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A Practitioner's Toolkit for Managing Menopause

Developed by the Women's Health Research Program in the Monash University School of Public Health and Preventive Medicine, 2023.

The supporting notes for the Practitioner's Toolkit for Managing Menopause are published, with free access, in Climacteric, the journal of the International Menopause Society.

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Endorsed by:

Australasian Menopause Society
Empowering menopausal women

BMS British Menopause Society

esa endocrine society of australia

International IMS Menopause Society

Jean Hailes for Women's Health

RANZCOG Excellence in Women's Health

Message from the research lead

I'm pleased to share this updated version of the Practitioner's Toolkit for Managing Menopause, the major update since the first iteration was launched in 2014.

The Toolkit, again published with open access in Climacteric, in which it was first published, meets the needs of clinicians by providing clear, evidence-based advice as to how to address and manage symptoms of, or concerns about menopause during clinical consultations.

It includes pragmatic algorithms to assess menopausal status, including that of women with a past hysterectomy or endometrial ablation, and users of hormonal contraception; along with treatment options and symptom management algorithms.

This updated version – relevant for clinicians around the world – builds on the 2014 publication, incorporating updated advice based on new knowledge around the physiological basis of menopause and new therapeutics, as well as expanding into guidance on issues of bone health. It also cuts through many years of misinformation and confusion, to provide clear evidence-based guidance on the appropriate use of menopause hormone therapies (MHT) and non-hormonal therapies for women with menopause-associated symptoms.

For many years the discomfort, poor health and reduced quality of life often caused by menopause has been viewed as an unavoidable consequence of ageing, one that lacked a sense of urgency with many in society and the medical community. It's been heartening to see a change in the seriousness with which menopause has been viewed over the last decade. This has been backed up by increased research funding, greater international collaboration, and louder women's voices sharing their experiences and demanding positive action in the media. This document can serve as a comprehensive guide for shared decision-making with patients, and thus provide patient-informed care.

I hope the Toolkit will help health practitioners around the world deliver informed care that genuinely responds to the needs of all the women who have or will inevitably experience menopause.

I'd like to thank the team of dedicated researchers who assisted in this update: Dr Sasha Taylor, Dr Chandima Hemachandra, Dr Karen Magraith, Professor Peter R Ebeling, Dr Fiona Jane, and Dr Rakibul Islam, and Professor Rodney Baber for his advice.

PROFESSOR SUSAN DAVIS AO

About Professor Davis AO

Professor Susan Davis AO is a leading endocrinologist-researcher, who heads the Women's Health Research Program within the School of Public Health and Preventive Medicine at Monash University, Australia. She has specific expertise in the role of sex hormones in women across the lifespan. She is a Fellow of the Australian Academy of Health and Medical Sciences, a co-founder of Jean Hailes for Women, a past President of the Australasian Menopause Society and of the International Menopause Society.

A Practitioner's Toolkit for Managing Menopause

A Woman# (40 years+) presents with:

Symptoms

- Irregular bleeding
- Vasomotor
  – Hot flushes
  – Night sweats
- Poor sleep
- Joint pain
- Anxiety/low mood
- Cognitive concerns
- Urogenital symptoms
  – Vaginal dryness/soreness
  – Bladder/urinary Sx
- Lost interest in sex
- Central weight gain

AND/OR

Concerns

- Osteoporosis
- Cardiovascular risk
- Dementia
- Diabetes
- Obesity

Is this Patient Pre/Peri/Postmenopausal?

Removal of both Ovaries

NO

YES → **Postmenopausal**

When was your last period?

- Less than 3 months ago, Regular bleeding → **Premenopausal**
- Less than 12 months ago, Irregular bleeding → **Perimenopausal**
- More than 12 months ago

Age over 58 years?

NO

YES → **Postmenopausal**

On systemic hormonal contraception or MHT?

NO

Hysterectomy, LNG-IUD or endometrial ablation?

NO → **Postmenopausal**

YES

- Aware of cycle → **Pre-menopausal**
- Hot flushes or Night sweats → **Peri/Post menopausal**
- Not aware of cycle ≥52 years → **Postmenopausal**

YES

Which one?

