Table 7. Situation-Specific Recommendations for Use of Antiretroviral Drugs in Pregnant People and Nonpregnant People Who Are Trying to Conceive

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People should be given information about the benefits and risks of initiating an antiretroviral regimen or making changes to an existing regimen during pregnancy or when trying to conceive so they can make informed decisions about their care (see Appendix C: Antiretroviral Counseling Guide for Health Care Providers). Patient autonomy and informed choice should be considered in all aspects of medical care, including HIV and obstetric care. These are primary guiding principles in all the Panel on Treatment of HIV During Pregnancy and Prevention of Perinatal Transmission recommendations.

ART Regimen Component	ART for Pregnant People Who Have Never Received ARV Drugs and Who Are Initiating ART for the First Time	Continuing ART for People Who Become Pregnant on a Fully Suppressive, Well-Tolerated Regimen	ART for Pregnant People Who Have Received ARV Drugs in the Past and Who Are Starting or Restarting ART[a]	New ART Regimen for Pregnant People Whose Current Regimen Is Not Well Tolerated and/or Is Not Fully Suppressive[a]	ART for Nonpregnant People Who Are Trying to Conceive[a,b]
Integrase Strand Transfer Inhibitor (INSTI) Drugs Used in combination with a dual-nucleoside reverse transcriptase inhibitor (NRTI) backbone[c]					
DTG[a]	Preferred[a]	Continue	Preferred[a]	Preferred	Preferred[a]
RAL	Alternative	Continue	Alternative	Alternative	Alternative
BIC[d]	Insufficient data	Continue with frequent viral load monitoring or consider switching due to insufficient data	Insufficient data	Insufficient data	Insufficient data
CAB[e] Oral (lead-in) Long-acting (IM)	Not recommended	Continue with frequent viral load monitoring or consider switching due to insufficient data[e]	Insufficient data	Insufficient data	Insufficient data
EVG/c[f]	Not recommended	Continue with frequent viral load monitoring or consider switching	Not recommended	Not recommended	Not recommended

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ART Regimen Component	ART for Pregnant People Who Have Never Received ARV Drugs and Who Are Initiating ART for the First Time	Continuing ART for People Who Become Pregnant on a Fully Suppressive, Well-Tolerated Regimen	ART for Pregnant People Who Have Received ARV Drugs in the Past and Who Are Starting or Restarting ART[a]	New ART Regimen for Pregnant People Whose Current Regimen Is Not Well Tolerated and/or Is Not Fully Suppressive[a]	ART for Nonpregnant People Who Are Trying to Conceive[a,b]
Protease Inhibitor (PI) Drugs Used in combination with a dual-NRTI backbone[c]					
ATV/r	Alternative	Continue	Alternative	Alternative	Alternative
DRV/r[a]	Preferred[a]	Continue	Preferred[a]	Preferred	Preferred[a]
LPV/r	Not recommended, except in special circumstances	Continue	Not recommended, except in special circumstances	Not recommended, except in special circumstances	Not recommended, except in special circumstances
ATV/c[f]	Not recommended	Continue with frequent viral load monitoring or consider switching	Not recommended	Not recommended	Not recommended
DRV/c[f]	Not recommended	Continue with frequent viral load monitoring or consider switching	Not recommended	Not recommended	Not recommended
Non-nucleoside Reverse Transcriptase Inhibitor (NNRTI) Drugs Used in combination with a dual-NRTI backbone[c]					
EFV	Alternative	Continue	Alternative	Alternative	Alternative
RPV Oral[g]	Alternative	Continue	Alternative	Alternative	Alternative
RPV Long-acting (IM)[e]	Not recommended	Continue with frequent viral load monitoring or consider switching due to insufficient data[e]	Insufficient data	Insufficient data	Insufficient data

