Your Guide To General Practice 2016

MINIRIN®

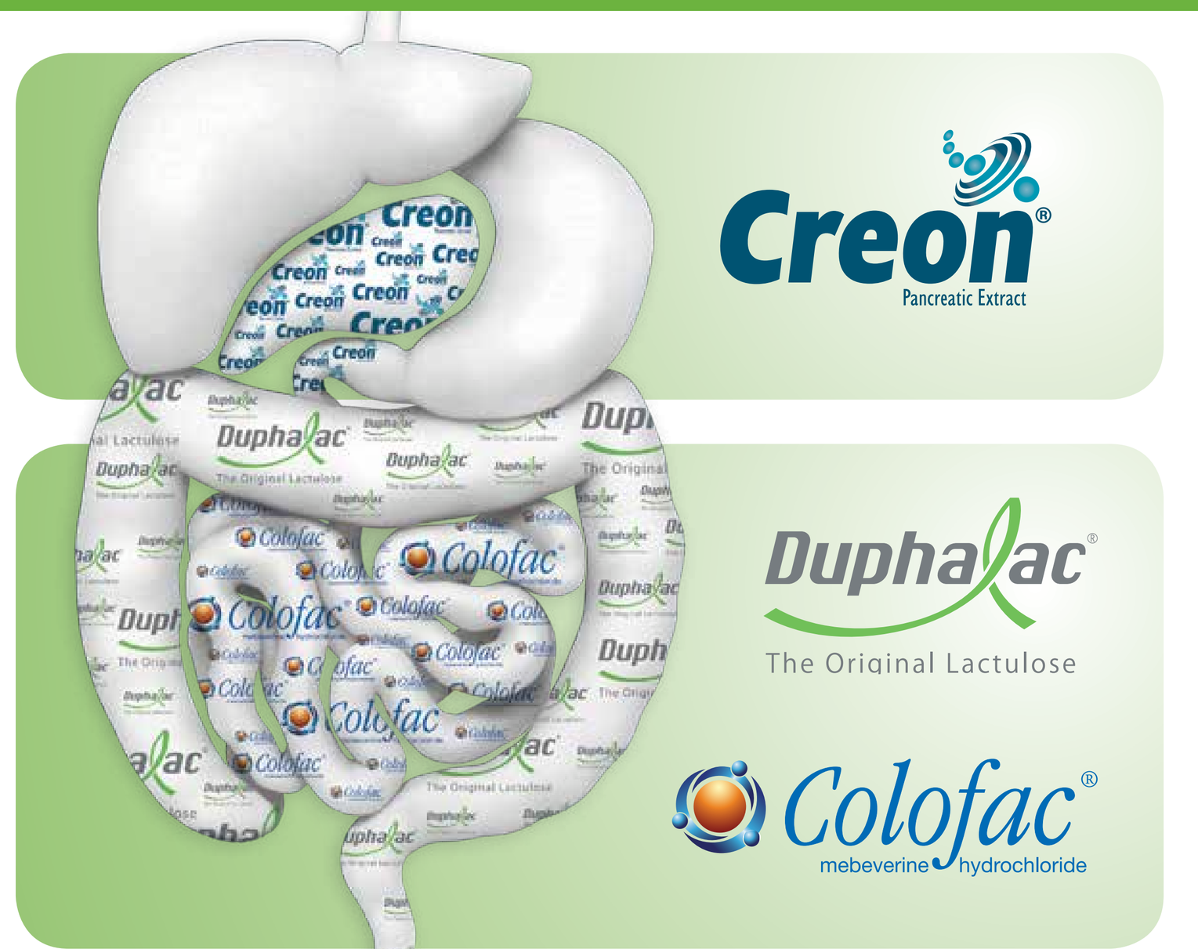
desmopressin/desmopressin acetate

For patients aged 6 years and over with monosymptomatic nocturnal enuresis (MNE) when alarm therapy fails or is inappropriate/contraindicated.[1,2,3]

Before prescribing review the Minimum Product Information and PBS status printed on the back of this poster.

References: 1. MINIRIN® Melt approved Product Information 2. MINIRIN® Tablets approved Product Information 3. www.pbs.gov.au

Products for Gastroenterology



PBS Information: Creon is listed on the PBS as Digestives, including Enzyme preparations (10 repeats). Restricted benefit: for cystic fibrosis patients under a GP Management Plan or Team Care Arrangement (21 repeats)

PBS Information: Colofac is not listed on the PBS. For RPBS Information refer to the PBS Schedule

Please review Product Information before prescribing.

For a copy of the Product Information or any further information call Mylan EPD on 1800 314 527

Call 1800 PFIZER (1800 734 937) to order PRISTIQ® starter packs, patient resources including patient initiation kits and understanding depression booklets.

PBS INFORMATION: Restricted benefit. Treatment of major depressive disorder.

BEFORE PRESCRIBING, PLEASE REVIEW PRODUCT INFORMATION AVAILABLE FROM PFIZER AUSTRALIA PTY LTD.

PRISTIQ® (desvenlafaxine succinate, 50 mg, 100 mg) Extended Release. Indications: Major depressive disorder including prevention of relapse. **Contraindications:** Concomitant use of monoamine oxidase inhibitors (MAOIs), hypersensitivity to desvenlafaxine, venlafaxine or excipients. **Precautions:** Clinical worsening and suicide risk, mania/hypomania, serotonin syndrome or neuroleptic malignant syndrome-like reactions, narrow angle glaucoma, co-administration of venlafaxine, hypertension, cardiovascular/cerebrovascular disease, seizures, discontinuation effects, abnormal bleeding, hyponatraemia and/or Syndrome of Inappropriate Antidiuretic Hormone Secretion, renal impairment, increase in serum cholesterol and lipids, pregnancy and lactation, patients <18 years. See PI for details. **Interactions with Other Medicines:** Serotonergic agents (including MAOIs), CNS-active drugs such as antipsychotics and dopamine antagonists, CYP3A4 inhibitors, drugs metabolised by CYP2D6 or CYP3A4, drugs affecting coagulation. See PI for details. **Adverse Effects: Very Common:** Nausea, dry mouth, constipation, fatigue, dizziness, headache, somnolence, insomnia, hyperhidrosis. **Common:** Palpitations, tachycardia, tinnitus, vertigo, vision blurred, mydriasis, diarrhoea, vomiting, chills, asthenia, feeling jittery, irritability, weight increased/decreased, blood pressure increased, blood cholesterol increased, liver function test abnormal, decreased appetite, musculoskeletal stiffness, tremor, paraesthesia, dysgeusia, attention disturbance, withdrawal syndrome, anxiety, abnormal dreams, nervousness, libido decreased, anorgasmia, abnormal orgasm, urinary hesitation, erectile dysfunction, ejaculation delayed, ejaculation disorder, ejaculation failure, yawning, rash, hot flush and orthostatic hypotension. **Serious but Rare:** Hypersensitivity, syncope, convulsion, extrapyramidal disorder, dyskinesia, dystonia, serotonin syndrome, depersonalisation, hypomania, withdrawal syndrome, mania, hallucinations, angioedema and Stevens-Johnson syndrome. See PI for details. **Dosage and Administration:** 50 mg once daily. The maximum dose should not exceed 200 mg once daily. Taper dose when discontinuing. See PI for details. V10116

References: 1. PRISTIQ® Product Information. 2. Psychotropic Expert Group. *Therapeutic Guidelines: Psychotropic.* Version 7. Melbourne: Therapeutic Guidelines Limited; 2013. 3. Soares CN *et al. J Clin Psychiatry.* 2009; 70: 1365-71. 4. Rickels K *et al. J Clin Psychopharmacol* 2010;30(1):18-24. 5. Septien-Velez L *et al. Int Clin Psychopharmacol* 2007;22:338-347. 6. Thase ME *et al. CNS Spectr* 2009;14(3):144-53. 7. Boyer P *et al. Int Clin Psychopharmacol* 2008;23(5):243-53. 8. Liebowitz MR *et al. Curr Med Res Opin* 2008;24(7):1877-90.

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AHHA's top policy priorities in 2016

To ensure that Australia's health system provides affordable, accessible quality care to all Australians, both now and into the future. AHHA calls on the health sector and governments to commit to an innovative patient-centred health system founded in well-resourced prevention and primary care, and integrated effectively with the hospital sector, universal healthcare principles and long term sustainable funding.

PBS Information: This product is listed on the PBS as a Section 100 Opiate Dependence item. Refer to PBS Schedule for full authority information.

References: 1. Blanch B *et al. Br J Clin Pharmacol* 2014;78:1159–66. 2. Roxburgh A *et al. Med J Aust* 2011;195:280–4. 3. United Nations Office on Drugs and Crime. *World Drug Report* (United Nations publication, Sales No. E.14.XI.7) 2014. 4. Roxburgh A and Burns L 2014. Accidental drug-induced deaths due to opioids in Australia, 2010. Sydney: National Drug and Alcohol Research Centre.

Depression and functional impairment

Depression is among the five most common chronic conditions seen by GPs, with a prevalence of approximately 17%.[1] The mainstay of treatment of all levels of depression should be counselling and cognitive behavioural therapies. These are particularly useful for mild to moderate depression (the main grades of depression in the community).