- **P-contraception***
- **COCP****
- **MHT** → **Postmenopausal**

Hot flushes/night sweats in pill free week?

NO → **Probably Premenopausal Needs trial off COCP for formal diagnosis**

YES → **Peri/Post menopausal**

assigned female at birth; *diagnosis of menopausal status requires detailed reproductive history; ** In some women an option is to cease the COCP and then review

What do you need to know?

Full assessment recommended for midlife women

Medical History

Relevant gynae facts:

- Bleeding pattern or LMP
- Past surgery eg hysterectomy/oophorectomy
- Current use of any exogenous hormones
- +/- contraceptive needs

Major medical illnesses – ask about:

- DVT/PE
- Breast cancer/endometrial cancer
- Thyroid disease
- Cardio/cerebrovascular disease including HT
- Osteoporosis
- Diabetes
- Depression/anxiety/postnatal depression
- Recurrent UTI's
- Liver disease

Family History:

- Cardio/cerebro vascular disease
- Osteoporosis/fractures
- Dementia
- Cancer

Smoking/alcohol use

Current medication including non prescription medications

Social history

Sexual wellbeing

Examination

- Height and weight
- Blood pressure
- Breast exam (not required if recent breast imaging/ breast checks)

Investigations for menopause diagnosis

≥ 45 years old

- Diagnosis symptom based; measure FSH and E only if atypical presentation

< 45 years old

- Measure FSH and E – Of no value in women on COCP
- **Prog/LH/AMH** levels of no diagnostic value

Midlife women general health assessment:

- Cervical screen test
- Mammogram (if available)
- Lipid profile
- FBG
- TSH
- Renal and liver function
- FBE/ferritin
- FOBT
- Vit D in at risk women

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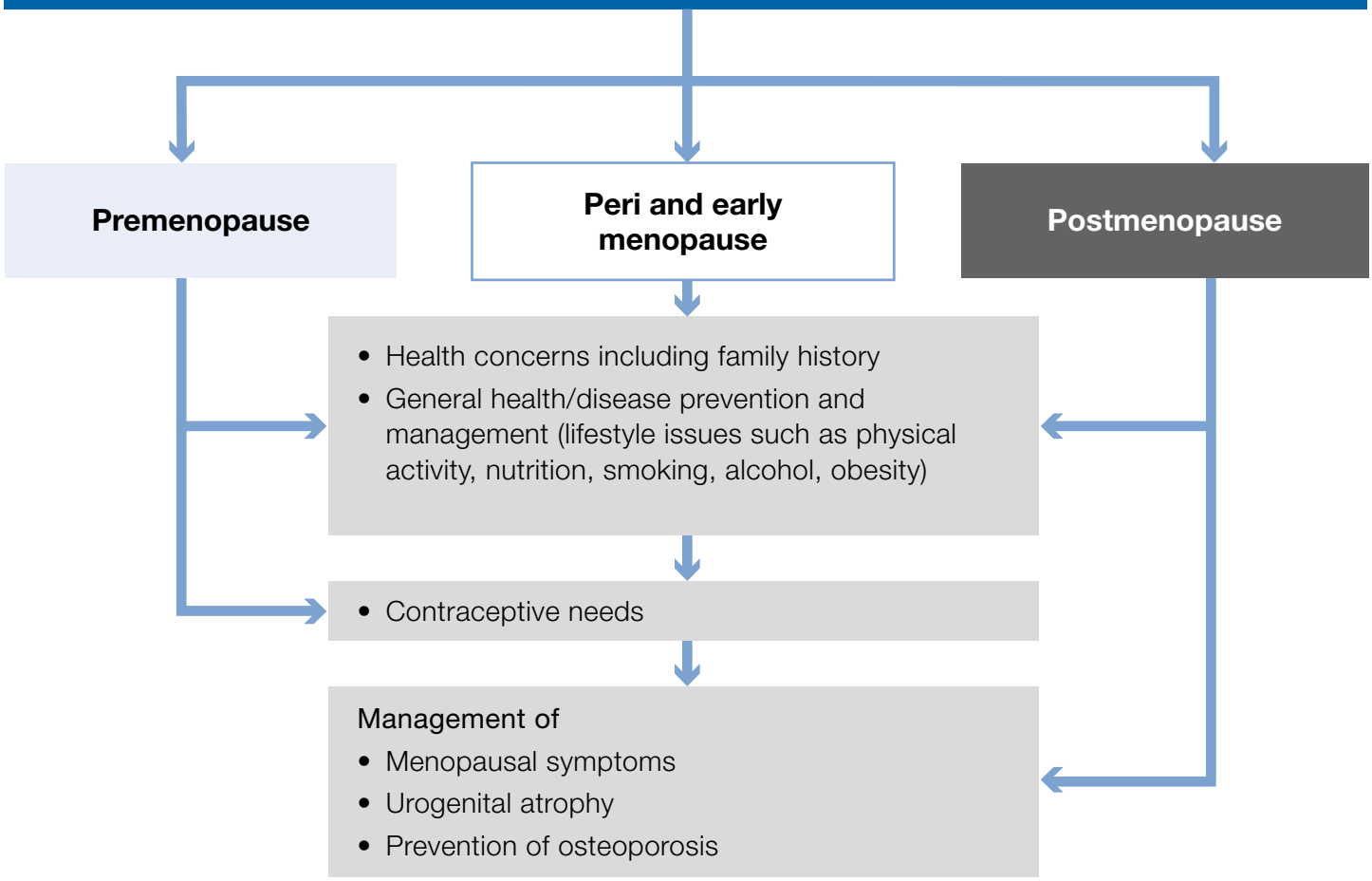
Patient care considerations