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ART Regimen Component	ART for Pregnant People Who Have Never Received ARV Drugs and Who Are Initiating ART for the First Time	Continuing ART for People Who Become Pregnant on a Fully Suppressive, Well-Tolerated Regimen	ART for Pregnant People Who Have Received ARV Drugs in the Past and Who Are Starting or Restarting ART[a]	New ART Regimen for Pregnant People Whose Current Regimen Is Not Well Tolerated and/or Is Not Fully Suppressive[a]	ART for Nonpregnant People Who Are Trying to Conceive[a,b]
DOR[d]	Insufficient data	Continue with frequent viral load monitoring or consider switching due to insufficient data	Insufficient data	Insufficient data	Insufficient data
ETR[h]	Not recommended	Continue	Not recommended, except in special circumstances	Not recommended, except in special circumstances	Not recommended, except in special circumstances
NVP[h]	Not recommended	Continue	Not recommended, except in special circumstances	Not recommended, except in special circumstances	Not recommended, except in special circumstances
NRTI Drugs[c,i]					
ABC[c,i,j]	Preferred[c]	Continue	Preferred[c]	Preferred	Preferred[c]
FTC	Preferred	Continue	Preferred	Preferred	Preferred
3TC	Preferred	Continue	Preferred	Preferred	Preferred
TDF[c]	Preferred[c]	Continue	Preferred[c]	Preferred	Preferred[c]
ZDV	Alternative	Continue	Alternative	Alternative	Alternative
TAF[c]	Preferred[c]	Continue	Preferred[c]	Preferred	Preferred[c]
Entry, Attachment, and Fusion Inhibitor Drugs					
IBA	Not recommended	For highly treatment-experienced patients without therapeutic alternatives, continue with frequent viral load monitoring and counsel patients that safety data are not available during	Insufficient data	Insufficient data	Insufficient data

Table 7. Situation-Specific Recommendations for Use of Antiretroviral Drugs in Pregnant People and Nonpregnant People Who Are Trying to Conceive

ART Regimen Component	ART for Pregnant People Who Have Never Received ARV Drugs and Who Are Initiating ART for the First Time	Continuing ART for People Who Become Pregnant on a Fully Suppressive, Well-Tolerated Regimen	ART for Pregnant People Who Have Received ARV Drugs in the Past and Who Are Starting or Restarting ART[a]	New ART Regimen for Pregnant People Whose Current Regimen Is Not Well Tolerated and/or Is Not Fully Suppressive[a]	ART for Nonpregnant People Who Are Trying to Conceive[a,b]
		pregnancy or consider switching			
MVC[h]	Not recommended	Continue	Not recommended, except in special circumstances	Not recommended, except in special circumstances	Not recommended, except in special circumstances
T-20[h]	Not recommended	Continue	Not recommended, except in special circumstances	Not recommended, except in special circumstances	Not recommended, except in special circumstances
FTR	Not recommended	For highly treatment-experienced patients without therapeutic alternatives, continue with frequent viral load monitoring and counsel patients that safety data are not available during pregnancy or consider switching	Insufficient data	Insufficient data	Insufficient data
Fixed-Dose Combination (FDC) and Co-administered Regimens[d,e,h] The individual drug component that is most responsible for the overall recommendation is indicated in parentheses.					
ABC/DTG/3TC[a,c,j]	Preferred[a,c]	Continue	Preferred[a,c]	Preferred	Preferred[a,c]
EFV/FTC/TDF	Alternative (EFV)	Continue	Alternative (EFV)	Alternative (EFV)	Alternative (EFV)
EFV/3TC/TDF	Alternative (EFV)	Continue	Alternative (EFV)	Alternative (EFV)	Alternative (EFV)
FTC/RPV/TDF[g]	Alternative (RPV)	Continue (RPV)	Alternative (RPV)	Alternative (RPV)	Alternative (RPV)
BIC/FTC/TAF[d]	Insufficient data (BIC)	Continue with frequent viral load monitoring or consider	Insufficient data (BIC)	Insufficient data (BIC)	Insufficient data (BIC)

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ART Regimen Component	ART for Pregnant People Who Have Never Received ARV Drugs and Who Are Initiating ART for the First Time	Continuing ART for People Who Become Pregnant on a Fully Suppressive, Well-Tolerated Regimen	ART for Pregnant People Who Have Received ARV Drugs in the Past and Who Are Starting or Restarting ART[a]	New ART Regimen for Pregnant People Whose Current Regimen Is Not Well Tolerated and/or Is Not Fully Suppressive[a]	ART for Nonpregnant People Who Are Trying to Conceive[a,b]
		switching due to insufficient data (BIC)			
DOR/3TC/TDF[d]	Insufficient data (DOR)	Continue with frequent viral load monitoring or consider switching due to insufficient data (DOR)	Insufficient data (DOR)	Insufficient data (DOR)	Insufficient data (DOR)
FTC/RPV/TAF	Alternative	Continue	Alternative	Alternative	Alternative
EVG/c/FTC/TDF[f]	Not recommended (EVG/c)	Continue with frequent viral load monitoring or consider switching (EVG/c)	Not recommended (EVG/c)	Not recommended (EVG/c)	Not recommended (EVG/c)
EVG/c/FTC/TAF[f]	Not recommended (EVG/c)	Continue with frequent viral load monitoring or consider switching (EVG/c)	Not recommended (EVG/c)	Not recommended (EVG/c)	Not recommended (EVG/c)
DRV/c/FTC/TAF[f]	Not recommended (DRV/c)	Continue with frequent viral load monitoring or consider switching (DRV/c)	Not recommended (DRV/c)	Not recommended (DRV/c)	Not recommended (DRV/c)
DTG/3TC As a complete regimen[k]	Not recommended	Continue with frequent viral load monitoring	Not recommended	Not recommended	Not recommended
DTG/RPV As a complete regimen[k]	Not recommended	Continue with frequent viral load monitoring[g]	Not recommended	Not recommended	Not recommended
IM CAB and RPV[e] As a complete regimen	Not recommended	Continue with frequent viral load monitoring or consider switching due to insufficient data[e]	Insufficient data	Insufficient data	Insufficient data

