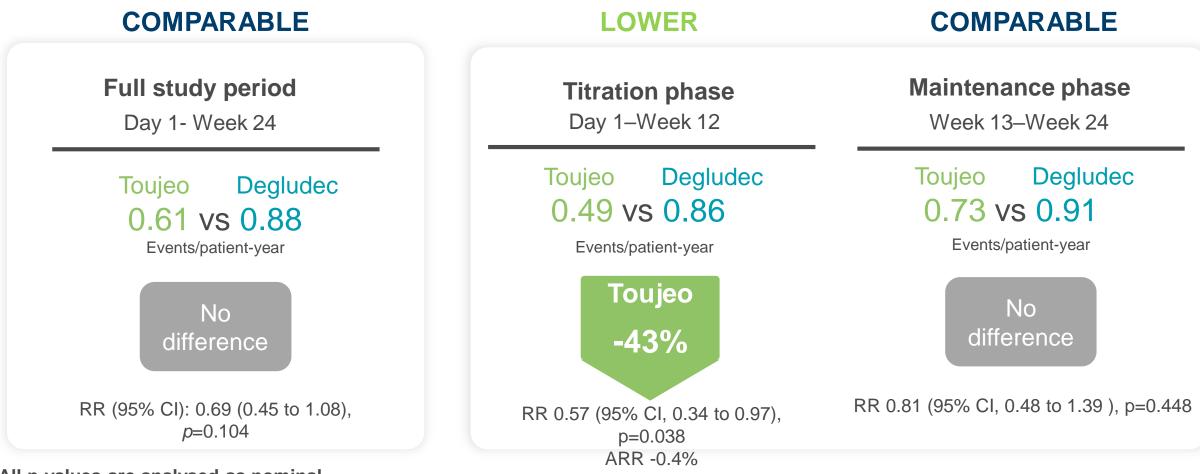


\*HbA<sub>1c</sub> LSM, least squares mean change; SE, standard error; insulin degludec, insulin degludec 100 units/mL

#### 1. Rosenstock J, et al. Diabetes Care. 2018;41:2147-54. 2. Cheng A, et al. Diabetes Obes Metab. 2020;22:346-54.

# Comparable anytime overall hypoglycaemia, with lower event rate during BR the titration phase

Rate of anytime (24 h) severe and/or documented hypoglycaemia (<3.0 mmol/L)



\*All p-values are analysed as nominal

ARR, absolute relative risk; CI, confidence interval; HbA1c, glycated haemoglobin; RR, rate ratio.

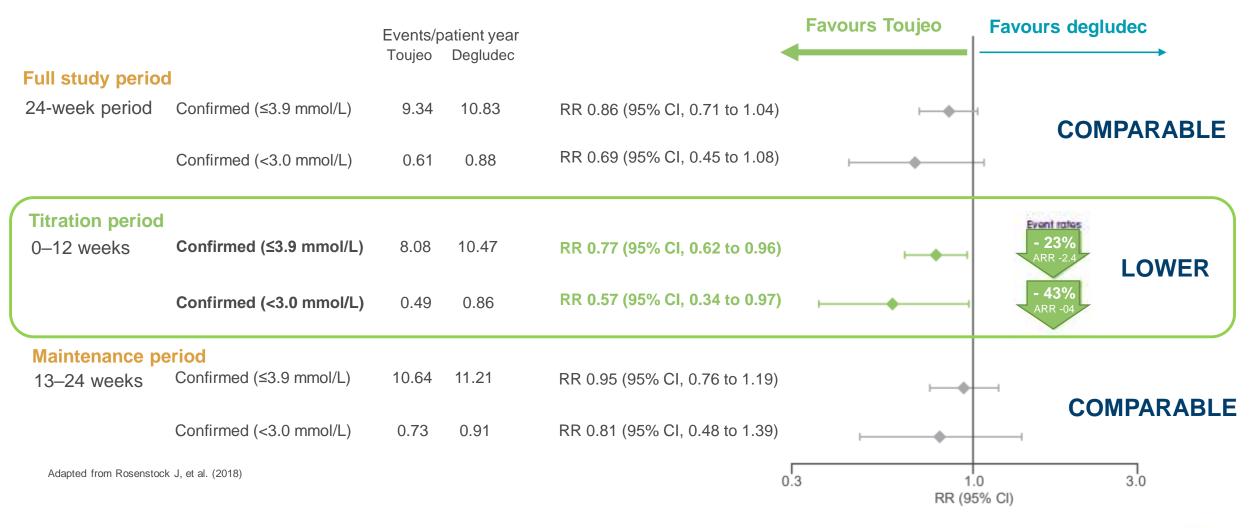
No specific safety concerns were reported. Overall, 202 (43.7%) and 221 (47.8%) of participants in the Toujeo and degludec treatment groups, respectively, reported adverse events during the 24-week study period. Cheng A, et al. Diabetes Obes Metab. 2020;22:346–54.

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Safety population (Toujeo<sup>®</sup>, n=462; insulin degludec 100 units/mL, n=462)

# Comparable anytime overall hypoglycaemia, with lower event rate during the titration phase





RR, relative risk; CI, confidence interval, degludec, insulin degludec 100 units/mL Rosenstock J, et al. Diabetes Care. 2018;41:2147–54.



# How to start Toujeo<sup>®</sup> and support your insulin-naïve patients



### How to start Toujeo® in your insulin-naïve patients

Dosing details for initiation and titration in type 2 diabetes



• The recommended starting dose is 0.2 U/kg



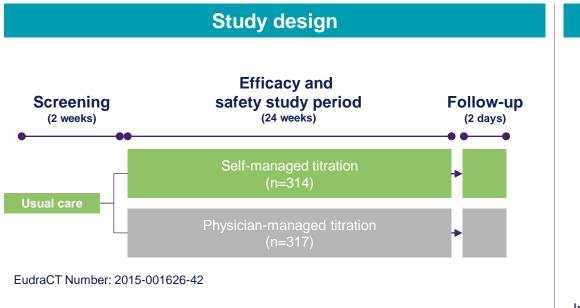
- Units of Toujeo® are rounded down to the nearest whole unit
- For example, 89 kg x 0.2 U/kg = 17 units



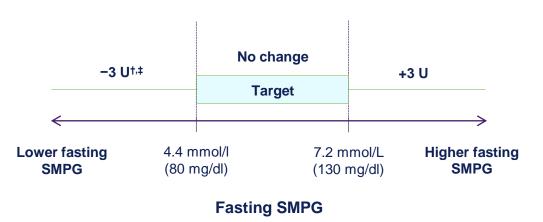
- Set titration goals based on your patient's needs
- These should be individualised and based on a fasting glucose goal
- Adjust and titrate the dose of Toujeo<sup>®</sup> as required
- Monitor glucose frequently in the first few weeks of therapy

Before prescribing the product, always refer to the Summary of Product Characteristics





#### Titration algorithm of Toujeo<sup>®</sup> (both groups)



In the physician-managed titration algorithm, doses were titrated at each visit according to study design (weekly for the first eight weeks, biweekly until week 12, and then monthly until week 24). In the self-managed titration algorithm, the dose was titrated every 3–4 days.

