

Classification of Contraception

Long Acting Reversible Contraception (LARC)

Intrauterine Contraception (IUC)

- Copper-Bearing Intrauterine Device (Cu-IUD)
- Levonorgestrel Intrauterine System (LNG-IUS)

Progestogen-only Contraception (POC)

- Progestogen only implant
- Progestogen only injectable

- Progestogen only pill

Combined Hormonal Contraception (CHC)

- Combined oral contraception
- Combined transdermal patches
- Combined Vaginal rings

Emergency Contraception (EC)

- COC
- Copper-Bearing IUD
- Oral EM
 - Oral Progesterone-Only
 - Ulipristal Acetate (UPA)

Barrier Method

- Condom, diaphragm
- Coitus interrupts

Vasectomy

Tubal Ligation

Contraception Clinical Practice Guidelines

How to choose a contraception method

- **History:** (family, sexual, cervical smears, social, medications, previous contraception)
- **Check:** BP, Weight and BMI
- **Exclude:** STI, pregnancy if appropriate
- Determine **patient's preferences** for contraception
- Promote barrier methods in addition for protection against STI
- Exclude contraindications to chosen method using the **USMEC**

Offer LARC as 1st Line option

Offer Combined Hormonal Contraception(CHC):

- If LARCS is inappropriate
- Not breast feeding
- No estrogen contraindications (DVT, BMI, HTN, Migraine with aura, smoking , CVD, history of breast or cervical cancer)
- USMEC 1-2

Offer progestrone only pill If CHC inappropriate

Offer other options if POC inappropriate

U.S. Medical Eligibility Criteria for Contraceptive Use

1. No restriction (method can be used)

2. Advantages generally outweigh theoretical or proven risks

3. Theoretical or proven risks usually outweigh the advantages

4. Unacceptable health risk (*method not to be used*)

How to choose Combined Hormonal Contraceptives

Contraception counselling

Assess medical eligibility for CHC

USMEC 1 or single USMEC 2

1ST Line

Route : oral
Preparation : Monophasic Standard Strength
OR Monophasic low Strength if CVD risk

Explain

- Directions for use
- Benefits & Risks
- Side effects & cautions
- Missed pill rule, compliance
- Sick day rule
- Red flags

2ND line

- **Estrogen excess:** Monophasic low Strength Preparations or Monophasic Low Strength Preparations with 3RD generation progestogens
- **Progesterone excess :** Monophasic Standard Strength with 3rd generation progesterone
- **Acne/hirsutism:** COC with progestogen that has minimal androgenic effect; desogestrel, gestodene, or norgestimate
- **Poor cycle control:** higher estrogen strength, change progesterone

Follow up 3 months then annually

- Medical eligibility
- Satisfaction & adherence
- Drug interactions
- Consideration of alternative contraception
- Blood pressure

Intrauterine Contraception (IUC)

Copper-Bearing Intrauterine Device (Cu-IUD)

Levonorgestrel Intrauterine System (LNG-IUS)

Example	•1st Line (10-year license): Copper T380 A® •2nd Line (5-year license): Copper T380 ®, 7 MED 380, Nova T380	1st Line (5- year license): Mirena®
Indication	Contraception	Contraception, menorrhagia(Mirena® preferred), part of HRT Effective for 4 y
Timing of insertion	Anytime, best of to avoid heavy days of the period. Best fitted after end of period & before calculated time of implantation . Post delivery 4-6 weeks	Insert within 7 days of onset of menstruation OR Anytime if reasonably certain women is not pregnant OR Anytime if replacement OR At least 4 weeks post delivery
Back up contraception requirements	Initiation: none needed Switching : none needed Replacement: none Removal: : removal after day 3 of the menstrual cycle another method of contraception should be used for at least 7 days after removal if had intercourse	Initiation: 7 days; only needed if > 7 days after starting menstruation Switching: 7 days; only needed if > 7 days after starting menstruation Replacement: 7 days contraception prior to removal Removal: 7 days of contraception after removal

Examination & monitoring requirements: Gynecological examination before insertion, 6-8 weeks after then annually

