

# Who could benefit from Ranexa®?

>> Choose a case study to find out







Lately, Lim hasn't been tolerating his angina treatment

Is it time to add-on Ranexa®?







On his current treatment plan, Lim has angina symptoms and fatigue that bother him when he's walking

Reduce angina, keep them active<sup>1-8</sup>



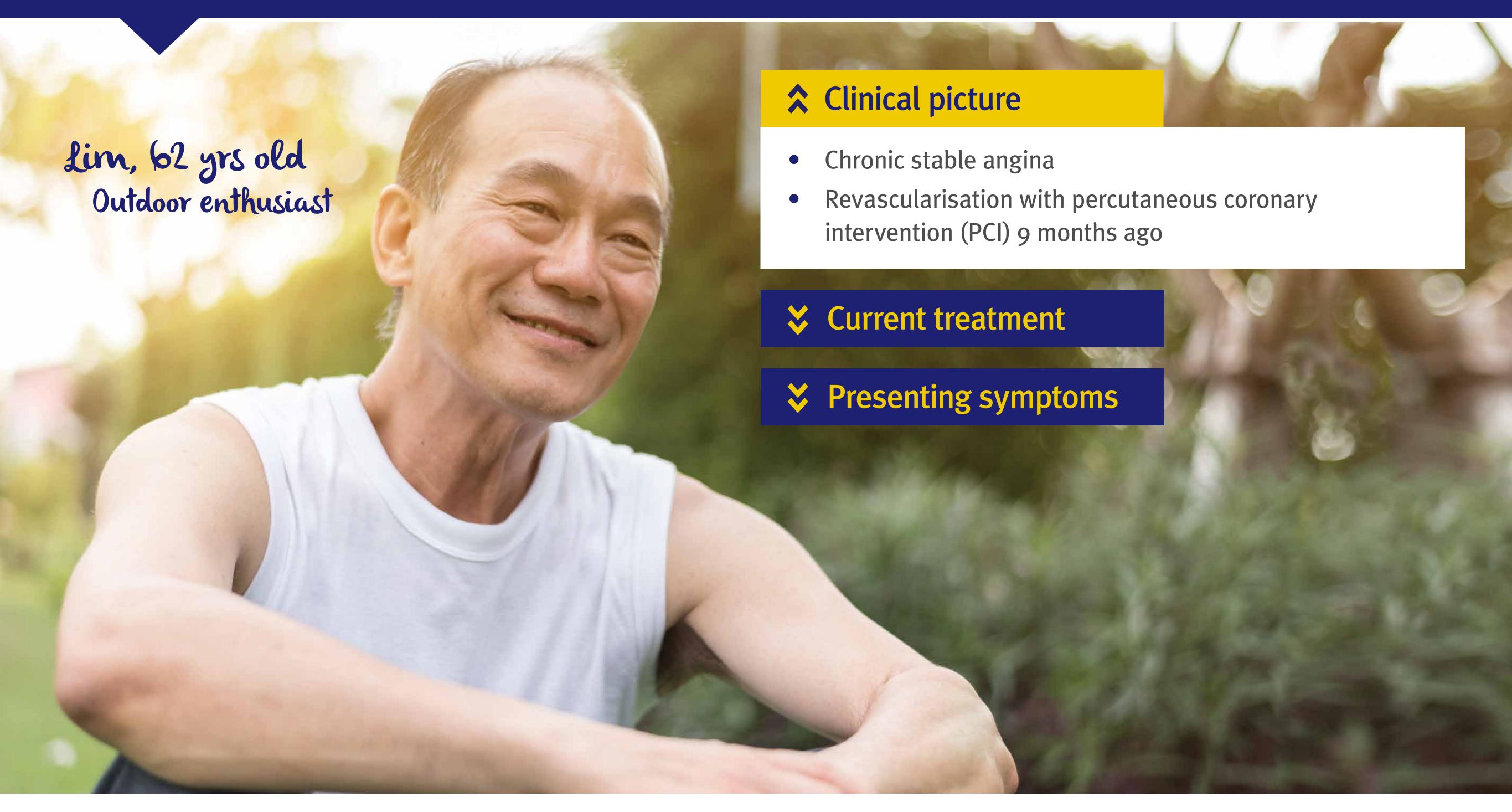






CAD & diabetes

On his current treatment plan, Lim has angina symptoms and fatigue that bother him when he's walking

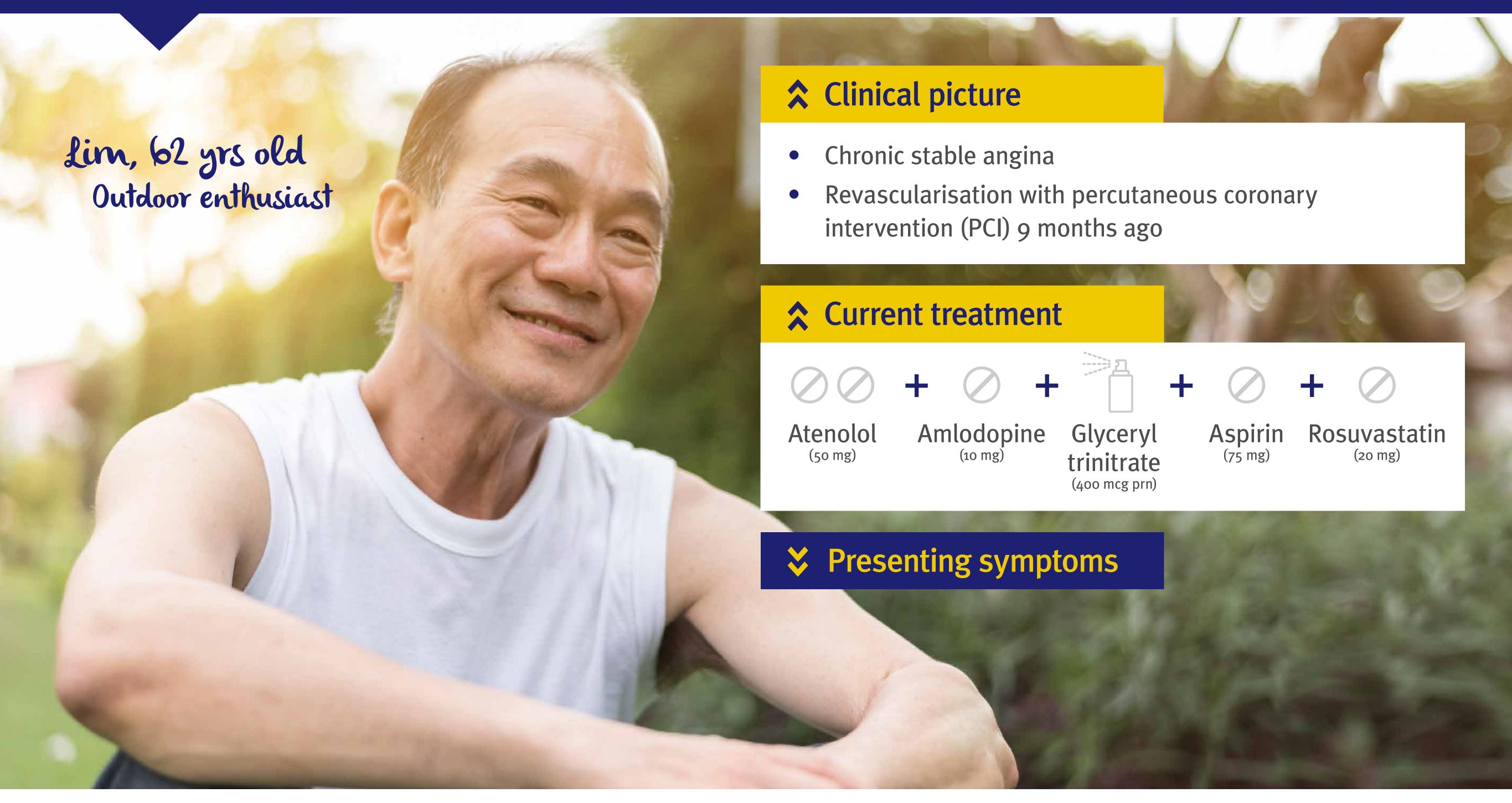








On his current treatment plan, Lim has angina symptoms and fatigue that bother him when he's walking



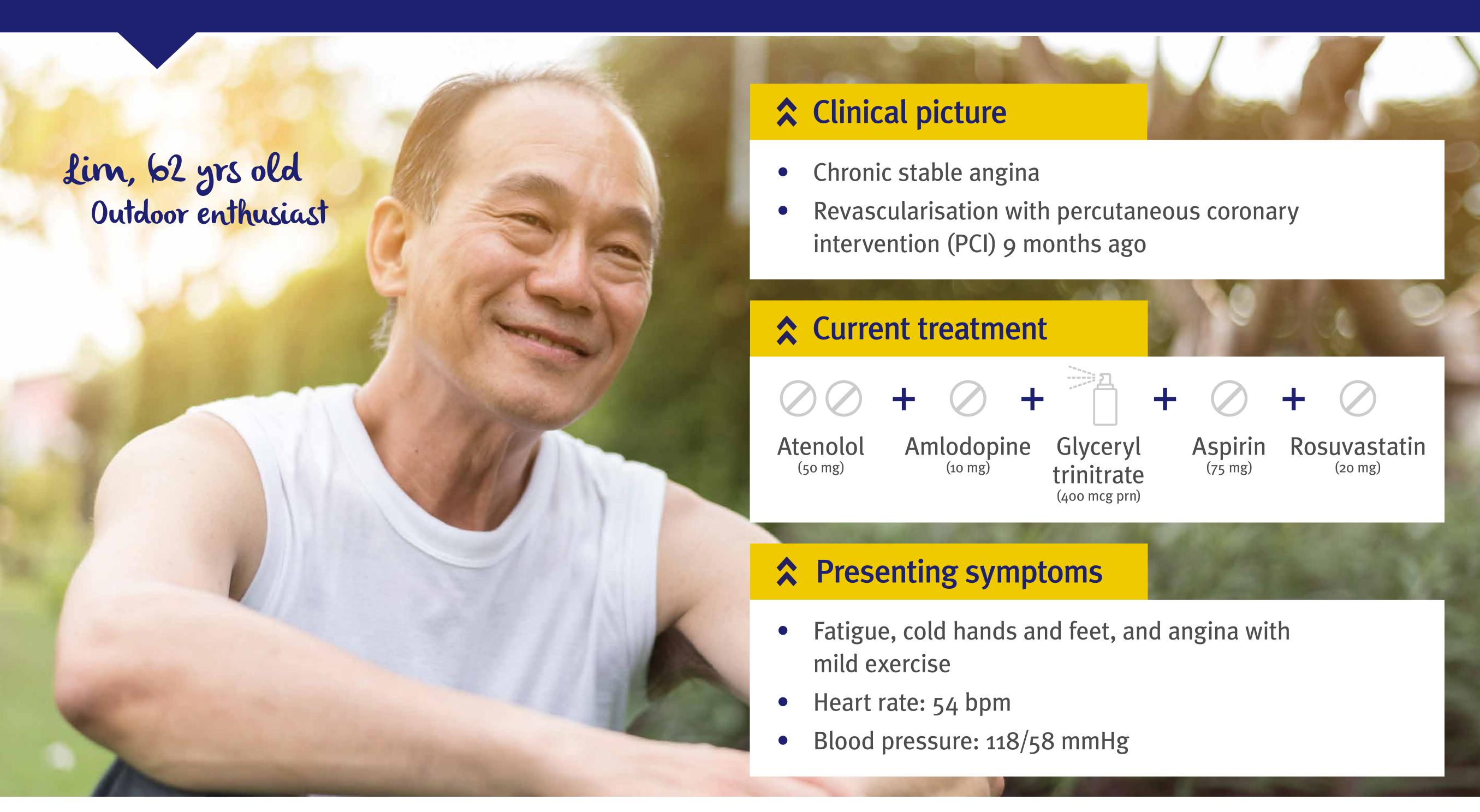






# On his current treatment plan, Lim has angina symptoms and fatigue that bother him when he's walking

Reduce angina, keep them active<sup>1-8</sup>









CAD & diabetes

# Lim's not alone: most patients have relative intolerances to maximum doses of antianginal agents<sup>9-11</sup>

Reduce angina, keep them active<sup>1-8</sup>



Lim still experiences angina despite maximum doses of his CCB<sup>9</sup> and beta blocker,<sup>10</sup> and he may be experiencing some adverse effects<sup>11</sup>







