PROGESTOGEN-ONLY INJECTABLE CONTRACEPTION

(DEPO-PROVERA® and SAYANA PRESS®)

What's New:

The subcutaneous depot medroxyprogesterone acetate (s.c. DMPA) preparation Sayana Press® is now licensed for self-administration.

Bone densitometry (DEXA) should no longer be routinely offered after 5 years of continuous DMPA use, the risks and benefits of remaining on DMPA should be discussed on a 2 yearly basis.

SC DMPA may be particularly suitable for clients wishing injectable contraception but who have a bleeding disorder or who are on anticoagulants. In obese women where there is concern regarding Depo-Provera reaching muscle, and Sayana Press may be indicated.

Mode of Action

The primary mode of action is to prevent ovulation, supplemented by contraceptive actions at the endometrial and cervical mucus level.

Dosing Interval

The recommended dosing interval for i.m. DMPA (Depo-Provera®) and s.c. DMPA (Sayana Press®) is **13 weeks**. This is outside the product licence for Depo-Provera®.

DMPA may be administered up to 14 weeks from the last injection without the need for additional contraceptive precautions (outside product licence for Depo-Provera®).

Efficacy

Perfect use failure rate is 0.2% in the first year of use

Injectable contraceptives are long acting reversible contraceptives. Typical use failure rates are lower than failure rates for oral contraceptives. However, injectable contraceptives are less cost-effective than the implant and intrauterine methods because users are required to return more frequently.

Administration

Shake syringe vigorously

IM DMPA

- IM injection into gluteus maximus or other muscle e.g. deltoid
    - IM administration into ventrogluteal site/. Is the preferred site as it reduces the risk of superficial injection and sciatic nerve injury .
    - If not yet trained in ventrogluteal injection the dorsogluteal site (upper outer quadrant of buttock) should be used.

SC DMPA

- Activate the injector according to the manufacturer's instructions (www.medicines.org.uk/emc)
- Inject into upper anterior thigh or abdomen
- Point needle downwards and inject over 5-7 seconds
- Licensed for self-administration but this cannot yet be offered routinely until staff are trained to instruct patients.

Common Side Effects

- Change in menstrual pattern
- Delay in return of fertility. (Median time to ovulation is 6 to 7 months following the preceding injection ie: 3 – 4 months following cessation of therapy).
- Weight gain
- Injection site reactions (more common with s.c. than IM. administration)