Side effects & counselling	Device related : slight increase risk of ectopic pregnancy & pelvic infection (risk increased mainly in first 20 days) , uterine injury, epilepsy (risk of fits on insertion), hemorrhage on insertion, very small risk of uterine perforation (ladies must be taught how to check threads and report s & s of perforation promptly). Menstrual cycles : can cause menstrual irregularities, mainly heavy periods	Device related : same as Cu-IUD Menstrual cycles : irregular, prolonged or infrequent menstrual bleeding in first 3-6 m (may persist in some patients) Progestogen side effects usually resolve in few months(breast abnormalities, depression, hirsutism, decreased libido, nervousness, ovarian cyst, weight loss. Uncommon (alopecia, edema)
Contraindications	USMEC4: Distorted uterine cavity ,Cervical cancer awaiting treatment (initiation), Endometrial cancer(initiation) , Gestational trophoblastic disease (Persistently elevated β-hCG levels or malignant disease), Immediately post-septic abortion , Current Pelvic inflammatory disease (initiation), Puerperal sepsis ,Pregnancy , Current purulent cervicitis or chlamydial infection or gonorrhea (initiation) , Pelvic TB (initiation)	USMEC 3: Gestational trophoblastic disease(Decreasing or undetectable β-hCG levels), AIDS or on Antiretroviral therapy (initiation), Complicated Solid organ transplantation, Severe thrombocytopenia (initiation) ,Pelvic TB (continuation),Unexplained vaginal bleeding

Progesterone-only contraception (POC)

<u>Subdermal implants</u>			<u>Injection</u>	<u>Progestin-only pill (POP)</u>
Route	•Nexplanon(Etonogestrel) (3-year license)		(Medroxyprogesterone): 12 Weekly SC or deep IM Injection: Depo-provera ®, Sayana press ®	•Desogestrol 75mg(Cerazette ®)
Indication	Long term revisable Contraception		Long term revisable Contraception. Norethisterone injections can be used IM for short term contraception (8 weeks)	Contraception. Norethisterone (endometriosis, to arrest bleeding in DUB & menorrhagia, dysmenorrhea, postponement of menstruation ,
Timing : when to start? How to take?	Insert within 5 days of onset of menstruation or after 1 st trimester miscarriage OR Anytime if reasonably certain women is not pregnant OR Anytime if replacement OR 21-28 days post delivery or 2 nd trimester miscarriage		Inject within 5 days of onset of menstruation OR within 5 days postpartum every 150mg every 12 weeks deep IM or 104 mg every 13 weeks SC (abdomen or anterior thigh). Ca+ Vit d co prescription advised. After 2 years review annualy	Start on day 1 of cycle, take at same time every day. If admiration is delayed for 3 hours or more for Norethisterone or 12 hours or more for Desogestrol should be regarded as missed pill.
Breast Feeding	Delay until 4 weeks postpartum		Delay until 6 weeks postpartum	POP don't affect breast feeding
Back up contraception requirements	Initiation: 7 days; only needed if > 5 days after starting menstruation Switching : 7 days; only needed if > 5 days after starting menstruation Replacement: none Removal: should be removed within 3 yrs		Initiation: 7 days; only needed if > 7 days after starting menstruation Switching: 7 days; only needed if > 7 days after starting menstruation Replacement: none	Initiation: 2 days; only needed if > 5 days after starting menstruation Switching : 2 days; only needed if > 5 days after starting menstruation
Progestogen side effects	Common: menstrual cycle irregularities, breast abnormalities, alopecia, depression, hirsutism, dizziness, decreased libido, nervousness, ovarian cyst, weight changes, fluid retention, mood alteration, flatulence, insomnia, Uncommon: embolism & thrombosis, vulvovaginal infections.			
Specific side effects	Migration of implant, neurovascular injury, angioedema		Hypertension, vertigo, osteoporosis (no monitoring is required, lipodystrophy	Desogestrol: contact lens intolerance, erythema nodosum
Contraindications	<p>USMEC4 ALL Current breast cancer, Acute porphyrias</p> <p>USMEC 3 ALL Breast cancer (past and no evidence of current disease for 5 yrs), Headache with aura(continuation), Severe Cirrhosis, Current and history of IHD (continuation), Hepatocellular adenoma, Malignant liver tumors, History of CVA (continuation), SLE with Positive (or unknown) antiphospholipid antibodies,</p> <p>USMEC 3 Injection same as all , besides DM with (Nephropathy/retinopathy/neuropathy) or >20 years' duration or with vascular disease., Hypertension (systolic ≥160 or diastolic ≥100) or with vascular disease, Current and history of IHD (initiation), Multiple risk factors for arterial cardiovascular disease <i>such as age, smoking, diabetes and hypertension</i>, RA on On immunosuppressive therapy, History of CVA (initiation), Severe thrombocytopenia (initiation), Unexplained vaginal bleeding</p> <p>USMEC 3 POP same as all, besides History of bariatric surgery (Malabsorptive procedures), certain antiretroviral therapy (Ritonavir-boosted protease inhibitors), Certain anticonvulsants (<i>phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine</i>), certain antimicrobial therapy (Rifampicin or rifabutin)</p>			
Missed pill / late administration	rule out pregnancy and use additional contraception for 7 days.		If interval between dose is greater than 12 w & 5 days in IM administration or 13 w & 5 days in SC rule out pregnancy and use additional contraception for 7 days.	Take missed pill ASAP and take next pill at usual time. Additional contraceptive (condoms or abstain) for 2 days. EC if unprotected SI occurred within 48 hours of restarting the POP.