Patients in the self-managed group were instructed on the use of the algorithm but made decisions regarding titration on their own

†Dose adjustment is −3 U or at the discretion of the investigator; ‡Dose reduced if self-monitored plasma glucose (SMPG) <4.4 mmol/l (<80 mg/dl) or occurrence of ≥2 symptomatic or 1 severe hypoglycaemic episode in the preceding week

SMPG, self-monitored plasma glucose; T2DM, type 2 diabetes mellitus

## Patient self-titration with Toujeo<sup>®</sup> resulted in a greater reduction in HbA1c vs physician-led titration at 24 weeks





At week 24, the least squares (LS) mean HbA1c reduction was:

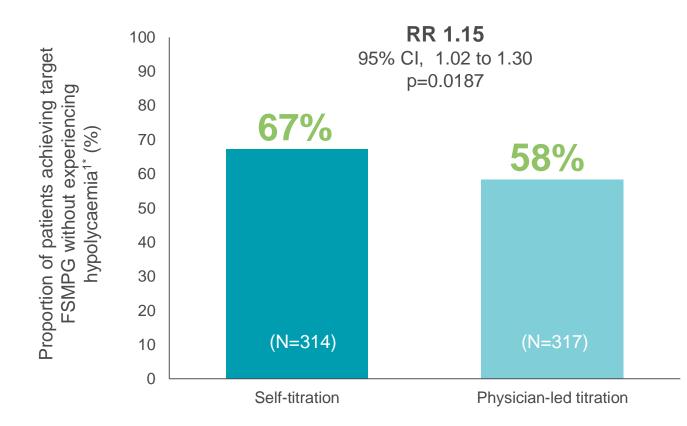
- self-managed group -0.97% (10.6 mmol/mol)
- physician-managed group -0.84% (9.2 mmol/mol)

**LS mean difference -0.13** (95% Cl: -0.2619; -0.0004)

#### p<0.0001 (non-inferiority) p=0.0247 (superiority)

## More of the self- than physician-managed group achieved SMPG target without hypoglycaemia at 24 weeks

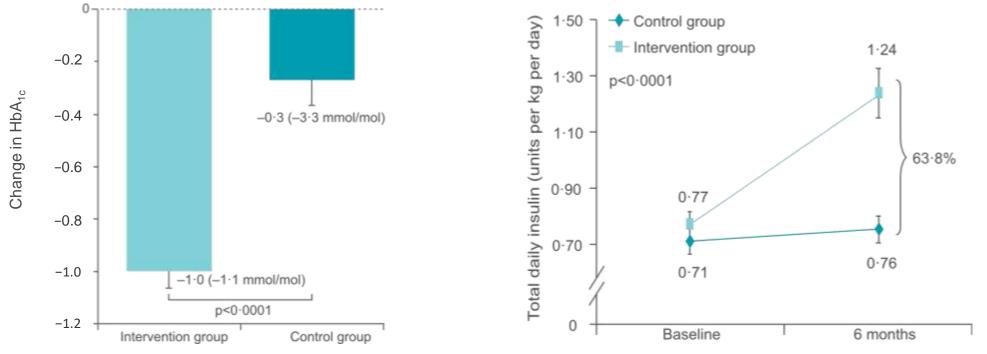
SMPG target achievement without hypoglycaemia\*



\*Proportion of patients achieving target fasting self SMPG 4.4-7.2 mmol/L, without severe and/or confirmed (<3.0 mmol/L) hypoglycaemia

# Automated insulin titration guidance with HCP support may lead to improved glycaemic control and effective titration

**Study**: Multicentre, randomised controlled study designed to assess whether the combination of automated insulin titration guidance with HCP support is superior to HCP support alone with T2DM (N=181) who has been using insulin regimen for the previous 3 months



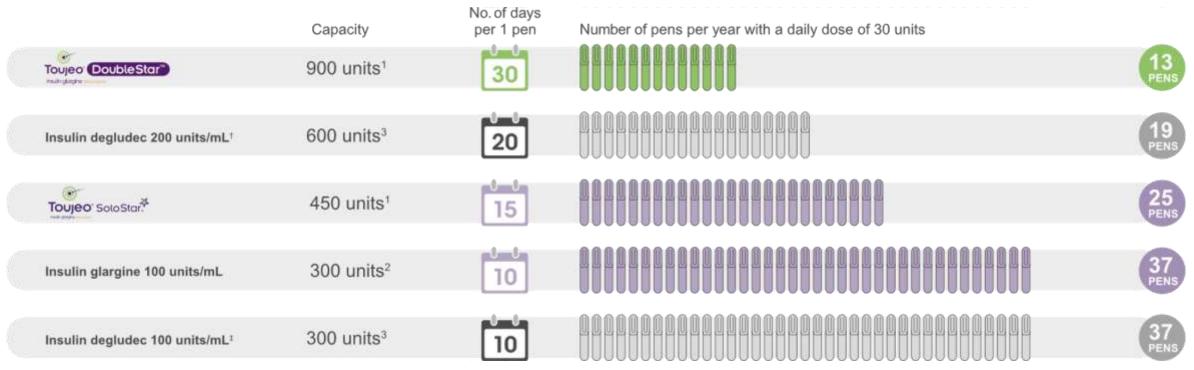
Adapted from Bergenstal, et al. (2019)

Frequent insulin titration is a key factor in effective insulin therapy and titration support tools need to be evaluated across large healthcare systems

HCP, healthcare professional Bergenstal RM, et al. Lancet 2019; 393: 1138–48

#### Toujeo® DoubleStar—the highest unit capacity basal insulin pen on the market<sup>1-5</sup>

#### Offering convenience for your patients with a long-lasting pen\*



\*For patients who require a dose of >80 U/day and who need to split their dose, Toujeo® DoubleStar can offer fewer injections which can add convenience †Tresiba FlexTouch units-200

<sup>‡</sup>Tresiba FlexTouch units-200

#### This does not take into account any clinical differences in dosing that may be needed with these insulins to get the same effect.

