

The *GelShield Diffusion Technology* of *metformin Glucophage XR* provide *simple and once-daily solution*

Taking metformin may experience...

○ GI adverse events

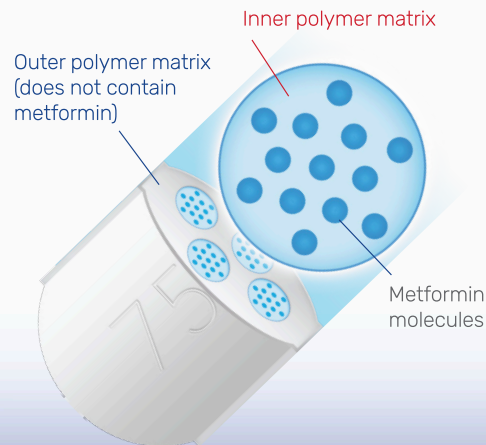


○ Forgetting medication

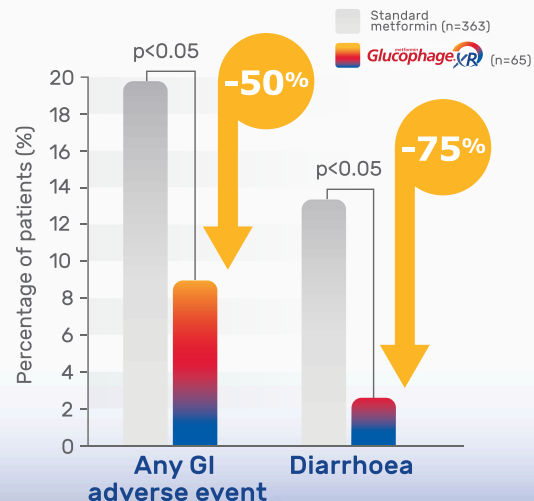


Start with *metformin Glucophage XR*

Sustained release of metformin over 24 hours¹



Enhanced GI Tolerability²



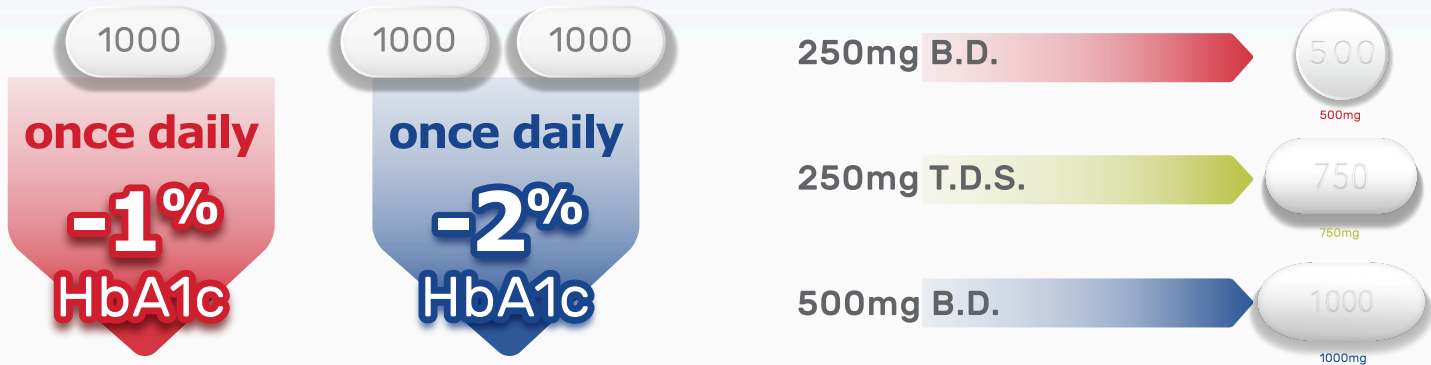
Frequency of GI events for patients new to standard metformin compared with *metformin Glucophage XR* during the first year of treatment²

metformin
Glucophage XR

is now indicated for **Prediabetes** and
is recommended as **1st line treatment**
for T2DM by most major guidelines

Reliable efficacy in dose dependent manner³

Metformin  switch to **Glucophage XR**



References:

1. Timmins P, et al. Clin Pharmacokinet 2005; 44: 721-9. 2. Blonde L, et al Curr Med Res Opin 2004; 20: 565-72. 3. Romero SP, et al. Int J Cardiol 2013; 166: 404-12

