

Management of pregnancy and breastfeeding in women living with HIV (WLWH)

Belgian guidance (2023) and updates (2024, 2025, 2026)

Methods

Working group (1)

Starting point: Breach meeting in November 2021

Review of the EACS guidelines

Table on antiretroviral regimen for ART naïve patients: preferred or alternative

Questions:

what about women already treated with other ARV?

What about viral cut off for C section, retrovir infusion perpartum?

What about breastfeeding?...etc

After the Breach meeting in November 2021: set up a working group on pregnancy in women living with HIV

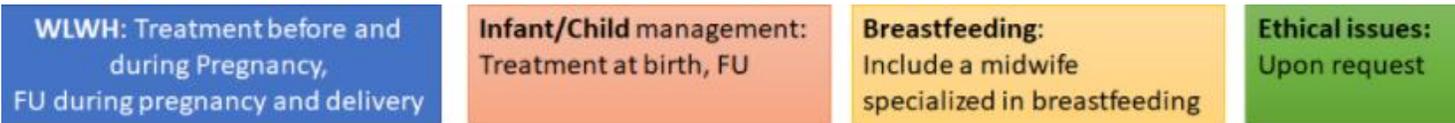
Methods

- ✓ Call to all Breach members to gather HCW involved in the management of pregnancy in WLWH
- ✓ Created a shared drive with literature and consensus drafts
- ✓ 8 live and online meetings
 - 2022: March 17, Sept 20th
 - 2023: Feb 9 and 14th, March 9th, 23rd and 28th and November 14th
- ✓ September 29th 2023: open to comments from all Breach members

Working group (2)

Working group

- ✓ **4 sub-groups:** Pregnancy (Deborah Konopnicki), Infants (Marc Hainaut), Breastfeeding (Dimitri Van der Linden), Ethical issues



- ✓ November 2023: presented at the 11th Breach Meeting
- ✓ October 2024: yearly working group online meeting to discuss updating
- ✓ November 2024: presented at the 12th Breach Meeting

Working groups (3)

- Breastfeeding group

BARLOW Patricia
LAURENT France
KONOPNICKI Deborah
GILLES Christine
PELGROM Jolanda
ROELENS Kristien
CALUWAERTS Séverine
DE GREEF Julien
NAGEL Julie
ROUSSEAU Charlotte

Dominique Van Beckhoven

GOETGHEBUER Tessa
STOFFELS Karolien
VAN DER LINDEN Dimitri
DELFORGE Marie-Luce
ADLER Catherine
SCHMITZ Veronique
HAINAUT Marc
EERDEKENS An
KONOPNICKI Deborah
NAGEL Julie
ROUSSEAU Charlotte

NOESTLINGER Christiana
WILLEMS Myriam
KONOPNICKI Deborah
STOFFELS Karolien
GILLES Christine
VAN DER LINDEN Dimitri
DELFORGE Marie-Luce
AMEYE Annick
ADLER Catherine
BELKHIR Leïla
SCHMITZ Veronique
HAINAUT Marc
EERDEKENS An
VERSCHELDEN Gil

VANDERSCHUEREN Patricia
JEANDENANS Aline
CARLSON Fanny
DAELEMANS Siel
WILLEMSSEN Marjolein
CAMPFFERMAN Fleur
NAGEL Julie
ROUSSEAU Charlotte

2023: 30 Virologists, Infectiologists, gynecologists, obstetricians, pediatricians, neonatologists, mid-wives, nurses, psychologist, social scientist.

13 institutions: CHU Liège-Hopital de la Citadelle, CHU Namur, CHU Saint-Pierre, Cliniques Universitaires Saint Luc, CHU Helora, HUB-Hôpital Erasme, ITG Antwerpen, UZ Antwerp, UZ Brussel, UZ Gent, UZ Leuven, LHUB-VUB AIDS reference laboratory, Sciensano.



Deborah De Geyter, Sabine Allard, Lucie Seyler UZ Brussels
Pauline Naessens UZ Gent
Anke Rotsaert ITG
Khalid El Moussaoui, Dolores Vaira, CHU Liège-hop Citadelle
Jens Van Praet AZ St Jan
Roland Thomas Helora

2024: 39 Virologists, Infectiologists, gynecologists, obstetricians, pediatricians, neonatologists, mid-wives, nurses, psychologist, public health researchers.

Working groups (4)



New members:

Olga Chatzis (in replacement of Dimitri Vanderlinden) Pediatrician, St Luc
Séverine Noirhomme, Infectiologist, CHR Namur
Emilie Hotte, Nancy Cleseur, Marylène Fernandes de Sousa, midwives, CHR Citadelle Liège
Véronique Masson, gynecologist, CHR Citadelle Liège
Eva Brebels, Annelies Meuwissen, Infectiologist and Monica Laubach, gynecologist, UZ Brussels
Schelstraete Petra, infectiologist, UZ Gent
Philip Maes, pediatrician, UZ Antwerpen
Marion Montourcy, sciensano

51 Virologists, Infectiologists, gynecologists, obstetricians, pediatricians, neonatologists, mid-wives, nurses, psychologists, social scientists.

From **14 institutions** AZ St Jan, CHU Liège, CHU Saint-Pierre, Cliniques Universitaires Saint Luc, CHU Helora, CHR Namur, HUB Hopital Erasme, ITG antwerpen, LHUB-ULB, UZ Antwerp, UZ Brussel, UZ Gent, UZ Leuven, Sciensano.