CAD & diabetes

Lim's not alone: most patients have relative intolerances to maximum doses of antianginal agents<sup>9-11</sup>

Reduce angina, keep them active<sup>1-8</sup>



Lim still experiences angina despite maximum doses of his CCB<sup>9</sup> and beta blocker,<sup>10</sup> and he may be experiencing some adverse effects<sup>11</sup>

What can Ranexa® do?







In a meta-analysis, Ranexa® was shown to be substantially haemodynamically neutral in patients with chronic stable angina<sup>12</sup>





Supine SBP NEUTRAL

(MD: -0.647; 95% CI: -1.431 to 0.0136; comparison p = 0.105; heterogeneity p = 0.734; i2 = 0.0%)



Supine DBP

(MD: 0.016; 95% CI:-0.425 to 0.280; comparison p = 0.944; heterogeneity p = 0.932; i2 = 0.0%)





Supine HR **NEUTRAL** 

(MD: -0.051; 95% CI: -0.549 to 0.447; comparison p = 0.841; heterogeneity p = 0.374; i2 = 3.7%)

Data from Savarese G et al. 2013<sup>12</sup> See 'i' button for study design information. Cl, confidence interval; DBP, diastolic blood pressure; HR, heart rate; MD, mean difference; SBP, systolic blood pressure. Ranexa® is indicated as add-on therapy for the symptomatic treatment of patients with stable angina pectoris who are inadequately controlled or intolerant to first-line antianginal therapies (such as betablockers and/or calcium antagonists).13 Ranexa®'s recommended initial dose is 375 mg twice daily. After 2-4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily.<sup>13</sup>





In a meta-analysis, Ranexa® was shown to be substantially haemodynamically neutral in patients with chronic stable angina<sup>12</sup>





Standing SBP

MODESTLY REDUCED

(-1.55 mmHg)

(MD: -1.553; 95% CI: -2.363 to -0.743; comparison p=0.000; heterogeneity p=0.672; i2 =0.0%)



Standing DBP **NEUTRAL** 

(MD: -0.404; 95% CI: -0.862 to -0.055; comparison p = 0.084; heterogeneity p = 0.287; i2 = 20.4%)





Standing HR **NEUTRAL** 

(MD:-0.162; 95% CI:-0.697 to 0.374; comparison p = 0.555; heterogeneity p = 0.143; i2 = 44.7%)

Data from Savarese G *et al.* 2013<sup>12</sup> See 'i' button for study design information. CI, confidence interval; DBP, diastolic blood pressure; HR, heart rate; MD, mean difference; SBP, systolic blood pressure.

Ranexa® is indicated as add-on therapy for the symptomatic treatment of patients with stable angina pectoris who are inadequately controlled or intolerant to first-line antianginal therapies (such as betablockers and/or calcium antagonists).<sup>13</sup> Ranexa®'s recommended initial dose is 375 mg twice daily. After 2–4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily.<sup>13</sup>





# Ranexa®: Help patients like Lim reconnect with the life they love<sup>1-7</sup>



In a meta-analysis, in patients with chronic stable angina, Ranexa® was shown to:



Reduce the frequency of angina symptoms while remaining haemodynamically neutral<sup>12</sup>

### Reduce angina, keep them active<sup>1-8</sup>

Ranolazine is indicated in adults as add-on therapy for the symptomatic treatment of patients with stable angina pectoris who are inadequately controlled or intolerant to first-line antianginal therapies (such as beta-blockers and/or calcium antagonists). The patient presented is not real but used only for illustrative purposes. For the treatment of any underlying disease, please do refer to the appropriate guidelines.









Study design: Saravese G et al. 2013.12

Intolerant

Meta-analysis of six clinical trials assessing the effects of Ranexa® on angina, nitroglycerin consumption, functional capacity, electrocardio-graphic signs of ischaemia and haemodynamic parameters in patients with chronic stable CAD (coronary artery disease). Three clinical trials involving 8,216 patients were included in the blood pressure and heart rate analysis.

#### References:

- **1.** Muhlestein JB *et al. Drugs R D* 2013;13:207–213. **2.** Chaitman BR *et al J Am Coll Cardiol* 2004;43:1375–82. **3.** Chaitman BR et al. JAMA 2004;291:309-16. 4. Alexopoulus D et al. Int J Cardiol 2016;205:111-116. 5. Stone PH et al. J Am Coll Cardiol 2006;48(3):566–75. 6. Wilson SR et al. J Am Coll Cardiol 2009;53:1510–6. 7. Diedrichs H et al. J Clin Exp Cardiol 2015;6(12):16.
- 8. Hasenfuss G, Maier LS. Clin Res Cardiol 2008;97:222–26. 9. Amlodipine 10 mg Tablet. Summary of Product Characteristics, October 2013. 10. APO-Atenolol tablets. Product Information, May 2018. 11. Al Mobeirek AF et al. Int J Clin Med 2014;5:249–59.
- **12.** Savarese G et al. Int J Cardiol 2013; 169:262–270. **13.** Ranexa® Summary of Product Characteristics, July 2014.









Lee's been taking his angina medicines like his doctor told him, but he's just suffered his 4th angina attack this week

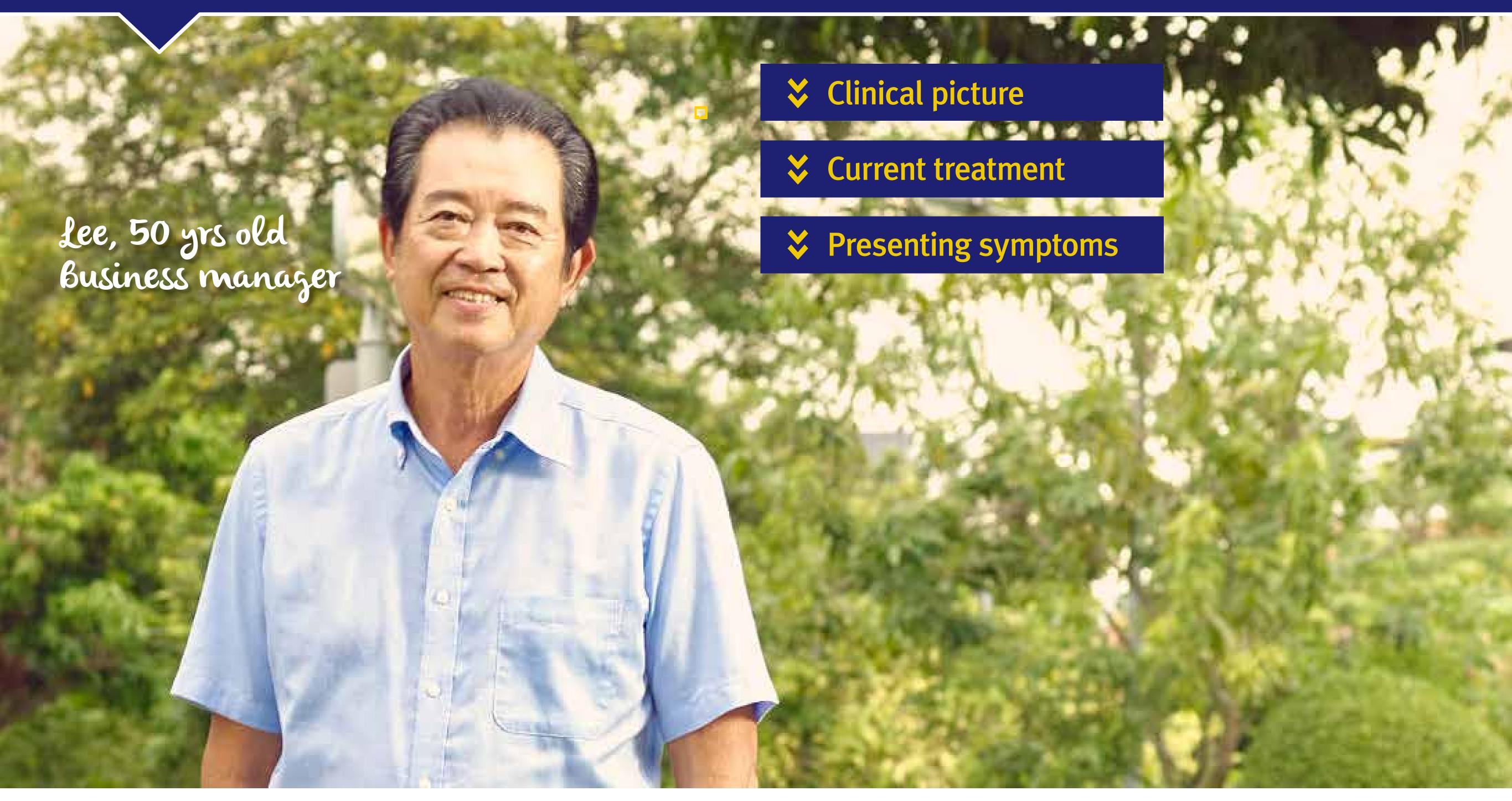
Is it time to add-on Ranexa®?







