**Case 1 –** Ella is a 23-year-old woman with history of acne who comes to clinic to establish care. She is interested in starting a combined oral contraceptive pill to prevent pregnancy. Vitals and physical exam are within normal limits. BMI is 35.

* *Question*: Using the medical eligibility criteria tab of app, what category risk are combined hormonal contraceptives for this patient?

*Answer*: Category 2 due to BMI>30 (advantages generally outweigh theoretical or proven risks)

She and her partner are currently using condoms and she has never used an alternative form of contraception before. She is a graduate student and is in a long-term relationship. She has had 1 partner in the past several years and has no history of STIs. She has no personal or family history of migraine or clotting disorder.

* *Question:* How will you counsel Ella on benefits/risks?

*Answer*: Assess contraindications to estrogen and counsel on possible reduced efficacy due to BMI. Does not protect against STIs

She understands the risk and decides to commit to a diet/exercise regimen for weight loss for a few months prior to starting. Using the Contraception app, answer the following questions:

* *Question*: What dose of estrogen would you use?

*Answer*: Low to medium dose estrogen.

* *Question*: What generation(s) of progestin would be most suitable?

*Answer*: For her acne it may be beneficial to use 3rd or 4th generation progestins. (See FAQ if questions arise on this subject)

Ella tells you she is going on vacation with her partner in a few months and wishes she could skip her period that month. The “how to choose/adjust pill” tab describes the difference between monophasic and multiphasic types.

* *Question*: If you prescribe a monophasic pill, how can she alter her regimen to accommodate her travel plans?

*Answer*: She can skip the placebo pills and continue the next pack to skip her period. COCPs can be used continuously without an increased cancer risk (unlike with unopposed estrogen). However, continuous use can lead undesirable side effects such as spotting. Withdrawal bleeding (placebo pills) after ~28 d of continuous use can help thin the lining and reduce spotting.

* *BONUS Question*: Her LMP was 2 weeks ago, and she has not had unprotected intercourse. What are some options for initiating the pill and which will require back up contraception?

*Answer*: Option 1 is to start the pill on the day she is prescribed so long as pregnancy has been reasonably excluded. Option 2 is she can start on the first Sunday after her period begins (benefit of this is avoid withdrawal bleeding on a weekend if this is important to the patient). Option 3 is to start on the first day of menses (advantage to this approach is maximum contraceptive effect in the first cycle so backup method is not required as it is for the first two options (7-9).

**Case 2 –** Miranda is a 35-year-old female with history of well-treated hypertension, bipolar depression on lamotrigine, and menorrhagia that has been evaluated in the past who is interested in switching her contraception method for pregnancy prevention.

* *Question*: Using the MEC tab, what category risk is associated with taking lamotrigine?

*Answer*: Category 3 – combined hormonal methods not recommended unless other, more appropriate methods are not available

* *Question*: She is worried about contraceptive sabotage and states she would like an option that is easy to hide. What options can you suggest?  
  *Answer:* IUD, Depo-provera or Nexplanon
* *Question*: How can you help Miranda choose between the various LNG IUDs? (Note this info is not available in the app but can be found in the bedsider article “Which IUD is best for you?”)

*Answer*:

* + Duration – Skyla is approved for use up to 3 years, Kyleena for 5, Liletta for 6, Mirena for 7 years.
  + Period preferences – For Mirena users, about 1 in 5 will stop having a period after 1 year and 1 in 3 who use it for longer stop having a period. Skyla has a lower dose of hormone and can make periods lighter, but most users will not have their periods go away altogether. Kyleena is the same size as Skyla but has a middle tier dose of levonorgestrel so that about 1 in 8 people who use it will stop having periods after a year.
* *Question*: What counseling will you provide regarding benefits/risks and side effects?   
  *Answer:*
  + Benefits include high efficacy, easy to hide, and some users will experience lighter to no periods.
  + Risks include procedural (bleeding, pain, rarely perforation and infection) and IUDs do not protect against STIs.
  + Important side effects to be aware of include spotting/irregular bleeding for the first 3-6 months after placement that can be bothersome and lead some women to have it removed early.

**Case 3 -** David is a 21-year-old transgender male with obesity and type I diabetes diagnosed in childhood. His last HbA1C was 9% and he was found to have microalbuminuria and mild retinopathy during a prior visit. His medications include insulin and lisinopril. He is sexually active with one male partner and is interested in “the shot” today.

* *Question:* Using MEC, what category of risk is associated with his condition?   
  *Answer:* CDC category 3. Due to elevated risk of a thromboembolic event, the risk of using injectable contraception generally outweighs the benefits in patients who have had diabetes > 20 years, or diabetic patients with either macrovascular OR microvascular complications (CDC category 3).
* *Question*: What methods of contraception may worsen gender dysphoria in a male-to-female transgender patient?

*Answer:* You may wish to avoid methods that may worsen menstrual bleeding such as the copper IUD and instead opt for methods such as Nexplanon or hormonal IUDs which tend to reduce menstrual bleeding and may lead to amenorrhea. Ask whether the patient is comfortable with a method that requires a pelvic procedure (IUD).

* *Question*: What additional counseling will you provide?

*Answer*: As with any patient, David should be counseled on condom use for STI prevention and assessed with PATH questions. One study (6) has shown overall higher prevalence of HIV amongst transgender patients (Positive HIV status did not differ in transmen compared to transwomen) and 88% of transmen reported using no protection. Another study noted that 68% of transmen in their cohort had a planned pregnancy. This highlights the importance of creating a safe and comfortable space for transgender patients to receive care and ask questions surrounding family planning and avoiding assumptions about transgender patients’ desire for pregnancy.

**Case 4** - Kylee is a 35-year-old woman presents for contraceptive counseling. What options for combined hormonal contraceptives are recommended if she had the following comorbidities?

* *Question*: Compensated cirrhosis from hepatitis B.

*Answer*: All methods would be low risk.

* *Question:* Decompensated cirrhosis from alcohol.

*Answer:* Combined hormonal methods would be contraindicated (category 4). All other methods are category 3, except for the copper IUD which is category 1.

* *Question*: Smoking.

*Answer*:

For combined hormonal methods:

< 35 yo – category 2

> 35 yo, smoking <15 cigarettes/day – category 3

> 35 yo, smoking > 15 cigarettes/day – category 4.

All other methods are safe.

* *Question:* You prescribe the patch. She breaks her leg in a skiing accident and requires ORIF. How will you manage her contraception after surgery?

*Answer*: Consider switching to a progestin only method. Combined hormonal methods are category 4 after major surgery with anticipated immobilization.