Current guidelines recommend antidepressants be considered for patients with moderate to severe major depressive disorder not responding to CBT. Antidepressants are also useful in patients with comorbid anxiety.[2] However, improvement in depressive symptoms in patients with major depressive disorder (MDD) does not always predict a return to normal functioning.[3]

Depressive symptoms can be related to impaired functioning across a number of domains, including the social, occupational and physical. For example, patients with depression can experience household strain, social irritability, economic problems, physical limitations, and lost productivity.[4]

Selecting an antidepressant

Antidepressants recommended first-line as initial treatment of MDD are the selective serotonin reuptake inhibitors (SSRIs) and serotonin and noradrenaline reuptake inhibitors (SNRIs) and mirtazapine.[5] When selecting an agent it is important to keep in mind that equally important as symptom remission is recovery from the significant functional impairment associated with depression. In terms of medical care and lost work productivity, the costs associated with functional impairment can be significant.[3]

There is a growing body of evidence that agents that act on noradrenergic neurotransmission, such as SNRIs, are more effective than those with pure serotonergic actions (eg, SSRIs). The noradrenergic action of SNRIs is not specifically associated with an antidepressant effect but with effects on behaviour and clusters of symptoms.[6]

Assessing functional improvement

A quick way to assess functional improvement after initiation of therapy is to use the patient-rated Sheehan Disability Scale (SDS) where patients are asked to rate on a scale of 1 to 10 how much their symptoms have disrupted work/schoolwork; social life/leisure activities; and family life/home responsibilities over the last week. In a recent pooled analysis of studies investigating desvenlafaxine, early functional improvement as measured by the SDS 2 weeks after therapy initiation, was predictive of later treatment success.[3]

Sheehan Disability Scale: **www.tinyurl.com/jdrh7vb**
beyondblue: **www.beyondblue.org.au**

Tips for managing antidepressant therapy

- Assess response after 2-4 weeks (onset of action may be within 1-2 weeks but full benefit may not occur for 4-6 weeks or longer in some cases).
- Continue at the initial treatment dose if patient responds well.
- If there is no initial response, increase the dose. If response at the higher dose is only partial after 2-4 weeks, increase the dose further if possible or if there is no response, switch to another agent. If, after 2-4 weeks at the further increased dose, there is still only partial response, and further dose increase is not possible, switch to a different drug.
- When an alternative antidepressant is indicated, it may be from the same or a different class.
- If severe or unacceptable side effects are experienced, switch to an agent with a lower propensity to cause those side effects.
- When discontinuing therapy, either because the course is complete or to switch to another agent, taper therapy slowly rather than abruptly stopping it.
- Continue therapy for at least 6 months and preferably 12 months.

1. Family Medicine Research Centre, University of Sydney. SAND abstract No. 212 from the BEACH program. Sydney: FMRC University of Sydney, 2014. ISSN 1444-9072. 2. NPS Newsletter. 2012;78: ISSN 1441 7421. 3. Soares CN, et al. CNS Spectr 2014;19:519-27. 4. McKnight PE, Kashdan TB. Clin Psychol Rev 2009;29:243-59. 5. Therapeutic guidelines: psychotropic. Version 7. Melbourne: Therapeutic Guidelines Limited; 2013. 6. Dell'Osso B, et al. CNS Neurosci Ther 2011;17:723-32.

A closer look at codeine

Codeine is used as an analgesic in both prescription and over-the-counter (OTC) preparations in Australia. It is often combined with paracetamol or ibuprofen, non-steroidal anti-inflammatory drug (NSAID) codeine-containing cough suppressants. The OTC products containing codeine are used for mild to moderate pain or cough suppression.[1]

The main reasons why codeine-containing preparations can be problematic when misused:[2]

- Codeine can be addictive.
- If codeine-containing medicines are taken in doses higher-than-recommended, more of the other active ingredients in the medicine are also being consumed, which can cause serious side effects.
- Codeine may be associated with side effects, such as nausea, constipation, dizziness, and, in some cases, respiratory depression.

Dependence and misuse

Although, codeine has a role to play in the management of pain relief, misuse of codeine-containing preparations may lead to the development of a physical and psychological dependence and has been associated in some cases with increased mortality.[3] Experts have often referred to codeine dependence as the "hidden addiction" because codeine is readily available with some restrictions.

Many people with codeine dependence may have a high prevalence of comorbid conditions, including pain, mental health, and substance abuse problems; thus it is clearly necessary to increase the capacity to identify those at high-risk and to respond more effectively to their needs.

Recognising codeine dependence

GPs have a key role to play in identifying people with codeine dependence. Patients showing any of the following behaviours may benefit from being evaluated and closely monitored for signs of opioid painkiller dependence:

- Frequent presentation for opioid-related scripts.
- Use of multiple opioid medications.
- Reports of opioid withdrawal symptoms such as:[4]
  - Cravings for codeine
  - Dilated pupils
  - Abdominal cramps, diarrhoea, nausea, vomiting
  - Lack of appetite
  - Runny nose and sneezing
  - Yawning and difficulty sleeping
  - Trembling, aching muscles and joints
  - Goosebumps, fever, chills, sweating
  - Restlessness, irritability, nervousness, depression

Treating dependence

There are a number of approaches to treating codeine-dependence. These include abstinence-focused programs, behavioural interventions, and self-directed intervention such as participation in Narcotics Anonymous. In situations where these measures are unsuccessful or are not appropriate, Medication Assisted Therapy or MAT (formerly known as opioid substitution therapy) is considered.[5]

MAT is indicated for opioid withdrawal and long-term maintenance. To manage withdrawal symptoms, reducing doses of an opioid substitute (eg, buprenorphine, methadone) are administered for approximately a week, followed by referral to counselling services.[5] Relapse following detoxification alone is common, thus most patients embark on abstinence-oriented treatment and substitution maintenance treatment after initial detoxification.[6]

If you suspect one of your patients may be dependent on codeine or other opioids, try and discuss your concerns and refer the customer to an addiction specialist for further assessment and appropriate treatment.

1. Crews KR, et al. Clin Pharmacol Ther 2014;95:376-82. 2. NPS Medicinewise. (Accessed November 30, 2015, at **www.tinyurl.com/zbhzrrv**). 3. Roxburgh A, et al. Med J Aust 2015;203:299 4. DrugInfo. Codeine Facts. (Accessed April 27, 2015, at **www.tinyurl.com/zjlfkkc**). 5. McDonough M. Aust Prescr 2013;36:83-7. 6. World Health Organization, United Nations Office on Drugs and Crime, UNAIDS. (Accessed at **www.tinyurl.com/hbnkyol**).

Fracture risk – beyond BMD

In addition to building healthy bones, preventing fractures is one of the keys to managing osteoporosis.[1] It is now clear that fracture risk reduction correlates with many factors, not just BMD. In other words, larger increases in BMD do not necessarily correlate to greater reduction in fracture risk.[2]

Assessing fracture risk

When assessing a patient's risk of minimal trauma fracture (MTF), the many factors that contribute to the risk need to be considered (Table). Keep in mind that having one major risk factor (eg, low BMD) does not necessarily predict overall fracture risk.[1]

Fracture risk calculators can help identify the degree of risk for individual patients. Among these, the Garvan Institute's Fracture Risk Calculator and WHO's FRAX are quick and easy to use, incorporating clinical risk factors to calculate fracture risk at 5 and 10 years (Garvan) and at 10 years (FRAX).[3]

FRAX includes more parameters than the Garvan tool. However, it does not use cumulative fracture and falls history. These highly relevant parameters are used in the Garvan calculator.[3] In a longitudinal Norwegian study designed to validate this calculator in more than 3000 men and women over the age of 60, incident MTFs were recorded over a 10-year period. Actual fracture incidence was compared with risk of fracture at 5 and 10 years, with close agreement being found between predicted and observed risk in men and women at all levels of risk apart from the highest predicted risk.

At this level, the Garvan calculator overestimated 5- and 10-year fracture risk.[4]

Note that these risk calculators are still being developed and should only be used as a guide to management.[3]

Table. Risk factors for osteoporotic fracture.[1]

Modifiable	Non-modifiable
Low BMD	Advanced age (>65 years)
Low body weight	Female gender
Oral glucocorticoid therapy	Early menopause (<45 years)
Increased risk of falls	Amenorrhea (>6-12 months)
Cigarette smoking	Primary hypogonadism
Regular excessive alcohol intake	Previous MTF
Sedentary lifestyle	Family history of MTF
Inadequate calcium intake	Slim build
Vitamin D deficiency	Asian or Caucasian race
High bone turnover	
Other secondary causes of osteoporosis (eg, rheumatoid artritis, etc)	

1. NPS MedicineWise News. (Accessed March 10, 2016, at **www.tinyurl.com/h4etryy**). 2. Divittorio G, et al. Pharmacotherapy 2006;26:104-14. 3. Croucher LC. Osteoblast 2015;Summer:1-8. 4. Ahmed LA, et al. PLoS One 2014;9:e107695.

Garvan calculator: **www.garvan.org.au/bone-fracture-risk**
FRAX: **www.shef.ac.uk/FRAX/tool.jsp**

Nocturnal enuresis (NE) – a manageable condition

Nocturnal enuresis (NE) is a common medical condition and can effect up to 20% of 5-year-olds and 10% of 10-year-olds.[1] Understanding its causes, and particularly that wetting the bed is not caused by other behavioural problems, is an essential part of dealing with a child's bedwetting problem.

NE can be classified into 2 types:[1]

- Monosymptomatic nocturnal enuresis (MNE) is when bedwetting occurs without any other urinary tract symptoms and is the most common type of enuresis.
- Non-monosymptomatic nocturnal enuresis (NMNE) is bedwetting in addition to other urinary symptoms, such as urgency, frequency, or daytime wetting.

The term primary nocturnal enuresis (PNE) refers to a child who has never been dry at night for more than six months, whereas secondary nocturnal enuresis refers to bedwetting in a child who has been dry previously for at least six months but has recommenced wetting the bed. Secondary nocturnal enuresis is more likely to be associated with a psychological or organic cause.[1]

The focus of this article is on the causes and treatment options for primary monosymptomatic nocturnal enuresis (PMNE).