# Reduce angina, keep them active<sup>1-8</sup>









CAD & diabetes

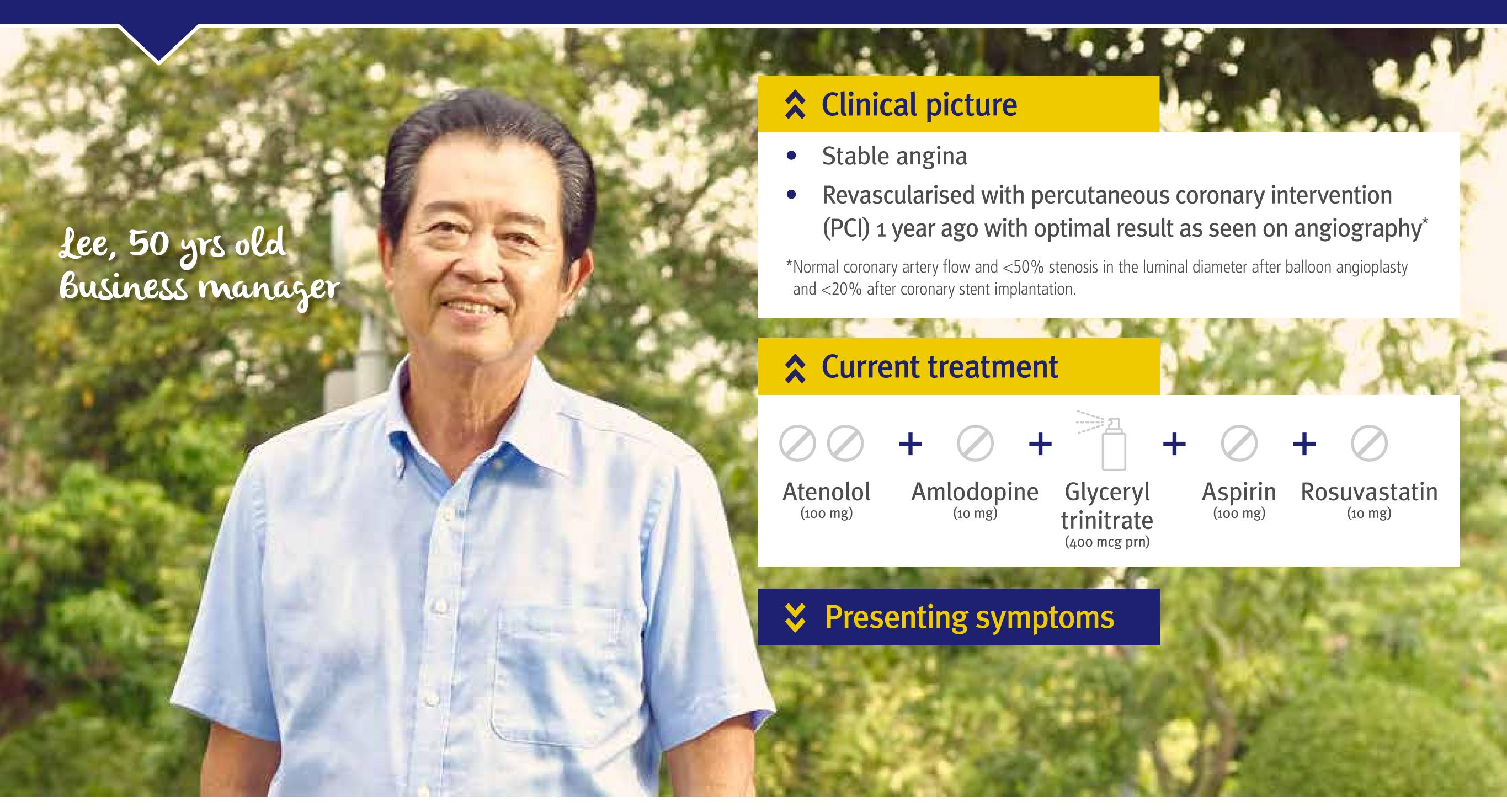
# Reduce angina, keep them active<sup>1-8</sup>



CAD & diabetes



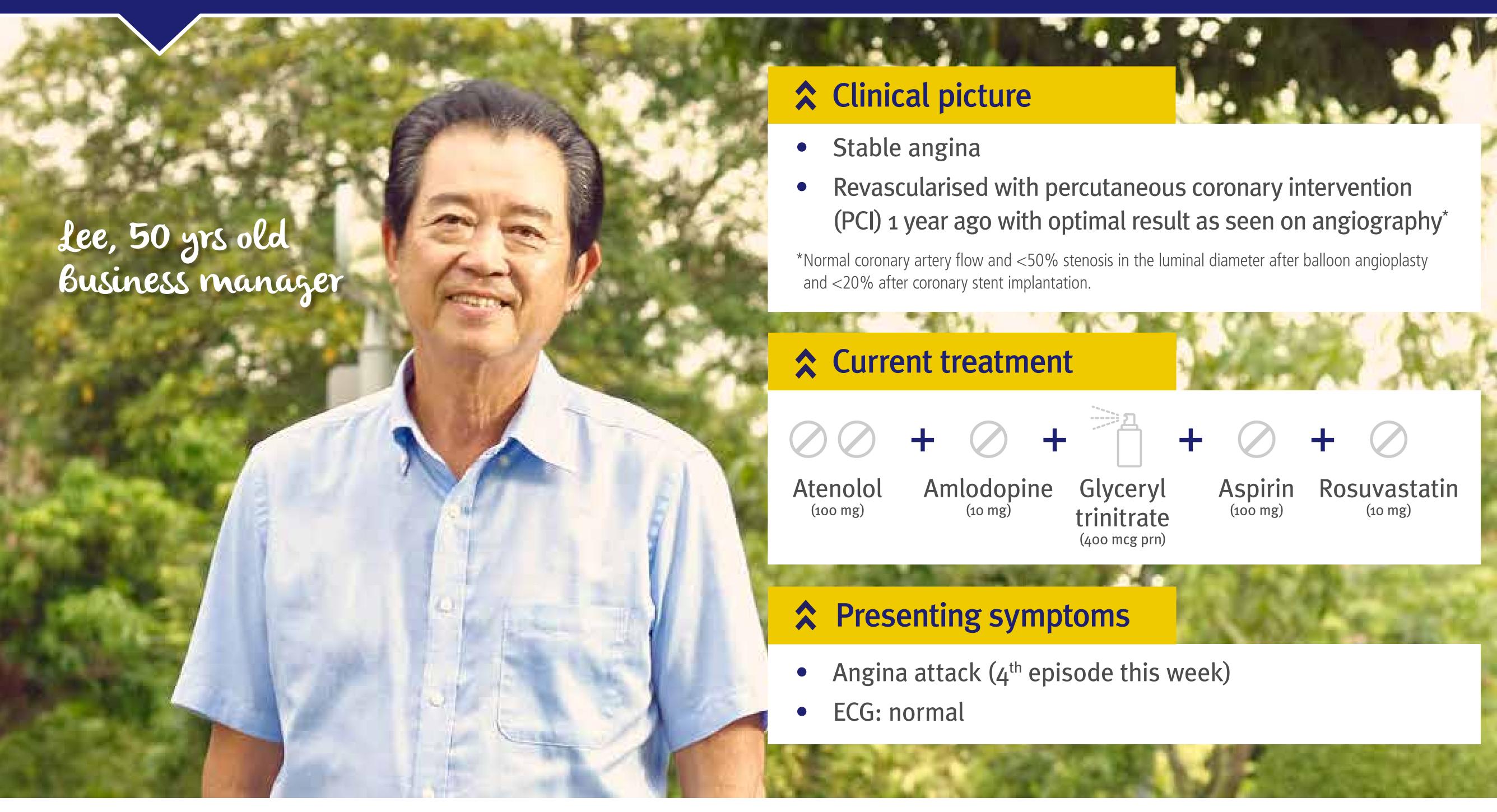










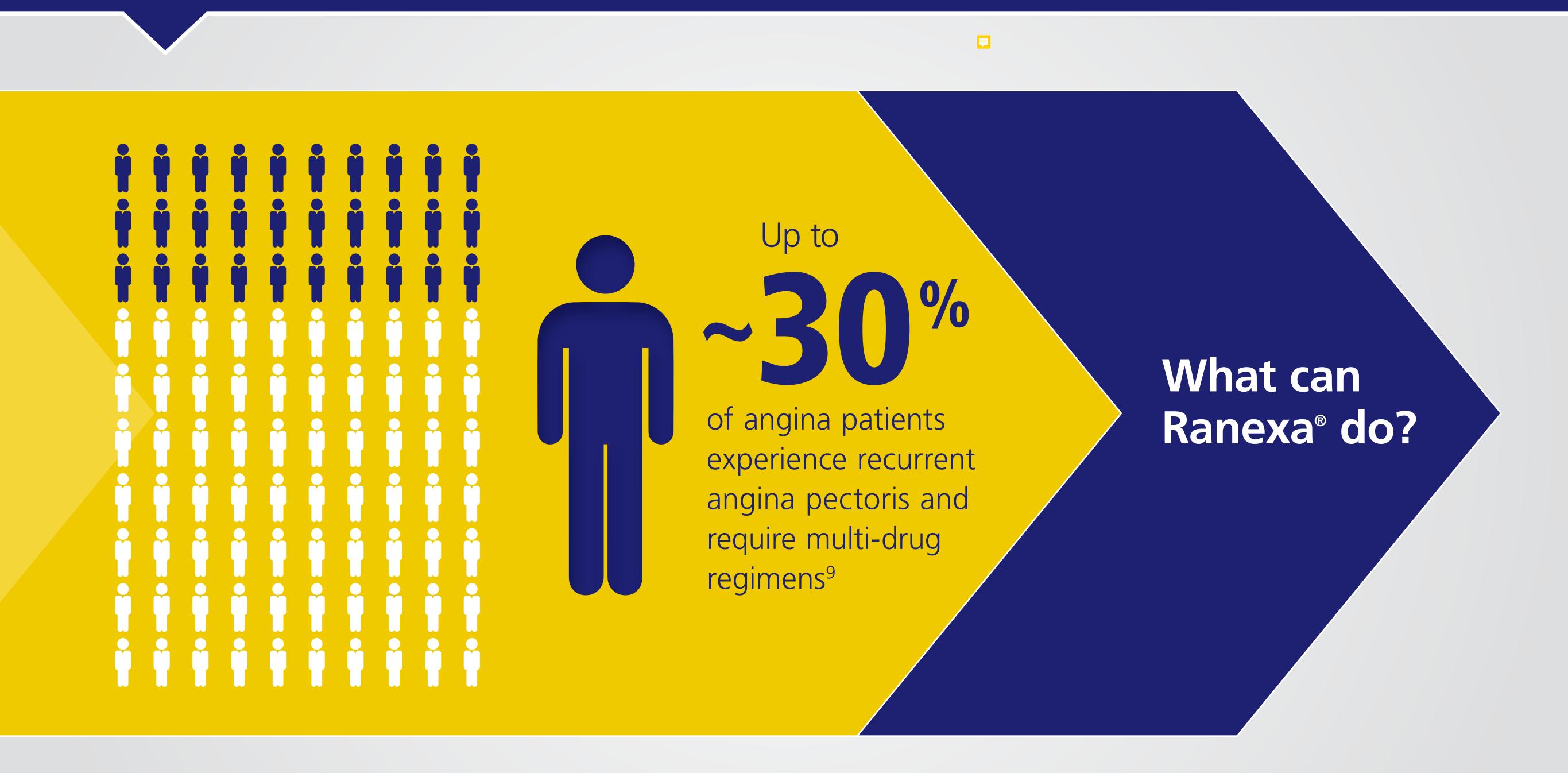








# Lee's not alone: many patients have recurring symptoms









Observational studies of 'real-world' symptomatic patients taking Ranexa®

Reduction in mean number of weekly angina attacks<sup>7</sup>

4.4 Baseline



3 months (p<0.0001)

>3 fewer

angina attacks per week vs. baseline<sup>7</sup>

Adapted from Diedrichs H et al. 2015<sup>7</sup> See 'i' button for study design information.