Combined Hormonal Contraception (CHC)

Route	<ul style="list-style-type: none"> Oral (COCs): 1st Line is oral admiration , other routes Not a cost effective option, consider only if compliance issues with oral CHC and LARC unsuitable Transdermal patches (CTP): apply on day 1, changed on day 8 and 15 then 7 day patch free period Vaginal rings (CVR) : 1 ring inserted on day 1 of cycle for 3 weeks, followed by 7-day ring free
Preparations	<p>Monophasic : COCs containing a fixed amount of an estrogen & progestogen in each active tablet are termed 'monophasic'</p> <p>Multiphasic: COCs with varying amounts of the two hormones are termed 'multiphasic'.</p> <p>COCs: usually contain ethinylestradiol (range from 20–40 micrograms) as the estrogen component; mestranol and estradiol are also used. levonorgestrel or norethisterone are the usual progesterone component. Desogestrol, drospirenone, dienogest, 3rd generation (gestodene, <i>Norgestimate</i>) are also used</p>
Preparation choice	<p>1st line: Monophasic COCs containing ≤ 30 micrograms ethinylestradiol in combination with levonorgestrel or norethisterone (to minimize cardiovascular risk)</p> <p>Monophasic standard strength: Marvelon®, Microgynon®</p> <p>Monophasic low strength: Loestrin®</p> <p>Multiphasic: Logynon®, Synphase®, not available in KSA</p>
Regimen	<p>Traditionally: 21 day with a monthly withdrawal bleed during the 7 day hormone free interval (HFI)</p> <p>Tailored CHC regimens can only be used with monophasic CHC containing (unlicensed use); Shortened HFI: 21 days of continuous use followed by a 4 day HFI; Extended use (tricycling): 9 weeks of continuous use followed by a 4 or 7 day HFI; Flexible extended use: continuous use for 21 days or more followed by a 4 day HFI when breakthrough bleeding occurs; Continuous use: continuous CHC use with no HFI.</p> <p>Benefits of tailored regimens : less heavy or painful withdrawal bleeds, headaches, mood changes, and decreased risk of incorrect use</p>
Indications	Menstrual symptoms, contraception
Side effects	<p>Estrogen related: Nausea, bloating, breast tenderness, vaginal discharge without infection, fluid retention</p> <p>Progesterone related: (acne, headache, depression, breast symptoms, breakthrough bleeding , weight gain). Uncommon Alopecia; hypertension Rare Venous thromboembolism</p> <p>Breast cancer: small increase in the risk of having breast cancer diagnosed in women taking the COCs; this relative risk may be due to an earlier diagnosis. The most important factor for diagnosing breast cancer appears to be the age at which the contraceptive is stopped rather than the duration of use; any increase in the rate of diagnosis diminishes gradually during the 10 years after stopping and disappears by 10 years.</p> <p>Cervical cancer: Use of for 5 years or longer is associated with a small increased risk of cervical cancer; the risk diminishes after stopping and disappears by about 10 years</p>
Contraindications	<p>USMEC4 Current & breast cancer, Acute porphyrias, Severe Cirrhosis, acute DVT, history of DVT with high risk for recurrence, major surgery with prolonged immobilization, migraine with aura or without if age≥ 35, DM with (Nephropathy/retinopathy/neuropathy) or >20 years' duration) or with vascular disease, Hypertension (systolic ≥160 or diastolic ≥100) or with vascular disease, Hepatocellular adenoma, Malignant liver tumors, Peripartum cardiomyopathy, Postpartum :<21 days, smoking Age ≥35 , <15 cigarettes/day , Solid organ transplantation: complicated, History of CVA, SLE with positive (or unknown) antiphospholipid antibodies, Thrombogenic mutations , complicated Valvular heart disease, acute or flare up of viral hepatitis.</p> <p>USMEC 3 Breast cancer (past and no evidence of current disease for 5 yrs), breast feeding <1 month postpartum, history of DVT with low risk of recurrence, Gallbladder disease: current or medically treated, migraine without aura(continuation age< 35) (initiation age≥ 35),hyperlipidemia, history of cholestasis post COC use, Hypertension: adequately controlled or systolic 140-159 or diastolic 90-99, inflammatory Bowel disease, postpartum 21-41 days with risk factors for VTE, smoking Age ≥35 , <15 cigarettes/day ,Anticonvulsants : (phenytoin, carbamazepine, barbiturates, primidone, topiramate, coxcarbazepine, Lamotrigine Antimicrobial: rifampicin or rifabutin</p>
Surgery	Discontinue COCs at least 4 weeks prior to major elective surgery,surgery to the legs or pelvis, or that involves prolonged immobilisation of a lower limb. An alternative contraception should be used to prevent unintentional pregnancy, and CHC may be recommenced 2 weeks after full remobilisation