1. Toujeo Summary of Product Characteristics. Available at: https://www.medicines.org.uk/emc/product/6938/smpc [Accessed December 2022]. 2. Lantus Summary of Product Characteristics. Available at: https://www.medicines.org.uk/emc/product/2376/smpc [Accessed December 2022]. 3. Tresiba Summary of Product Characteristics. Available at: https://www.medicines.org.uk/emc/product/2944/smpc [Accessed December 2022]. 4. Levemir Summary of Product Characteristics. Available at https://www.medicines.org.uk/emc/product/5536/smpc [Accessed December 2022]. 5. Singh R, et al. Eur Endocrinol. 2018;14;47–51.

## Dedicated websites to support people who have been prescribed Toujeo®

Simply share the link or the QR code below with people who have been prescribed Toujeo<sup>®</sup>. They allow easily access to resources and support which will help them have the best experience with the product.



#### Long-acting insulin acquisition costs—price per unit



The listed insulins are not bioequivalent and these costs are not based on dose for dose comparisons.\*

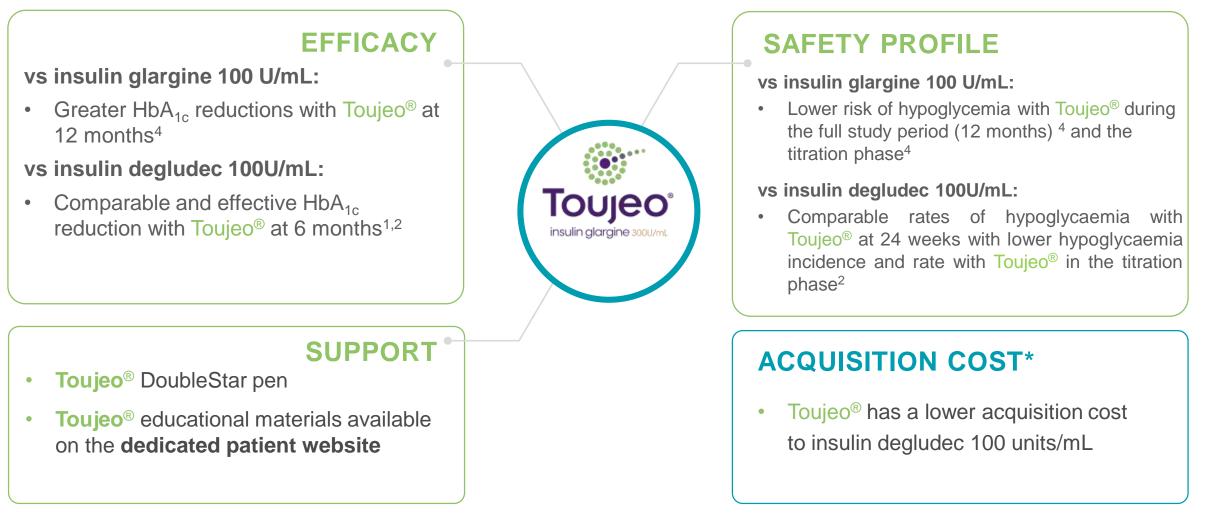
\*Insulin glargine 100 U/mL and Toujeo® are not bioequivalent, a higher dose of Toujeo® (~10–18%) may be needed to achieve target ranges for plasma glucose levels, as shown in the treat-to-target randomised controlled trials.

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In the InRange trial, at Week 12 Toujeo® insulin dose was greater by 0.05 U/kg compared to insulin degludec 100 U/mL.

Image adapted from MIMS, April 2022.

### The clinical evidence and support when starting insulin



\*Insulin glargine 100 U/mL and Toujeo<sup>®</sup> are not bioequivalent, a higher dose of Toujeo<sup>®</sup> (~10–18%) may be needed to achieve target ranges for plasma glucose levels, as shown in the treat-to-target randomised controlled trials.<sup>4</sup> In the treat-to-target BRIGHT trial, at Week 24 Toujeo<sup>®</sup> insulin dose was higher by 0.11 units/kg than degludec 100 U/mL dose.<sup>5</sup>



#### Prescribing Information: Toujeo® (insulin glargine 300 units/ml) Please refer to Summary of Product Characteristics (SmPC) before prescribing.

**Presentation:** Toujeo SoloStar pre-filled pens each ml contains 300 units of insulin glargine. SoloStar pen contains 1.5ml (450 units) of solution for injection. DoubleStar pen contains 3ml (900 units) of solution for injection.

**Indication:** Treatment of diabetes mellitus in adults, adolescents and children from the age of 6 years. **Dosage and Administration:** Toujeo is administered

subcutaneously, by injection into the abdominal wall, the deltoid or the thigh, once daily, at any time of the day, preferably at the same time every day. The dose regimen (dose and timing) should be adjusted according to individual response. Injection sites must be rotated within a given injection area from one injection to the next in order to reduce the risk of lipodystrophy and cutaneous amyloidosis. Do not administer intravenously. In type 1 diabetes mellitus, Toujeo must be combined with short-/rapidacting insulin to cover mealtime insulin requirements. In patients with type 2 diabetes mellitus, recommended daily starting dose is 0.2 units/kg followed by individual dose adjustments. Toujeo can also be given together with other anti-hyperglycaemic medicinal products. Switch between insulin alaraine 100 units/ml and Touieo: Insulin glargine 100 units/ml and Touieo are not bioequivalent and are not directly interchangeable. When switching from insulin glargine 100 units/ml to Toujeo, this can be done on a unit-to-unit basis, but a higher Toujeo dose (approximately 10-18%) may be needed to achieve target ranges for plasma glucose levels. When switching from Toujeo to insulin glargine 100 units/ml, the dose should be reduced (approximately by 20%). Switching from other basal insulins to Toujeo: A change of dose and/or timing of the basal insulin and concomitant anti-hyperglycaemic treatment may be required. Dose adjustments may also be required if the patient's weight or lifestyle changes, the timing of insulin dose is changed or other circumstances arise that increase susceptibility to hypoor hyperglycaemia. Toujeo must not be mixed or diluted with any other insulin or other medicinal products. Close metabolic monitoring is recommended during a switch and in the initial weeks thereafter. SoloStar 1-80 units per single injection in steps of 1 unit and DoubleStar 2-160 units in steps of 2 units. When changing from Toujeo SoloStar to Toujeo DoubleStar, if the patient's previous dose was an odd number then the dose must be increased or decreased by 1 unit. Toujeo DoubleStar prefilled pen is recommended for patients requiring at least 20 units per day. Special Populations: Elderly. renal and hepatic impairment: Insulin requirements may be diminished in the elderly or patients with renal or hepatic impairment. Paediatric: When switching basal insulin to Toujeo, dose reduction of basal and bolus insulin needs to be considered on an individual basis, in order to minimise the risk of hypoglycaemia.