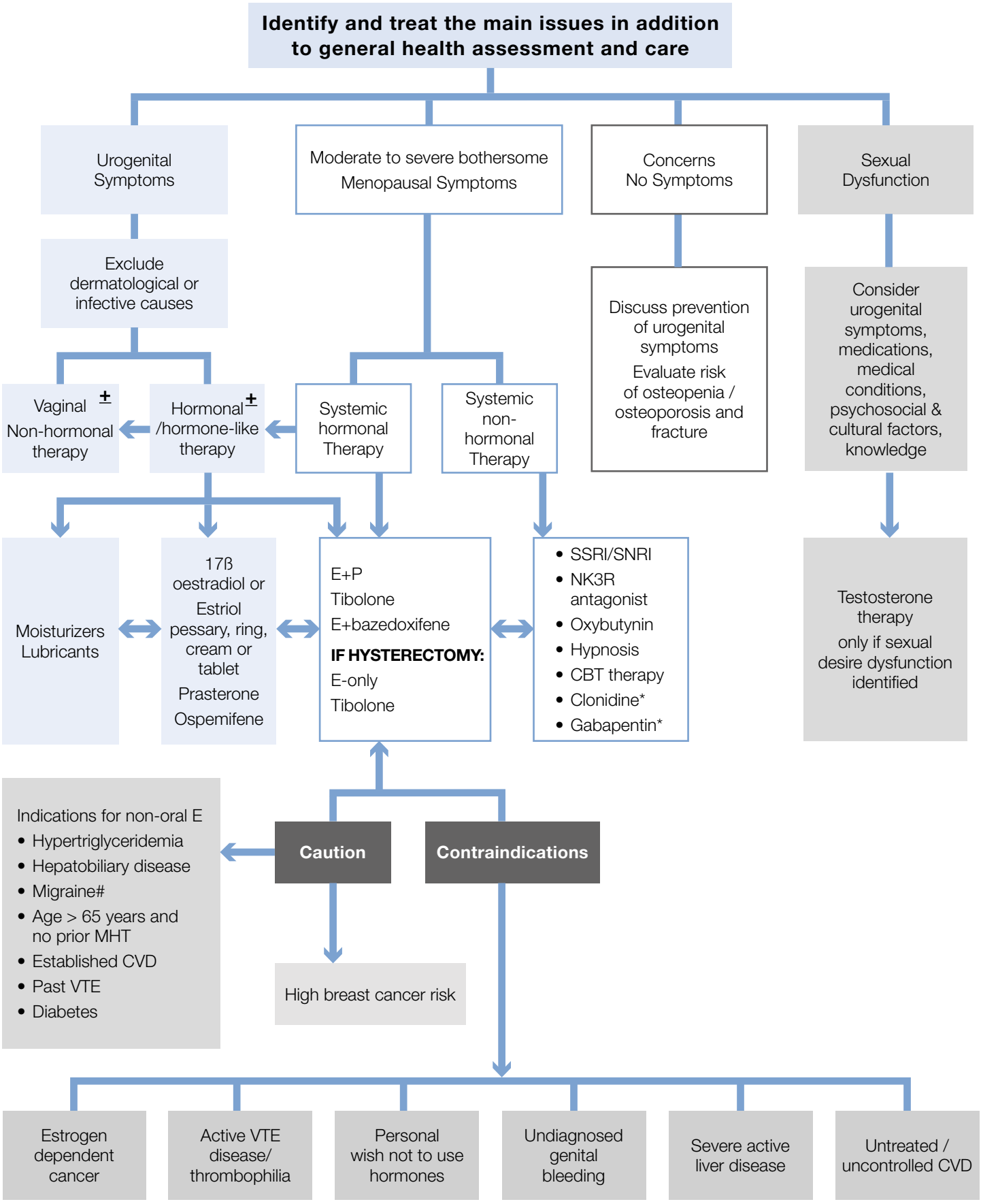


Management of Perimenopause

COCP	• Review contraindications to COCP • May control PMS/mastalgia/bleeding • Low dose EE and 17βE/estetrol COCP preferred
Continuous E and LNG-IUD	• Reduces/eliminates bleeding but not cyclical symptoms
Continuous E and cyclical P	• Irregular bleeding may occur • Cyclical symptoms may occur • Not contraceptive
Continuous E and cyclical 4mg drosperinone# / 75 mcg desogestrel OCP#	• Provides contraception • Amenorrhea or irregular bleeding may occur