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[a] Do not initiate ARV regimens with components that have documented resistance or suspected resistance based on prior ARV exposure. DTG is not *Preferred* for initial treatment in people with a history of CAB exposure for PrEP due to concerns about INSTI resistance mutations; DRV/r is *Preferred* in this situation.

[b] This guidance is intended for people who are pregnant or trying to conceive. These recommendations are not intended for all people with HIV who might become pregnant.

[c] ABC plus 3TC, TDF plus FTC, TAF plus FTC, and TDF plus 3TC are *Preferred* dual-NRTI backbones, and ZDV plus 3TC is an *Alternative* dual-NRTI backbone for ARV regimens. ABC is not recommended as part of regimens for initial treatment of early (acute or recent) HIV infection since it requires HLA-B*5701 testing before use. When results of HLA-B*5701 testing are not available, use of TDF or TAF rather than ABC will avoid delays in initiating ART.

[d] Data on the safety, PKs, and dosing of BIC in pregnancy are limited. Viral load should be monitored more frequently (every 1–2 months).Because fewer than 200 first trimester and periconception exposures have been reported in the Antiretroviral Pregnancy Registry, it is not yet possible to exclude a risk of birth defects greater than that in the general population. Please report all exposures to the Antiretroviral Pregnancy Registry.

[e] The long-acting injectable formulations of CAB and RPV are available only as a co-packaged product. Co-administration of CAB plus RPV is a complete two-drug ART regimen for nonpregnant adults with HIV RNA levels <50 copies/mL for at least 3 months, on a stable ARV regimen, with no history of treatment failure, and no known or suspected resistance to CAB or RPV. Oral lead-in dosing with CAB and RPV for at least 28 days is used to assess tolerability before starting monthly long-acting IM injections. CAB plus RPV (oral or injectable) should not be administered with NRTIs or other ARV drugs. Oral and injectable CAB and injectable RPV are not recommended for initiation in pregnancy due to lack of dosing, PK, and safety data for injectable RPV and for injectable or oral CAB. However, people who conceive while suppressed on injectable CAB/RPV may have few other treatment options, and the Panel recommends a shared decision-making process to decide whether to continue this regimen with viral load monitoring every 1 to 2 months or to switch to a recommended oral regimen. If a switch is made, the timing of the switch must take into account the long half-life of the long-acting injectable formulations with persistence of the drug for up to 12 months. With the current dosing schedule of monthly injections, change to an oral regimen should occur within 4 weeks of the last CAB and RPV IM doses. Dosing recommendations, including guidance for switching to an oral regimen, can be found in the prescribing information. (See Cabotegravir in the Perinatal Guidelines and Optimizing Antiretroviral Therapy in the Setting of Viral Suppression in the Adult and Adolescent Antiretroviral Guidelines.)

[f] DRV/c, EVG/c, and ATV/c are not recommended for use in pregnancy because of PK changes that pose a risk for low drug levels and viral rebound in the second and third trimesters. However, in cases where virologically suppressed pregnant people present to care on regimens that include these drugs, these drug combinations can be continued with frequent viral load monitoring or can be switched to a recommended or alternative agent. If concerns about switching exist, see People With HIV Who Are Taking Antiretroviral Therapy When They Become Pregnant. If the cobicistat pharmacologic booster is replaced with RTV for ATV and DRV, attention to dosing in pregnancy is critical; higher doses of ATV are required if coadministered with TDF or antacids, and twice-daily dosing is required for DRV, in the second and third trimesters.