Contraindications: Hypersensitivity to insulin glargine or any excipients.

**Precautions and Warnings:** <u>Traceability</u>: In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded. Toujeo is not the insulin of choice for treatment of diabetic ketoacidosis. Patients must be instructed to perform continuous rotation of the injection site to reduce the risk of developing lipodystrophy and cutaneous amyloidosis. There is a potential risk of delayed insulin absorption and worsened glycaemic control following insulin injections at sites with these reactions. A sudden change in the injection site to an unaffected area has been reported to result in hypoglycaemia. Blood glucose

monitoring is recommended after the change in the injection site, and dose adjustment of antidiabetic medications may be considered. Hypoglycaemia: In case of insufficient glucose control or a tendency to hyper/hypoglycaemic episodes, the patient's adherence to the prescribed treatment regimen, injection sites and proper injection technique and all other relevant factors must be reviewed before dose adjustment is considered. Particular caution should be exercised, and intensified blood glucose monitoring is advisable for patients in whom hypoglycaemic episodes might be of clinical relevance and in those where dose adjustments may be required. Warning signs of hypoglycaemia may be changed, less pronounced or absent in certain risk groups, potentially resulting in severe hypoglycaemia and loss of consciousness. Risk groups include patients in whom glycaemic control is markedly improved, hypoglycaemia develops gradually, an autonomic neuropathy is present, or who are elderly. The prolonged effect of subcutaneous insulin glargine may delay recovery from hypoglycaemia. Intercurrent illness: Requires intensified metabolic monitoring and often it is necessary to adjust the insulin dose. Insulin antibodies: administration may cause insulin antibodies to form. Use with pioglitazone: Cases of cardiac failure have been reported when pioglitazone was used in combination with insulin, especially in patients with risk factors for development of cardiac heart failure. If the combination is used, patients should be observed for signs and symptoms of heart failure, weight gain and oedema. Pioglitazone should be discontinued if any deterioration in cardiac symptoms occurs. Medication errors: Insulin labels must always be checked before each injection to avoid errors between Toujeo and other insulins. Patients must be instructed to never use a syringe to remove Toujeo from the SoloStar or DoubleStar pre- filled pen. A new sterile needle must be attached before each injection. Needles must not be re-used. Pregnancy and breast-feeding: There is no data from exposed pregnancies in controlled clinical trials. However, there is a large amount of data on use of insulin glargine 100 units/ml in pregnant women indicating no specific adverse effects on pregnancy and no specific malformative nor feto/neonatal toxicity. The use of Toujeo may be considered during pregnancy, if clinically needed. Careful monitoring of glucose control is essential. It is unknown if insulin glargine is excreted in breast milk. Interactions: Substances that affect glucose metabolism may require adjustment of insulin glargine. Adverse Reactions: Very common: Hypoglycaemia. Prolonged or severe hypoglycaemia may be lifethreatening. Common: Lipohypertrophy, injection site reactions, including redness, pain, itching, hives, swelling, or inflammation. Not known: Cutaneous amyloidosis. Prescribers should consult the SmPC in relation to other adverse reactions.

GB List Price: SoloStar 3 x 1.5ml pens: £32.14; DoubleStar 3 x 3ml pens: £64.27

Legal Category: POM Marketing Authorisation Number: SoloStar 3 Pen pack: PLGB 04425/0817; DoubleStar 3 Pen pack: PLGB 04425/0818. Marketing Authorisation Holder: Sanofi, 410 Thames Valley Park Drive, Reading, Berkshire, RG6 1PT, UK Further information is available from: Medical Information, Sanofi, 410 Thames Valley Park Drive, Reading, Berkshire, RG6 1PT, UK. <u>uk-medicalinformation@sanofi.com</u>. Date of preparation: September 2022. MAT-XU-2203098 (V1.0)

Adverse events should be reported. Reporting forms and information can be found at <u>www.mhra.gov.uk/yellowcard</u> or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Sanofi Tel: 0800 090 2314. Alternatively, send via email to UK- drugsafety@sanofi.com

#### Prescribing Information: Toujeo® (insulin glargine 300 units/ml) Please refer to Summary of Product Characteristics (SmPC) before prescribing.

**Presentation:** Toujeo SoloStar pre-filled pens each ml contains 300 units of insulin glargine. SoloStar pen contains 1.5ml (450 units) of solution for injection. DoubleStar pen contains 3ml (900 units) of solution for injection.

**Indication:** Treatment of diabetes mellitus in adults, adolescents and children from the age of 6 years. **Dosage and Administration:** Toujeo is administered

subcutaneously, by injection into the abdominal wall, the deltoid or the thigh, once daily, at any time of the day, preferably at the same time every day. The dose regimen (dose and timing) should be adjusted according to individual response. Injection sites must be rotated within a given injection area from one injection to the next in order to reduce the risk of lipodystrophy and cutaneous amyloidosis. Do not administer intravenously. In type 1 diabetes mellitus, Toujeo must be combined with short-/rapidacting insulin to cover mealtime insulin requirements. In patients with type 2 diabetes mellitus, recommended daily starting dose is 0.2 units/kg followed by individual dose adjustments. Toujeo can also be given together with other anti-hyperglycaemic medicinal products. Switch between insulin alaraine 100 units/ml and Touieo: Insulin glargine 100 units/ml and Touieo are not bioequivalent and are not directly interchangeable. When switching from insulin glargine 100 units/ml to Toujeo, this can be done on a unit-to-unit basis, but a higher Toujeo dose (approximately 10-18%) may be needed to achieve target ranges for plasma glucose levels. When switching from Toujeo to insulin glargine 100 units/ml, the dose should be reduced (approximately by 20%). Switching from other basal insulins to Toujeo: A change of dose and/or timing of the basal insulin and concomitant anti-hyperglycaemic treatment may be required. Dose adjustments may also be required if the patient's weight or lifestyle changes, the timing of insulin dose is changed or other circumstances arise that increase susceptibility to hypoor hyperglycaemia. Toujeo must not be mixed or diluted with any other insulin or other medicinal products. Close metabolic monitoring is recommended during a switch and in the initial weeks thereafter. SoloStar 1-80 units per single injection in steps of 1 unit and DoubleStar 2-160 units in steps of 2 units. When changing from Toujeo SoloStar to Toujeo DoubleStar, if the patient's previous dose was an odd number then the dose must be increased or decreased by 1 unit. Toujeo DoubleStar prefilled pen is recommended for patients requiring at least 20 units per day. Special Populations: Elderly, renal and hepatic impairment: Insulin requirements may be diminished in the elderly or patients with renal or hepatic impairment. Paediatric: When switching basal insulin to Toujeo, dose reduction of basal and bolus insulin needs to be considered on an individual basis, in order to minimise the risk of hypoglycaemia.