October 4th: online meeting, updated guidelines presentation

December 2025: First manuscript

Both open to the working group comment

February 10th 2026: Online meeting to approve comments and paper

February 12th 2026: sent to BREACH members, open to comments up to March 10th 2026

March 10th 2026: will be posted on Breach website

Belgian guidance

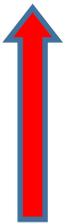
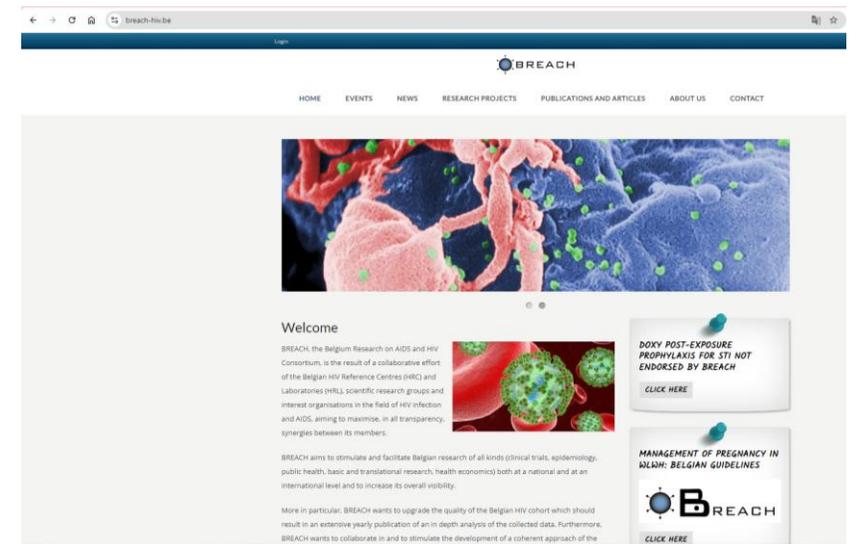
Presented at BREACH symposium

- 2023: Deborah Konopnicki, Marc Hainaut and Dimitri Van der Linden
- 2024: Deborah Konopnicki, Catherine Adler and Julie Nagel

Available On the BREACH web site

- Project
 - 2026: to be submitted to publication: Acta Clinica Belgica
 - Then to
 - Pediatric society
 - BVIKM
 - Sciensano
 - VVOG

- Presented at AfraVIH Yaoundé 2024 as poster and today
- 2025 Published in La revue médicale de Liège



Belgian guidance

- 1. Management of pregnancy in women living with HIV**
- 2. Management of infants/children born from a mother living with HIV**
- 3. Management of breastfeeding in women living with HIV**

1. Management of pregnancy in women living with HIV

1. Management of pregnancy in WLWH

- **Ideal situation**

Viral load ≤ 50 cp/ml before the pregnancy and throughout the whole pregnancy

- When HIV is diagnosed at time of pregnancy or the WLWH is not treated for HIV at time of pregnancy:

Starting ARV triple therapy as soon as possible for all women:

According to EACS guidelines 2023 table

INSTI-based regimen allows reaching VL ≤ 50 cp/ml more rapidly

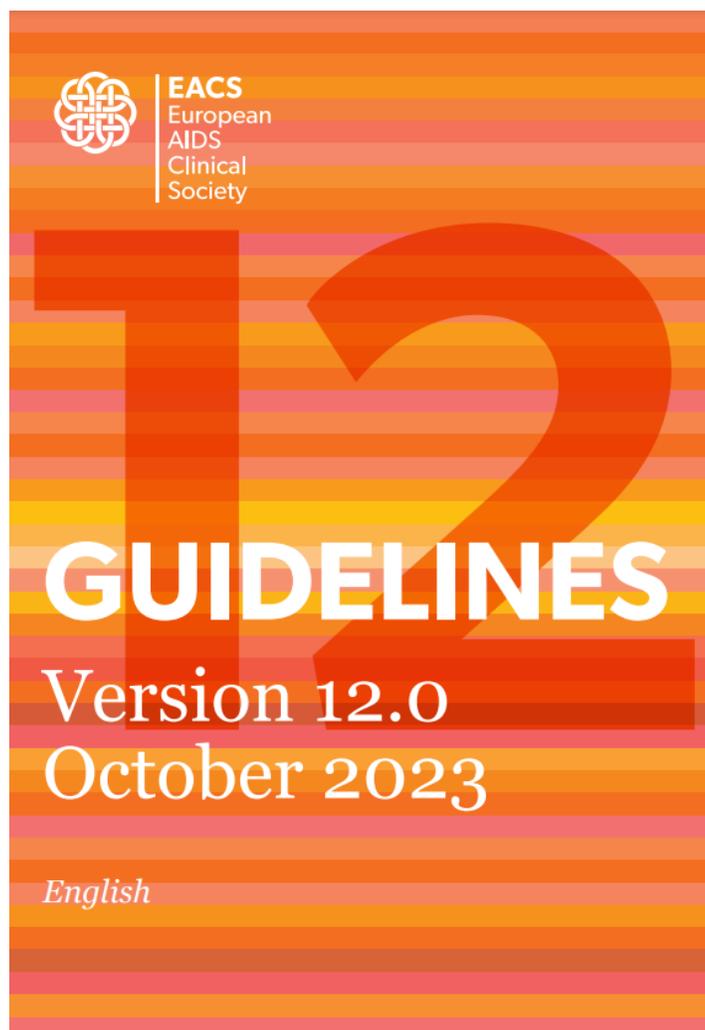


Table 1. Antiretroviral regimen for ART-naïve pregnant women

ART-naïve pregnant women should initiate treatment as soon as possible. The decision of ART regimen should be discussed with the person and individualized taking into account tolerability, possible adherence issues, as well weighed against potential risk coming from ART exposure or suboptimal pharmacokinetics in pregnancy.