Causes

There are three main causes of PMNE: difficulty rousing from sleep, an overactive bladder and overproduction of urine at night.[2] The latter (nocturnal polyuria) appears to cause bedwetting in nearly two-thirds of children with PMNE.[2] In this condition, increased urine production during the night occurs as a result of low levels of a substance called vasopressin. The brain normally produces vasopressin during the night to reduce the amount of urine produced and allow an uninterrupted night's sleep.[3]

Treatment

Treatment for PMNE is recommended when a child is 6 years of age or older and motivated to be dry. Understanding the causes of PMNE is an important first step to help determine which type of treatment is most likely to work.

The initial treatment for a child with PMNE is an enuresis alarm. This improves arousal from sleep, helping to alert and sensitise a child to respond to a full bladder when asleep.[2]

It's recommended that alarm treatment be continued for at least two to three months, with the recommendation being that a child uses the alarm until they achieve 14 consecutive dry nights.[4]

If alarm therapy doesn't work or can't be used, medications are usually the next step to treat the condition. Desmopressin is a medication that works like vasopressin, a substance naturally produced in the brain to reduce urine production during the night.[4] Desmopressin is indicated for PMNE in children from 6 years of age who are refractory to alarm therapy or in whom an alarm is contraindicated or inappropriate.[5,6] The recommended duration of therapy with desmopressin is for ongoing cycles of 3 months, with a treatment-free week in between cycles to assess the need for continued treatment.[3,4] Fluid intake should be restricted from 1 hour before until 8 hours after administration of desmopressin.

Oxybutynin is an anticholinergic medication and may be used if a child has an overactive bladder during sleep. Tricyclic antidepressants, such as imipramine, are also approved for the treatment of NE. However, they are less commonly recommended because of their potential side-effects.[7]

1. Caldwell PH, et al. Med J Aust 2005;182:190-5. 2. Moulden A. Aust Fam Physician 2002;31:161-3. 3. Lottmann HB, Alova I. Int J Clin Pract Suppl 2007:8-16. 4. Vande Walle J, et al. Eur J Pediatr 2012;171:971-83. 5. MINIRIN® Melt approved Product Information. Pymble, NSW: Ferring Pharmaceuticals Pty Ltd. 6. MINIRIN® Tablet approved Product Information. Pymble, NSW; Ferring Pharmaceuticals Pty Ltd. 7. Robson WL. N Engl J Med 2009;360:1429-36

NVAF research roundup

Approximately 90% of people aged 50 years and older in Australia with atrial fibrillation (AF) have non-valvular AF (NVAF). Of these more than half (~57%) are at high risk of stroke, ~30% are at moderate risk and ~13% at low risk.[1] Here are some highlights of recent research in stroke prevention in NVAF.

Genetic testing for warfarin sensitivity

Warfarin remains the most widely used anticoagulant despite being associated with serious bleeding complications.[2] Genetic testing could identify approximately 40% of patients with NVAF who are at increased risk of over-coagulation and bleeding in the first few months of warfarin therapy, according to a 2015 study. In this study of 14,348 patients with NVAF, 61.7% of warfarin users responded normally, 35.4% were sensitive responders, and 2.9% were highly sensitive to the therapy.[2]

Compared with normal responders, sensitive and highly sensitive responders were much more likely to be overcoagulated during the first 90 days of therapy with an increased risk of bleeding (P<0.0001 for both analyses).[2]

Dabigatran vs. warfarin

Pooled analysis from a 2016 observational study comparing clinical and safety findings of dabigatran vs. warfarin, found that although dabigatran 150 mg was not superior in preventing stroke (P=0.066), it had a significantly lower risk of intracranial bleeding (P<0.001).[3]

Compared with warfarin, dabigatran 150 mg was associated with a significantly greater risk of gastrointestinal (GI) bleeding (P=0.041), potentiated in patients ≥75 years vs. <75 years (P=0.020).[3]

Rivaroxaban and stroke prevention

XANTUS was the first large-scale observation study investigating the safety and efficacy of a non-Vitamin K antagonist (VKA) anticoagulant in the real-world setting. Average age among the 6784 patients treated with rivaroxaban was 71.5 years and mean treatment duration was 329 days.[4]

The overall number of major bleeding and thromboembolic events and all-cause deaths were low. A total of 11 patients (0.2%) had a haemorrhagic stroke and 32 (0.5%) an ischaemic stroke (see Table). Medication persistence is important in stroke prevention because discontinuation of anticoagulant therapy potentially leaves patients unprotected from stroke risk. In XANTUS, the persistence rate with rivaroxaban at 1 year was 80%. In XANTUS, the incidence of major GI bleeding was lower than seen in a Phase III trial of rivaroxaban (0.9, vs. 2 events/100 patient years, respectively).[4]

Table. XANTUS: key treatment-emergent thromboembolic/bleeding events.[4]

	Incidence, n (%)	Incidence per 100-pt years (95% CI)
All-cause death	118 (1.7)	1.9 (1.6-2.3)
Thromboembolic events*	108 (1.6)	1.8 (1.5-2.1)
Stroke/SE	51 (0.8)	0.8 (0.6-1.1)
Stroke	43 (0.6)	0.7 (0.5-0.9)
Primary haemorrhagic	11 (0.2)	
Primary ischaemic	32 (0.5)	
SE	8 (0.1)	0.1 (0.1-0.3)
Trans-ischaemic attack	32 (0.5)	0.5 (0.4-0.7)
Myocardial infarction	27 (0.4)	0.4 (0.3-0.6)
Major bleeding	128 (1.9)	2.1 (1.8-2.5)
Intercranial haemorrhage	26 (0.4)	0.4 (0.3-0.6)

*Stroke, systemic embolism (SE), trans-ischaemic attack, myocardial infarction

1. Baker IDI Heart & Diabetes Institute. (Accessed March 3, 2016, at **www.tinyurl.com/z42d82e**). 2. Mega JL, et al. Lancet 2015;385:2280-7. 3. Romanelli RJ, et al. Circ Cardiovasc Qual Outcomes 2016. 4. Camm AJ, et al. Eur Heart J 2015.

‡ PBS-eligible patients should be stabilised on a combination of LAMA (e.g. tiotropium, glycopyrronium, aclidinium or umeclidinium) and LABA (e.g. indacaterol, salmeterol, eformoterol, vilanterol or olodaterol).

COPD=chronic obstructive pulmonary disease; FEV_1=forced expiratory volume in 1 second; LAMA=long-acting muscarinic antagonist; LABA=long-acting β_2-agonist; TDI=transition dyspnoea index. ♦ ULTIBRO® BREEZHALER® 110/50 is indicated for maintenance bronchodilator treatment to relieve symptoms in patients with COPD[1]. ♦ ULTIBRO® BREEZHALER® 110/50 should not be used in asthma due to the absence of long-term outcome data in asthma with ULTIBRO® BREEZHALER® 110/50. A differential diagnosis should be made to exclude asthma or mixed airways disease before initiating ULTIBRO®[1]. ♦ ULTIBRO® BREEZHALER® 110/50 should not be used in combination with ONBREZ® BREEZHALER® (indacaterol) or SEEBRI® BREEZHALER® (glycopyrronium)[1]. ♦ ULTIBRO® BREEZHALER® 110/50 should not be used in combination with ONBREZ® BREEZHALER® (indacaterol) or SEEBRI® BREEZHALER® (glycopyrronium).[1] ULTIBRO® BREEZHALER® 110/50 should not be used in combination with other long-acting β_2-agonists such as eformoterol, salmeterol, olodaterol or vilanterol or long-acting muscarinic antagonists such as tiotropium, ipratropium, glycopyrronium, aclidinium and umeclidinium or their combination products.[1]

STREAMLINED AUTHORITY CODE 5763

PBS Information: Authority required (STREAMLINED). Refer to PBS Schedule for full authority information.

Before prescribing review the Minimum Product Information and PBS status printed on the back of this poster.

References: 1. ULTIBRO® BREEZHALER® 110/50. TGA-approved Product Information. Novartis Pharmaceuticals Pty Limited. 21 March 2014. 2. Bateman ED *et al. Eur Resp J* 2013;42:1484–94. 3. Wedzicha JA *et al. Lancet Respir Med* 2013;1:199–209. 4. Australian Register of Therapeutic Goods (ARTG). ULTIBRO® BREEZHALER® 110/50 indacaterol maleate/ glycopyrronium bromide (AUSTR 206449). 5. Pharmaceutical Benefits Scheme. Available at www.pbs.gov.au.

Spotlight on HRT

Since the 1960s hormone replacement therapy (HRT) has been the centre of much discussion and speculation. The media from time to time sensationalise risks of HRT but research suggests the benefits outweigh the risks in symptomatic women <60 or within 10 years of menopause.[1] GPs should feel confident in discussing the benefits and prescribing HRT for their patients.