[g] Although PK data indicate that RPV plasma concentration is reduced during the second and third trimesters, the reduction is less than the reductions seen with use of EVG/c or DRV/c. Higher-than-standard doses of RPV have not been studied, so data are insufficient to recommend a dose change in pregnancy. With standard dosing, viral load should be monitored more frequently (every 1–2 months).

[h] Although these drugs are not recommended for initial treatment in ART-naive pregnant people, in special circumstances ART-experienced people may need to continue or initiate ETR, NVP, MVC, and T-20 to maintain or achieve viral suppression. Safety and efficacy data are limited about the use of ETR, MVC, and T-20 in pregnancy. NVP is not recommended for ART-naive people, because it has a greater potential for adverse events than other NNRTIs, complex lead-in dosing, and a low barrier to resistance; however, if a pregnant person presents to care on a well-tolerated, NVP-containing regimen, it is likely that NVP will be safe and effective during pregnancy. See Table 6. What to Start: Initial Antiretroviral Regimens During Pregnancy for People Who Are Antiretroviral-Naive and Nevirapine for more information.

[i] When using FDC tablets, refer to Table 14. Antiretroviral Drug Use in Pregnant People With HIV: Pharmacokinetic and Toxicity Data in Human Pregnancy and Recommendations for Use in Pregnancy and the drug sections in Appendix B: Supplement: Safety and Toxicity of Individual Antiretroviral Agents in Pregnancy for information about the dosing and safety of individual components of the FDC tablet during pregnancy.

[j] Testing for HLA-B*5701 identifies patients who are at risk of developing hypersensitivity reactions while taking ABC; testing should be performed and a patient should be documented as negative before initiating ABC.

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[k] Two-drug oral ARV regimens are not recommended for use in pregnancy due to lack of available data about use in pregnancy. However, pregnant persons who present to care on an oral DTG/3TC or DTG/RPV regimen with successfully maintained virologic suppression can continue it with more frequent viral load monitoring, every 1 to 2 months throughout pregnancy, because the component drugs are recommended for use in pregnancy.

Note: The following drugs and drug combinations, which are not listed above, should not be used during pregnancy: If a person becomes pregnant while taking any of these medications, they should switch to a recommended regimen: d4T, ddI, FPV, FPV/r, IDV, IDV/r, NFV, RTV (as the sole PI), SQV, SQV/r, TPV, TPV/r, or a three-NRTI ARV regimen (e.g., ABC/ZDV/3TC). See Archived Drugs in the Perinatal Guidelines and What Not to Use in the Adult and Adolescent Antiretroviral Guidelines for individual ARV drugs, ARV combinations, and ARV regimens that are not recommended or should not be used in adults. Refer to the table above and Table 6. What to Start: Initial Antiretroviral Regimens During Pregnancy for People Who Are Antiretroviral-Naive for ARV regimens that are recommended for use in pregnancy.

Key: 3TC = lamivudine; ABC = abacavir; ART = antiretroviral therapy; ARV = antiretroviral; ATV = atazanavir; ATV/c = atazanavir/cobicistat; ATV/r = atazanavir/ritonavir; BIC = bictegravir; CAB = cabotegravir; d4T = stavudine; ddI = didanosine; DOR = doravirine; DRV = darunavir; DRV/c = darunavir/cobicistat; DRV/r = darunavir/ritonavir; DTG = dolutegravir; EFV = efavirenz; ETR = etravirine; EVG/c = elvitegravir/cobicistat; FDC = fixed-dose combination; FPV = fosamprenavir; FPV/r = fosamprenavir/ritonavir; FTC = emtricitabine; FTR = fostemsavir; IBA = ibalizumab; IDV = indinavir; IDV/r = indinavir/ritonavir; IM = intramuscular; IM CAB and RPV = long-acting intramuscular formulations of cabotegravir and rilpivirine; INSTI = integrase strand transfer inhibitor; LPV/r = lopinavir/ritonavir; MVC = maraviroc; NFV = nelfinavir; NNRTI = non-nucleoside reverse transcriptase inhibitor; NRTI = nucleoside reverse transcriptase inhibitor; NVP = nevirapine; the Panel = Panel on Treatment of HIV During Pregnancy and Prevention of Perinatal Transmission; PI = protease inhibitor; PK = pharmacokinetic; PrEP = pre-exposure prophylaxis; RAL = raltegravir; RPV = rilpivirine; RTV = ritonavir; SQV = saquinavir; SQV/r = saquinavir/ritonavir; T-20 = enfuvirtide; TAF = tenofovir alafenamide; TDF = tenofovir disoproxil fumarate; TPV = tipranavir; TPV/r = tipranavir/ritonavir; ZDV = zidovudine