Contraindications: Hypersensitivity to insulin glargine or any excipients.

**Precautions and Warnings:** <u>Traceability</u>: In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded. Toujeo is not the insulin of choice for treatment of diabetic ketoacidosis. Patients must be instructed to perform continuous rotation of the injection site to reduce the risk of developing lipodystrophy and cutaneous amyloidosis. There is a potential risk of delayed insulin absorption and worsened glycaemic control following insulin injections at sites with these reactions. A sudden change in the injection site to an unaffected area has been reported to result in hypoglycaemia. Blood glucose monitoring is recommended after the change in the injection site,

and dose adjustment of antidiabetic medications may be considered. Hypoglycaemia: In case of insufficient glucose control or a tendency to hyper/hypoglycaemic episodes, the patient's adherence to the prescribed treatment regimen, injection sites and proper injection technique and all other relevant factors must be reviewed before dose adjustment is considered. Particular caution should be exercised, and intensified blood glucose monitoring is advisable for patients in whom hypoglycaemic episodes might be of clinical relevance and in those where dose adjustments may be required. Warning signs of hypoglycaemia may be changed, less pronounced or absent in certain risk groups, potentially resulting in severe hypoglycaemia and loss of consciousness. Risk groups include patients in whom glycaemic control is markedly improved, hypoglycaemia develops gradually, an autonomic neuropathy is present, or who are elderly. The prolonged effect of subcutaneous insulin glargine may delay recovery from hypoglycaemia. Intercurrent illness: Requires intensified metabolic monitoring and often it is necessary to adjust the insulin dose. Insulin antibodies: administration may cause insulin antibodies to form. Use with pioglitazone: Cases of cardiac failure have been reported when pioglitazone was used in combination with insulin, especially in patients with risk factors for development of cardiac heart failure. If the combination is used, patients should be observed for signs and symptoms of heart failure, weight gain and oedema. Pioglitazone should be discontinued if any deterioration in cardiac symptoms occurs. Medication errors: Insulin labels must always be checked before each injection to avoid errors between Toujeo and other insulins. Patients must be instructed to never use a syringe to remove Toujeo from the SoloStar or DoubleStar pre-filled pen, A new sterile needle must be attached before each injection. Needles must not be re-used. Pregnancy and breast-feeding: There is no data from exposed pregnancies in controlled clinical trials. However, there is a large amount of data on use of insulin glargine 100 units/ml in pregnant women indicating no specific adverse effects on pregnancy and no specific malformative nor feto/neonatal toxicity. The use of Toujeo may be considered during pregnancy, if clinically needed. Careful monitoring of glucose control is essential. It is unknown if insulin glargine is excreted in breast milk. Interactions: Substances that affect glucose metabolism may require adjustment of insulin glargine.

Adverse Reactions: <u>Very common</u>: Hypoglycaemia. Prolonged or severe hypoglycaemia may be lifethreatening. <u>Common</u>: Lipohypertrophy, injection site reactions, including redness, pain, itching, hives, swelling, or inflammation. <u>Not known</u>: Cutaneous amyloidosis. Prescribers should consult the SmPC in relation to other adverse reactions.

NI List Price: SoloStar 5 x 1.5ml pens: £53.57; DoubleStar 3 x 3ml pens: £64.27.

Legal Category: POM Marketing Authorisation Number: SoloStar 5 Pen pack: EU/1/00/133/035; DoubleStar 3 Pen pack: EU/1/00/133/038. Marketing Authorisation Holder: Sanofi Aventis Deutschland GmbH, D-65926 Frankfurt am Main, Germany. Further information is available from: Medical Information, Sanofi, 410 Thames Valley Park Drive, Reading, Berkshire, RG6 1PT, UK. <u>uk-medicalinformation@sanofi.com</u>. Date of preparation: September 2022.MAT-XI-2200061 (V1.0)

Adverse events should be reported. Reporting forms and information can be found at <u>www.mhra.gov.uk/yellowcard</u> or search for MHRA Yellow Card in the Google Play or Apple App Store. Adverse events should also be reported to Sanofi Tel: 0800 090 2314. Alternatively, send via email to <u>UK- drugsafety@sanofi.com</u>

#### Prescribing Information: Lantus® (insulin glargine) 100 units/ml solution for injection Please refer to Summary of Product Characteristics (SmPC) before prescribing.

**Presentations:** Lantus 100 units/ml solution for injection in a vial or in a cartridge. Lantus SoloStar 100 units/ml solution for injection in a pre-filled pen. Lantus cartridges and Solostar pre- filled pens each contain 3 ml of solution for injection, equivalent to 300 units insulin glargine. Each vial contains 10 ml of solution for injection, equivalent to 1000 units.