CV effects—benefits early after menopause

The cardiovascular (CV) benefits of HRT have been extensively studied in randomised controlled trials (RCTs) and observational studies. The former have shown no or negative CV effects, frequently in women who start hormone therapy 5 to 20 years after menopause, while the latter, on the whole, have shown positive effects, probably as the result of HRT starting shortly after menopause. Meta-analyses where age has been considered have found that HRT in younger women is associated with a lower risk of coronary heart disease and reduces overall mortality.[2]

A recent RCT demonstrated that after 10 years of randomised treatment, women receiving HRT early after menopause (on average 7 months) had a significantly reduced risk of mortality, heart failure, or myocardial infarction, without any apparent increase in risk of stroke, cancer, or VTE.[2]

Administration—the latest developments

Early forms of HRT were designed to mirror a menstruation cycle by adding progestogen for 12 days a month, known as sequential therapy. This is still used in perimenopausal women and during the first year or two after menopause.[3]

Continuous HRT with progestogen and oestrogen avoids bleeding altogether and is thought to reduce the risk of endometrial cancer. Women may prefer to switch to this a year after menopause has occurred; however, it's not always easy to determine when menopause has finished.[3]

A new development tries to strike the balance by inducing a withdrawal bleeding every 3 months by adding progestogen to daily oestrogen for just 14 days every 13 weeks. This means the uterus is still protected.[3]

Another development is the lowering of the dose of oestrogen in combined HRT, aimed at reducing the side effects while maintaining symptom relief and bone strength.[3]

Before HRT is started[4]

- Consider HRT in perimenopausal or recently postmenopausal symptomatic women with low risk factors for CV or VTE disease.
- Consider nature and severity of symptoms and impact on function and quality of life.
- It is reasonable to advise younger, healthy postmenopausal women that HRT is unlikely to increase their risk of CVD.
- Consider therapy in women at high risk of fracture if there are no contraindications.

Note that HRT is contraindicated in patients who have had an oestrogen-related tumour in the past.

1. Womens Health Concern. (Accessed February 22, 2016, at **www.tinyurl.com/havnolv**). 2. Schierbeck LL, et al. BMJ 2012;345:e6409. 3. Women's Health Concern. (Accessed February 22, 2015, at **www.womens-health-concern.org**). 4. Royal Australian and New Zealand College of Obstetricians and Gynaecologists; 2012.

How much sleep do people really need?

Along with food, water, and oxygen, humans need sleep to survive. Given that we spend up to a third of our lives asleep, the overall state of our sleep health is an important indicator of our health and wellbeing.

The US National Sleep Foundation has updated their guidelines on how much sleep people need at each age (see Table). The guidelines, which feature minimum and maximum ranges for health as a "recommended" window, identify the rule-of-thumb amounts.

The US guidelines are recommendations only. Sleep needs differ between age groups. To assess how much sleep a person needs, it's essential to examine what lifestyle factors may affect the quality and quantity of their sleep as well as where they fall on the sleep needs spectrum.

People should still determine their own individual needs by paying attention to how they feel on different amounts of sleep. Questions you could ask patients:

- Are you productive, healthy, and happy on 7 hours of sleep? Or do you need 9 hours of quality sleep to get into high gear?
- Do you have health issues (eg, overweight, menopause)?
- Are you experiencing sleep problems?

If patients answer yes to the last question and if there does not appear to be any underlying medical cause of insomnia, you may suggest an over-the-counter sleep aid for a few nights. Use of these medications can often help get people back into their normal sleeping pattern.

Age group	Hours of sleep needed per day
Newborns (0-3 months)	14-17
Infants (4-11 months)	12-15
Toddlers (1-2 years)	11-14
Preschoolers (3-5)	10-13
School age children (6-13)	10-11
Teenagers (14-17)	8-10
Young adults (18-25)	7-9
Adults (26-64)	7-9
Older adults (65)	7-8

National Sleep Foundation.
www.sleepfoundation.org

National Sleep Foundation. (Accessed November 3, 2015, at **www.tinyurl.com/nuud8an**).

Role of ICS in COPD

Inhaled corticosteroids (ICS) remain the foundation of asthma therapy because of their ability to decrease airway inflammation and improve airflow limitation and symptoms.[1]

While eosinophilic inflammation is the hallmark of asthma, inflammation seen in COPD is associated with neutrophilic infiltration. Neutrophilic infiltration is not as responsive to steroids as eosinophilic inflammation.[1] Hence, guidelines recommend different use of inhaled steriods in chronic obstructive pulmonary disease (COPD).

Recommended use of ICS in COPD

According to the latest COPDX guidelines, ICS should only be used in the following settings:[2]

- FEV_1 <50% predicted and ≥2 exacerbations in previous 12 months in a fixed-dose combination with a long-acting beta-agonist (LABA)
- Moderate-to-severe COPD with frequent exacerbations (consider adding a long-acting muscarinic antagonist [LAMA] to fixed-dose LABA plus ICS)

These guidelines reflect the most recent recommendations of the Global Initiative for Chronic Obstructive Lung Disease (GOLD). However, evidence suggests that ICS are prescribed to the majority of patients with COPD (>70%) and many of these patients (around 45%) do not meet the prescribing criteria. In addition, ICS are prescribed to more than 50% of newly-diagnosed patients, usually in combination with a LABA.[3]

ICS-associated side effects

The inappropriate use of ICS potentially puts patients at risk for ICS-related adverse events. Long-term exposure to ICS can lead to local and systemic side effects. The most well-established problem associated with ICS is the risk of pneumonia, with one recent population-based cohort study reporting that discontinuation of ICS resulted in a 37% reduction in the risk of serious pneumonia.[4] The GOLD report cautions that ICS should not be prescribed long-term outside their indication because of the risk of pneumonia and potential for a slight increased risk of fractures.[5]

Patients with COPD tend to be older and frequently receive multiple medications for other comorbidities, making them more susceptible to side effects associated with ICS. Given these concerns, there is renewed interest in re-evaluating the role of ICS in COPD and, in appropriate patients prescribing alternate therapies.[3]

Hence, inhaled steroids should only be used after considering the risks and benefits depending on the unique patient type.

COPDX guidelines. **www.copdx.org.au**

1. Ejiofor S, Turner AM. Clin Med Insights Circ Respir Pulm Med 2013;7:17-34. 2. Lung Foundation of Australia.. (Accessed March 9, 2016, at **www.copdx.org.au**) 3. Kaplan AG. Int J Chron Obstruct Pulmon Dis 2015;10:2535-48. 4. Suissa S, et al. Chest 2015;148:1177-83. 5. GOLD (Accessed March 30, 2016, at **www.tinyurl.com/jdqme6p**).

Why go Low GI?

Research from around the world demonstrates that following a healthy low Glycemic Index (GI) diet helps people with diabetes improve their blood glucose management[1], helps people to lose body weight and body fat and keep it off[2,3] by feeling fuller for longer, and decreases the risk of developing type 2 diabetes[4,5] and cardiovascular disease[6,7,8].

It is a matter of swapping high GI carbohydrate foods with low GI alternatives within a food group or category, e.g. Jasmine rice for Doongara Low GI white or Doongara Low GI brown rice.

Simply look out for foods that carry the GI Symbol. It's your guide to healthier food choices and guarantees that a food is not only low GI but also meets strict nutrient criteria consistent with international dietary guidelines. For more information on the benefits of Low GI eating and simple swaps go to www.gisymbol.com

References: [1] Thomas et al. The Cochrane Library 2009, Issue 1; [2] Larsen et al. N Engl J med. 2010 25;363(22):2102-13; [3] Thomas et al. The Cochrane Library 2007, Issue 3; [4] Livesey et al. Am J Clin Nutr. 2013 Jan 30; [5] Barclay et al. Am J Clin Nutr. 2008; 87:627-37; [6] Goff et al. Nutrition, Metabolism & Cardiovascular Diseases, 2013; [7] Gögebakan et al. Circulation. 2011 Dec 20;124(25):2829-38; [8] Mirrahimi, A et al. J Am Heart Assoc. October 12, 2012

This wall chart is published by Setform Ltd with the support of The Australian Healthcare and Hospitals Association. Text approved by Dr. Morton Rawlin, a GP and educator.

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Wholegrain is the way to go

Processing grains makes them less nutritious. However, eating them with the bran and germ present delivers a hefty dose of heart protection. A recent meta-analysis found a high intake of wholegrain and foods offer greater protection against coronary heart disease (relative risk 0.787, (5% CI 0.743-0.833) than a low intake.[1] Eating up to 3 serves of wholegrain and high-fibre grain foods daily reduces the likelihood of developing heart disease, Type 2 diabetes, or obesity by 20% to 30%.[2]

Food companies love to feature "wholegrain" on packaging. But patients should be wary if managing blood glucose levels is crucial. Many products labelled "wholegrain" may have started with the grain's germ, endosperm and bran, but the end product has been milled, cooked, flaked, toasted, puffed and popped. Because they are highly refined, the majority of processed cereal products today, both the "white" version and the brown or "wholegrain" version, have high GI values.[2]

The introduction of specially-developed low-GI foods, such as white rice, that are staples of many people's diets, is hoped to have an impact on the diabetes epidemic and public health in general.

GI basics[3]

- GI ranks carbohydrates on a scale from 0 to 100 according to the extent to which they raise blood sugar levels after eating. (0-55 is considered low; 56-69 moderate; and >70 high).
- Foods with a high GI are rapidly digested and absorbed, resulting in marked fluctuations in blood sugar levels.
- Low GI foods, because they are digested and absorbed slowly, produce gradual rises in blood sugar and insulin levels and have proven health benefits.