#off-label use, # desogestrel may not give adequate endometrial protection.

Menopausal management



*Caution due to side effects at therapeutic doses

Migraine with aura requires early review to ensure no increase in migraine symptoms

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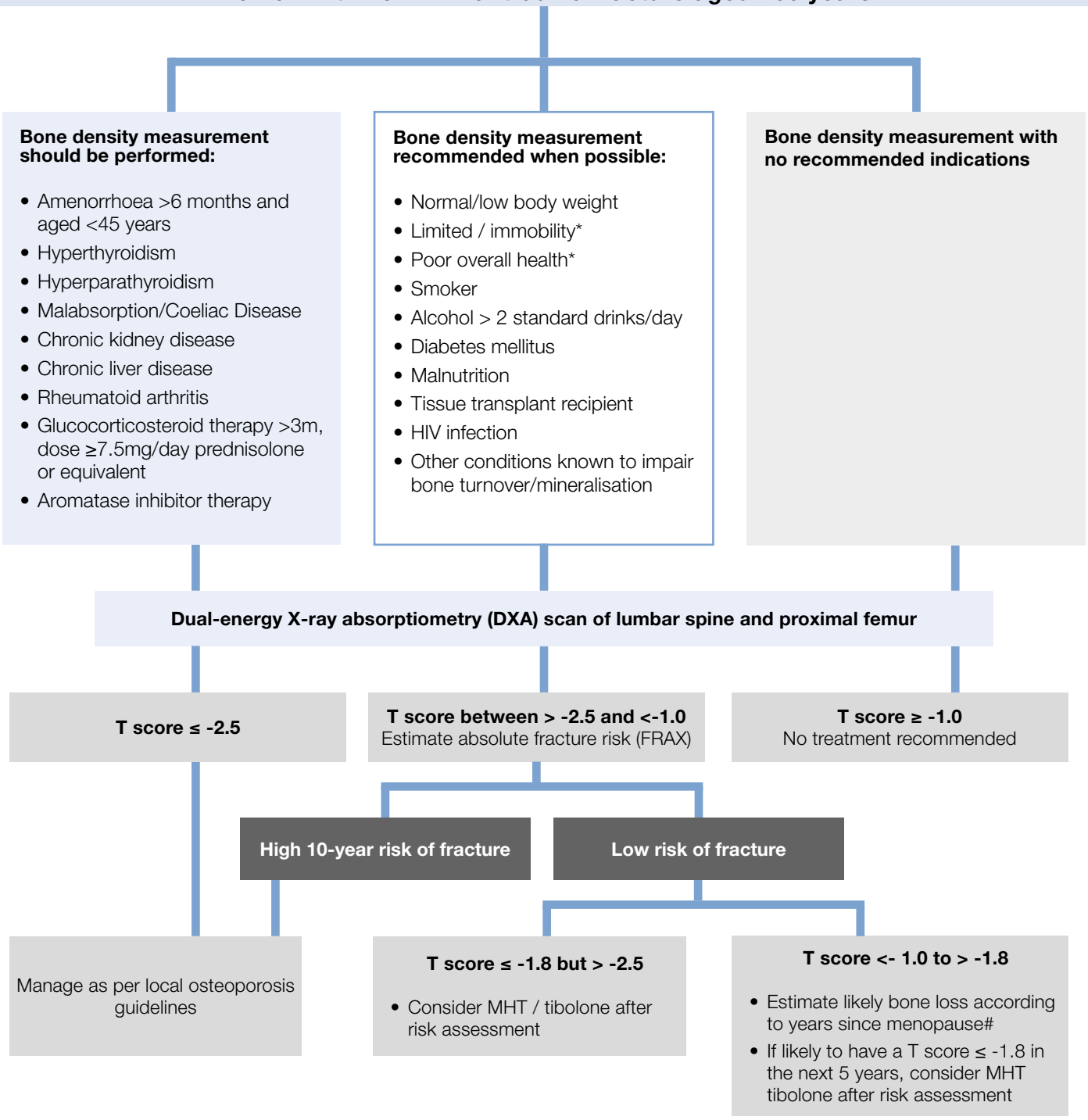
General guide for bone health assessment and management of postmenopausal women with no minimal trauma fracture aged <65 years