Combined Hormonal Contraception (CHC)

Health care benefits	Reduced risk of ovarian, endometrial and colorectal cancer, Predictable bleeding patterns, Reduced dysmenorrhoea and menorrhagia, Management of symptoms of PCOS, endometriosis and premenstrual syndrome, Improvement of acne, Reduced menopausal symptoms, Maintaining bone mineral density in peri-menopausal females under the age of 50 years
Efficacy	User-dependant ; if used perfectly (i.e. correctly and consistently) failure rate is less than 1% •Certain factors such as the weight, malabsorption (COC only), and drug interactions may contribute to contraceptive failure
Starting , switching & back up contraception requirements	<ul style="list-style-type: none"> Start in the first 5 days OR anytime if reasonably certain woman is not pregnant starting on day 6 of cycle or later, additional precautions (barrier methods) necessary during first 7 days. Changing to COC containing different progestogen: If previous contraceptive used correctly start the first active tablet of new brand immediately Changing from progestogen-only tablet: If previous contraceptive used correctly, or pregnancy can reasonably be excluded, start new brand immediately, additional precautions (barrier methods) necessary for first 7 days After childbirth (not breast-feeding) : 3 weeks in the absence of additional risk factors for thromboembolism, or 6 weeks after childbirth in the presence of additional risk factors for thromboembolism additional precautions (barrier methods) necessary for first 7 days After abortion, miscarriage, ectopic pregnancy or gestational trophoblastic disease: additional contraceptive precautions (barrier methods) required for 7 days if started after day 5 following treatment
Breast feeding	Avoid until weaning or after 6 weeks
Missed pill Sick day rule	<p>If ONE pill has been missed (48 – 72 hours since last pill in current packet or 24- 48 hours late starting first pill in new pack)</p> <p>Continuing contraceptive cover</p> <ul style="list-style-type: none"> The missed pill should be taken as soon as it is remembered The remaining pills should be continued at the usual time <p>Minimising the risk of pregnancy EC is not usually required but may need to be considered if pills have been missed earlier in the packet or in the last week of the previous packet</p> <p>IF TWO or MORE pills have been missed (>72 since last pill in current packet or >48 hours late starting first pill in new packet)</p> <p>Continuing contraceptive cover</p> <ul style="list-style-type: none"> The most recent pill missed should be taken as soon as possible. – if vomiting or diarrhea, take the next pill as soon as tolerated The remaining pills should be continued at the usual time. Condoms should be used or sex avoided until seven consecutive active pills have been taken. This advice may be over-cautious in the second and third weeks, but the advice is a back-up in the event that further pills are missed. <p>Minimising the risk of pregnancy</p> <ul style="list-style-type: none"> If pills are missed in the 1st week (Pills 1-7): EC should be considered if unprotected sex occurred in the pill-free interval or in the first week of pill taking If pills are missed in the second week (pills 8-14): No indication for EC if pills in the preceding 7 days have been taken consistently and correctly, provided the pills thereafter are taken correctly and additional contraceptive precautions used If pills are missed in the third week (pills 15-21): OMIT THE PILL-FREE INTERVAL by finishing the pills in the current pack (or discarding any placebo tablets) and starting a new pack the next day
Acne	<ul style="list-style-type: none"> If side effect for current COC switch to COC with progestogen that has minimal androgenic effect; desogestrel, gestodene, or norgestimate (Marvelon®) If severe acne unresponsive to topical therapy and oral antibiotics: Co-Cyprindiol 2000/35 tabs (Not licensed solely for contraception) .Higher VTE risk: Discontinue 3-4 cycles after acne has resolved. Continuation of treatment with co-cyprindiol should be under a specialist. Higher risk of meningioma