The Glycaemic Index Foundation call the following wholegrain:[2]

Grain	Glycaemic Index
Barley, pearl	25
Bulgar	47
Buckwheat groats	48
Couscous, pearl or Isreali	53
Rice brown, Sunrice low GI rice	51
Rye kernels	39
Whole wheat kernels	52
Wild rice	57

1. Tang G, et al. Am J Cardiol 2015;115:625-9. 2. Glycaemic Index Foundation. (Accessed at **www.tinyurl.com/jjgzq4n**). 3. The University of Sydney. Glycaemic Index. (Accessed February 22, 2016, at **www.tinyurl.com/bqnhcme**).

osteoporosis australia

Direct your patients to Osteoporosis Australia

www.osteoporosis.org.au

national toll-free consumer line

1800 242 141

MINIRIN® can help control bedwetting while the condition resolves itself.[1,2] MINIRIN® is indicated for patients aged 6 years and over with monosymptomatic nocturnal enuresis in whom alarm therapy has failed or is inappropriate/contraindicated.[1,2] While MINIRIN® only acts on the nights it is administered, an initial duration of therapy of 2-6 weeks might be required to establish the level of efficacy and the optimal dose.[3] The initial dose of MINIRIN® Melt is 120μg or MINIRIN® Tablet 200μg, at bedtime. If there is no response or only a partial response over the first 2 weeks of treatment, consider titrating up to 240μg Melt or 2 x 200μg Tablets.[1,2,4] It is very important that fluid is restricted to a minimum from 1 hour before until 8 hours after MINIRIN® is administered.[1,2]

For PBS and Product Information, please refer to back of this poster.

References: 1. MINIRIN® Melt approved Product Information 2. MINIRIN® Tablets approved Product Information 3. Vande Walle J et al. Eur J Pediatr 2012;171:971-983 4. Lottmann H et al. Int J Clin Pract 2009;63:35-45.

Pancreatic exocrine insufficiency

Pancreatic exocrine insufficiency (PEI) can be caused by a number of conditions, including cystic fibrosis, chronic pancreatitis, acute pancreatitis, pancreatic cancer, and upper gastrointestinal surgery, including pancreatectomy and gastrectomy.[1,2]

When PEI is suspected, a pancreatic function test should be performed.[3] The most widely used non-invasive test is faecal elastase-1 (FE-1) level. It is reliable in patients with moderate to severe PEI. A single stool sample is used for analysis with concentrations of <200 mcg/g of stool indicating mild PEI, and <100mcg/g indicating severe PEI.

Use of pancreatic enzyme replacement therapy

Pancreatic enzyme replacement therapy (PERT) is the pharmacological mainstay of treatment of PEI. Newer preparations contain pancreatic extract encapsulated in microtablets or mini-microspheres with pH-sensitive enteric coating. The enzymes mix intragastrically with the chyme yet are protected from acid degradation by the enteric coating. The higher pH found in the duodenum dissolves the coating to release the enzymes at the appropriate site.[2]

The Australasian Pancreatic Club updated their guidelines on the management of PEI in late 2015. Motivating this update was the knowledge that some patients are not being prescribed enzymes when their use has clear clinical benefits (eg, reduction in pain and steatorrhea) and a desire to evaluate new evidence since the previous guidelines were published.[2]

Key recommendations for the use of PERT[2]

- Commence on 25,000 to 40,000 units lipase with each meal (adults)
- Titrate dosage up to 75,000 to 80,000 units lipase with each meal according to presence of malabsorption (adults)
- Trial acid suppressing agents in patients failing to respond to high dose PERT

1. Lindkvist B. World J Gastroenterol 2013;19:7258-66. 2. Australasian Pancreatic Club. (Accessed February 29, 2016, at **www.tinyurl.com/zz7xpvq**). 3. Lohr JM, et al. United European Gastroenterol J 2013;1:79-83

*vs. placebo (p<0.05). ^vs. placebo (p<0.001).

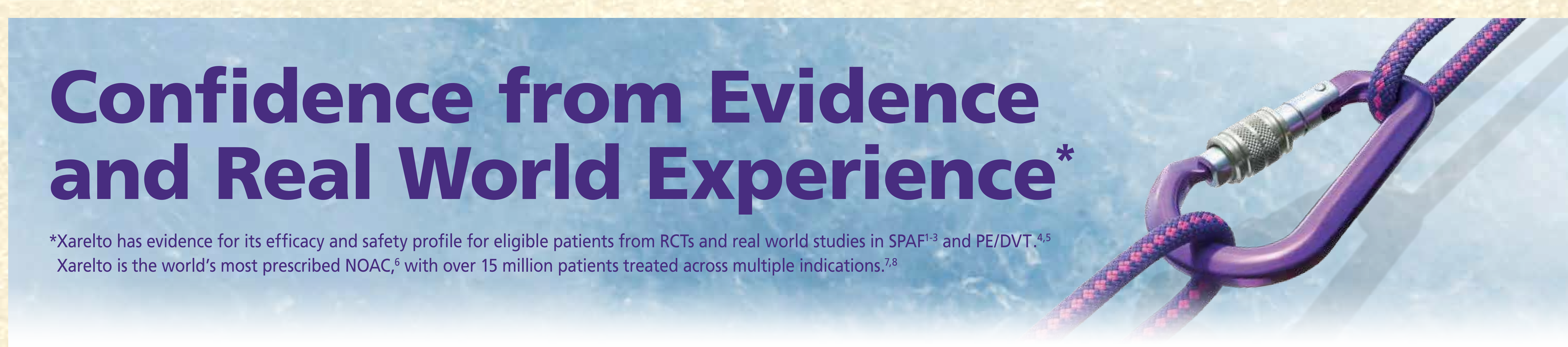
PBS Information: These products are not listed on the PBS.

BEFORE PRESCRIBING, PLEASE REFER TO THE PRODUCT INFORMATION AT THE BACK OF THE CHART AND AT WWW.PFIZER.COM.AU

PREMARIN® (conjugated oestrogens) 0.3 mg, 0.625 mg Tablets
Warning: Should not be used for the prevention of cardiovascular disease or dementia. The Women's Health Initiative (WHI) study reported increased risks of stroke and deep vein thrombosis during 7.1 years of oestrogen-alone therapy and increased risks of myocardial infarction, stroke, invasive breast cancer, pulmonary emboli, and deep vein thrombosis during 5.6 years of oestrogen plus progestogen therapy in postmenopausal women (50–79 years old). The Women's Health Initiative Memory Study (WHIMS), a substudy of WHI, reported an increased risk of developing probable dementia in postmenopausal women at 65 years or older during 4 years of treatment with conjugated oestrogens combined with medroxyprogesterone acetate or 5.2 years of treatment with conjugated oestrogen alone relative to placebo.

PREMIA® Continuous (conjugated oestrogens and medroxyprogesterone acetate), 0.625 mg/2.5 mg and 0.625 mg/5.0 mg Tablets
Warning: Should not be used for the prevention of cardiovascular disease or dementia. The Women's Health Initiative (WHI) study reported increased risks of stroke and deep vein thrombosis during 7.1 years of oestrogen-alone therapy and increased risks of myocardial infarction, stroke, invasive breast cancer, pulmonary emboli, and deep vein thrombosis in postmenopausal women (50–79 years old) during 5.6 years of oestrogen plus progestogen therapy. The Women's Health Initiative Memory Study (WHIMS), a substudy of WHI, reported an increased risk of developing probable dementia in postmenopausal women (65 years or older) during 4 years of treatment with conjugated oestrogens combined with medroxyprogesterone acetate or 5.2 years of treatment with conjugated oestrogen alone relative to placebo.

References: 1. Utian WU *et al. Fertil Steril* 2001;75:1065–79. 2. Lindsay R *et al. JAMA* 2002;287:2668–76.



RCT=randomised controlled trial; SPAF=stroke prevention in atrial fibrillation; PE=pulmonary embolism; DVT=deep vein thrombosis; NOAC=non-vitamin K antagonist oral anticoagulant. Calculation based on IMS Health MIDAS, Database: Monthly Sales June 2015.

PBS Information: Authority Required (STREAMLINED). Refer to PBS Schedule for full authority information.

BEFORE PRESCRIBING PLEASE REVIEW PBS AND PRODUCT INFORMATION ON THE BACK OF THIS CHART.

References: 1. Patel MR *et al. N Engl J Med* 2011;365:883–91. 2. Camm J *et al. Eur Heart J.* 2015 Sep 1. pii: ehv466. [Epub ahead of print]. 3. Tamayo S *et al. Clin Cardiol* 2015;38:63–8. 4. Prins MH *et al. Thrombosis J* 2013;11(1):21. 5. Beyer-Westendorf J *et al. Blood* 2014;124:955–62. 6. IMS Health MIDAS, Database: Monthly Sales June 2015. 7. Calculation based on IMS Health MIDAS, Database: Monthly Sales June 2015. 8. Xarelto® (rivaroxaban) Product Information, 9 November 2015.

PBS Information: Actonel EC. Restricted Benefit. Actonel EC Combi, Actonel EC Combi D. Authority Required (STREAMLINED). Refer to PBS schedule for full restricted and authority information.

BEFORE PRESCRIBING REVIEW THE PBS AND MINIMUM PRODUCT INFORMATION ON THE BACK OF THIS CHART

References: 1. Eastell R *et al. Osteoporos Int.* 2000; 11;4:331-337. 2. Roux C *et al. Curr Med Res Opin* 2004;20:433–39. 3. Harrington JT *et al. Calcif Tissue Int* 2004;74:129–35. 4. Blake GM and Fogelman I. *Postgrad Med J.* 2007; 83(982): 509–517. 5. Osteoporosis Australia. Bone density testing in general practice. Available at: http://www.osteoporosis.org.au/sites/default/files/files/Bone%20Density%20Testing%20in%20General%20Practice.pdf. Accessed on: 15.2.16.

ATTENTION GENERAL PRACTITIONERS

THIS GUIDE CARRIES INFORMATION ON PRESCRIPTION MEDICINES AND IS FOR HCP USE ONLY.

PLEASE DISPLAY IN AREAS NOT SEEN BY THE GENERAL PUBLIC.