Pregnant women starting ART should be monitored monthly or bimonthly (depending on adherence and length of virological suppression) and as close as possible to the predicted delivery date. HIV-VL should be tested every two months of pregnancy and including 36 weeks of gestation

Regimen	Main requirements	Additional guidance (see footnotes)
Recommended regimens		
2 NRTIs + INSTI (PREFERRED)		
TDF/XTC or TAF/FTC + DTG		I (Tenofovir salts)
TDF/XTC or TAF/FTC + RAL 400 mg bid		I (Tenofovir salts) II (RAL in pregnancy, bid dosing)
2 NRTIs + PI/r		
TDF/XTC or TAF/FTC + DRV/r 600 mg/100 mg bid	With food	I (Tenofovir salts) III (DRV dosing) IV (COBI boosting)
Alternative regimens		
2 NRTIs + INSTI		
ABC/3TC + DTG or ABC/3TC/DTG	HLA-B*57:01 negative HBsAg negative	V (ABC: HLA-B*57:01, may delay starting ART)
ABC/3TC + RAL 400 mg bid	HLA-B*57:01 negative HBsAg negative	II (RAL in pregnancy, bid dosing) V (ABC: HLA-B*57:01, may delay starting ART)
2 NRTIs + NNRTI		
ABC/3TC + EFV	HLA-B*57:01 negative HBsAg negative HIV-VL < 100,000 copies/mL At bedtime or 2 hours before dinner	V (ABC: HLA-B*57:01, may delay starting ART) VI (EFV HIV-2 & group O)
TDF/XTC or TAF/FTC + EFV or TDF/FTC/EFV	At bedtime or 2 hours before dinner	I (Tenofovir salts) VI (EFV HIV-2 & group O)
TDF/XTC or TAF/FTC + RPV or TDF/FTC/RPV or TAF/FTC/RPV	CD4 count > 200 cells/ μ L HIV-VL < 100,000 copies/mL Not on gastric pH increasing agents With food	I (Tenofovir salts) VII (RPV exposure during 2 nd and 3 rd trimester, HIV-2) VIII (Interactions)
2 NRTIs + PI/r		
ABC/3TC + DRV/r 600 mg/100 mg bid	HLA-B*57:01 negative HBsAg negative With food	III (DRV dosing) IV (COBI boosting) V (ABC: HLA-B*57:01, may delay starting ART)

Additional guidance

- I Some generic forms of TDF use phosphate, maleate, and succinate salts instead of fumarate. They may be used interchangeably. In certain countries, TDF is labelled as 245 mg rather than 300 mg to reflect the amount of the prodrug (tenofovir disoproxil) rather than the fumarate salt (tenofovir disoproxil fumarate)
- II There were no reports of neural tube defects among 1991 prospective reports of RAL exposure in pregnancy, 456 of which were in the periconception period. No data on RAL 1200 mg qd: not recommended
- III DRV/r 800/100 mg qd not recommended as initial ART during pregnancy due to decreased levels, but could be continued if the woman has already undetectable VL. DRV/c is not recommended during pregnancy due to significant lower exposures of DRV and COBI in the second and third trimester of pregnancy
- IV Boosting with COBI is not recommended after the second trimester of pregnancy (insufficient drug levels)
- V ABC contraindicated if HLA-B*57:01 positive. Even if HLA-B*57:01 negative, counselling on HSR risk still mandatory. If testing for HLA-B*57:01 results in delay of ART initiation, consider other recommended backbone
- VI EFV not active against HIV-2 and HIV-1 group O strains
- VII Lower RPV exposure during second and third trimesters; Consider monitoring VL more frequently. RPV is not active against HIV-2
- VIII Pregnant women are often prescribed anti-H2 or proton pump inhibitors for nausea. Careful review of concomitant medicines at each visit and providing pregnant women with information on potential interactions is recommended

ARV therapy before pregnancy 2025



<p>1. Drugs that are recommended</p>		<p>Dolutegravir based triple (or double regimen) Bictegravir based triple regimen Raltegravir 400 bid based triple regimen Darunavir 800/ritonavir 100 based triple regimen Rilpivirine or Nevirapine based triple regimen</p>
<p>2. Not recommended</p> <p>- Pharmacokinetic - Risk of viral rebound</p>	<p>Elvitegravir Cobicistat (significant decrease in blood concentrations at T3) Atazanavir (risk of hyperbilirubinemia, risk of viral failure)</p>	<ul style="list-style-type: none"> • Discussion with the patient to inform her: shared decision and based on a case to case evaluation <ul style="list-style-type: none"> ➤ Propose to switch to another regimen (as there are a lot of alternatives) ➤ If VL ≤ 50 cp/ml and well tolerated, continue and during pregnancy: monitoring VL frequently (at least at T1, T2, every month during T3)
<p>3. Insufficient data</p> <p>Safety, Pharmacokinetic, dual as opposed to the triple therapy dogma</p>	<p>Doravirine Raltegravir 1200 mg QD Cabotegravir/rilpivirine Dolutegravir/lamivudine Dolutegravir/rilpivirine</p>	<ul style="list-style-type: none"> • Discussion with the patient to inform her: shared decision <ul style="list-style-type: none"> ➤ If VL ≤ 50 cp/ml, therapy well tolerated, and the patient wishes to continue her therapy, continue During pregnancy: monitoring VL frequently (at least at T1, T2, every month during T3) ➤ If VL > 50 cp/ml, or if the patient prefer to have cART with sufficient data background: switch for a recommended therapy