<del>-</del>









# Observational studies of 'real-world' symptomatic patients taking Ranexa®

Reduction in % patients experiencing 1–3 angina attacks in the indicated time intervals<sup>4</sup>

88.4% Baseline



**26.5%** 6 months (p<0.001)

A clear declining trend in angina symptoms after both 3 and 6 months of therapy (p<0.0001)<sup>4</sup>

IMPROVED DAILY ACTIVITY SCORES

Adapted from Alexopoulus D et al. 2016<sup>4</sup> See 'i' button for study design information.





CAD & diabetes





In OSCAR-GR there was a significant improvement in patients' daily activity scores (p<0.001), with the greatest improvement seen in employment activities:<sup>4</sup>





3 7%

# improvement in mean scores over 6 months

(change in employment activity score, 3.81 to 2.39 measured on a visual analogue scale where 0=no limitation and 10=severe limitation).

Ranexa®'s recommended initial dose is 375 mg twice daily. After 2-4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily.¹⁰



**ARETHA** 











# Ranexa®: Help patients like Lee reconnect with the life they love1-7





Decrease frequency of angina attacks<sup>3,5,7</sup>



Reduce angina symptoms<sup>4</sup>



Improve daily activity<sup>4</sup>

## Reduce angina, keep them active<sup>1-8</sup>

Ranolazine is indicated in adults as add-on therapy for the symptomatic treatment of patients with stable angina pectoris who are inadequately controlled or intolerant to first-line antianginal therapies (such as beta-blockers and/or calcium antagonists). The patient presented is not real but used only for illustrative purposes. For the treatment of any underlying disease, please do refer to the appropriate guidelines.









#### **Study design:** Diedrichs H *et al.* 2015<sup>7</sup>

ARETHA: Application of ranolazine in stable angina pectoris therapy. Patients (n=1,537, full analysis set) with stable angina pectoris receiving ranolazine were enrolled and monitored at baseline and after 3 months. Only patients receiving ranolazine for the first time were monitored (provided that therapy did not start earlier than 2 to a maximum of 4 weeks previously and the dosage still equalled the recommended starting dose).

#### **Study design:** Alexopoulus D *et al.* 2016<sup>4</sup>

OSCAR-GR: Prospective, multicentre, observational, study in 189 patients with chronic stable angina. Ranolazine was prescribed, and 6 months' follow-up was performed, with study visits at baseline, 3 and 6 months.

#### References:

1. Muhlestein JB et al. Drugs R D 2013;13:207–213. 2. Chaitman BR et al. J Am Coll Cardiol 2004;43:1375–82. 3. Chaitman BR et al. JAMA 2004; 291: 309–16. **4.** Alexopoulus D et al. Int J Cardiol 2016; 205: 111. **5.** Stone PH et al. J Am Coll Cardiol 2006; 48(3): 566– 75. **6.** Wilson SR *et al. J Am Coll Cardiol* 2009;53:1510–6. **7.** Diedrichs H *et al. J Clin Exp Cardiol* 2015;6(12):16. **8.** Hasenfuss G, Maier LS. Clin Res Cardiol 2008;97:222–26. 9. Manolis AJ et al. Int J Cardiol 2016;445–43. 10. Ranexa® Summary of Product Characteristics. July 2014.









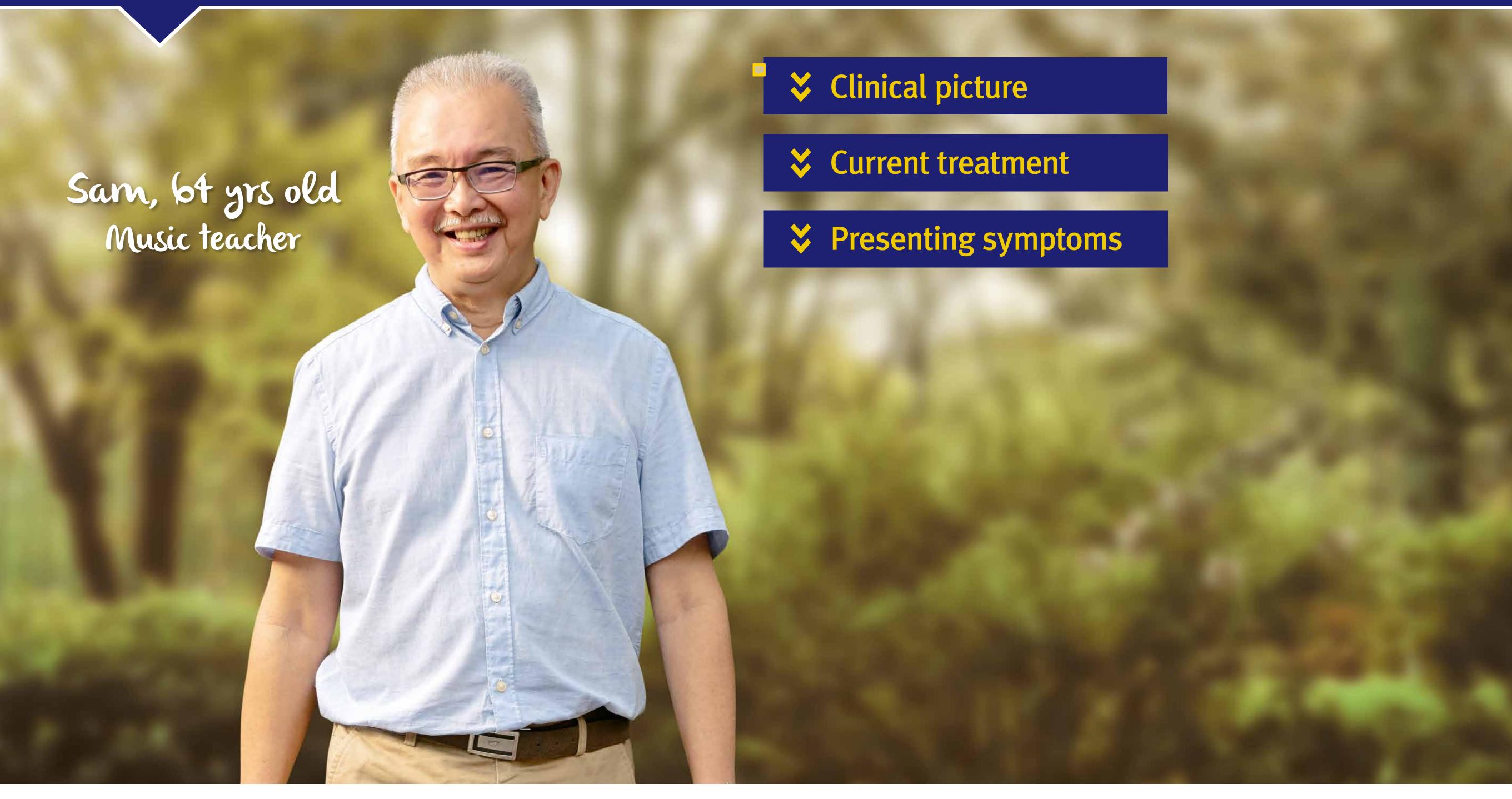
Sam is diabetic and he is being treated for stable coronary artery disease, but he still experiences angina symptoms

Is it time to add-on Ranexa®?















Reduce angina, keep them active<sup>1-8</sup>



### **Clinical picture**

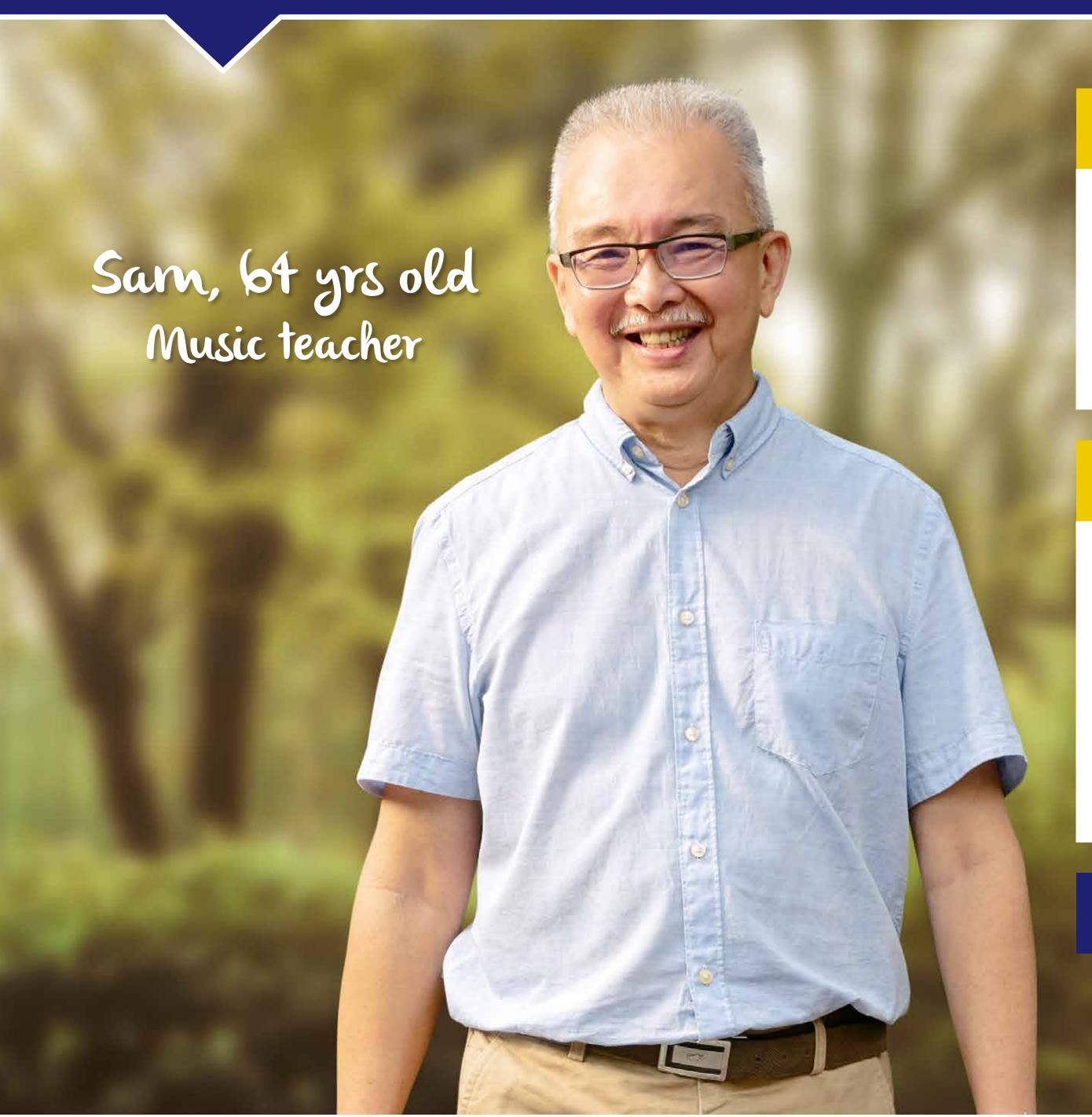
- Chronic stable angina
- 1-year history of stable coronary artery disease (CAD) with daily symptoms
- Type 2 diabetes
- **Current treatment**
- Presenting symptoms