**Indications:** Treatment of diabetes mellitus in adults, adolescents and children of 2 years or above. Dosage and administration: Lantus is administered subcutaneously once daily, at any time but at the same time each day. Injection sites must be rotated within a given injection area from one injection to the next in order to reduce the risk of lipodystrophy and cutaneous amyloidosis. Do not administer intravenously. Lantus dosage should be individually adjusted. In type 2 diabetes mellitus, Lantus can also be used in combination with orally active antidiabetic medicinal products. Lantus must not be mixed with other insulins or diluted. Switch from twice daily NPH insulin to Lantus: To reduce the risk of nocturnal and early morning hypoglycaemia, patients who are changing their basal insulin regimen from a twice daily NPH insulin to a once daily regimen with Lantus should reduce their daily dose of basal insulin by 20 - 30% during the first weeks of treatment. Switch from Toujeo (insulin glargine) 300 units/ml to Lantus: Lantus and Toujeo are not bioequivalent and are not directly interchangeable. To reduce the risk of hypoglycemia, patients who are changing their basal insulin regimen from an insulin regimen with once daily Toujeo to a once daily regimen with Lantus should reduce their dose by approximately 20%. Switching from other insulins to Lantus: When switching from a treatment regimen with an intermediate or long-acting insulin to a regimen with Lantus, a change of the dose of the basal insulin may be required and the concomitant antidiabetic treatment may need to be adjusted (dose and timing of additional regular insulins or fast-acting insulin analogues or the dose of oral antidiabetic medicinal products). Close metabolic monitoring is recommended during, and for a period after, transition from other insulins to Lantus. Dose adjustments may also be required if the patient's weight or lifestyle changes, the timing of insulin dose is changed or other circumstances arise that increase susceptibility to hypo- or hyperglycaemia.

**Special populations:** <u>Elderly, renal or hepatic impairment:</u> Insulin requirements may be diminished. <u>Paediatric population (<2 years of age):</u> No data are available.

**Contraindications:** Hypersensitivity to insulin glargine or any excipients.

**Precautions and warnings:** Lantus is not the insulin of choice for treatment of diabetic ketoacidosis. In case of insufficient glucose control or a tendency to hypo/hyperglycaemic episodes all relevant factors must be reviewed before dose adjustment is considered. Transferring a patient to another type or brand of insulin should be done under strict medical supervision. <u>Traceability:</u> In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded. <u>Injection technique:</u> Patients must be instructed to perform continuous rotation of the injection site to reduce the risk of developing lipodystrophy and cutaneous amyloidosis. There is a potential risk of delayed insulin absorption and worsened glycaemic control following insulin injections at sites with these reactions. A sudden change in the injection site to an unaffected area has been reported to result in hypoglycaemia. Blood glucose monitoring is recommended after the change in the injection site, and dose adjustment of antidiabetic medications may be considered. Intercurrent illness also requires intensified metabolic monitoring. <u>Hypoglycaemia:</u> Particular caution should be exercised, and intensified blood monitoring is advisable for patients in whom hypoglycaemic episodes

might be of clinical relevance and in those where dose adjustments may be required. Warning signs of hypoglycaemia may be changed, less pronounced or absent in certain risk groups. The prolonged effect of subcutaneous Lantus may delay recovery from hypoglycaemia. Due to more sustained basal insulin supply with Lantus, less nocturnal but earlier morning hypoglycaemia can be expected. Insulin antibodies: administration may cause insulin antibodies to form. Rarely, this may necessitate dose adjustment. Pioglitazone: Cases of cardiac failure have been reported, especially in patients with risk factors for development of cardiac heart failure. Patients on this combination should be observed and pioglitazone should be discontinued if any deterioration in cardiac symptoms occurs. Medication errors: Insulin labels must always be checked before each injection to avoid errors between Lantus and other insulins. Lantus Solostar is only suitable for subcutaneous injections from its pre-filled pen. Lantus cartridges are only suitable for subcutaneous injections from specific reusable pens (please refer to SmPC for further details). If administration by syringe is necessary, a vial should be used. Interactions: A number of substances affect glucose metabolism and may require dose adjustment of Lantus. Pregnancy and lactation: No clinical data on exposed pregnancies from controlled clinical trials are available. A large amount of post-marketing data indicates no specific adverse effects of Lantus in pregnancy. Use of Lantus in pregnancy can be considered if clinically needed. Insulin requirements may decrease during the first trimester and generally increase during the second and third trimesters. Immediately after delivery, insulin requirements decline rapidly (increased risk of hypoglycaemia). Careful monitoring of glucose control is essential. It is unknown if Lantus is excreted in breast milk.

Adverse reactions: <u>Very common</u>: Hypoglycaemia. Prolonged or severe hypoglycaemia may be lifethreatening. Overdose may lead to severe and sometimes long-term and life-threatening hypoglycaemia. <u>Common</u>: Lipohypertrophy, injection site reactions. <u>Uncommon</u>: Lipoatrophy. <u>Rare</u>: Allergic reactions, visual impairment, retinopathy and oedema. <u>Very rare</u>: Dysgeusia, myalgia. <u>Frequency not known</u>: Cutaneous amyloidosis. *Prescribers should consult the SmPC in relation to other adverse reactions*.

#### Legal category: POM.

**GB list price and Marketing Authorisation Number(s):** 1 x 10ml Lantus vial (PLGB 04425/0814): £25.69; 5 x 3ml Lantus cartridge (PLGB 04425/0815): £34.75; 5 x 3ml Lantus SoloStar (PLGB 04425/0816): £34.75.

**Marketing Authorisation Holder:** Sanofi, 410 Thames Valley Park Drive, Reading, Berkshire, RG6 1PT, UK.

**For more information please contact:** Medical Information, Sanofi, 410 Thames Valley Park Drive, Reading, Berkshire, RG6 1PT, UK. <u>uk-medicalinformation@sanofi.com</u>.

Date of preparation: October 2022. MAT-XU-2204110 (V1.0)

Adverse events should be reported. Reporting forms and information can be found at <u>www.mhra.gov.uk/yellowcard</u> or search for MHRA Yellow Card in the Google Play or Apple App

Adverse events should also be reported to Sanofi Tel: 0800 090 2314. Alternatively, send via email to <u>uk-drugsafety@sanofi.com</u>

#### Prescribing Information: Lantus® (insulin glargine) 100 units/ml solution for injection Please refer to Summary of Product Characteristics (SmPC) before prescribing.

**Presentations:** Lantus 100 units/ml solution for injection in a vial or in a cartridge. Lantus SoloStar 100 units/ml solution for injection in a pre-filled pen. Lantus cartridges and Solostar pre- filled pens each contain 3 ml of solution for injection, equivalent to 300 units insulin glargine. Each vial contains 10 ml of solution for injection, equivalent to 1000 units.