ARV therapy during pregnancy 2025



<p>1. Drugs that are recommended</p>	<p>To be started</p> <p>To be continued</p>	<p>Dolutegravir based or Bictegravir based triple drugs regimen</p> <p>Dolutegravir based triple (or double regimen) or Bictegravir triple regimens</p> <p>Raltegravir 400 bid based triple regimen</p> <p>Darunavir /rito based triple regimen</p>
<p>2. Not recommended</p> <p>- Pharmacokinetic</p> <p>- Risk of viral rebound</p>	<p>Elvitegravir</p> <p>Cobicistat</p> <p>Atazanavir (risk of hyperbilirubinemia, risk of viral failure)</p> <p>(Doravirine: concerns for significant decrease in blood concentrations at T3)</p>	<ul style="list-style-type: none"> • Discussion with the patient to inform her: shared decision and based on a case to case evaluation ➤ Propose to switch to another regimen BEFORE T3 (as there are a lot of alternatives) ➤ If VL ≤ 50 cp/ml and well tolerated, continue and during pregnancy: monitoring VL frequently (at least at T1, T2, every month during T3)
<p>3. Insufficient data</p> <p>Safety,</p> <p>Pharmacokinetic,</p> <p>dual as opposed to the triple therapy dogma</p>	<p>Raltegravir 1200 mg QD</p> <p>Cabotegravir/rilpivirine</p> <p>Dolutegravir/lamivudine</p> <p>Dolutegravir/rilpivirine</p>	<ul style="list-style-type: none"> • Discussion with the patient to inform her: shared decision ➤ If VL ≤ 50 cp/ml, therapy well tolerated, and the patient wishes to continue her therapy, continue During pregnancy: monitoring VL frequently (at least at T1, T2, every month during T3) ➤ If VL > 50 cp/ml, or if the patient prefer to have cART with sufficient data background: switch for a recommended therapy <p>Rilpivirine based triple regimen</p> <p>(Nevirapine or efavirenz based triple regimen)</p>

ARV therapy during Pregnancy:

Should we switch Darunavir/r 800/100mg QD to 600/100 mg bid ?

 Not if the woman has VL \leq 50 cp/ml

There is a theoretical risk based on PK studies but they measured total darunavir and not unbound fraction so the clinical relevance of these measures are not evident

- Large cases series and our own experiences are reassuring
- **2026 updated reference:** Sconza R and al. AIDS. 2026 Feb 11.

Epidemiology of Pregnancy and Paediatric Infections International Cohort Collaboration (EPPICC)* and London HIV Perinatal Research Group (LHPRG)*.
Dosing of ritonavir-boosted darunavir for treatment of HIV in pregnancy.

ARV therapy during Pregnancy:

Is TAF safe on pregnancy outcome ? What about weight gain?

- Review of the guidelines
- Pharmacokinetic of tenofovir alafenamide during pregnancy
- Animal studies (Fertility, teratogenicity, placental and breast milk passage)
- Clinical efficacy
- Safety
- Weight gain



Is TAF safe on pregnancy outcome ?

- Up to date data on use of TAF during pregnancy are reassuring
- There seems to have no contraindication during first trimester
 - No teratogenicity in animal studies with TAF exposure higher than in human with therapeutic dosage.
 - No increase in congenital abnormalities in different registry
- Even with decreasing plasma TAF/TFV during pregnancy, still within therapeutic range
- IMPACT/Vested trial is one of very few randomized ART trials in pregnancy: excellent efficacy and safety outcome
- TAF is associated with increasing weight gain during pregnancy (compared to TDF) but was under the normal weight gain expected during pregnancy so this should be monitored

Endorsed in the last the EACS guidelines October 2023

Testing and ARV during pregnancy

Added in the
EACS
guidelines
2025

Patient diagnosed during pregnancy T1 or T2 or lost to follow-up before pregnancy	<ul style="list-style-type: none">• VL + genotype at diagnosis; Start ARV including Dolutegravir or Bictegravir before genotyping results• VL 1 month after treatment initiation• Then VL every 1 to 2 months• At 36 weeks and at birth
Patient diagnosed during late pregnancy T3	<ul style="list-style-type: none">• VL + genotype at diagnosis; Start ARV including Dolutegravir or Bictegravir before genotyping results• VL every 1-2 weeks until undetectable VL reached• At 36 weeks and at birth
Patient under regular follow-up and VL controlled (≤ 50 cp/ml)	<ul style="list-style-type: none">• VL at least once per trimester ; monthly in T3 if on not recommended ARV• At 36 weeks and at birth
Patient under regular follow-up and VL not controlled	<ul style="list-style-type: none">• Check for tolerability, nausea, pill size, drug interaction, observance, etc..• VL + genotype; TDM monitoring• Consider adding or switching to INSTI (Dolutegravir or bictegravir) before genotyping results• Recheck VL at 1 month if T1 or T2 or after 2 weeks if T3• If VL ≤ 50 cp/ml, recheck every 1-2 months thereafter• At 36 weeks and at birth

What if VL not controlled?