# Reduce angina, keep them active<sup>1-8</sup>



### **Clinical picture**

- Chronic stable angina
- 1-year history of stable coronary artery disease (CAD) with daily symptoms
- Type 2 diabetes

### Current treatment



Diltiazem\*
(60 mg)

Isosorbide mononitrate prolongedrelease tablet (120 mg) Glyceryl trinitrate (400 mcg prn) Aspirin (100 mg)

Rosuvastatin (20 mg)

Basal-bolus insulin injection regimen

\*For the interactions between Diltiazem and Ranolazine please refer to the full SmPC for Ranolazine.

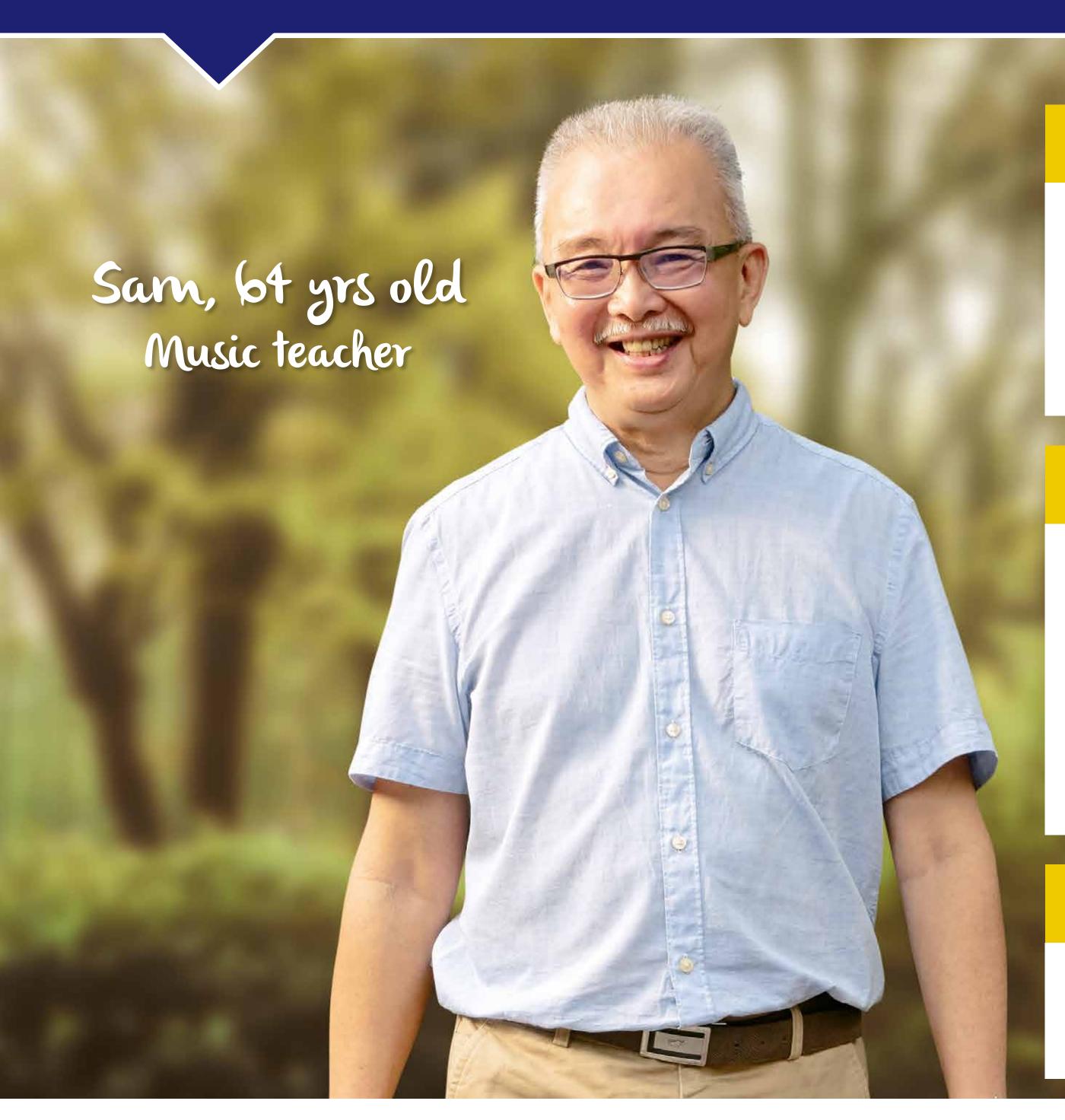
Presenting symptoms







# Reduce angina, keep them active<sup>1-8</sup>



### **☆** Clinical picture

- Chronic stable angina
- 1-year history of stable coronary artery disease (CAD) with daily symptoms
- Type 2 diabetes

### Current treatment



Diltiazem\*
(60 mg)

Isosorbide mononitrate prolongedrelease tablet (120 mg) Glyceryl trinitrate (400 mcg prn) Aspirin (100 mg)

Rosuvastatin (20 mg)

Basal-bolus insulin injection regimen

\*For the interactions between Diltiazem and Ranolazine please refer to the full SmPC for Ranolazine.

### Presenting symptoms

- Fatigue
- Frequent angina







Sam's on the maximum dose of his sustained-release nitrate<sup>9</sup> and a high dose of non-dihydropyridine CCB<sup>10</sup>

Reduce angina, keep them active<sup>1-8</sup>

# Older traditional beta-blockers have the potential to:

- Facilitate or accelerate new-onset diabetes in predisposed patients, or
- Aggravate the glycaemic profile in patients with preexisting diabetes<sup>11</sup>

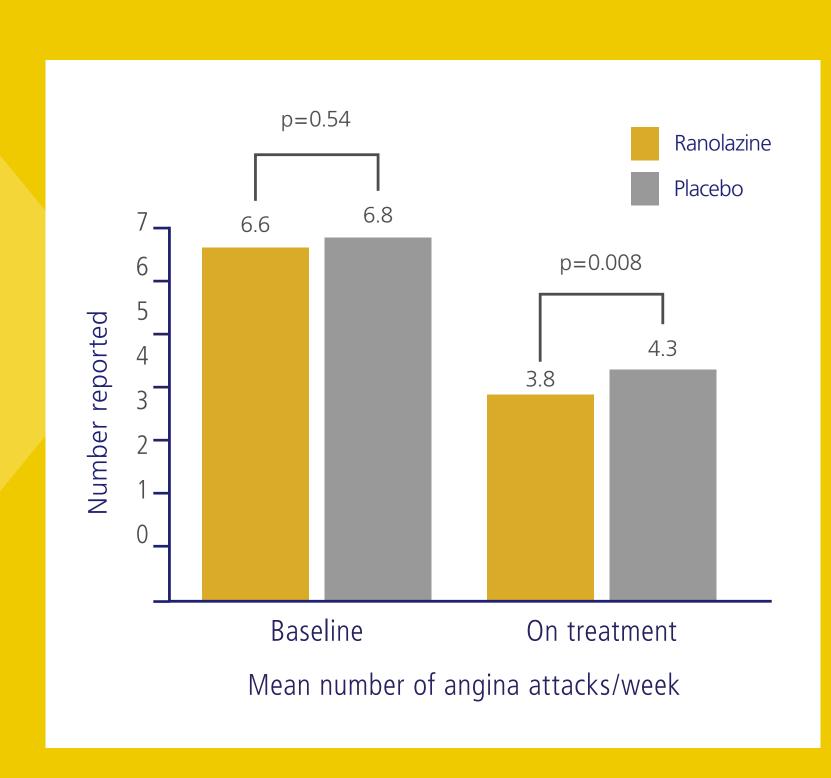








#### Efficacy endpoints in CAD/CSA patients with diabetes treated with Ranexa® for 8 weeks<sup>12</sup>



In patients with type 2 diabetes CAD and chronic stable angina who were being treated with 1 to 2 anti-anginal agents:12



Ranexa® significantly reduced the frequency of angina symptoms (p=0.008)

Adapted from Kosiborod M et al.<sup>12</sup> See 'i' button for study design information.

**EXPERT OPINION** 

**ANGINA** F **ATTACKS**  **NITROGLYCERIN CONSUMPTION** 

Uncontrolled

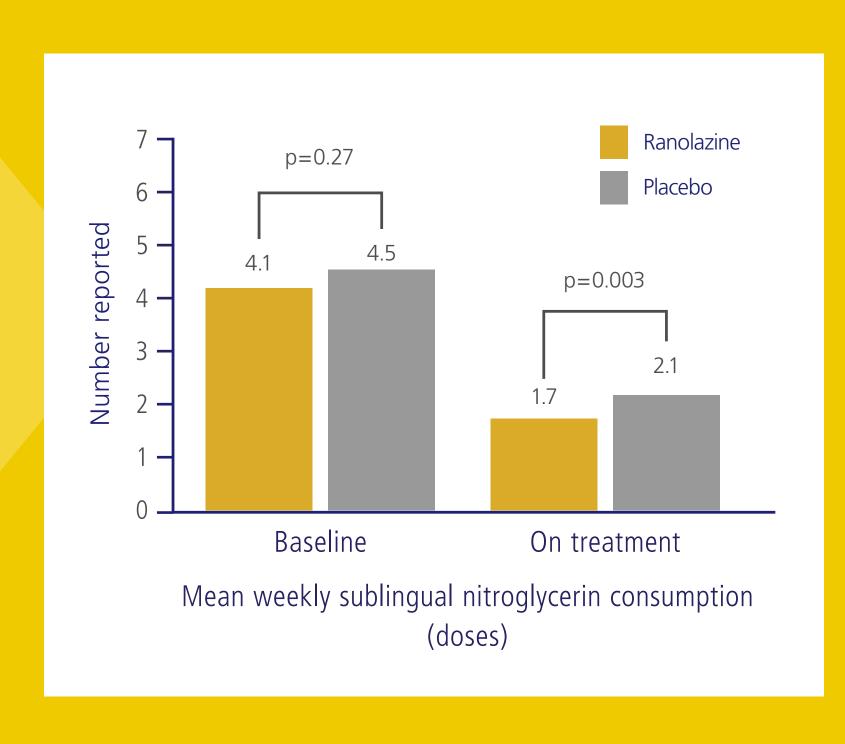
CAD, coronary artery disease; CCB, calcium channel blocker; CSA, chronic stable angina.