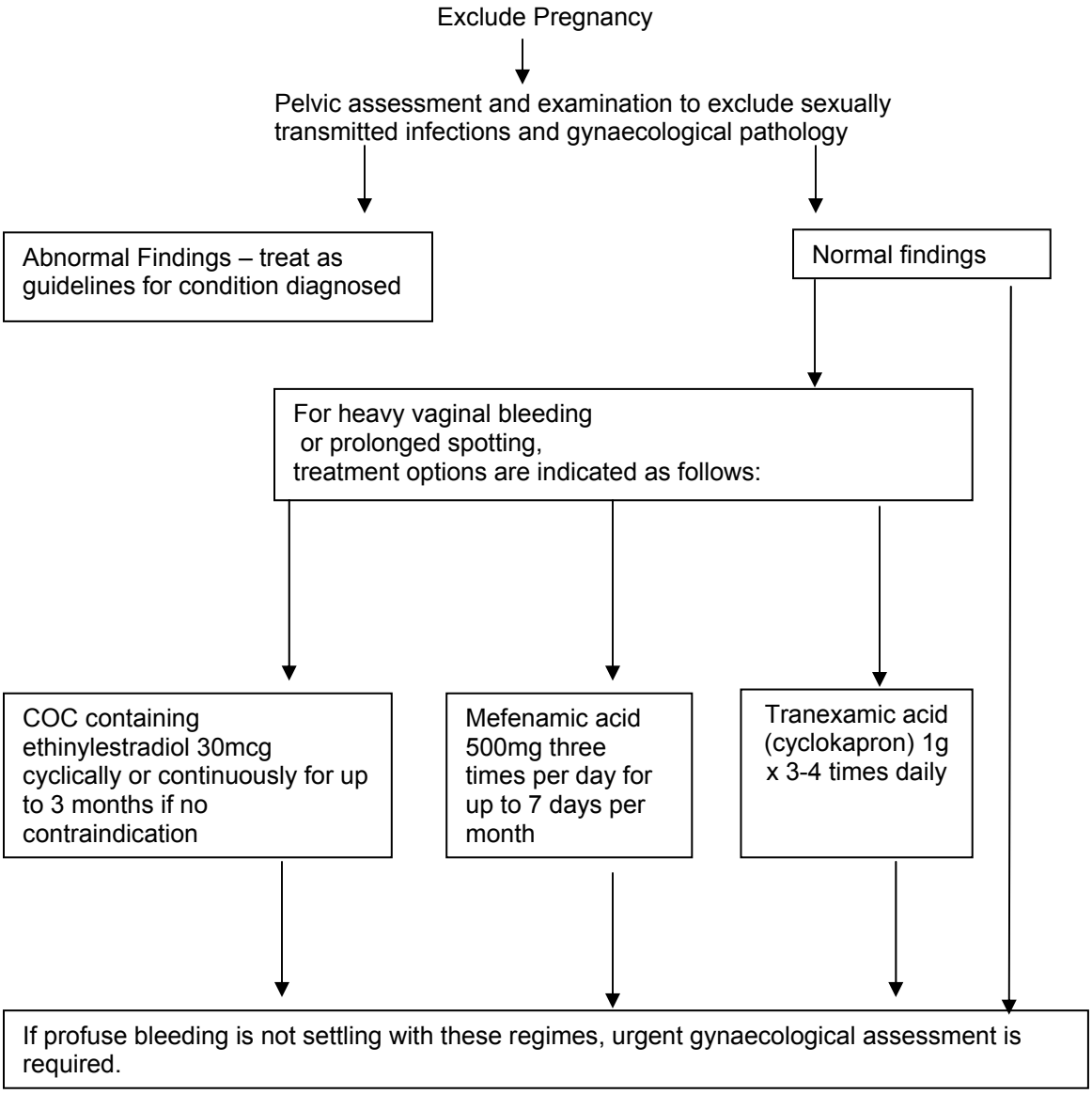
Less Common Adverse Effects

- Prolonged or very heavy bleeding – history and examination must be taken to exclude gynaecology pathology (eg: pelvic, infection, miscarriage).
- Anaphylaxis
- Galactorrhoea
- Possible small increased relative risk of breast cancer and cervical cancer
- Loss of bone mineral density (see below)

Prices (As Per BNF Sep 2013)

Depo-Provera® £6.01
Sayana Press® £6.11

Action for Persistent Bleeding



There is no evidence that reducing the injection interval improves bleeding but the interval can be reduced to 10 weeks if the patient wishes early repeat injections.

Assessment of Client Suitability

History

• Clinical history taking and examination allow an assessment of medical eligibility for DMPA use. In this context the history should include: relevant social and sexual history (to assess risk of sexually transmitted infections – STIs), medical, family and drug history as well as details of reproductive health and previous contraceptive use.
• Risk factors for osteoporosis should be assessed and alternative contraceptive choices discussed as appropriate.

Examination

•Blood pressure and BMI should be noted prior to commencement of injectable contraception
• Pelvic examination and cervical cytology if indicated

Documentation

•The full visit history should be completed or updated as required, including osteoporosis risk factors
• Written method information including contact number is given to client
• Prescription is recorded and dated
• Site of injection, batch number and expiry date of medication recorded
• Record date when injection is next due
• Nurse supplying where appropriate under patient group direction
• GP notified of prescription, if permission is given for correspondence

Drug Interactions

Women should be informed that the efficacy of progestogen-only injectable contraception is not reduced with concurrent use of medication (including antibiotics and liver enzyme-inducing drugs) and the injection intervals do not need to be reduced.

Management & Timing Of First Injection

General initiation	Ideally, first injection should occur between Days 1–5 (inclusive) of a normal menstrual cycle. No additional contraception is required. Injections may also be initiated at any other time in the menstrual cycle if the clinician is reasonably certain that the woman is not pregnant and that there is no risk of conception. Additional contraception (barrier method or abstinence) should be advised for 7 days after initiation. If the woman is amenorrhoeic, the clinician must be reasonably certain that the woman is not pregnant and there is no risk of conception. Additional contraception should be used for 7 days.
Post-partum	Progestogen-only injectables may be initiated up to and including Day 21 postpartum with immediate contraceptive cover. If initiated after Day 21 then condoms or abstinence is advised for 7 days. Medroxyprogesterone is safe to use during breast-feeding.
Following miscarriage or termination	Initiate on day of surgical or second part of medical abortion or immediately following miscarriage:no additional contraception is required. If started >5 days after abortion or miscarriage, additional contraception is required for 7 days.