For all women: Review adequate vitamin D, calcium, magnesium and protein intake; vegans at risk of zinc deficiency. Encourage physical activity, minimising alcohol, and smoking cessation.

* Strong independent risk predictors and encompass other risk factors in the list (Miller et al Arch Intern Med. 2004)

In women with BMI 27 kg/m2 (loss greater with lower BMI and less with higher BMI)
Lumbar spine loss ~2.5%/year for first 2 years post final menstrual period/estimated menopause, ~1%/years 2 to 5 years postmenopause, then ~0.7%/year with age.
Femoral neck loss ~1.8 %/year for first 2 years post final menstrual period/estimated menopause, ~1%/years 2-5 years post menopause, then ~0.5%/year with age.
(Greendale G et al JCEM 2012; Writing Group for PEPI Trial JAMA 1996).

MHT Dosing*

	Low dose	Mid-range dose	Highest dose#
CEE	0.3 - 0.45 mg	0.625 mg	1.25 mg
17β estradiol	0.5 mg	1.0 mg	1.5 - 2.0 mg
Estradiol valerate	0.5 mg	1.0 mg	2.0 mg
Estriol	1.0 - 2.0 mg		
Transdermal estradiol patch	25 - 37.5 mcg	50 mcg	75 - 100 mcg
Estradiol gel	0.5 mg	1.0 mg	1.5 mg
Estradiol hemihydrate gel	0.75 mg (1 pump)	1.5 mg (2 pumps)	2.25 - 3.0 mg (3-4 pumps)
Estradiol hemihydrate skin spray	1.53 mg (1 spray)	3.06 mg (2 sprays)	4.50 mg (3 sprays)

Sequential P – daily dose for 12-14 days per month for endometrial protection:

	With Low dose E	With mid to highest dose E
Dydrogesterone (oral)	5 mg	10 mg
Micronized progesterone (oral)	200 mg (efficacy of lower dose not established)	200 mg
Medroxyprogesterone acetate (oral)	5 mg	5 - 10 mg
Norethisterone acetate (oral)	1.25 mg-2.5mg	2.5-5mg
Transdermal norethisterone acetate (with estradiol) patch		releases 0.140 - 0.250mg / day

Continuous P – daily dose for endometrial protection:

	Low dose E	With mid to highest dose E
Dydrogesterone (oral)	2.5 - 5 mg	5 - 10 mg
Drospirenone (oral)	2.0 mg	
Micronized progesterone (oral)^	100 mg	100 mg for mid dose E; (however, this dose may not always provide sufficient endometrial protection with highest dose E)
Medroxyprogesterone acetate (oral)	2.5 mg	2.5 - 5 mg
Norethisterone acetate (oral)	0.1mg with 0.5mg estradiol 0.5 mg with 1.0 mg estradiol	1.0 mg - 2.5 mg
Transdermal norethisterone acetate (with estradiol) patch		releases 0.140-0.250mg/day
Levonorgestrel (with estradiol) patch		releases 0.015mg/day
LNG-IUD	Device initially releasing 20 mcg/day	

Other options:

Tibolone	1.25 - 2.5 mg/day
CEE + bazedoxifene	0.45 + 20 mg/day

* Availability of hormonal/non hormonal treatment and indications for use from regulatory bodies vary between countries; #"highest dose" refers to the highest approved prescription doses; ^ is occasionally prescribed to be use vaginally off-label.

MHT Dosing for vaginal symptoms

Inserts	Estradiol vaginal tablet	0.01 mg	Nightly for 2 weeks then 2-3 x/week
	Estriol	0.5 mg	Nightly for 3 weeks then 2 x/week
	Prasterone (DHEA)	6.5 mg	Nightly
Creams	Estradiol 0.01% cream	0.1 mg estradiol/g	2- 4 g daily for 1-2 weeks, then 1 g, 1-2 x/week
	Estriol	0.5 mg	Nightly for 3 weeks, then 2 x/week
	CEE 0.625mg/g	0.625 mg/g	Cyclic use of 0.5 - 2 g intravaginally, daily for 21 days then off for 7 days
Gel	Estriol	0.050/g	Nightly for 3 weeks then 2 x/week
Vaginal Ring	Estradiol 2 mg	.0075 mg/day	3 monthly
	Estradiol acetate 12.5 mg, 24.8 mg	0.05, 0.1 mg/day	3 monthly
Oral	Ospemifene tab	60 mg daily	daily

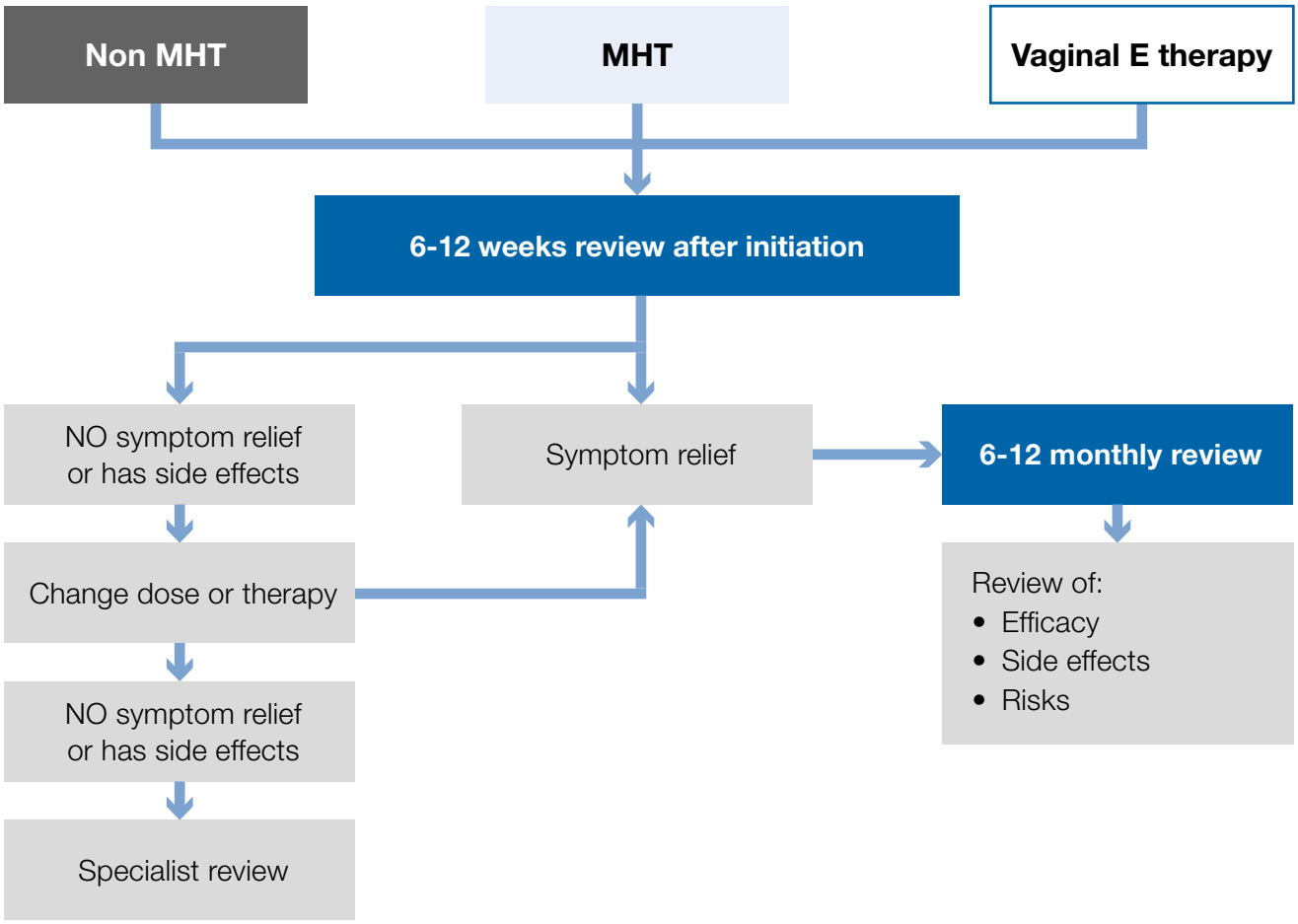
Evidence-based Non-Hormonal Treatments for vasomotor symptoms