**Indications:** Treatment of diabetes mellitus in adults, adolescents and children of 2 years or above. Dosage and administration: Lantus is administered subcutaneously once daily, at any time but at the same time each day. Injection sites must be rotated within a given injection area from one injection to the next in order to reduce the risk of lipodystrophy and cutaneous amyloidosis. Do not administer intravenously. Lantus dosage should be individually adjusted. In type 2 diabetes mellitus, Lantus can also be used in combination with orally active antidiabetic medicinal products. Lantus must not be mixed with other insulins or diluted. Switch from twice daily NPH insulin to Lantus: To reduce the risk of nocturnal and early morning hypoglycaemia, patients who are changing their basal insulin regimen from a twice daily NPH insulin to a once daily regimen with Lantus should reduce their daily dose of basal insulin by 20 - 30% during the first weeks of treatment. Switch from Toujeo (insulin glargine) 300 units/ml to Lantus: Lantus and Toujeo are not bioequivalent and are not directly interchangeable. To reduce the risk of hypoglycemia, patients who are changing their basal insulin regimen from an insulin regimen with once daily Toujeo to a once daily regimen with Lantus should reduce their dose by approximately 20%. Switching from other insulins to Lantus: When switching from a treatment regimen with an intermediate or long-acting insulin to a regimen with Lantus, a change of the dose of the basal insulin may be required and the concomitant antidiabetic treatment may need to be adjusted (dose and timing of additional regular insulins or fast-acting insulin analogues or the dose of oral antidiabetic medicinal products). Close metabolic monitoring is recommended during, and for a period after, transition from other insulins to Lantus. Dose adjustments may also be required if the patient's weight or lifestyle changes, the timing of insulin dose is changed or other circumstances arise that increase susceptibility to hypo- or hyperglycaemia.

**Special populations:** <u>Elderly, renal or hepatic impairment:</u> Insulin requirements may be diminished. <u>Paediatric population (<2 years of age):</u> No data are available.

**Contraindications:** Hypersensitivity to insulin glargine or any excipients.

**Precautions and warnings:** Lantus is not the insulin of choice for treatment of diabetic ketoacidosis. In case of insufficient glucose control or a tendency to hypo/hyperglycaemic episodes all relevant factors must be reviewed before dose adjustment is considered. Transferring a patient to another type or brand of insulin should be done under strict medical supervision. <u>Traceability:</u> In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded. <u>Injection technique:</u> Patients must be instructed to perform continuous rotation of the injection site to reduce the risk of developing lipodystrophy and cutaneous amyloidosis. There is a potential risk of delayed insulin absorption and worsened glycaemic control following insulin injections at sites with these reactions. A sudden change in the injection site to an unaffected area has been reported to result in hypoglycaemia. Blood glucose monitoring is recommended after the change in the injection site, and dose adjustment of antidiabetic medications may be considered. Intercurrent illness also requires intensified metabolic monitoring. <u>Hypoglycaemia:</u> Particular caution should be exercised, and intensified blood monitoring is advisable for patients in whom hypoglycaemic episodes

might be of clinical relevance and in those where dose adjustments may be required. Warning signs of hypoglycaemia may be changed, less pronounced or absent in certain risk groups. The prolonged effect of subcutaneous Lantus may delay recovery from hypoglycaemia. Due to more sustained basal insulin supply with Lantus, less nocturnal but earlier morning hypoglycaemia can be expected. Insulin antibodies: administration may cause insulin antibodies to form. Rarely, this may necessitate dose adjustment. Pioglitazone: Cases of cardiac failure have been reported, especially in patients with risk factors for development of cardiac heart failure. Patients on this combination should be observed and pioglitazone should be discontinued if any deterioration in cardiac symptoms occurs. Medication errors: Insulin labels must always be checked before each injection to avoid errors between Lantus and other insulins. Lantus Solostar is only suitable for subcutaneous injections from its pre-filled pen. Lantus cartridges are only suitable for subcutaneous injections from specific reusable pens (please refer to SmPC for further details). If administration by syringe is necessary, a vial should be used. Interactions: A number of substances affect glucose metabolism and may require dose adjustment of Lantus. Pregnancy and lactation: No clinical data on exposed pregnancies from controlled clinical trials are available. A large amount of post-marketing data indicates no specific adverse effects of Lantus in pregnancy. Use of Lantus in pregnancy can be considered if clinically needed. Insulin requirements may decrease during the first trimester and generally increase during the second and third trimesters. Immediately after delivery, insulin requirements decline rapidly (increased risk of hypoglycaemia). Careful monitoring of glucose control is essential. It is unknown if Lantus is excreted in breast milk.

Adverse reactions: <u>Very common</u>: Hypoglycaemia. Prolonged or severe hypoglycaemia may be lifethreatening. Overdose may lead to severe and sometimes long-term and life-threatening hypoglycaemia. <u>Common</u>: Lipohypertrophy, injection site reactions. <u>Uncommon</u>: Lipoatrophy. <u>Rare</u>: Allergic reactions, visual impairment, retinopathy and oedema. <u>Very rare</u>: Dysgeusia, myalgia. <u>Frequency not known</u>: Cutaneous amyloidosis. *Prescribers should consult the SmPC in relation to other adverse reactions*.

#### Legal category: POM.

**NI list price and Marketing Authorisation Number(s):** 1 x 10ml Lantus vial (EU/1/00/134/012):  $\pounds 25.69$ ; 5 x 3ml Lantus cartridge (EU/1/00/134/006):  $\pounds 34.75$ ; 5 x 3ml Lantus SoloStar (EU/1/00/134/033):  $\pounds 34.75$ . **Marketing Authorisation Holder**: Sanofi Aventis Deutschland GmbH, D-65926 Frankfurt am Main, Germany.

For more information please contact: Medical Information, Sanofi, 410 Thames Valley Park Drive, Reading, Berkshire, RG6 1PT, UK. <u>uk-medicalinformation@sanofi.com.</u> Date of preparation: October 2022 MAT-XI-2200071 (V1.0)

Adverse events should be reported. Reporting forms and information can be found at <u>www.mhra.gov.uk/yellowcard</u> or search for MHRA Yellow Card in the Google Play or Apple App Store.