Switching from CHC, PO implant or POP	Can be initiated immediately if method has been used consistently and correctly or if the clinician is reasonably certain that the woman is not pregnant and that there has been no risk of conception. No additional contraception is needed.
Switching from PO injectable	If the woman's previous method was another injectable, she should have the injection before or at the time the next injection was due. No additional contraception is needed.
Switching from IUS	Can be initiated immediately if the LNG-IUS was used consistently and correctly or if the clinician is reasonably sure that the woman is not pregnant. As bleeding with the LNG-IUS may not reflect ovarian activity, the LNG-IUS should be continued for at least 7 days.
Switching from IUD	Can be initiated immediately if the IUD was used consistently and correctly or if the clinician is reasonably sure that the woman is not pregnant. The IUD should be continued for at least 7 days unless the first injection occurs between Days 1–5 (inclusive) of a normal menstrual cycle.
Switching from barrier method	Can be initiated immediately if barrier method has been used consistently and correctly or if the clinician is reasonably certain that the woman is not pregnant and that there is no risk of conception. If the woman is amenorrhoeic or it has been more than 5 days since menstrual bleeding started, additional contraception should be continued for 7 days.
Quick starting after oral EC or in other situations in which pregnancy cannot be excluded	DMPA should only be quick started in the absence of acceptable alternatives. Quick starting after Levonorgestrel EC: give DMPA immediately and advise condoms for 7 days. Quick starting after Ulipristal EC: wait for at least 5 days following EC before administering DMPA. Advise condoms for a further 7 days (12 days of condom use in total) ***patient requires a pregnancy test 3 weeks after last UPSI****

***** see appendix

DMPA and Bone Mineral Density

Women using DMPA contraception have a small reduction in bone mineral density (BMD) while using this method of contraception, which may be at least partly reversible on discontinuation. It is not known whether this increases the risk of osteoporosis in later life. The effect on BMD may be most marked in adolescents, who have yet to achieve their peak bone mass. For adolescent women, the MRHA recommends that DMPA is prescribed as first line contraception only after other methods have been discussed and deemed unsuitable or unacceptable.

Whilst further clarification of this is awaited, suggested management in women who wish to continue with this method of contraception follows (see flow chart).

Gonadotrophin checks or oestrogen replacement are not advised.