✓ C oncentration	?	TDM
✓ R esistance	?	Genotype
✓ O bservance	?	Anamnèse
✓ I nteractions	?	Anamnèse

Consider adding an INSTI or shifting to INSTI (preferred=dolutegravir)

Threshold of HIV Viral load (VL) at Week 36 for prevention measures

Added in the EACS
guidelines 2025

	Elective scheduled caesarian section at 38 weeks		Intravenous (IV) Zidovudine (ZDV) per partum	
	recommended	considered	recommended	considered
EACS Oct 2025	(before >50) >400 cp/ml	50-400 cp/ml	>50 cp/ml	
DHHS Dec 2020	>1000 cp/ml		>1000 cp/ml	50-1000 cp/ml
BHIVA 2020	> 400 cp/ml	50-399 cp/ml	>1000 cp/ml	50-1000 cp/ml

Per partum preventive measures according to HIV VL at Week 36

	Vaginal delivery	Elective Caesarian-section at 38 weeks	IV ZDV per partum 2 mg/kg loading dose followed by continuous <u>iv</u> infusion of 1 mg/kg/hour until delivery (stop when cord clamped) If scheduled cesarean delivery: start iv ZDV 3 hours before surgery
≤50 cp/ml	Recommend	No	No
50-400 cp/ml	Favor*	Consider*	Yes
400-1000 cp/ml	Consider*	Consider*	Yes
>1000 cp/ml	No	Recommend	Yes

* decision on a case-by-case basis after shared discussion and decision with the patient

Belgian guidance: we RECOMMEND

- an elective caesarean-section (C-section) if VL > 1000 cp/ml (except imminent delivery)+IV zidovudine
- vaginal delivery if VL ≤50 cp/ml (and no other obstetrical condition needing C-section)

Between 50-400 and 1000 cp/ml: CONSIDER

a decision between vaginal delivery versus elective C- section should **be shared with the patient.**

The obstetrical future, the presence of other comorbidity, the history and the opinion of the patient will be taken into account for a decision on a case-by-case basis.

Based on:

- In this case, risk of vertical transmission between 1 and 3%
- Expected gain from an elective C Section: maximum 1% reduction in the risk of vertical transmission
- However, the increase in maternal and fetal morbidity in the event of elective C- section during the current pregnancy and during future pregnancies is >1%

=>we favor vaginal delivery between 50-400 cp/ml

Intravenous Zidovudine will be given during caesarean section and/or labor if VL > 50 cp/ml.

In the event of a vaginal delivery, protective measures will be applied such as:

- Rupture of membranes as late as possible.
- No internal electrode or scalp pH
- No “routine” instrumental extraction or “routine” episiotomy
- (Consider disinfection of vagina, the cord and newborn with chloramine: scant data supporting that)

2. Management of infants/children born from a mother living with HIV

Risk stratification

Lowest risk

- Full VL suppression ≤ 50 **cp/ml** before and throughout pregnancy **including delivery**

Intermediate risk

- Maternal VL detectable at some point(s) during pregnancy but ≤ 50 **cp/ml** before birth

High risk

- Maternal VL known or suspected to be **>50 cp/mL** at delivery

VL = viral load

Optimal scenario: Full VL suppression ≤ 50 cp/ml before and throughout pregnancy

- Post-exposure prophylaxis is not indicated anymore
- Neonatal follow-up without breastfeeding:
 - DNA + RNA testing
 - At birth (0-2 days)
 - +/- 6 weeks
 - +/- 12 weeks
 - Serology screen test at ≥ 20 months

Maternal VL detectable at some point during the pregnancy but ≤ 50 copies/mL before birth

- Zidovudine (AZT) during 4 weeks
- Neonatal follow-up without breastfeeding:
 - DNA + RNA testing
 - At birth (0-2 days)
 - +/- 6 weeks
 - +/- 12 weeks
 - At least 2 tests after completion of PEP, ≥ 4 weeks apart
 - Serology screen test at ≥ 20 months

Maternal VL known or suspected to be >50 copies/mL at delivery (1)

- Triple therapy 4 weeks – Preferred : AZT + 3TC + NVP*
- If NVP not indicated (demonstrated/suspected maternal virus resistance): replace NVP with Dolutegravir (or Lopinavir/ritonavir)
- If maternal VL sampled at birth is ≤ 50 cp/mL, triple therapy could be simplified in favor of AZT alone for 4 weeks

*Nevirapine

Maternal VL known or suspected to be >50 copies/mL at delivery (2)

- Neonatal follow-up without breastfeeding:
 - DNA + RNA testing
 - At birth (0-2 days)
 - 2 to 3 weeks
 - 6 weeks
 - 3 months
 - 6 months
 - The rationale to add a testing at 6 months of age is that combination ART has the potential to interfere with the sensitivity of the PCR tests for a prolonged period of time.
 - Serology screen test at ≥ 20 months