SSRI or SSRI/SNRI–low dose	Generally effective daily doses: venlafaxine 75mg, desvenlafaxine 100mg, citalopram 20mg, paroxetine 7.5*-20mg, escitalopram 10-20mg/day
Fezolinetant*	45 mg daily
Clonidine*	25 to 100 mcg daily
Oxybutynin	2.5mg-5mg bd (oral); the dose of transdermal patch for VMS not established
Gabapentin	Start 100mg nocte up to 900mg/day#
Hypnosis	
Cognitive behaviour therapy	
Weight loss for women with obesity	
Stellate ganglion blockade – for treatment resistant VMS; requires expertise	

* has regulatory approval for VMS in some countries # higher doses can be used but side effects more likely

Availability of hormonal/non hormonal treatment and indications for use from regulatory bodies vary between countries

Review of Treatment



Abbreviations

AMH	Anti-mullerian hormone
β	Beta
BMI	Body mass index
CBT	Cognitive behaviour therapy
CEE	Conjugated equine estrogen
COCP	Combined oral contraceptive pill
CVD	Cardiovascular disease
DHEA	Dehydroepiandrosterone
DVT	Deep vein thrombosis
E	Estrogen
EE	Ethinylestradiol
FBE	Full blood examination
FBG	Fasting blood glucose
FOBT	Faecal occult blood test
FRAX	Fracture risk assesment tool
FSH	Follicle stimulating hormone
g	Gram
HIV	Human immunodeficiency virus
HT	Hypertension
inc	including

IUD	Intrauterine device
LH	Luteinizing hormone
LMP	Last menstrual period
LNG-IUD	Levonorgestrel IUD
mcg	microgram
mg	milligram
MHT	Menopausal Hormone Therapy
NK3R	Neurokinin 3 receptor
OCP	Oral contraceptive pill
P	Progestogen
PE	Pulmonary embolism
PMS	Premenstrual syndrome
Prog	Progesterone
SNRI	Selective noradrenaline reuptake inhibitor
SSRI	Selective serotonin reuptake inhibitor
Sx	Symptoms
TSH	Thyroid stimulating hormone
UTI	Urinary tract infection
VMS	Vasomotor symptoms
VTE	Venous thromboembolism

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