Long Term Use Of DMPA > 2 Years

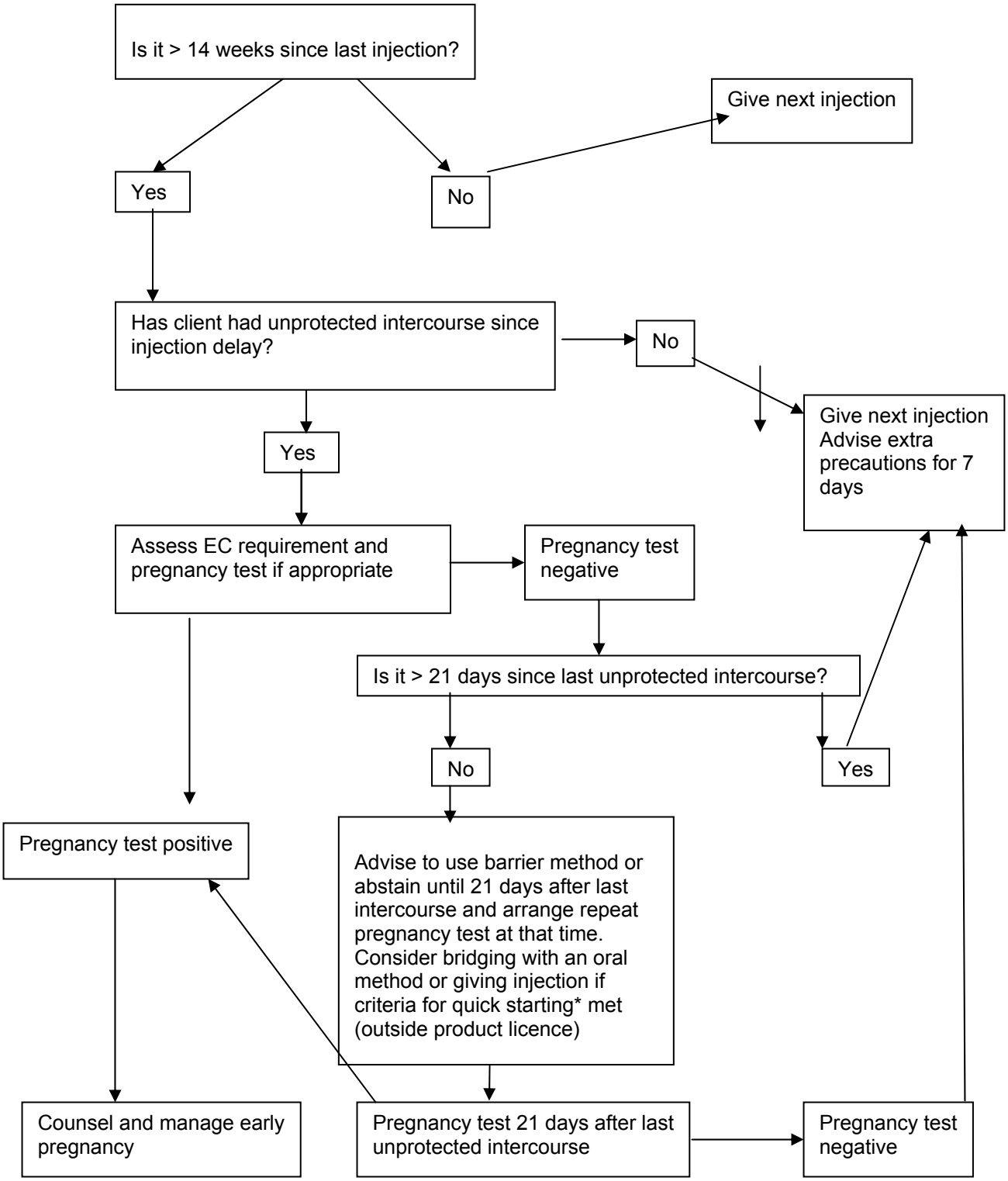
DMPA >2 years regardless of bleeding pattern

- Discuss effects of DMPA on bone density and uncertainty about risk of later osteoporosis/fracture
- Review risk factors for osteoporosis: alcohol, exercise, diet, smoking, family history, medical conditions, e.g. Crohn's or drug use, e.g. steroids
- Discuss alternative forms of contraception.
- Document discussion and client's choice in notes

Continue client contraceptive method of choice

Review indications, risk factors, alternatives every 2 years

Delayed Follow Up Visit > 13 weeks



*See appendix

UKMEC	DEFINITION OF CATEGORY
Category 1	A condition for which there is no restriction for the use of the contraceptive method.
Category 2	A condition where the advantages of using the method generally outweigh the theoretical or proven risks.
Category 3	A condition where the theoretical or proven risks usually outweigh the advantages of using the method.
Category 4	A condition which represents an unacceptable health risk if the contraceptive method is used.