Ranexa®'s recommended initial dose is 375 mg twice daily. After 2–4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily.<sup>14</sup>





#### Efficacy endpoints in CAD/CSA patients with diabetes treated with Ranexa® for 8 weeks¹²



In patients with type 2 diabetes CAD and chronic stable angina who were being treated with 1 to 2 anti-anginal agents:12



Ranexa® significantly reduced sublingual nitroglycerin use (p=0.003)

Adapted from Kosiborod M et al.<sup>12</sup> See 'i' button for study design information.

**EXPERT OPINION** 

**ANGINA ATTACKS**  **NITROGLYCERIN CONSUMPTION** 

CAD, coronary artery disease; CCB, calcium channel blocker; CSA, chronic stable angina.

Ranexa®'s recommended initial dose is 375 mg twice daily. After 2–4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily.<sup>14</sup>





Uncontrolled

# Ranexa® could help reduce Sam's angina symptoms and medication use<sup>12</sup>

Reduce angina, keep them active

7 - 6 - Patrodar 1 - 0 -

The combined anti-ischaemic and HbA1c lowering effects of Ranexa® indicate that this agent may become the preferred anti-anginal agent for the management of stable coronary artery disease in patients who also have diabetes¹¹¹-¹³

ANGINA ATTACKS NITROGLYCERIN CONSUMPTION CAD, coronary artery disease; CCB, calcium channel blocker; CSA, chronic stable angina.

Ranexa®'s recommended initial dose is 3/5 mg twice daily. After 2–4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily. 14



Uncontrolled

CAD & diabetes

Female patients





# Ranexa®: Help patients like Sam reconnect with the life they love<sup>1-7</sup>



In patients with type 2 diabetes, CAD, and chronic stable angina, who were being treated with 1 to 2 anti-anginal agents Ranexa® helped:



Decrease frequency of angina attacks<sup>12</sup>



Reduce angina symptoms<sup>12</sup>

### Reduce angina, keep them active<sup>1-8</sup>

Ranolazine is indicated in adults as add-on therapy for the symptomatic treatment of patients with stable angina pectoris who are inadequately controlled or intolerant to first-line antianginal therapies (such as beta-blockers and/or calcium antagonists). The patient presented is not real but used only for illustrative purposes. For the treatment of any underlying disease, please do refer to the appropriate guidelines.

Uncontrolled





# Ranexa®: Help patients like Sam reconnect with the life they love1-7





#### **Study Design:** Kosiborod M *et al.*<sup>12</sup>

TERISA (Type 2 Diabetes Evaluation of Ranolazine in Subjects with Chronic Stable Angina): a randomised, double-blind, international multicentre trial of ranolazine versus placebo in 949 patients with diabetes, coronary artery disease and stable angina treated with 1–2 antianginals. After a 4-week placebo run-in, patients were randomised to 8 weeks of double-blind ranolazine (target dose 1000 mg bd) or placebo. Anginal episodes and nitroglycerin use were recorded daily. Primary outcome was the average weekly number of anginal episodes over the last 6 weeks of the study.

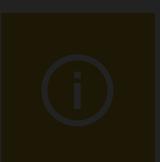
Ranexa®'s recommended initial dose is 375 mg twice daily. After 2-4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily.

#### References:

- **1.** Muhlestein JB *et al. Drugs R D* 2013;13:207–213. **2.** Chaitman BR *et al J Am Coll Cardiol* 2004;43:1375–82. **3.** Chaitman BR *et al. JAMA* 2004;291:309–16. **4.** Alexopoulus D *et al. Int J Cardiol* 2016;205:111-116. **5.** Stone PH *et al. J Am Coll Cardiol* 2006;48(3):566–75. **6.** Wilson SR *et al. J Am Coll Cardiol* 2009;53:1510–6. **7.** Diedrichs H *et al. J Clin Exp Cardiol* 2015;6(12):16. **8.** Hasenfuss G, Maier LS. *Clin Res Cardiol* 2008;97:222–26. **9.** Monomax XL (Isosorbide mononitrate) 60 mg Prolonged Release Tablets. Summary of Product Characteristics, January 2017. **10.** Diltiazem Hydrochloride Tablets 60 mg. Summary of Product Characteristics, April 2016.
- 11. Manolis AJ et al. Int J Cardiol 2016;220:445-53. 12. Kosiborod M et al. J Am Coll Cardiol 2013 May 21;61(20):2038-45.
- 13. Ambrosio G et al. Diab Vasc Dis Res 2016;13(2):98-112. 14. Ranexa® Summary of Product Characteristics, July 2014.

Ranolazine beta-block











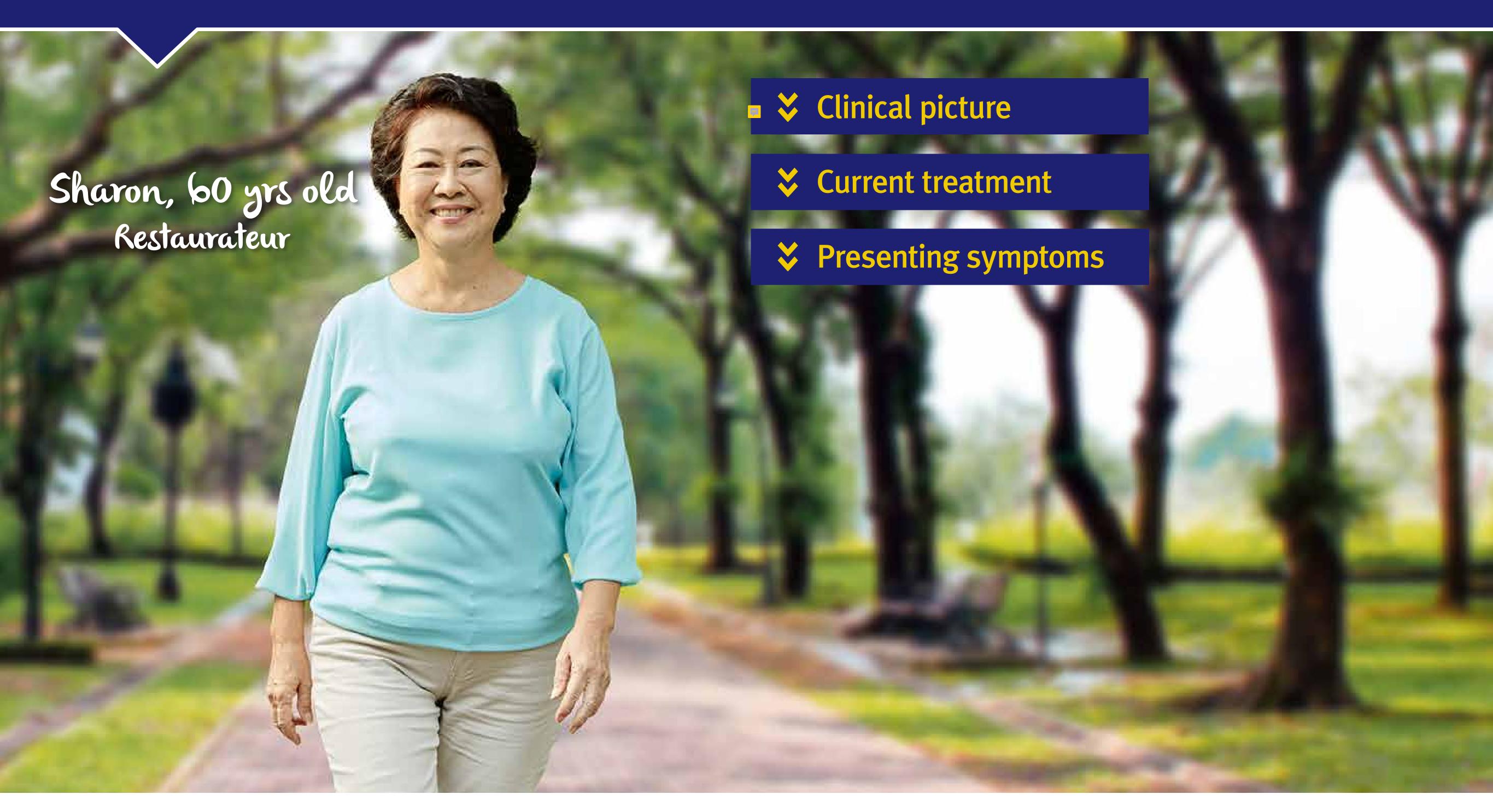
Sharon started the day with chest pain. Again.

Is it time to add-on Ranexa®?