PBS Information: Actonel EC. Restricted Benefit. Actonel EC Combi, Actonel EC Combi D. Authority Required (STREAMLINED). Refer to PBS schedule for full restricted and authority information.

BEFORE PRESCRIBING, PLEASE REVIEW FULL PRODUCT INFORMATION. FULL PRODUCT INFORMATION IS AVAILABLE FROM ACTAVIS PTY LTD OR BY CALLING 1800 678 302.

ACTONEL EC, ACTONEL EC COMBI & ACTONEL EC COMBI D Presentations: Actonel EC 35mg tablets contain 35mg of risedronate sodium. Actonel EC Combi: 1 Actonel EC 35mg tablet and 6 calcium carbonate 1250mg (equivalent to 500mg elemental calcium) tablets. Actonel EC Combi D: 1 Actonel 35mg tablet and 6 daily sachets containing 2500mg calcium carbonate and 22µg cholecalciferol, equivalent to 1000mg elemental calcium and 22µg (880IU) vitamin D3 respectively. **Indications:** Actonel EC 35mg tablet, Actonel EC Combi, Actonel EC Combi D: Treatment of osteoporosis, treatment of glucocorticoid-induced osteoporosis, preservation of bone mineral density in patients on long term corticosteroid therapy. **Contraindications:** Risedronate: Hypersensitivity to the drug or ingredients, hypocalcaemia, inability to stand or sit upright for at least 30 minutes. Calcium carbonate: Hypersensitivity to the drug or ingredients; hypercalcaemia; hypercalciuria; nephrolithiasis. Cholecalciferol: Hypercalcaemia; hypercalciuria; nephrolithiasis; hypervitaminosis D. **Precautions:** Risedronate: Hypocalcaemia; bone and mineral metabolism dysfunction; calcium and vitamin D if dietary intake is inadequate; severe renal impairment; oesophageal reaction, inflammatory bowel disease, osteonecrosis of the jaw; dental examination with preventive dentistry; avoid invasive dental procedures; atypical stress fractures; pregnancy (Category B3); certain medications (e.g. calcium supplements, antacids). Calcium carbonate and/or Cholecalciferol: Impairment of renal functions; monitoring of serum calcium levels and renal function; other drugs containing vitamin D; sarcoidosis; immobilised patients due to the increased risk of hypercalcaemia; disease associated with unregulated overproduction of calcitriol; malabsorption. **Adverse Effects:** Risedronate: Common: abdominal and musculoskeletal pain. Uncommon: gliositis, iritis, and duodenitis, abnormal liver function tests. Postmarketing: very rare: hypersensitivity and skin reactions, including angioedema, generalised rash and bullous skin reaction, uveitis and osteonecrosis of the jaw. See full PI. Calcium carbonate and/or Cholecalciferol: Uncommon: hypercalciuria, hypercalciuria. Rare: flatulence, constipation, nausea, abdominal pain, diarrhoea, pruritus, rash and erticaria. **Dosage and Administration:** Actonel EC 35mg tablets: take with a glass of plain water with or without food, once a week, taken on the same day each week. Actonel EC should be taken in an upright position. Patient should avoid lying down for 30 minutes. Tablets must be swallowed whole. Actonel EC Combi: Two component therapy consisting of 7 tablets in a blister, 1 Actonel EC 35mg tablet and 6 calcium 500mg tablets. The recommended dose in adults is 1 Actonel EC 35mg tablet on the first day, followed by, beginning on the next day, 1 calcium 500mg tablet daily for 6 days. This 7 day sequence is then repeated each week. Actonel EC Combi D: Intended of patients for whom the amount of calcium and cholecalciferol included is considered to provide adequate supplementation. The recommended dose is 1 Actonel EC 35mg tablet on the first day, followed by, beginning on the next day, 1 calcium carbonate/cholecalciferol sachet daily for 6 days. This 7 day sequence is then repeated each week starting with the Actonel EC 35mg tablet. Date of most recent amendment 6 February 2015. **Name and Address of the Sponsor:** Actavis Pty Ltd, 5/117 Harrington St, The Rocks, NSW 2000.

Allergan.

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Actonel® EC
risedronate sodium (enteric - coated)

PREMARIN® (conjugated oestrogen) 0.3 mg, 0.625 mg Tablets. Indications: Oestrogen deficiency states associated with the climacteric manifested by moderate-severe vasomotor symptoms or atrophic vaginitis, prevention of postmenopausal osteoporosis, primary ovarian failure, female hypogonadism. **Contraindications:** Known or suspected pregnancy, known, suspected or past breast cancer, oestrogen dependent neoplasia (e.g. breast or endometrial cancer), undiagnosed abnormal urogenital bleeding, active or history of venous or arterial thromboembolic disorders, severe uncontrolled hypertension, undiagnosed breast pathology, liver dysfunction or disease, thrombophilic disorders, hypersensitivity to oestrogen or any ingredient in Premarin tablets. **Precautions: Pregnancy Category D.** Not for use in pregnant or breastfeeding women or children. Use without a progestogen in non-hysterectomised women, may increase risk of endometrial hyperplasia/carcinoma, cardiovascular disorders (stroke, coronary heart disease, venous thromboembolism & other thrombotic disorders, elevated blood pressure, myocardial infarction), malignant neoplasms (breast, endometrium or ovarian cancer) dementia, uterine bleeding, fluid retention, exacerbation of other conditions, gallbladder disease, impaired liver function, angioedema, hypertriglyceridaemia, hyper/hypocalcaemia, hypothyroidism, visual abnormalities. See PI for details. **Interactions with other Medicines:** CYP3A4 inducers and inhibitors, antihypertensive agents, theophyllines, phenothiazines, corticosteroids, tricyclic antidepressants, diazepam, caffeine. See PI for details. **Adverse Effects:** ***Common:*** arthralgias, leg cramp, abnormal uterine bleeding, breast pain, tenderness, enlargement, discharge, leukorrhoea alopecia, weight changes, increased TGs. ***Others:*** See PI for details. **Dosage and Administration:** Usually 0.3mg, 0.625mg or 1.25mg daily. Tablets to be swallowed whole not divided, chewed or dissolved in mouth. Add progestogen in non-hysterectomised women. See PI for indication specific dosage. Before prescribing, please review Product Information available from Pfizer Australia Pty Ltd. ®Registered trademark of Pfizer Inc. V10914

Minimum Product Information

PRISTIQ® (desvenlafaxine succinate, 50 mg, 100 mg) Extended Release.

Indications: major depressive disorder including prevention of relapse.

Contraindications: Concomitant use of monoamine oxidase inhibitors (MAOIs), hypersensitivity to desvenlafaxine, venlafaxine or excipients.

Precautions: clinical worsening and suicide risk, mania/hypomania, serotonin syndrome or neuroleptic malignant syndrome-like reactions, narrow angle glaucoma, co-administration of venlafaxine, hypertension, cardiovascular/cerebrovascular disease, seizures, discontinuation effects, abnormal bleeding, hyponatraemia and/or Syndrome of Inappropriate Antidiuretic Hormone Secretion, renal impairment, increase in serum cholesterol and lipids, pregnancy and lactation, patients <18 years. See PI for details.

Interactions with other Medicines: serotonergic agents (including MAOIs), CNS-active drugs such as antipsychotics and dopamine antagonists, CYP3A4 inhibitors, drugs metabolised by CYP2D6 or CYP3A4, drugs affecting coagulation. See PI for details.

Adverse effects: *Very common*: nausea, dry mouth, constipation, fatigue, dizziness, headache, somnolence, insomnia, hyperhidrosis. *Common*: palpitations, tachycardia, tinnitus, vertigo, vision blurred, mydriasis, diarrhoea, vomiting, chills, asthenia, feeling jittery, irritability, weight increased/decreased, blood pressure increased, blood cholesterol increased, liver function test abnormal, decreased appetite, musculoskeletal stiffness, tremor, paraesthesia, dysgeusia, attention disturbance, withdrawal syndrome, anxiety, abnormal dreams, nervousness, libido decreased, anorgasmia, abnormal orgasm, urinary hesitation, erectile dysfunction, ejaculation delayed, ejaculation disorder, ejaculation failure, yawning, rash, hot flush and orthostatic hypotension. *Serious but rare*: hypersensitivity, syncope, convulsion, extrapyramidal disorder, dyskinesia, dystonia, serotonin syndrome, depersonalisation, hypomania, withdrawal syndrome, mania, hallucinations, angioedema and Stevens-Johnson syndrome. See PI for details.

Dosage and Administration: 50 mg once daily. The maximum dose should not exceed 200 mg once daily. Taper dose when discontinuing. See PI for details.

Before prescribing, please review Product Information available from Pfizer Australia Pty Ltd.

® Registered trademark.

V10116

PBS INFORMATION: Authority Required (STREAMLINED). Refer to PBS Schedule for full authority information.

PLEASE REVIEW THE FULL PRODUCT INFORMATION BEFORE PRESCRIBING. THE APPROVED PRODUCT INFORMATION IS AVAILABLE UPON REQUEST FROM BAYER AUSTRALIA LIMITED AND CAN BE ACCESSED AT WWW.BAYERRESOURCES.COM.AU/RESOURCES/UPLOADS/PI/FILE9466.PDF.