UKMEC TABLE – DMPA/NET-EN COMMON REVERSIBLE METHODS I = Initiation, C = Continuation	
PREGNANCY	n/a
AGE	
PARITY	
a) Nulliparous	1
b) Parous	1
BREASTFEEDING	
a) <6 weeks postpartum	2
b) 6 weeks to <6 months (fully or almost fully breastfeeding)	1
c) ≥6 weeks to 6 months postpartum (partial breastfeeding medium to low)	1
d) ≥ 6 months postpartum	1
POSTPARTUM (non breastfeeding women)	
a) < 21 days	1
b) ≥ 21 days	1
POSTPARTUM (breastfeeding or non breastfeeding women, including post-caesarean section)	
a) 48 hours to < 4 weeks	
b) ≥ 4 weeks	
c) Puerperal sepsis	
POST ABORTION	
a) First trimester	1
b) Second trimester	1
c) Immediate post septic abortion	1
POST ECTOPIC PREGNANCY	1
HISTORY OF PELVIC SURGERY (including caesarean section) (see also postpartum section)	1
SMOKING	
a) Age < 35 years	1
b) Age ≥ 35 years	
i. <15 cigarettes per day	1
ii. ≥ 15 cigarettes per day	1
iii. Stopped smoking < 1 year ago.	1
iv. Stopped smoking ≥ 1 year ago	1
OBESITY	
a) Body mass index ≥ 30 – 34 kg/ m2	1
b) Body mass index ≥ 35 kg/m2	1
MULTIPLE RISK FACTORS FOR ARTERIAL CARDIOVASCULAR DISEASE (such as older age, smoking, diabetes and hypertension)	3
HYPERTENSION	
a) Adequately controlled hypertension	2
b) Consistently elevated blood pressure levels (properly taken measurements)	
i. systolic >140 to 159mmHg or diastolic > 90 to 94 mmHg	1
ii. systolic ≥160 or diastolic ≥ 95mmHg	2
c) Vascular disease	3
HISTORY OF HIGH BLOOD PRESSURE DURING PREGNANCY (where current blood pressure is normal)	1
VENOUS THROMBO-EMBOLISM (VTE) (including deep vein thrombosis and pulmonary embolism)	
a) History of VTE	2
b) Current VTE (on anticoagulants)	2
c) Family history of VTE	
i. First degree relative aged <45 years.	1

ii. First degree relative aged ≥45 years	1
d) Major surgery	
i. *With* prolonged immobilisation	2
ii. *Without* prolonged immobilisation	1
e) Minor surgery *without* immobilisation	1
f) Immobility (unrelated to surgery) eg: wheelchair use, debilitating illness)	1
KNOWN THROMBOGENIC MUTATIONS (eg: Factor V Leiden; Prothrombin mutation; Protein S, Protein C and Antithrombin deficiencies)	2
SUPERFICIAL VENOUS THROMBOSIS	
a) Varicose veins	1
b) Superfical thrombophlebitis	1
CURRENT AND HISTORY OF ISCHAEMIC HEART DISEASE	3
STROKE (history of cerebrovascular accident)	3
KNOWN HYPERLIPIDAEMIAS (screening is NOT necessary for safe use of contraceptive methods)	2
VALVULAR AND CONGENITAL HEART DISEASE	
a) Uncomplicated	1
b) Complicated (eg: with pulmonary hypertension, artial fibrillation, or a history of subacute bacterial endocarditis)	1
HEADACHES	
a) Non migrainous (mild or severe)	IC 11
b) Migraine	
i. without aura, at any age	IC 22
iii. with aura, at any age	I C 22
c) Past history (> 5 years ago) of migraine with aura at any age.	2
EPILEPSY	1
DEPRESSIVE DISORDERS	1
VAGINAL BLEEDING PATTERNS	
a) Irregular pattern *without* heavy bleeding	2
b) Heavy or prolonged bleeding (includes regular and irregular patterns)	2
UNEXPLAINED VAGINAL BLEEDING (suspicious for serious condition) Before evaluation	3
ENDOMETRIOSIS	1
BENIGN OVARIAN TUMOURS (including cysts)	1
SEVERE DYSMENORRHOAE	1
GESTATIONAL TROPHOBLASTIC NEOPLASIA (GTN) (includes hydatidiform mole, invasive mole, placental site trophoblastic tumour)	
a) Descreasing or udetectable β-hCG levels	1
b) Persistently elevated β-hCG levels or malignant disease	1
CERVICAL ECTROPION	1
CERVICAL INTRAEPITHELIAL NEOPLASIA (CIN)	2
CERVICAL CANCER (awaiting treatment)	2
BREAST DISEASE	
a) Undiagnosed mass	2
b) Benign breast disease	1
c) Family history of cancer	1
d) Carriers of known gene mutations associated with breast cancer (eg: BRCA1)	2
e) Breast cancer	
i. Current	4
ii. Past and no evidence of current disease for 5 years	3