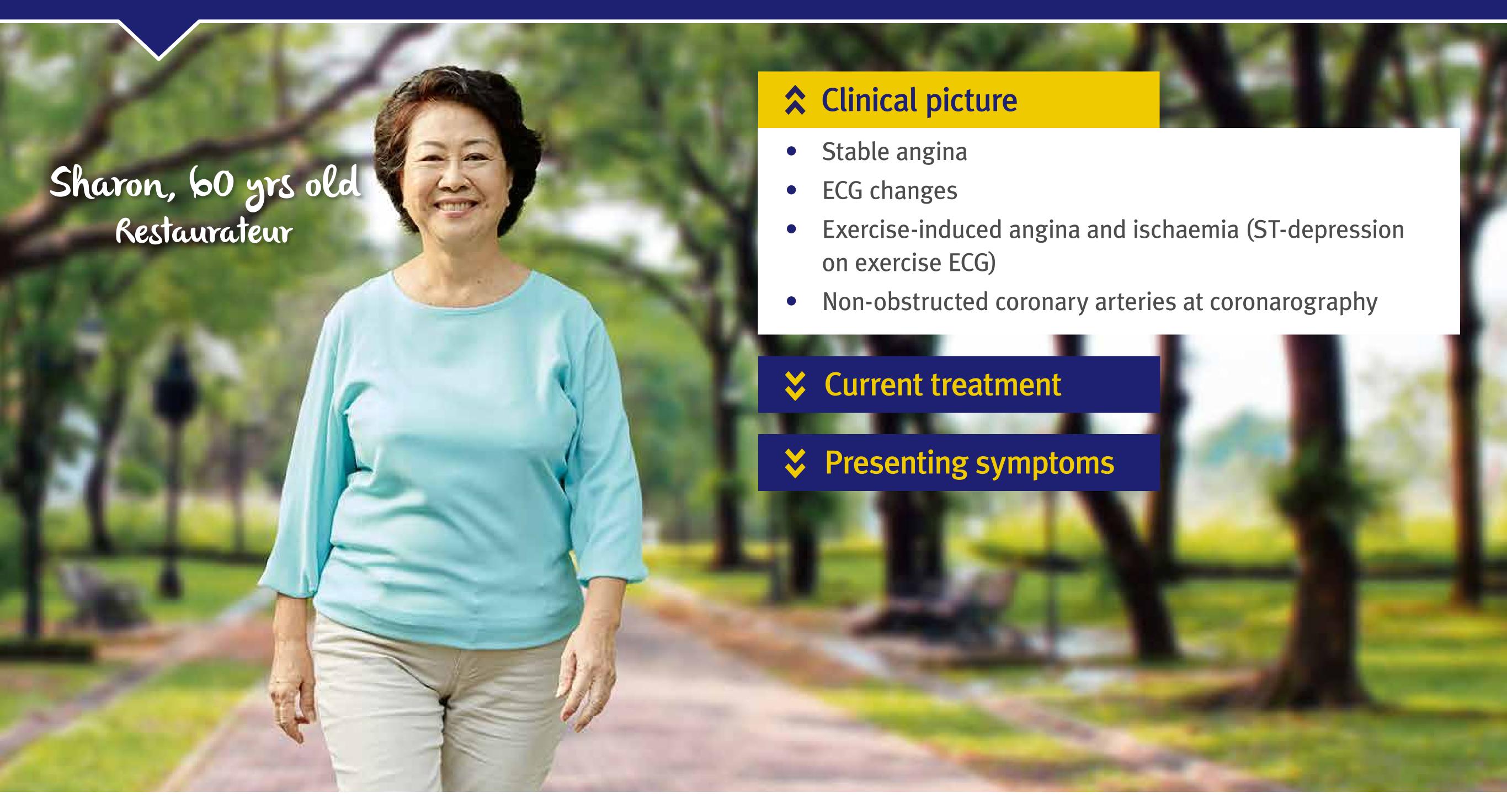








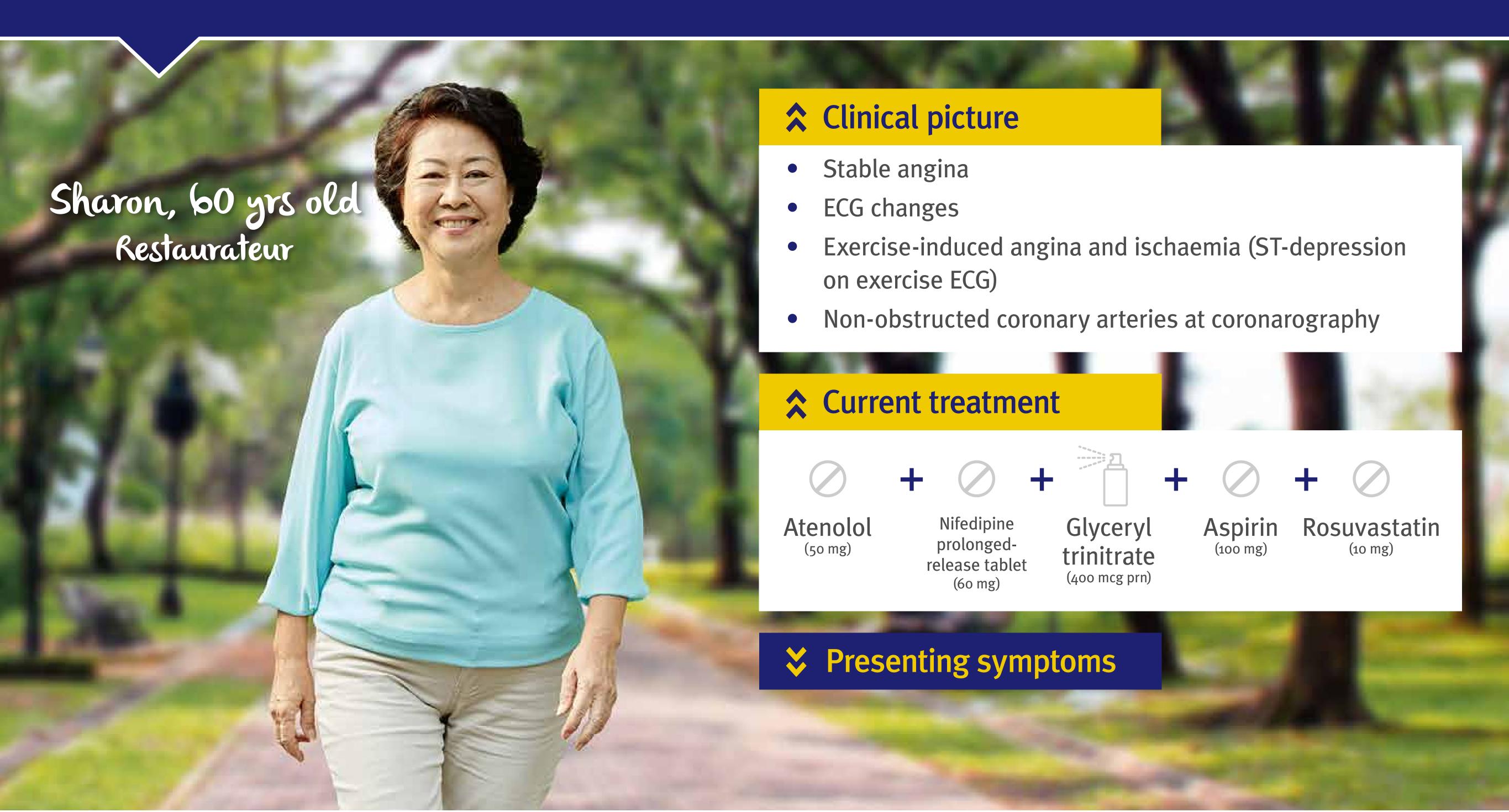








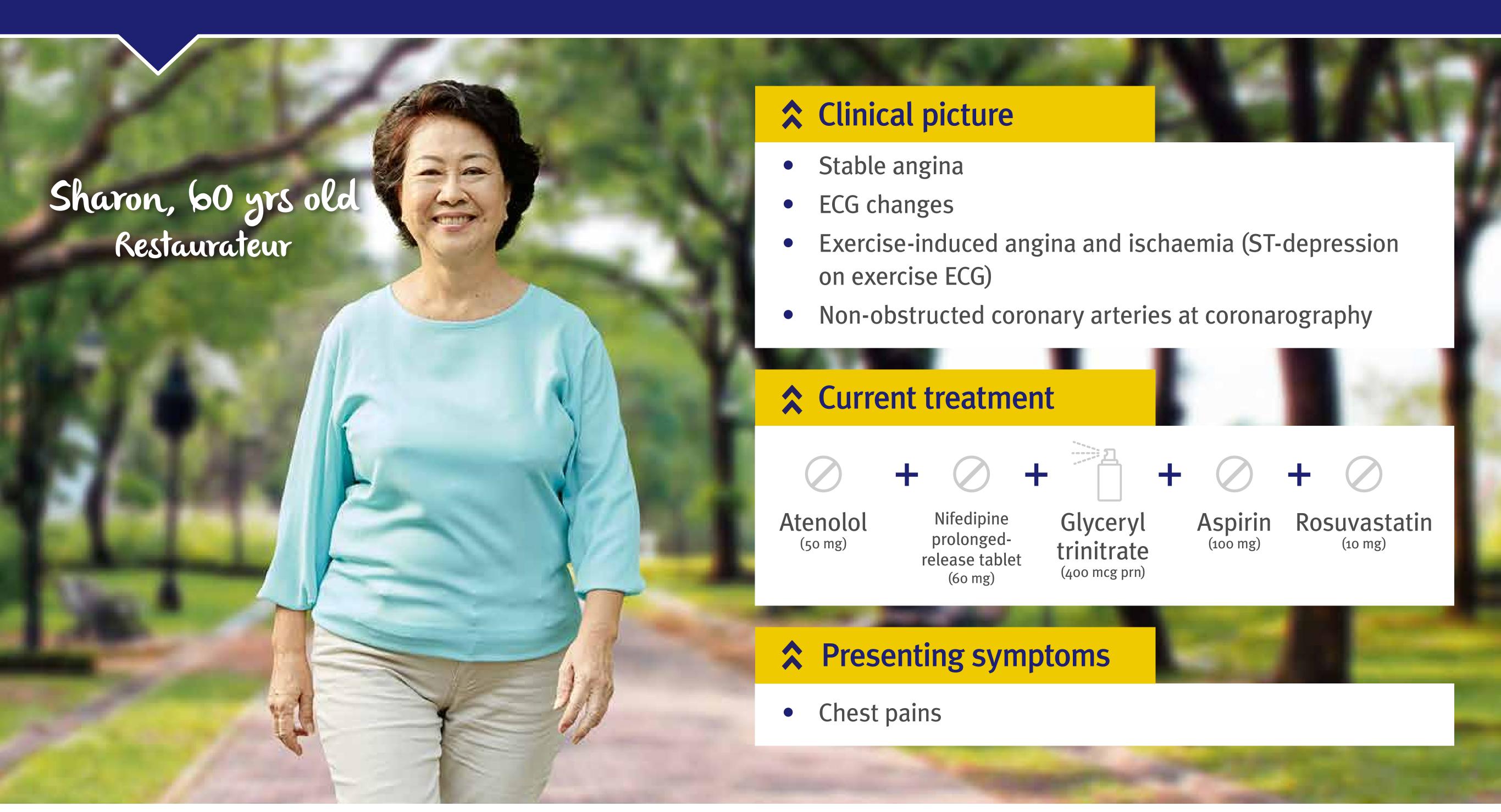










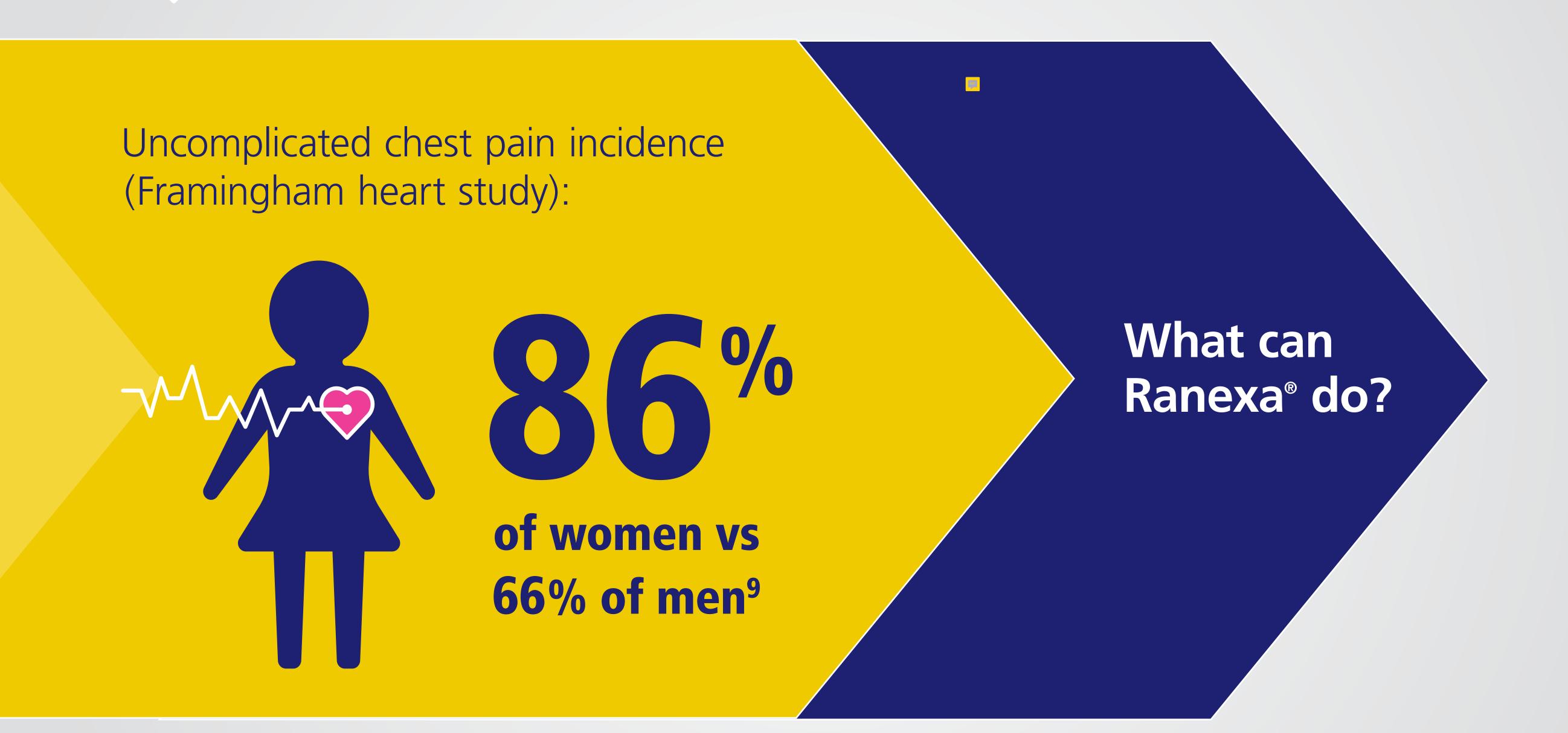








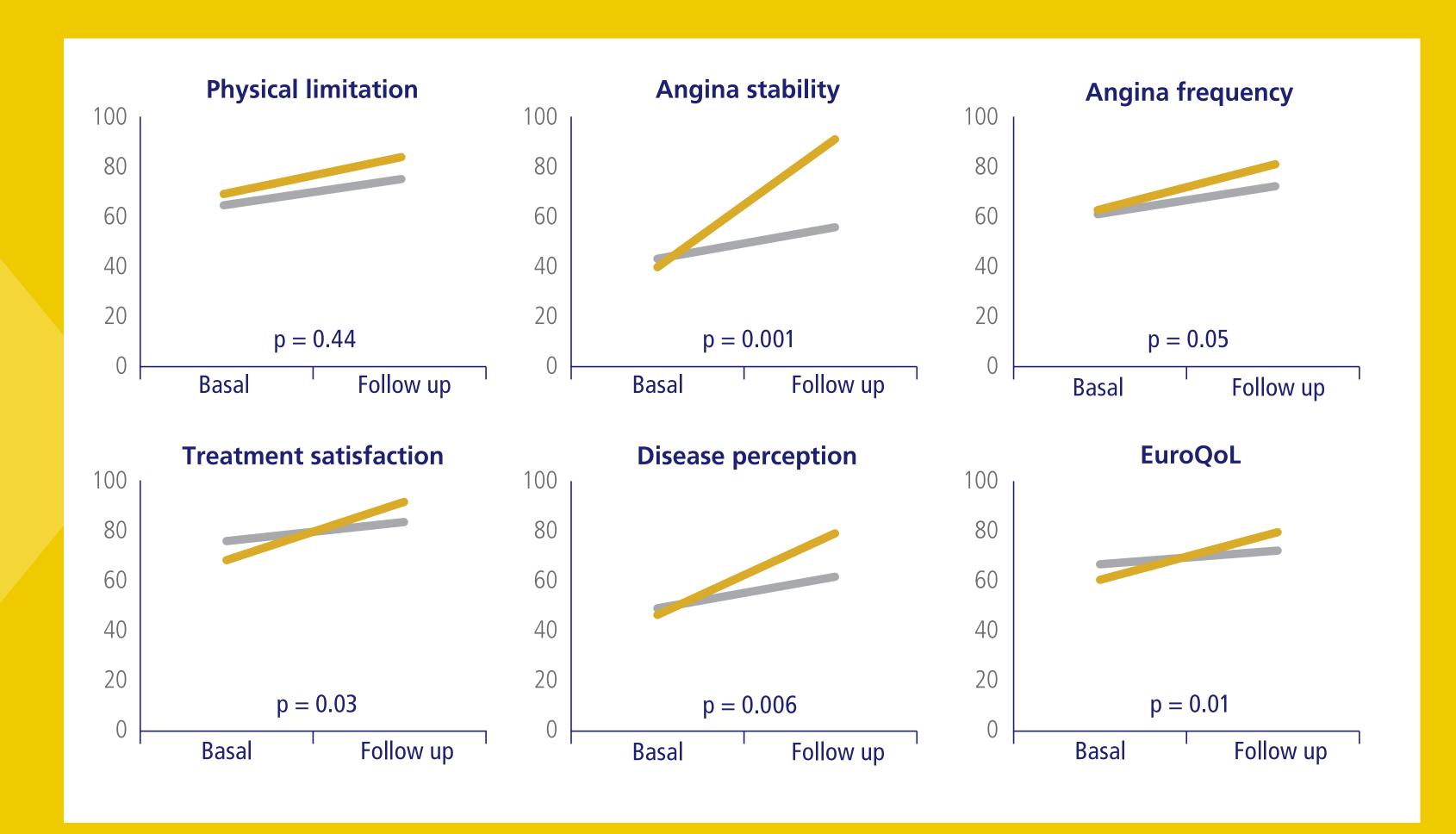
Sharon is not alone: women are more likely than men to present with chest pain uncomplicated by myocardial infarction and unstable angina<sup>9</sup>











Ranolazine and ivabradine both significantly improved angina symptoms and QoL vs baseline in patients (80% women) with effortinduced angina without obstructive coronary artery disease<sup>10</sup>

IMPROVED SAQ SCORES

Adapted from Villano et al. 2013.10 See 'i' button for study design information.







# Ranexa® is an effective add-on antianginal therapy for women<sup>10-12</sup>

Reduce angina, keep them active'





- Anginal stability
- Physical functioning
- Quality of life
   (Women with angina, evidence of ischaemia and no obstructive coronary artery disease)

Ranexa®'s recommended initial dose is 375 mg twice daily. After 2—4 weeks, the dose should be titrated to 500 mg twice daily, and according to the patient's response, further titrated to a recommended maximum dose of 750 mg twice daily.¹³

Adapted from Villano et al. 2013.10 See 'i' button for study design information







# Ranexa®: Help patients like Sharon reconnect with the life they love 1-7





In patients (80% women) with effort-induced angina without obstructive coronary artery disease, Ranexa® was shown to (vs baseline):



Improve angina symptoms<sup>10</sup>



Improve quality of life<sup>10</sup>



Significantly increase treatment satisfaction<sup>10</sup>

## Reduce angina, keep them active<sup>1-8</sup>

Ranolazine is indicated in adults as add-on therapy for the symptomatic treatment of patients with stable angina pectoris who are inadequately controlled or intolerant to first-line antianginal therapies (such as beta-blockers and/or calcium antagonists). The patient presented is not real but used only for illustrative purposes. For the treatment of any underlying disease, please do refer to the appropriate guidelines.