Contents: Metformin HCl Indications: Reduction in risk or delay onset of type 2 DM in adult, overweight patients with IGT and/or IFG, and/or increased HbA1c who are at high risk for developing overt type 2 DM and still progressing towards type 2 DM despite implement intensive lifestyle change for 3-6 months. Treatment of type 2 DM in adults as an adjunct to adequate diet & exercise. Monotherapy or in combination w/ other oral antidiabetic medicines or insulin. **Dosage:** Adult w/normal renal function (GFR >90ml/min) Reduction in the risk or delay of the onset of type 2 DM Initiate one tablet XR 500mg once daily w/ evening meal. Regularly monitor (every 3-6 months) Monotherapy in Type 2 DM and combination with other oral antidiabetic agents Usual starting dose is one tablet once daily. After 10 to 15 days the dose should be adjusted on the basis of blood glucose measurements. Max. recommended dose is 2g daily. Combination with insulin Usual starting dose is one tablet XR 500mg or XR 1g once daily, while insulin dosage is adjusted on the basis of blood glucose measurements For renal impairment patients A GFR should be assessed before initiation of treatment and at least annually thereafter. In patients at an increased risk of further progression of renal impairment and in the elderly, renal function should be assessed more frequently, e.g. every 3-6 months. Total max. daily dose of 2g for GFR 60-89ml/min, consider dose reduction for declining renal function. Total max. daily dose of 2g for GFR 45-59ml/min, review any increased risk of lactic acidosis before initiating metformin, whereas starting dose is at most half of max. dose. Total max. daily dose of 1g for GFR 30-44ml/min, review any increased risk of lactic acidosis before initiating metformin, whereas starting dose is at most half of max. dose. **Pre- & Post-Prandial Advice:** Swallow whole, do not chew/crush. **Contraindications:** Any type of acute metabolic acidosis (such as lactic acidosis diabetic ketoacidosis), severe renal failure (GFR<30ml/min), hepatic insufficiency, infectious diseases, following an IV urography or angiography, heart failure, recent MI, resp. failure, shock, persistent or severe diarrhoea, recurrent vomiting, alcoholism. Lactation. **Special Precautions:** Regular renal & blood sugar monitoring. Suspend therapy during surgery & clinical investigations. May impair ability to drive or operate machinery in combination w/ other antidiabetic agents. Pregnancy, Elderly (for reduction of risk or delay of type 2 DM) Adverse Reactions: GI & taste disturbances. **Interactions:** Iodinated contrast agents, corticosteroids, NSAIDs, ACE inhibitors, diuretics, β2-agonists, alcohol, COX II inhibitors, angiotensin II receptor antagonists, OCT1 and OCT2 Presentations: XR tab 500 mg x 60's. 750 mg x 30's. 1,000 mg x 60's. Date of version: Jun 2018

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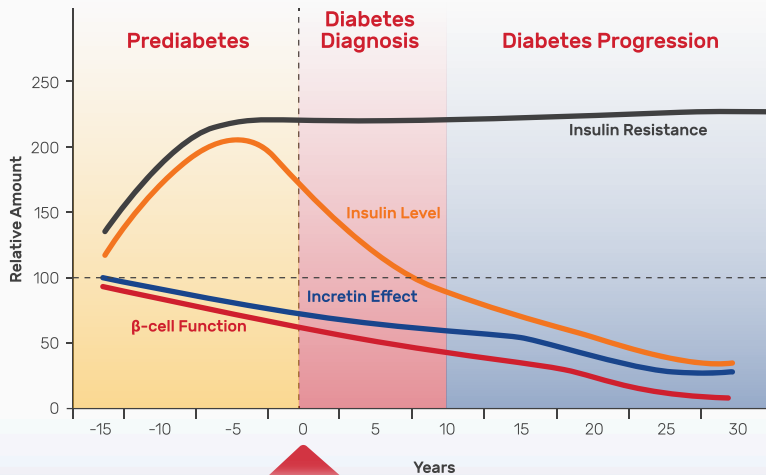
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Providing preventive care to your patients Staving off DM complications with



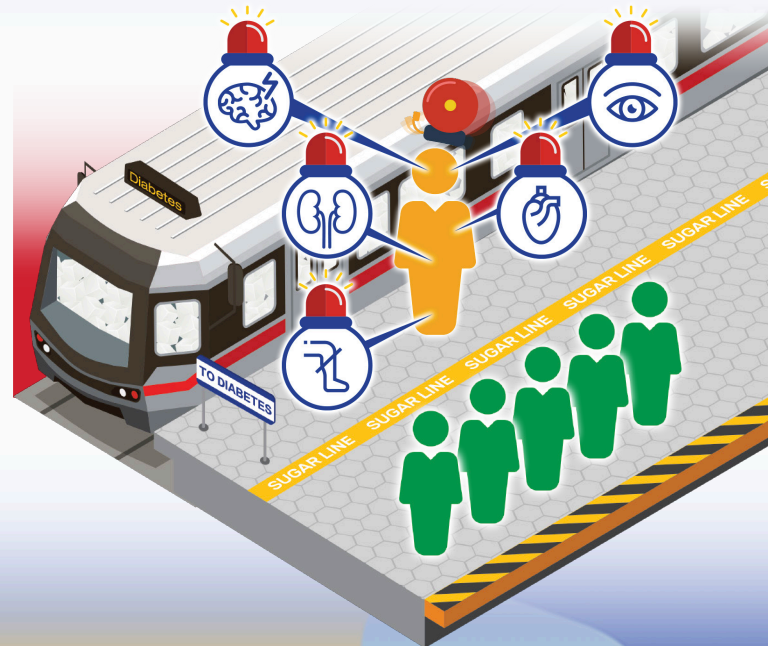
Preserve the β -cell !