Minimum Product Information. XARELTO® (rivaroxaban) INDICATIONS: Prevention of venous thromboembolism (VTE) in adult patients who have undergone major orthopaedic surgery of the lower limbs (elective total hip replacement, treatment for up to 5 weeks; elective total knee replacement, treatment for up to 2 weeks); 10 mg tablet once daily. Prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation and at least one additional risk factor for stroke; 20 mg tablet once daily (15 mg for patients with CrCl 30-49 mL/min). Treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE) and for the prevention of recurrent DVT and pulmonary embolism (PE); 15 mg tablet twice daily for 3 weeks, followed by 20 mg tablet once daily. Xarelto 15 mg and 20 mg tablets should be taken with food. Tablets may be crushed and administered orally (mixed with water or applesauce) or given through gastric tubes. See full PI for details. **CONTRAINDICATIONS**: Hypersensitivity to rivaroxaban or to any of the excipients, clinically significant active bleeding, lesions at increased risk of clinically significant bleeding and patients with spontaneous impairment of haemostasis, significant hepatic disease which is associated with coagulopathy, dialysis or severe renal impairment with a creatinine clearance < 15 mL/min for Xarelto 10 mg or < 30 mL/min for Xarelto 15 mg and 20 mg, concomitant treatment with strong inhibitors of both CYP 3A4 and P-glycoprotein, Pregnancy, Lactation. **PRECAUTIONS**: Increased bleeding risk such as general haemorrhagic risk (see PI for list), bronchiectasis or history of pulmonary bleeding, renal impairment, hepatic impairment, surgery and interventions, spinal/epidural anaesthesia or puncture, patients with prosthetic valves (no clinical data), haemodynamically unstable PE patients or patients who require thrombolysis or pulmonary embolectomy, lactose intolerance. **INTERACTIONS WITH OTHER MEDICINES**: Care to be taken if concomitantly used with medicines affecting haemostasis; concomitant administration with NSAIDs, platelet aggregation inhibitors, other anticoagulants. **ADVERSE EFFECTS:** Please refer to PI for a complete list. Very common and common adverse reactions (≥ 1%) include post procedural haemorrhage, increased transaminases, gingival bleeding, constipation, diarrhoea, nausea, pyrexia, oedema peripheral, contusion, pain in extremity, headache, dizziness, haematuria, menorrhagia, epistaxis, haematoma, anaemia, rectal haemorrhage, fatigue and ecchymosis, haemoptysis, pruritus, conjunctival haemorrhage, abdominal pain, dyspepsia, gastrointestinal haemorrhage, syncope, hypotension, increased gamma-glutamyltransferase, tachycardia, vomiting, asthenia, wound haemorrhage, subcutaneous haematoma and rash. Less frequent but serious adverse reactions include: urticaria, hypersensitivity, hyperglycaemia, cerebral, cerebellar and intracranial haemorrhage, haemorrhagic transformation stroke, jaundice, eye haemorrhage, loss of consciousness, angioedema, allergic oedema, cholestasis, hepatitis and thrombocytopaenia. **DOSAGE AND ADMINISTRATION:** see INDICATIONS above. **BASED ON PI DATED:** 09 Nov 2015.

Bayer Australia Ltd, ABN 22 000 138 714. 875 Pacific Highway, Pymble NSW 2073.

PREMIA® Continuous (conjugated oestrogen and medroxyprogesterone acetate), 0.625 mg/2.5 mg and 0.625 mg/5.0 mg tablets. Indications: Oestrogen deficiency states associated with the climacteric in women with an intact uterus manifested by moderate-severe vasomotor symptoms, atrophic vaginitis and prevention of postmenopausal osteoporosis. **Contraindications:** known or suspected pregnancy and lactation, known, suspected or past breast cancer, oestrogen dependent neoplasia (e.g., breast or endometrial cancer), liver dysfunction or disease, undiagnosed abnormal urogenital tract bleeding, active or past venous or arterial thromboembolic disorders, thrombophilic disorders, undiagnosed breast pathology, severe uncontrolled hypertension, hypersensitivity to oestrogen, medroxyprogesterone acetate or any other ingredient in Premia tablets. See PI for details. **Precautions:** Not for use in pregnant or breastfeeding women or children. Cardiovascular disorders (stroke, coronary heart disease, venous thromboembolism, pulmonary embolism and other thrombotic disorders, elevated blood pressure, myocardial infarction), malignant neoplasms (breast, endometrium, ovarian cancer), increased risk of breast cancer, changes in lipoprotein metabolism, impaired glucose tolerance, dementia, uterine bleeding, gallbladder disease, impaired liver function, cholestatic jaundice, hypertriglyceridaemia, hyper/hypocalcaemia, hypothyroidism, visual abnormalities, angioedema, fluid retention, exacerbation of other conditions. See PI for details. **Interactions with other medicines:** CYP3A4 inducers and inhibitors, aminogluethimide, antihypertensive agents, theophyllines, phenothiazines, corticosteroids, tricyclic antidepressants, diazepam, caffeine. See PI for details. Adverse Effects: ***Very Common & Common***: breast pain, tenderness, enlargement, discharge, vaginitis, breakthrough bleeding, dysmenorrhoea, spotting, leucorrhoea, depression, weight changes, arthralgia, leg cramp. ***Post-marketing experience***: increased risk of ulcerative colitis and Crohn's disease ***Others***: See PI for details. Dosage and Administration: Continuous dosing, one tablet daily. See PI for details. Before prescribing, please review Product Information available from Pfizer Australia Pty Ltd. Registered trademark of Pfizer Inc. V11114

Restavit & Snuzaid

Restavit doxylamine succinate 25mg. Use: Insomnia, sleeplessness. **Contraindications:** Sensitivity to lactose, maize starch, ethanolamine antihistamines; pregnancy, lactation, children <12 years, especially premature infants and neonates. **Precautions**: Avoid alcohol; glaucoma; asthma, chronic bronchitis; GI, urinary obstruction including enlarged prostate; epilepsy; renal hepatic impairment; discontinue 72 hours before cutaneous histamine tests; elderly. **Adverse reactions:** Drowsiness; dizziness; psychomotor impairment; muscular weakness; dry mouth; GI upset. **Interactions:** MAOIs; atropine-like drugs; TCAs; CNS depressants including alcohol, sedatives, tranquillizers , opioid analgesics; ototoxic drugs e.g. aminoglycoside antibiotics. **Dosage:** 1-2 tablets 20 minutes before bedtime; maximum 10 consecutive days.

Snuzaid tablets diphenhydramine hydrochloride 50mg. Use Temporary relief of insomnia. **Contraindications:** Hypersensitivity to diphenhydramine or any other component; severe hepatic, renal or respiratory insufficiency; pregnancy, lactation,children <12 years, especially premature infants and neonates. **Precautions:** Alcohol and other medications which suppress the CNS; glaucoma; bladder neck obstruction, urinary retention, chronic bronchitis, stenosing peptic ulcer, pyloroduodenal obstruction, symptomatic prostatic hypertrophy, porphyria, asthma and epilepsy. **Adverse reactions:** Dizziness, disturbed coordination, lassitude, headache, muscular weakness and psychomotor impairment, dry nose, throat and mouth and thickened respiratory tract secretions. **Interactions:** MAOIs; atropine-like drugs; TCAs; CNS depressants including alcohol, sedatives, tranquillizers , opioid analgesics; ototoxic drugs e.g. aminoglycoside antibiotics. **Dosage:** 1 tablet 20 minutes before bed when necessary; maximum 10 consecutive nights. Do not give to children under 12 years of age.

♦ULTIBRO® BREEZHALER® 110/50 is indicated for maintenance bronchodilator treatment to relieve symptoms in patients with COPD. ♦ULTIBRO® BREEZHALER® 110/50 should not be used in asthma due to the absence of long-term outcome data in asthma with ULTIBRO® BREEZHALER® 110/50. A differential diagnosis should be made to exclude asthma or mixed airways disease before initiating ULTIBRO®. ♦ULTIBRO® BREEZHALER® 110/50 should not be used in combination with ONBREZ® BREEZHALER® (indacaterol) or SEEBRI® BREEZHALER® (glycopyrronium)† ♦ULTIBRO® BREEZHALER® 110/50 should not be used in combination with ONBREZ® BREEZHALER® (indacaterol) or SEEBRI® BREEZHALER® (glycopyrronium). ♦ULTIBRO® BREEZHALER® 110/50 should not be used in combination with other long-acting β_2-agonists such as eformoterol, salmeterol, olodaterol or vilanterol or long-acting muscarinic antagonists such as tiotropium, ipratropium, glycopyrronium, aclidinium and umeclidinium or their combination products.†

STREAMLINED AUTHORITY CODE 5763

PBS Information: Authority required (STREAMLINED). Refer to PBS Schedule for full authority information.