# Ranexa®: Help patients like Sharon reconnect with the life they love<sup>1-7</sup>





Study Design: Villano *et al.* 2013.<sup>10</sup>

n=46 patients with stable microvascular angina (effort angina, positive exercise stress test, normal coronary angiography, coronary flow reserve <2.5), who had symptoms inadequately controlled by standard anti-ischaemic therapy, were randomised to ivabradine (5 mg bd), ranolazine (375 mg bd), or placebo for 4 weeks. Primary endpoints were anginal status assessed by the Seattle Angina Questionnaire, items (physical limitation, angina frequency, angina stability, treatment satisfaction, disease perception) scored on a 0 to 100 scale (higher scores indicate better functional status); and quality of life (QoL) assessed by the validated EuroQoL visual analogue scale, from 0 (worst condition) to 100 (best condition).

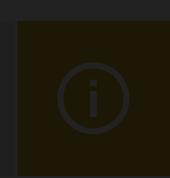
#### References:

**1.** Muhlestein JB *et al. Drugs R D* 2013;13:207–13. **2.** Chaitman BR *et al J Am Coll Cardiol* 2004;43:1375–82. **3.** Chaitman BR *et al. JAMA* 2004;291:309–16. **4.** Alexopoulus D *et al. Int J Cardiol* 2016;205:111-116. **5.** Stone PH *et al. J Am Coll Cardiol* 2006;48(3):566–75. **6.** Wilson SR *et al. J Am Coll Cardiol* 2009;53:1510–6. **7.** Diedrichs H *et al. J Clin Exp Cardiol* 2015;6(12):16. **8.** Hasenfuss G, Maier LS. *Clin Res Cardiol* 2008;97: 222–26. **9.** Lerner DJ, Kannel WB. *Am Heart J* 1986;111(2):383–90. **10.** Villano A *et al. Am J Cardiol* 2013;112:813. **11.** Mehta PK *et al. JACC Cardiovasc Imaging* 2011;4:514–22. **12.** Wenger NK *et al. Am J Cardiol* 2007;99:1118. **13.** Ranexa® Summary of Product Characteristics, July 2014.

Ranolazir

beta-blockers and/or calcium antagonists). The patient presented is not real but used only for illustrative purposes. For the treatment of any underlying disease, please do refer to the appropriate guidelines





LOCAL COUNTRIES TO INSERT API HERE, HIGHLIGHTING INTERACTIONS WITH DILTIAZEM.



A. Menarini Asia-Pacific Pte Ltd. 30 Pasir Panjang Road. #08-32 Mapletree Business City. Singapore 117440. RG/RAN/XX/2019/XXX