Neonatal testing according to risk categories and breastfeeding or not

Definition	Low risk Full viral load suppression before and throughout pregnancy	Intermediate risk Maternal viral load detectable at some point during the pregnancy but ≤50 copies/mL before delivery	High risk Maternal viral load known or suspected >50 copies/mL at <u>delivery</u>
In case of neonatal PEP: Start within 4h after delivery if possible	No PEP*	AZT 4 weeks	Triple therapy : AZT+3TC+NVP 2 weeks Followed by AZT+3TC 2 weeks In case of resistance to NVP: AZT+3TC +DTG 4 weeks
Neonatal follow-up <u>without</u> breastfeeding	DNA + RNA testing - At birth (0-2 days) - 6 weeks - 12 weeks Serology screen test (HIV antigen + antibody) at ≥20 months	DNA + RNA testing - At birth (0-2 days) - 6 weeks - 12 weeks At least 2 tests after completion of preventive treatment, ≥4 weeks apart Serology screen test (HIV antigen + antibody) at ≥20 months	DNA + RNA testing - At birth (0-2 days) - 2 to 3 weeks - 6 weeks - 12 weeks - 6 months At least 2 tests after completion of preventive treatment, ≥4 weeks apart Serology screen test (HIV antigen + antibody) at ≥20 months
Neonatal follow-up <u>in case of</u> breastfeeding**	DNA + RNA testing - At birth (0-2 days) - every 6 weeks during breastfeeding - continue every 6 weeks until 3 months after stop breastfeeding Serology screen test (HIV antigen + antibody) at ≥20 months	DNA + RNA testing - At birth (0-2 days) - every 6 weeks during breastfeeding - continue every 6 weeks until 3 months after stop breastfeeding Serology screen test (HIV antigen + antibody) at ≥20 months	Breastfeeding is NOT recommended, and HIGHLY DISCOURAGED But if breastfeeding is decided anyway, same test schedule as intermediate risk.

Details on the Sciensano web site:

[Sciensano link](#)

*When maternal viral load is not available at birth, AZT can be started and discontinued when result of maternal viral load <50 cp/ml is obtained
AZT: zidovudine, 3TC: lamivudine, NVP: nevirapine, DTG: dolutegravir
**Breastfeeding is not routinely recommended but opened to a shared decision process: risks & benefits should be discussed before delivery. A multidisciplinary team should offer guidance and follow-up.

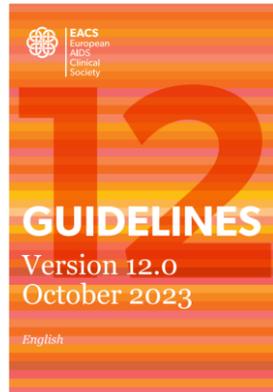


Oral dosing of antiretroviral in infants

Zidovudine (AZT): duration 4 weeks	
Birth at < 30 weeks gestation	Until 4 weeks: 2 mg/kg per dose x 2/day From 4 to 6 weeks: 3 mg/kg per dose x 2/day
Birth at ≥30 to <35 weeks gestation	From birth to 2 weeks: 2 mg/kg per dose x 2/day From 2 to 6 weeks: 3 mg/kg per dose x 2/day
Birth at ≥35 weeks gestation	From birth to ≤ 6 weeks: 4 mg/kg per dose x 2/day
Lamivudine (3TC): duration 4 weeks	
Birth at ≥ 32 weeks gestation	From birth to < 4 weeks: 2 mg/kg per dose x 2/day From ≥ 4 to ≤ 6 weeks: 4 mg/kg per dose x 2/day
Nevirapine (NVP): duration 2 weeks	
Birth at ≥32 to <34 weeks gestation	From birth to <2 Weeks: 2 mg/kg per dose x 2/day From ≥2 to <4 Weeks: 4 mg/kg per dose x 2/day From ≥4 to ≤6 Weeks: 6 mg/kg per dose x 2/day
Birth at ≥34 to <37 weeks gestation	From birth to <1 Week: 4 mg/kg per dose x 2/day From ≥1 to ≤6 Weeks: 6 mg/kg per dose x 2/day
Birth at ≥37 weeks gestation	From birth to ≤ 6 weeks: 6 mg/kg per dose x 2/day
Dolutegravir: duration 4 weeks (in case of resistance to nevirapine)	
Birth at ≥37 Weeks Gestation and weight ≥ 3 kg (range in the PETITE-DTG study 2,365-4,330 kg)*	From day 0 to 14 of life : 5 mg every 48 h From day 15 up to 28 of life: 5 mg daily (dispersible pill)

3. Management of breastfeeding in women living with HIV

3. Breastfeeding (B/F) infants born from a mother living with HIV



- **Breastfeeding is not recommended routinely**
- **In situations where there is persistently undetectable maternal HIV viral load and very low risk of transmission, breastfeeding may be facilitated by joint decision making and with appropriate close monitoring of mother and infant. Please see the section on **General Principles of Postnatal Prophylaxis and Infant Feeding** for details, on page 157**



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Successful implementation of new Swiss recommendation  breastfeeding of infants born to women living with HIV

[Pierre Alex Crisinel](#) • [Katharina Kusejko](#) • [Christian R Kahlert](#) • ... [Andri Rauch](#) • [Paolo Paioni](#) • [Karoline Aebi-Popp](#)   • [Show all authors](#) • [Show footnotes](#)

[Open Access](#) • Published: February 14, 2023 • DOI: <https://doi.org/10.1016/j.ejogrb.2023.02.013>



In Belgium, breastfeeding is not routinely recommended.

All pregnant women living with HIV should be informed on the potential benefits and risks of breastfeeding.

If a woman living with HIV decides to breastfeed, after having been informed, it is the duty of health care providers, as professionals, **to offer proper guidance and follow-up in a supportive environment to minimize risk of HIV transmission knowing that:**

The risk of transmission of HIV during breastfeeding is:

- high (up to 10-15%) in the absence of antiretroviral treatment and suppressed viral load
- low (<1%) if the mother has sustained undetectable viral load under antiretroviral therapy

The benefits of breastfeeding are (not exhaustive list): bonding with the child, easy and cheap way of feeding the child, transfer of antibodies to infant decreasing infection risk, reduce risks of postpartum depression and breast cancer for the mother.

Formula feeding, in high resources countries such as Belgium, is safe and healthy for the baby.