See approved Product Information before prescribing. Approved Product Information available on request. For the most up to date Product Information go to http://www.novartis.com.au/products_healthcare.html

ULTIBRO® BREEZHALER® (indacaterol maleate / glycopyrronium bromide) Indication: Once-daily maintenance bronchodilator treatment to relieve symptoms of patients with chronic obstructive pulmonary disease (COPD). **Dosage and administration:** Recommended dose: 110/50µg once daily using only the Breezhaler inhaler. Do not swallow the capsules. **Contraindications:** Hypersensitivity to any ingredients, galactose intolerance, severe lactose deficiency or glucose-galactose malabsorption. **Precautions:** ♦Asthma: should not be used in asthma, long-acting β_2-adrenergic agonists may increase the risk of asthma-related serious adverse events, including asthma-related deaths, when used for treatment of asthma. ♦Acute use: should not be used as rescue therapy ♦Hypersensitivity: if hypersensitivity reaction occurs, ULTIBRO BREEZHALER 110/50 should be discontinued immediately and alternative therapy instituted ♦Paradoxical bronchospasm: as with other inhalation therapy, administration may result in paradoxical bronchospasm that may be life-threatening. If paradoxical bronchospasm occurs, ULTIBRO BREEZHALER 110/50 should be discontinued immediately and alternative therapy instituted ♦ Anticholinergic effects related to glycopyrronium: use with caution in patients with narrow-angle glaucoma and urinary retention. Discontinue when signs and symptoms of acute narrow-angle glaucoma occur. Monitor for signs and symptoms of hyperplasia or bladder-neck obstruction. ♦Systemic effects of beta-agonists: as with other β_2-adrenergic agonists, ULTIBRO BREEZHALER 110/50 should be used with caution in patients with cardiovascular disorders (coronary artery disease, acute myocardial infarction, cardiac arrhythmias, hypertension); in patients with convulsive disorders or thyrotoxicosis; in patients who are unusually responsive to β_2-adrenergic agonists. ♦Patients with severe renal impairment: to be used only if expected benefit outweighs potential risk in patients with severe renal impairment including end-stage renal disease requiring dialysis. ♦Cardiovascular effects of beta-agonists: like other β_2-adrenergic agonists, indacaterol may produce a clinically significant cardiovascular effect in some patients as measured by increases in pulse rate, blood pressure, and/or symptoms, ECG changes. ♦Hypokalaemia: β_2-adrenergic agonists may produce significant hypokalaemia in some patients, which has the potential to produce adverse cardiovascular effects. In patients with severe COPD, hypokalemia may be potentiated by hypoxia and concomitant treatment which may increase the susceptibility to cardiac arrhythmias. ♦ Hyperglycemia with beta agonists: clinically notable changes in blood glucose (4.1%) at the recommended dose than on placebo (2.3%). ULTIBRO BREEZHALER 110/50 has not been investigated in patients for whom diabetes mellitus is not well controlled. ♦ Pregnancy (Category B3): Should be used during pregnancy only if the expected benefit justifies the potential risk to the fetus. ♦ Use in lactation: Should only be considered if the expected benefit to the woman is greater than any possible risk to the infant. ♦ Labor and delivery: Information related to indacaterol - Like other β_2-adrenergic agonist containing drugs, ULTIBRO BREEZHALER 110/50 may inhibit labor due to a relaxant effect on uterine smooth muscle. **Interactions:** No specific drug-drug interaction studies were conducted with ULTIBRO BREEZHALER110/50. Information on the potential for interactions is based on the potential for each of its two components. ♦ Should not be given together with beta-adrenergic blockers (including eye drops) unless there are compelling reasons for their use. ♦ Caution in patients being treated with monoamine oxidase inhibitors, tricyclic antidepressants, or drugs known to prolong the QT-interval. Drugs known to prolong the QT-interval may increase the risk of ventricular arrhythmia. ♦ Concomitant administration of other sympathomimetic agents may potentiate the undesirable effects. ♦ Concomitant treatment with methylxanthine derivatives, steroids, or non-potassium sparing diuretics may potentiate the possible hypokalemic effect of β_2-adrenergic agonists. ♦ Inhibition of the key contributors of indacaterol clearance, CYP3A4 and P-gp, has no impact on safety of therapeutic doses. ♦ Co-administration with other inhaled anticholinergic-containing drugs has not been studied and is therefore not recommended. ♦ No clinically relevant drug interaction is expected when glycopyrronium is co-administered with cimetidine or other inhibitors of the organic cation transport. **Side effects:** Uncommon (0.1 to 1%) and potentially serious: glaucoma. ♦ Very common: upper respiratory tract infection ♦ Common (1 to 10%): urinary tract infection, dizziness, cough, oropharyngeal pain including throat irritation, dyspepsia, dental caries, musculoskeletal pain, pyrexia, chest pain ♦ Uncommon (0.1 to 1%): palpitations, epistaxis, bladder obstruction including urinary retention. ♦ Not known: angioedema. ♦ Some serious adverse events, including hypersensitivity and ischemic heart disease, have been reported as ADRs for ULTIBRO BREEZHALER 110/50 (0.1% versus 0.0% for placebo and 0.4% versus 0.3% for placebo, respectively). ♦ Elderly patients only: urinary tract infection. ♦ Additional adverse reactions from individual components: Not known and potentially serious: Paradoxical bronchospasm. Not known: Gastroenteritis, pain in extremity. (ubl2102744n.doc) Novartis Pharmaceuticals Australia Pty Limited, ABN 18 004 244 160. 54 Waterloo Road, North Ryde NSW 2113. Ph (02) 9805 3555. ®Registered Trademark. ULT0906. March 2016.CRD2653

SUBOXONE® SUBLINGUAL FILM
buprenorphine + naloxone
MINIMUM PRODUCT INFORMATION

Indication: Treatment of opioid dependence within a framework of medical, social and psychological treatment.
Contraindications: Hypersensitivity to ingredients; children less than 16 years; severe respiratory or hepatic insufficiency; acute intoxication with alcohol or other CNS depressants; pregnancy; breastfeeding.
Precautions: Elderly or debilitated; hepatic, respiratory or renal impairment; hypothyroidism; adrenal cortical insufficiency; hypotension; prostatic hypertrophy, urethral stenosis; increased intracholedochal pressure; kyphoscoliosis; head injury or increased cerebrospinal pressure; CNS depression; toxic psychoses; delirium tremens; acute alcoholism; hepatitis; driving or operating machinery*; misuse, abuse or diversion*; respiratory depression*; allergic reaction, use in opioid-naïve patients*. May obscure diagnosis or clinical course of patients with acute abdominal conditions. Administration too soon after another opioid may cause withdrawal syndrome in opioid dependent patients. For details, see full Product Information.
Interactions: Alcohol*; benzodiazepines*; other CNS depressants*; other opioid analgesics*; naltrexone*; CYP3A4 inhibitors or inducers.
Adverse effects: Common: upper respiratory tract infection, vomiting, sinusitis, pharyngitis streptococcal, urinary tract infection, influenza, tooth abscess, glossodynia, hypoaesthesia oral, nausea, oral mucosal erythema, toothache, back pain, arthralgia, musculoskeletal pain, insomnia, stress, skin laceration, pain, headache, nephrolithiasis, dermatitis contact. For adverse events relating to Suboxone® Tablets or buprenorphine alone or observed during post-marketing surveillance see full Product Information.
Dosage and administration: Place under the tongue until dissolved. Avoid overlapping if taking more than one. Avoid food, drinks, chewing, swallowing or moving film until completely dissolved. Not designed to be split or broken*. **Induction** a) from short-acting opioids: start ≥ 6 hours after last opioid use or when early signs of withdrawal appear; 4 mg on day 1, with possible additional 4 mg depending on individual patient's requirement. b) from methadone: first reduce methadone dose to ≤ 30mg/day; first dose of Suboxone ≥ 24 hours after last methadone dose; start with 4mg when early signs of withdrawal appear. **Dose adjustment and maintenance**- increase dose progressively according to clinical effect up to 32 mg/day. **Less than daily dosing** - decrease to dosing every other day at twice the individually titrated daily dose, then to 3 times a week; do not exceed 32mg/day **Reducing and stopping**: gradual dose taper over 21 days must be part of a comprehensive treatment plan. For more details on dosage and administration, see full Product Information. Indivior Pty Ltd, 78 Waterloo Road, Macquarie Park, NSW 2113. Based on Product Information dated November 2015.

**Please note change(s) in Product Information*

Please review full Product Information before prescribing. Full Product Information is available at www.tga.gov.au/hp/information-medicines-pi.htm

PBS Information: This product is listed on the PBS as a Section 100 Opiate Dependence item.
Refer to PBS Schedule for full authority information.

PBS Information: MINIRIN® Tablets and Melt Authority Required (STREAMLINED)
for the treatment of Primary Nocturnal Enuresis. Refer to the PBS Schedule for full authority information.

Please review Product Information before prescribing.
Product Information is available at www.ferring.com.au/products.html

Minimum Product Information: ***MINIRIN® Tablets; MINIRIN® Melt:*** **INDICATIONS:** Primary nocturnal enuresis (PNE) from 6 years (refractory to or unsuitable for alarms); Cranial diabetes insipidus (CDI). **DOSAGE AND ADMINISTRATION:** PNE - Tablets: 200µg at bedtime; increase to 400µg if required. PNE - Melt (sublingual): 120µg at bedtime; increase to 240 µg if required. PNE - Tablets and Melt: Limit fluid intake from 1 h before until 8 h after administration. After 3 months of treatment, cease for at least one week to assess need for continued treatment. CDI - Tablets: Total daily dose normally 200µg to 1200µg. Suitable starting dose 100µg TID. Maintenance dose in majority of patients 100µg to 200µg TID. CDI - Melt (sublingual): Total daily dose normally 120µg to 720µg. Suitable starting dose 60µg TID. Maintenance dose in majority of patients 60µg to 120µg TID. **CONTRAINDICATIONS:** polydipsia; cardiac insufficiency; moderate/severe renal insufficiency; hyponatraemia; hypersensitivity to any ingredients; SIADH. **PRECAUTIONS:** water retention and/or hyponatraemia; other causes of urinary frequency; diabetes mellitus; renal impairment; concomitant treatment with diuretics, drugs inducing SIADH, NSAIDs or loperamide; cardiovascular disease; elderly; observe children closely; cystic fibrosis; acute intercurrent illness; increased intracranial pressure; galactose intolerance (MINIRIN Tablets). Consider risk of overhydration and cardiac failure. Do not administer to dehydrated or overhydrated patients. Commencing treatment in patients over 65 years of age not recommended. **ADVERSE REACTIONS:** Headache; abdominal pain; nausea/vomiting; hyponatraemia; allergic skin and general allergic reactions; visual abnormalities; emotional disturbances; convulsion. Please review Product Information before prescribing. PI available from Ferring Pharmaceuticals. #23684-V4A