

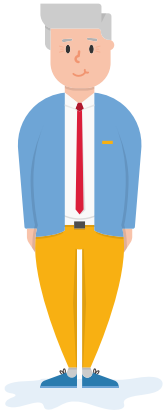
# In Control

Long-acting insulins for the management of type 2 diabetes

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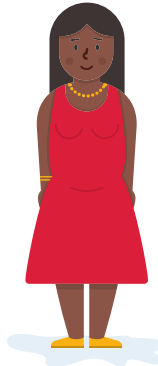
Participant Handout

## Patient Cases



### Patrick

59-year-old male  
Flight attendant  
Type 2 diabetes  
Diagnosed 6 years ago  
Private insurance coverage



### Priyanka

45-year-old female  
Office administrator  
Type 2 diabetes  
Diagnosed 10 years ago  
Private insurance coverage



#### Health Status

**BMI:** 26.7 kg/m<sup>2</sup>  
**BP:** 132/88 mmHg  
**eGFR:** 78 mL/min/1.73m<sup>2</sup>  
**ACR:** Negative  
**LDL:** 1.5 mmol/L  
**CV:** No history of cardiovascular disease  
**Exercise:** Walks briskly 3 times/week for 20 minutes  
**Diet:** Eats a balanced diet when at home and has 2 alcoholic drinks 3 days/week



#### Health Status

**BMI:** 29.4 kg/m<sup>2</sup>  
**BP:** 138/88 mmHg  
**eGFR:** 68 mL/min/1.73m<sup>2</sup>  
**ACR:** Negative  
**LDL:** 1.9 mmol/L  
**CV:** No history of cardiovascular disease, but strong family history  
**Exercise:** On her feet during the day at work  
**Diet:** Indian vegetarian diet; does not drink alcohol



#### Glycemic Parameters

**A1C:** 8.5%  
**FPG:** 11.8 mmol/L



#### Glycemic Parameters

**A1C:** 8.3%  
**FPG:** 8.5 mmol/L



#### Medications

Gliclazide modified release (90 mg QD)  
Sitagliptin and metformin HCL-extended release (100 mg sitagliptin/2000 mg metformin QD)  
Rosuvastatin (10 mg QD)  
Ramipril (10 mg QD)



#### Medications

Metformin 1000 mg BID  
Sitagliptin 100 mg QD  
Empagliflozin 10 mg QD  
Atorvastatin 10 mg QD  
Amlodipine 5 mg QD  
Was previously on gliclazide but stopped due to daytime hypoglycemia

#### Notes

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#### Insulin Treatment Regimen

**Basal:** Insulin glargine U100  
32 units at bedtime

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## Initiating Basal Insulin in Type 2 Diabetes



**Start:** 10 units once daily

**Titration:** 1 unit per day until target reached (detemir, glargine and NPH)

Degludec should be titrated by 2 units every 3–4 days or by 4 units once a week

## Switching Basal Insulin in T2DM

From once-daily basal<sup>2,3,4,5</sup>

**1:1**

From BID basal<sup>2,3,4,5</sup>

**↓ 20%**

From IGlax U300<sup>2,3</sup>

**↓ 20%**

Followed by daily or weekly titration (as described above)

## Basal Insulin Product Options and Features

Insulin type	Brand name	Total units per pen (units)	Maximum single dose for injection (units)	In-use time (days)	Pre-filled pen
Insulin degludec	Tresiba® 100 units/mL	300	80	56	FlexTouch®
	Tresiba® 200 units/mL	600	160	56	FlexTouch®
Insulin detemir	Levemir® 100 units/mL	300	80	42	FlexTouch®*
Insulin glargine	Lantus® 100 units/mL	300	80	28	SoloSTAR®*
	Basaglar™ 100 units/mL	300	60	28	Kwikpen®*
	Toujeo™ 300 units/mL	450	80	42	SoloSTAR®
NPH	Novolin® ge NPH 100 units/mL	300	60	28	Cartridge only
	Humulin® N 100 units/mL	300	60	28	Kwikpen®*

\* Also available in cartridges for use in durable/refillable pens; max dose in durable pen may differ from max dose in prefilled pens above.



## Key Takeaways

Goal of insulin treatment: Get to A1C target with as few adverse events as possible.



Enhance conversations  
with your patients



Consider CGM and FGM to reduce  
A1C and hypoglycemia



### Nocturnal and symptomatic hypoglycemia:

Use basal insulin analogues over NPH

### Overall and nocturnal hypoglycemia:

Use insulin glargine U300 or insulin  
degludec over insulin glargine U100



### Patients at high CV risk:

Use insulin degludec over insulin glargine  
U100 to reduce risk of hypoglycemia

Low glucose variability is associated with  
a lower rate of severe hypoglycemia,  
MACE and all-cause mortality compared  
to medium or high variability

CGM: continuous glucose monitoring; FGM: flash glucose monitoring; MACE: major adverse cardiovascular event

## REFERENCES

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