ENDOMETRIAL CANCER	1
OVARIAN CANCER	1
UTERINE FIBROIDS	
a) Without distortion of the uterine cavity.	1
b) With distortion of the urine cavity	1
ANATOMICAL ABNORMALITIES	
a) Distorted uterine cavity (any congenital or acquired uterine abnormality distorting the uterine cavity in a manner that is incompatible with IUD insertion)	1
b) Other abnormalities (including cervical stenosis or cervical laceration) not distorting the uterine cavity or interfering with IUD insertion.	1
PELVIC INFLAMMATORY DISEASE	
a) Past PID (assuming no current risk factor of STIs)	
i. With subsequent pregnancy.	1
ii. Without subsequent pregnancy	1
b) PID – current	1
STIs	
a) Current purulent cervicitis or chlamydial infection or gonorrhoea.	1
b) Other STIs (excluding HIV and hepatitis)	1
c) Vaginitis (including trichomonas vaginalis and bacterial vaginosis)	1
d) Increased risk of STIs	1
HIGH RISK OF HIV	1
HIV INFECTED	
a) Not using anti-retroviral therapy	1
b) Using anti-retroviral therapy	1-2
AIDS	2
SCHISTOSOMIASIS	
a) Uncomplicated	1
b) Fibrosis of the liver	1
TUBERCULOSIS	
a) Non pelvic	1
b) Known pelvic	1
MALARIA	1
DIABETES	
a) History of gestational disease	1
b) Non vascular disease	
i. non insulin dependent	2
ii. insulin dependent	2
c) Nephropathy/retinopathy/neuropathy	3
d) Other vascular disease or diabetes of >20 years' duration	3
THYROID DISORDERS	
a) Simple goitre	1
b) Hyperthyroid	1
c) Hypothyroid	1
GALL BLADDER DISEASE	
a) Symptomatic	2
i. treated by cholecystectomy	2
ii. medically treated	2
iii. current	2

b) Asymptomatic	2
HISTORY OF CHOLESTASIS	
a) Pregnancy related	1
b) Past COC related	2
VIRAL HEPATITIS	
a) Acute or flare	1
b) Carrier	1
c) Chronic	1
CIRRHOSIS	
a) Mild (compensated without complications)	1
b) Severe (decompensated)	3
LIVER TUMOURS	
a) Benign (adenoma) i) focal nodular hyperplasia ii) Hepatocellular (adenoma)	 2 3
b) Malignant (hepatoma)	3
INFLAMMATORY BOWEL DISEASE (includes Crohn's disease, Ulcerative colitis)	1
THALASSAEMIA	1
SICKLE CELL DISEASE	1
IRON DEFICIENCY ANAEMIA	1
RAYNAUD'S DISEASE	
a) Primary	1
b) Secondary	
i. *without* lupus anticoagulant	1
ii. *with* lupus anticoagulant	2
DRUGS WHICH AFFECT LIVER ENZYMES (eg: Rifampicin, Rifabutin, St John's Wort, Griseofulvin, certain anticonvulsants (phenytoin, carmazepine, barbiturates, primidone, topiramate, oxcarbazepine)	1
NON LIVER ENZYME INDUCING ANTIBIOTICS	1
HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)	2
RHEUMATIC DISEASES	
SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) **People with SLE are at an increased risk of ischaemic heart disease, stroke and venous thromboembolism and this is reflected in the categories given.**	
a) Positive (or unknown) antiphospholipid antibodies	3
b) Severe thrombocytopenia	I 3 / C 2
c) Immunosuppressive	2
d) None of the above	2
DRUG INTERACTIONS	
ANTIRETROVIRAL THERAPY **This section relates to the SAFETY of contraceptive use in women using these antiretroviral. EFFECTIVENESS may be reduced and pregnancy itself may have a negative impact on health for some women with certain medical conditions**	
Antiretroviral therapy and hormonal contraception: Antiretroviral drugs have the potential to either decrease or increase the bioavailability of steroid hormones in hormonal contraceptives. Limited data suggest potential drug interactions between many antiretroviral drugs (particularly some non-nucleoside reverse transcriptase inhibitors and ritonavir-boosted protease inhibitors) and hormonal contraceptives. These interactions may alter the safety and effectiveness of both the hormonal contraceptive and the antiretroviral drug. Thus, **if a woman on antiretroviral treatment decides** **to initiate or continue hormonal contraceptive use,THE CONSISTENT USE OF CONDOMS IS RECOMMENDED**.This is for	