Contraception in special situations

Condition	Options	Remarks
Age	POP, progesterone implants and LNG-IUD are safer options in older women with high CVD risk	Healthy , non-smoking women without specific risk factors for cardiovascular disease can continue use till age of 50-55
Postpartum	POP can be used immediately after delivery USMEC 1 COC can be used 4-6 weeks after delivery	IUDs can be placed at anytime postpartum, although there may be an increased risk of expulsion if placed less than 4 weeks from delivery.
Breast feeding	POC	Exclusively breast-feeding mom , with amenorrhea , meet criteria of LAM method of contraception
Trophoblastic disease	Any	Trophoblastic disease treated with suction curettage and falling or undetectable HCG – Any hormonal method of contraception is considered appropriate
Obesity	POP and LNG-IUD is considered safer option in women with obesity and older than 35yrs CHC is rated as USMEC 2 for women with obesity	Surgery compromising the absorption of oral medication like Rouxen-Y gastric bypass or biliopancreatic diversion –should not use oral contraception USMEC3
Migraine	No restriction in use of progesterone only methods in patient with migraine with or without aura USMEC1	CHC can be used in women with migraine without aura and no other risk factor for stroke USMEC2
Diabetes	POP, LNG-IUD and subdermal implants are suitable options	Uncomplicated Insulin and non-insulin dependent diabetics-hormonal methods of contraception are USMEC2 DMPA is also USMEC 3 in such patient as of increase lipoprotein profile
Hypertension	BP below 140/90- any contraceptive method can be used	Women on antihypertensive medication progesterone only or non hormonal methods are recommended DMPA is also USMEC 3 in such patient as of increase lipoprotein profile
Mood Disorders	Women with depressive disorders can use all methods of hormonal contraception	CHC does not modify the metabolism and effectiveness of SSRI and SNRI
Drug interaction	Women taking Rifampin and liver enzyme inducing antiepileptic and antiretroviral medication that interfere with contraceptive efficacy can use DMPA and LNG-IUD	COC and POP are not recommended because of increased contraceptive failure (USMEC 3) All other broad-spectrum antibiotics, antifungal and antiparasitic do not interfere with OC efficacy
Epilepsy	Avoid oral routes with certain anticonvulsants	Certain anticonvulsants (<i>phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine</i>)

Approaching Menopause

Choice of Contraception: Methods that can be used without restriction

- Barrier methods
- Copper intra-uterine devices (IUD)
- Levonorgestrel releasing Intrauterine system (IUS)
- Progesterone only pill, progesterone only implant
- Progesterone only injections can be used until age of 50
- Combined hormonal contraception is not contraindicated by age alone but factors like smoking and migraine history must be considered. If suitable, a pill containing 20 mcg of ethinylestradiol is a reasonable first choice.