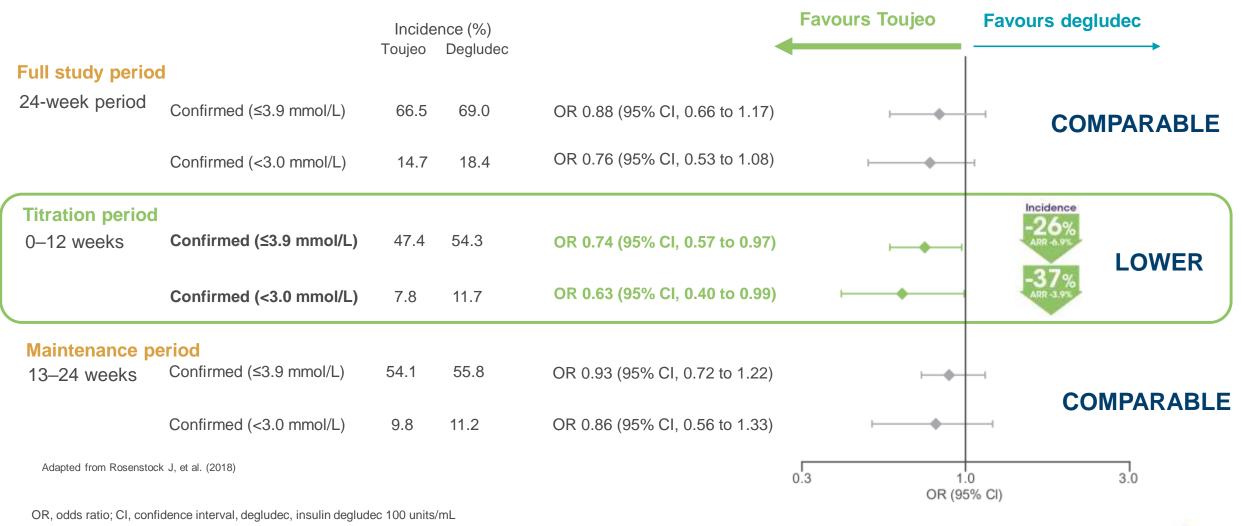
Adverse events should also be reported to Sanofi Tel: 0800 090 2314. Alternatively, send via email to <u>uk-drugsafety@sanofi.com</u>



## BACK UP

# Comparable anytime overall hypoglycaemia, with lower incidence during titration phase





Rosenstock J, et al. Diabetes Care. 2018;41:2147-54.

#### Comparable nocturnal overall hypoglycaemia, with numerically lower incidence during titration phase



#### Incidence % Favours Insulin degludec insulin degludec Toujeo<sup>®</sup> 100 units/mL OR (95% CI) Favours p-value\* Toujeo® 100 units/mL Full study period (0-24 weeks) Confirmed (≤3.9 mmol/L) 28.6 28.8 0.99 0.931 (0.74 to 1.32) Confirmed (<3.0 mmol/L) 6.1 1.00 0.991 6.1 (0.58 to 1.72) Titration period (0-12 weeks) 15.2 18.8 0.77 Confirmed (≤3.9 mmol/L) 0.133 (0.54 to 1.08) Confirmed (<3.0 mmol/L) 2.8 3.5 0.80 0.564 (0.38 to 1.69) Maintenance period (13-24 weeks) Confirmed (≤3.9 mmol/L) 21.4 21.0 1.03 0.881 (0.74 to 1.42) Confirmed (<3.0 mmol/L) 4.5 1.18 3.8 0.620 (0.61 to 2.29) 0.3 3.0 0 OR (95% CI)

Adapted from Rosenstock J, et al. (2018)

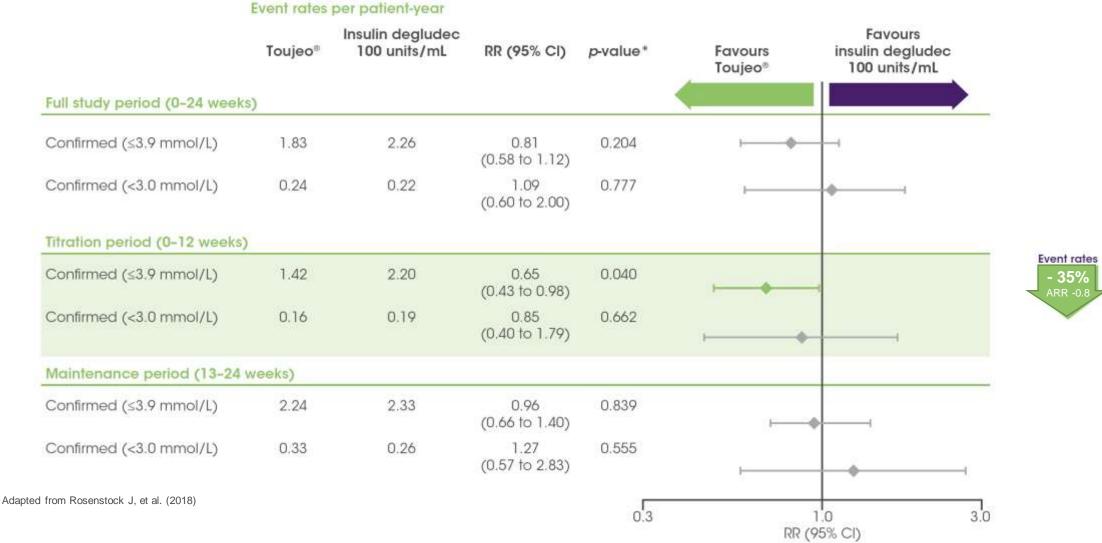
\*All p-values are analysed as nominal.

RR, relative risk; CI, confidence interval, degludec, insulin degludec 100 units/mL

Rosenstock J, et al. Diabetes Care. 2018;41:2147-54.

# Comparable nocturnal overall hypoglycaemia, with lower rate during titration phase





\*All p-values are analysed as nominal.

RR, relative risk; CI, confidence interval, degludec, insulin degludec 100 units/mL

Rosenstock J, et al. Diabetes Care. 2018;41:2147-54.



### BRIGHT: Toujeo vs insulin degludec 100 units/mL for 24 weeks

Insulin dose adjustment was to a target fasting SMPG



#### Insulin dose change over 24 weeks

SE, standard error; W, week, SMPG, self-monitored plasma glucose

Adapted from Rosenstock J, et al. (2018)

Mean body weight increase at week 24 Toujeo: 2.0 +/- 3.8 kg Degludec: 2.3 +/- 3.6 kg

LS mean difference in body weight change Toujeo vs insulin degludec 100 U/mL -0.33 kg (95% CI -0.81 to 0.15)

Despite the difference in insulin dose at Week 24, bodyweight gains and the rates of hypoglycaemia at Week 24 were similar

### sanofi

Rosenstock J, et al. Diabetes Care. 2018;41:2147-54.