Natural History of Type 2 Diabetes¹



Diabetes Onset

~1 in 6 Hong Kong people will have IGT²






DM = Diabetes Mellitus; IGT = Impaired Glucose Tolerance

metformin
Glucophage XR

is now indicated for **Prediabetes** and
is recommended as **1st line treatment**
for **T2DM** by most major guidelines

Different Stages of Glucose Level: ³

| | Blood Test | HbA _{1c} | Fasting Plasma Glucose (FPG) | Oral Glucose Tolerance Test (OGTT) |
|--|------------------------|-------------------|------------------------------|------------------------------------|
|  | Type 2 Diabetes | ≥ 6.5% | ≥ 7.0 mmol/L | ≥ 11.1 mmol/L |
|  | Prediabetes | 5.7 - 6.4% | 5.6 - 6.9 mmol/L | 7.8 - 11.0 mmol/L |
|  | Normal | < 5.7% | < 5.6 mmol/L | < 7.8 mmol/L |

References:

1. Tobin GS, et al. Int J Clin Pract 2012; 66: 1147-57 2. International Diabetes Federation. IDF Diabetes Atlas 8th ed. Available at: <https://reports.instantatlas.com/report/view/704ee0e6475b4af885051bccc15f0e2c/HKG>. Accessed Jun 2019. 3. American Diabetes Association. Diabetes Care 2019; 42: S29-S33 4. Blonde L, et al. Curr Med Res Opin 2004; 20: 565-72

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GelShield Diffusion Technology of **Glucophage XR**
enhances gastrointestinal tolerability⁴



T2DM = Type 2 Diabetes Mellitus ; HbA_{1c} = Hemoglobin A_{1c}

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reduces the risk or
delays onset of T2DM

DPP showed **Glucophage** significantly
reduces the diabetes risk by¹

The point of reaching **50%** cumulative
incidence of diabetes was delayed by about²



A multicenter, randomized controlled clinical trial on 3234 nondiabetic persons with elevated fasting and post-load plasma glucose concentrations were randomly assigned to assess the efficacy of intensive lifestyle intervention or metformin on the prevention or delay of the development of type 2 diabetes mellitus.¹



DPP=Diabetes Prevention Program; T2DM=Type 2 Diabetes Mellitus



is now indicated for **Prediabetes** and is recommended as **1st line treatment** for T2DM by most major guidelines

Metformin is as effective as lifestyle modification, especially for³:



GelShield Diffusion Technology of **Glucophage XR** enhances gastrointestinal tolerability⁴



References: 1. Knowler WC, et al. N Engl J Med 2002; 346: 393-403 2. Glucophage® XR Prescribing Information Version: Jun 2018. 3. American Diabetes Association. Diabetes Care 2019; 42: S29-S33 4. Blonde L, et al. Curr Med Res Opin 2004; 20: 565-72

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> 60 years of therapeutic use, **Glucophage^{metformin} XR** is time-proven, showing a good safety profile

Metformin is the **1st line therapy** for T2DM^{1,2,3}



○ Low Cost



○ Long-term Safety



○ Reduces CV Risks



○ Can be used in CKD

Note: GFR >30 mL/min



○ No Hypoglycemia

Note: Metformin alone does not usually cause hypoglycemia

GelShield Diffusion Technology of **Glucophage^{metformin} XR** enhances gastrointestinal tolerability⁴



T2DM = Type 2 Diabetes Mellitus; CV = Cardiovascular; CKD = Chronic Kidney Disease



is now indicated for **Prediabetes** and is recommended as **1st line treatment** for T2DM by most major guidelines

Legacy Effect...10 Years Cardiovascular Benefit ²



↓21%

Diabetes related endpoint



↓33%

Myocardial infarction



↓27%

All-cause mortality

T2DM=Type 2 Diabetes Mellitus; GFR=Glomerular Filtration Rate

References:

1. American Diabetes Association. Diabetes Care 2019; 42:S90-S102 2. Holman RR, et al. N Engl J Med 2008; 369: 1577-89. 3. Glucophage® XR Prescribing Information Version: Jun 2018. 4. Blonde L, et al. Curr Med Res Opin 2004; 20: 565-72

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Glucophage XR is clinically proven for T2DM patients with **moderate renal impairment** ³

| GFR (ml/min) | Total max. daily dose of Glucophage XR |
|--------------|--|
| 60-89 | 2000 mg |
| 45-59 | 2000 mg |
| 30-44 | 1000 mg |



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