Non-contraceptive Benefits can influence the choice of contraceptive:

- Vasomotor symptoms (hot flushes): combined hormonal contraception may reduce symptoms.
- Osteoporosis: Combined hormonal contraception may increase bone mineral density. Depot medoxyprogesterone acetate can reduce BMD.
- Menstrual pain, bleeding, and irregularity: combined hormonal contraception may reduce symptoms. Progestogen-only methods may reduce pain
- Heavy menstrual bleeding: The LNG-IUS reduces menstrual bleeding and can cause amenorrhoea.

Advise Women that Hormone Replacement Therapy does not provide contraception

Stopping Contraception

If using a non-hormonal method of contraception: Continue until:

- 1y of amenorrhoea >50 years of age Or 2 years of amenorrhoea <50 years of age
- If a woman continues to menstruate >55years, advise contraception use until 1 year of amenorrhoea has passed.

If using a hormonal method of contraception:

If woman wishes to stop contraception aged <50 years: advise to switch to a non-hormonal method and wait until 2 years of amenorrhoea (3 years if switching from progestogen only injections)

Combined hormonal contraception and progestogen only injections

- Continue until aged 50, then switch to a non-hormonal method OR switch to one of the following: POP, Progestogen only implant or LNG-IUS
- Follow advice for chosen method

POP, Progestogen only implant or LNG-IUS

- Continue until aged 55
- if woman still not amenorrhoeic at the age of 55 continue until 1 year of amenorrhoea
- If amenorrhoeic and aged > 50, arrange confirmation of menopause (two FSH readings taken 6 weeks apart and results of both tests are >30) and continue contraception for another year

Emergency Contraception

METHOD	DOSAGE	TIMING OF USE AFTER UPSI
Combined oral contraceptive	100 mcg of ethinyl estradiol plus 0.5 mg of levonorgestrel; two doses taken 12 hours apart 4 Pills stat and 4 pills 12 h later	5 days
Levonorgestrel, split dose	0.75 mg; two doses taken at the same time or 12 hours apart	3 days
Levonorgestrel, single dose	1.5 mg, single dose	3 days
Ulipristal (Ella)	30 mg, single dose	5days
Cu-IUD	Single device, can be left for long term contraception	5 days

References

US Medical Eligibility Criteria (US MEC) for Contraceptive Use 2020
The American College of Obstetricians & Gynecologists

Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use

Condition	Sub-Condition	CHC		POP		Injection		Implant		LNG-IUD		Cu-IUD		
		I	C	I	C	I	C	I	C	I	C	I	C	
Age		Menarche to <40=1 ≥40=2		Menarche to <18=1 18-45=1 ≥45=1		Menarche to <18=2 18-45=1 ≥45=2		Menarche to <18=1 18-45=1 ≥45=1		Menarche to <20=2 ≥20=1		Menarche to <20=2 ≥20=1		
Anatomic abnormalities	a) Distorted uterine cavity b) Other abnormalities										4	4		
Anemias	a) Thalassemia b) Sickle cell disease ^a c) Iron-deficiency anemia (including cysts)	1 2 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	2 2 2 1	2 2 2 1			
Benign ovarian tumors														
Breast disease	a) Undiagnosed mass b) Benign breast disease c) Family history of cancer d) Breast cancer ^a i) current ii) past and no evidence of current disease for 5 years			2* 2* 1 1 4		2* 2* 1 1 4		2* 2* 1 1 4		2* 2* 1 1 4		2 2 1 1 1		
Breastfeeding (see also Postpartum)	a) <1 month postpartum b) 1 month or more postpartum			3* 2* 3		2* 1* 3		2* 1* 3		2* 1* 3		3 3 3		1
Cervical cancer	Awaiting treatment			2		1		2		2		4	2	4
Cervical ectropion				1		1		1		1		1		1
Cervical intraepithelial neoplasia				2		1		2		2		2		1
Cirrhosis	a) Mild (compensated) b) Severe ^a (decompensated)	1 4	1 3	1 3	1 3	1 3	1 3	1 3	1 3	1 3	1 3	1 3	1 1	
Deep venous thrombosis (DVT)/Pulmonary embolism (PE)	a) History of DVT/PE, not on anticoagulant therapy i) higher risk for recurrent DVT/PE ii) lower risk for recurrent DVT/PE b) Acute DVT/PE c) DVT/PE and established on anticoagulation therapy for at least 3 months i) higher risk for recurrent DVT/PE ii) lower risk for recurrent DVT/PE d) Family history (first-degree relatives) e) Major surgery i) with prolonged immobilization ii) without prolonged immobilization f) Minor surgery without immobilization													
Depressive disorders				1*		1*		1*		1*		1*		1*
Diabetes mellitus (DM)	a) History of gestational DM only b) Non-vascular disease i) non-insulin dependent ii) insulin dependent ^a c) Nephropathy/retinopathy/neuropathy ^a d) Other vascular disease or diabetes of type 2	1	1	1	1	1	1	1	1	1	1	1	1	
				2		2		2		2		2		1
				2		2		2		2		2		1
				3/4*		2		3		2		2		1
				3/4*		2		3		2		2		1