both preventing HIV transmission and to compensate for any possible reduction in the effectiveness of the hormonal contraceptive.When a COC is chosen, a preparation containing a minimum of 30mcgs EE should be used. **Antiretroviral therapy and IUDs:** There is no known interaction between antiretroviral therapy and IUD use. However, AIDS as a condition is classified as Category 3 for insertion and Category 2 for continuation unless the woman is clinically well on antiretroviral therapy, in which case both insertion and continuation are classified as Category 2. (See AIDS condition).	
a) Nucleoside reverse transcriptase inhibitors b) Non-nucleoside reverse transcriptase inhibitors c) Ritonavir-boosted protease inhibitors	1 1 1
Certain anticonvulsants and combined oral contraception: When a COC is chosen, a preparation containing a minimum of 30mcgs EE should be used. **THE CONSISTENT USE OF CONDOMS IS RECOMMENDED***. **Certain anticonvulsants and progestogen-only contraception:** Although the interaction of certain anticonvulsants with POPs, NET-EN and implants is not harmful to women, it is likely to reduce the effectiveness of POPs, NET-EN and implants. Whether increasing the hormone dose of POPs alleviates this concern remains unclear. If a woman on certain anticonvulsants decides to use CHC, POP or implant **THE CONSISTENT USE OF CONDOMS IS RECOMMENDED*. Use of** **other contraceptives should be encouraged for women who are long-term users of any of these anticonvulsant drugs.** Use of DMPA is a Category 1 because its effectiveness is NOT decreased by the use of certain anticonvulsants. **Lamotrigine:** When a COC is chosen, a preparation containing a minimum of 30mcgs EE should be used. Anticonvulsant treatment regimens that combine lamotrigine and non-enzyme inducing antiepileptic drugs (such as sodium valproate) do not interact with COCs	
a) Certain anticonvulsants (phenytoin, carbamazepine, barbiturates, primidone, topiramate, oxcarbazepine) b) Lamotrigine	1 1
Rifampicin or rifabutin therapy and combined oral contraception: When a COC is chosen, a preparation containing a minimum of 30mcgs EE should be used. **THE CONSISTENT USE OF CONDOMS IS RECOMMENDED***. **Rifampicin or rifabutin therapy and progestogen-only contraception:** Although the interaction of rifampicin or rifabutin with POPs, NET-EN and implants is not harmful to women, it is likely to reduce the effectiveness of POPs, NET-EN and implants. Whether increasing the hormone dose of POPs alleviates this concern remains unclear. If a woman on rifampicin or rifabutin decides to use POP or implant **THE CONSISTENT USE OF CONDOMS IS** **RECOMMENDED*. Use of other contraceptives should be encouraged for women who are long-term users of rifampicin or rifabutin**. Use of DMPA is a Category 1 because its effectiveness is unlikely to be decreased by the use of rifampicin or rifabutin.	
a) Broad spectrum antibiotics b) Antifungals c) Antiparasitics d) Rifampicin or rifabutin therapy	1 1 1 1

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References

FSRH. Progestogen-only injectable contraception. December 2014
http://www.fsrh.org/pdfs/CEUGuidanceProgestogenOnlyInjectables.pdf

FSRH. UK Medical eligibility criteria for contraceptive use. Nov 2009.

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http://www.fsrh.org/pdfs/CEUGuidanceProblematicBleedingHormonalContraception.pdf

FSRH Drug Interactions with Hormonal Contraception January 2011
http://www.fsrh.org/pdfs/CEUGuidanceDrugInteractionsHormonal.pdf

FSRH New Product Review. Subcutaneous medroxyprogesterone acetate. June 2013
http://www.fsrh.org/pdfs/CEUProductReviewSayana.pdf

FSRH Quick Starting Contraception September 2010
http://www.fsrh.org/pdfs/CEUGuidanceQuickStartingContraception.pdf

Appendix

Check List for Quick Starting Hormonal Contraception

If risk of pregnancy cannot be reasonably excluded, the contraceptive provider should ensure that the woman is:

- Likely to continue to be at risk of pregnancy or that she has expressed a preference to begin contraception immediately.
- Aware that there is a possibility of pregnancy.
- Informed that there is a theoretical risk from foetal exposure to contraceptive hormones but most evidence indicates no harm.
- Aware that pregnancy cannot be excluded until she has had a pregnancy test no sooner than 3 weeks after the last episode of unprotected sexual intercourse.
- Provided with a pregnancy testing kit or informed of alternative options for pregnancy testing, including local.
  providers of free testing.
- Given advice on additional contraceptive precautions.
- Offered a supply of condoms or informed of local providers of condoms.
- Advised to return if there are any concerns or problems with her contraception.