Eligibility criteria for breastfeeding

OPTIMAL SCENARIO (=LOW RISK)

- Long-term follow-up with undetectable viral load on cART
- Proof of excellent adherence

INTERMEDIATE RISK group

- discourage BF but same service/support should be offered if decision to BF

- Premature infant (<35 weeks): As there are currently no data on breastfeeding in premature infant <35 weeks, we do not recommend breastfeeding in premature infants

Prenatal preparations

- **Multidisciplinary** prenatal consultation to discuss the pros and cons.
- **Involve the partner/father** in the decision process if possible.
- An **information leaflet** must be available to the parents to help them to make a decision. This document should be signed, ideally by both parents.
- Lack of financial resources **should not be** the main motivation to breastfeed. In that case, financial/material support should be sought.
- **Propose**
 - **Consultations with trained midwife to inform on both breastfeeding and formula feeding**
 - **Peer support**

Post-natal follow-up (FU)

MAX 6 MONTHS EXCLUSIVE BREASTFEEDING IS RECOMMENDED

INFANT

- Clinical follow up and PCR test (RNA+DNA)/6 weeks until 3 months post weaning
- Serology \geq 20 months
- AZT could be proposed to parent's request
- In case of INTERMEDIATE RISK \rightarrow AZT 4 weeks

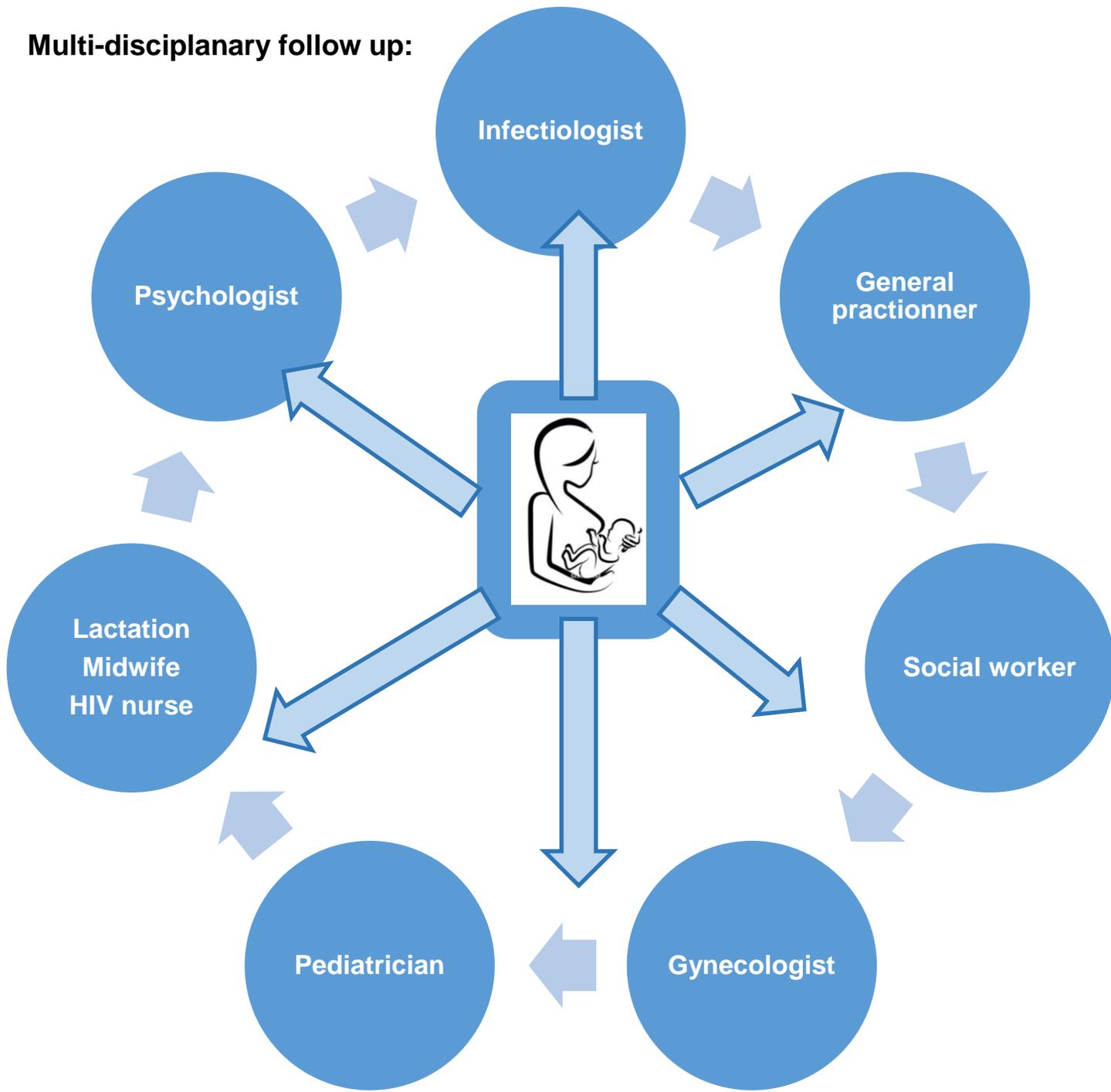
MOTHER

- HIV RNA/6 weeks at the same time as infant
- Special attention to adherence
- B/feeding-nipples supervision by a specialized nurse

Exclusive breastfeeding means:

- Solid food: not allowed
- Formula feeding not allowed but exception ***if occasionally and of short duration (< 24-48 hours)**** for specific indications such establishing lactation, gastroenteritis, mastitis.
- How to avoid formula feeding in case of mastitis/cracked nipples?
 - Prevention with lactation midwife
 - Use of previously frozen breastmilk
 - Use contralateral breast if healthy (in case of)

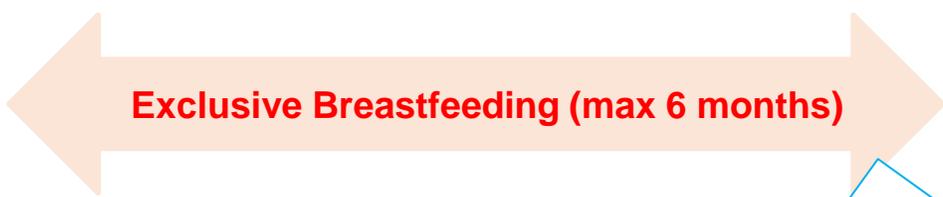
Multi-disciplinary follow up:



- Best conditions to breastfeed if
- Maternal viral suppression during pregnancy
 - Healthy breasts and nipples
 - Digestive mucosal integrity of the mother/newborn

When and how to interrupt breastfeeding (BF)

1. Gastro-enteritis, severe candidiasis
2. Cracked nipples, mastitis:
 - Use contralateral breast if healthy (in case of localised mastitis/cracked nipples)
 - Use previously frozen breastmilk from the mother
 - Express milk, throw it away and restart BF when healing
3. Blip > 50 copies/ml : stop BF and discourage resuming
 - If minor blip 50-100 copies/ml and VL undetectable again a case-by-case discussion to consider resuming BF
4. When weaning : frozen breastmilk could be used to facilitate the transition.

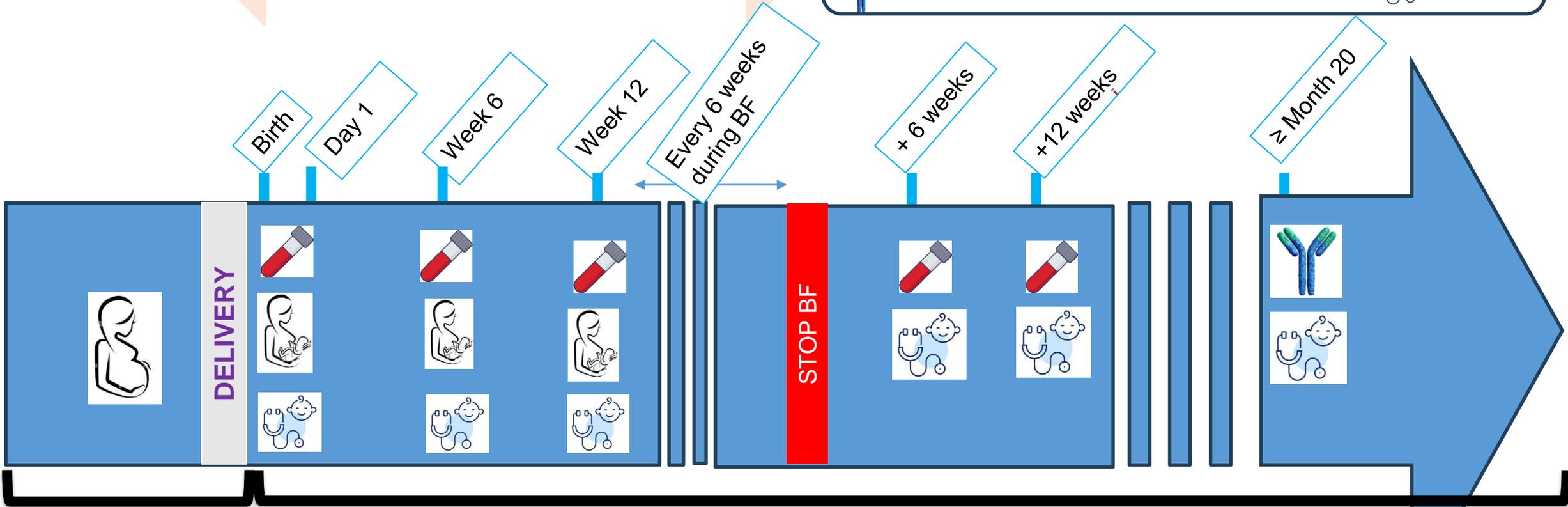


 HIV PCR (RNA and DNA in infant. RNA in mother)

 HIV serology



in mother
in child



Antenatal



Pediatric follow-up

- Clinical
- Growth
- Vaccination
- Neurodevelopment

+ Collaboration:

- Infectiologist
- Gynecologist
- Midwife /lactation
- Psychologist
- Social worker
- Referent HIV nurse

Perspectives

- Belgian registry for delivery
- **Belgian registry collecting prospectively breastfeeding cases will start in 2026**

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Abbreviations

- 3TC: Lamivudine
- AZT: zidovudine
- Bid: twice daily
- BF : breastfeeding
- cART: combined antiretroviral therapy
- C-section: caesarian sectioncp: copies
- FU follow up
- HCW: health care workers
- INSTI: integrase inhibitor
- IV: intravenous
- NVP: nevirapine
- VL: viral load
- PEP: post exposure prophylaxis
- QD: once daily
- R: ritonavir
- T: trimester
- TAF: tenofovir alafelanide
- TDF: tenofovir disproxil
- TDM: therapeutic drug monitoring
- WLWH: women living with HIV

Thank you for your attention

HIV and Pregnant People