Condition	Sub-Condition	CHC	POP	Injection	Implant	LNG-IUD	Cu-IUD
		I	I	I	I	I	I
Ischemic heart disease ^a	Current and history of	4	2	3	2	3	1
Liver tumors	a) Benign						
	i) Focal nodular hyperplasia	2	2	2	2	2	1
	ii) Hepatocellular adenoma ^b	4	3	3	3	3	1
	b) Malignant ^c	4	3	3	3	3	1
Malaria		1	1	1	1	1	1
Multiple risk factors for arterial cardiovascular disease	(such as older age, smoking, diabetes and hypertension)	3/4*	2*	3*	2*	2	1
Obesity	a) ≥30 kg/m ² body mass index (BMI)	2	1	1	1	1	1
	b) Menarche to <18 years and ≥30 kg/m ² BMI	2	1	2	1	1	1
Ovarian cancer ^d		1	1	1	1	1	1
Parity	a) Nulliparous	1	1	1	1	2	2
	b) Parous	1	1	1	1	1	1
Past ectopic pregnancy		1	2	1	1	1	1
Pelvic inflammatory disease	a) Past, (assuming no current risk factors of sexually transmitted infections [STIs])						
	i) with subsequent pregnancy	1	1	1	1	1	1
	ii) without subsequent pregnancy	1	1	1	1	2	2
	b) Current	1	1	1	1	4	2*
Peripartum cardiomyopathy ^e	a) Normal or mildly impaired cardiac function						
	i) <6 months	4	1	1	1	2	2
	ii) ≥6 months	3	1	1	1	2	2
	b) Moderately or severely impaired cardiac function	4	2	2	2	2	2
Postabortion	a) First trimester	1*	1*	1*	1*	1*	1*
	b) Second trimester	1*	1*	1*	1*	2	2
	c) Immediately post-septic abortion	1*	1*	1*	1*	4	4
Postpartum (see also Breastfeeding)	a) <21 days	4	1	1	1		
	b) 21 days to 42 days						
	i) with other risk factors for venous thromboembolism (VTE)	3*	1	1	1		
	ii) without other risk factors for VTE	2	1	1	1		
	c) >42 days	1	1	1	1		
Postpartum (in breastfeeding or non-breastfeeding women, including post-caesarean section)	a) <10 minutes after delivery of the placenta					2	1
	b) 10 minutes after delivery of the placenta to <4 weeks					2	2
	c) ≥4 weeks					1	1
	d) Puerperal sepsis					4	4
Pregnancy		NA*	NA*	NA*	NA*	4*	4*
Rheumatoid arthritis	a) On immunosuppressive therapy	2	1	2/3*	1	2	1
	b) Not on immunosuppressive therapy	2	1	2	1	1	1
Schistosomiasis	a) Uncomplicated	1	1	1	1	1	1
	b) Fibrosis of the liver ^f	1	1	1	1	1	1

Abbreviations: C=continuation of contraceptive method; CHC=combined hormonal contraceptive (pill, patch, and ring); COC=combined oral contraceptive; Cu-IUD=copper-containing Intrauterine device; I=Initiation of contraceptive method; LNG-IUD=levonorgestrel-releasing Intrauterine device; NA=not applicable; POP=progestin-only pill; PR=patch/ring

Legend:

1 No restriction (*method can be used*)

2 Advantages generally outweigh theoretical or known risks

proven technologies for tomorrow's challenges

Condition	Sub-Condition	CHC		POP		Injection		Implant		LNG-IUD		Cu-IUD	
		I	C	I	C	I	C	I	C	I	C	I	C
Sexually Transmitted Infections (STI)	a) Current purulent cervicitis or chlamydial infection or gonorrhea	1		1		1		1		4	2*	4	2*
	b) Other STIs (excluding HIV and hepatitis)	1		1		1		1		2	2	2	2
	c) Vaginitis (including trichomonas vaginalis and bacterial vaginosis)	1		1		1		1		2	2	2	2
	d) Increased risk of STIs	1		1		1		1		2/3*	2	2/3*	2
Smoking	a) Age <35	2		1		1		1		1		1	
	b) Age ≥35, <15 cigarettes/day	3		1		1		1		1		1	
	c) Age ≥35, ≥15 cigarettes/day	4		1		1		1		1		1	
Solid organ transplantation ^a	a) Complicated	4		2		2		2		3	2	3	2
	b) Uncomplicated	2*		2		2		2		2		2	
Stroke ^b	History of cerebrovascular accident	4	2	3	3	2	3	2	3	2		2	1
Superficial venous thrombosis	a) Varicose veins	1		1		1		1		1		1	
	b) Superficial thrombophlebitis	2		1		1		1		1		1	
Systemic lupus erythematosus ^c	a) Positive (or unknown) antiphospholipid antibodies	4		3	3	3	3	3		3	1	1	1
	b) Severe thrombocytopenia	2		2	3	2	2	2		2*	3*	2*	
	c) Immunosuppressive treatment	2		2	2	2	2	2		2	2	2	1
	d) None of the above	2		2	2	2	2	2		2	1	1	1
Thrombogenic mutations ^d		4*		2*		2*		2*		2*		2*	1*
Thyroid disorders	Simple goiter/hyperthyroid/hypothyroid	1		1		1		1		1		1	
Tuberculosis ^e (see also Drug Interactions)	a) Non-pelvic	1*		1*		1*		1*		1		1	
	b) Pelvic	1*		1*		1*		1*		4	3	4	3
Unexplained vaginal bleeding	(suspicious for serious condition) before evaluation	2*		2*		3*		3*		4*	2*	4*	2*
Uterine fibroids		1		1		1		1		2		2	
Valvular heart disease	a) Uncomplicated	2		1		1		1		1		1	
	b) Complicated ^f	4		1		1		1		1		1	
Vaginal bleeding patterns	a) Irregular pattern without heavy bleeding	1		2		2		2		1	1	1	
	b) Heavy or prolonged bleeding	1*		2*		2*		2*		1*	2*	2*	
Viral hepatitis	a) Acute or flare	3/4*	2	1		1		1		1		1	
	b) Carrier/Chronic	1	1	1		1		1		1		1	
Drug Interactions													
Antiretroviral therapy	a) Nucleoside reverse transcriptase inhibitors	1*		1		1		1		2/3*	2*	2/3*	2*
	b) Non-nucleoside reverse transcriptase inhibitors	2*		2*		1		2*		2/3*	2*	2/3*	2*
	c) Ritonavir-boosted protease inhibitors	3*		3*		1		2*		2/3*	2*	2/3*	2*
Anticonvulsant therapy	a) Certain anticonvulsants (<i>phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine</i>)	3*		3*		1		2*		1		1	
Antimicrobial therapy	b) Lamotrigine	3*		1		1		1		1		1	
	a) Broad spectrum antibiotics	1	1	1		1		1		1		1	
	b) Antifungals	1	1	1		1		1		1		1	
	c) Antiparasitics	1	1	1		1		1		1		1	
Rifampicin or rifabutin therapy	d) Rifampicin or rifabutin therapy	3*		3*		1		2*		1		1	