



Variabilité génétique du virus de l'hépatite B et réponse antivirale chez les patients co-infectés VIH-VHB en Afrique subsaharienne

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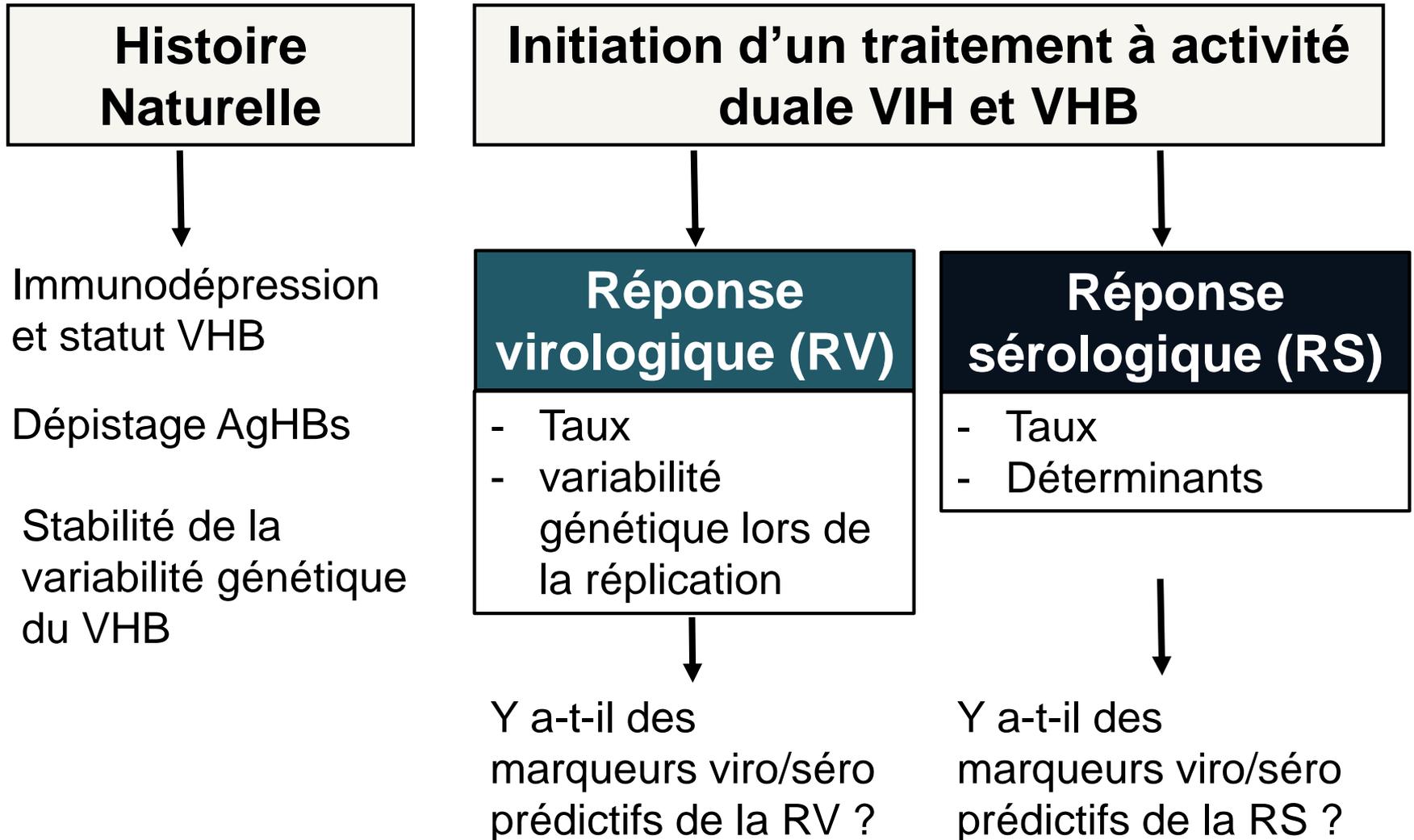
Conflits d'intérêt

- *Advisory boards: Abbvie, BMS, Gilead, Janssen, MSD.*
- *Soutien à la recherche: Gilead, Janssen, MSD.*
- *Invitations en congrès: Abbvie, BMS, Gilead, Janssen, MSD.*

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Questions de recherche concernant la co-infection VIH-VHB en Afrique Sub-Saharienne



VarBVA: schéma d'étude

- Prospective, nested cohort study

TRIVACAN¹

150 < CD4/mm³ < 350
continuous ART

CD4+ ≤350/mm³
or VIH-VL >50
cp/mL

Until CD4+
>350/mm³ and
VIH-VL <50 cp/mL

ARV
contin

ARV
contin

ARV
fixed ITP

ARV
CD4+ ITP

LAM

TEMPRANO²

WHO < CD4/mm³ < 800

WHO

WHO
+INH

Early
ART

Early
ART+INH

TDF+FTC

¹Danel C et al., *Lancet*, 2006

²Danel C et al., *NEJM*, 2015

VarBVA: population d'étude

Treatment-naïve, HIV-HBV co-infected patients from Sub-Saharan Africa (SSA) initiating an anti-HBV containing antiretroviral treatment (ART)

- **Inclusion criteria**

- HIV-1 or mixed HIV-1/2 infection
- Validated HBsAg-positive serology
- Initiating ART with LAM or TDF/FTC during follow-up
- Available virological or serological results at treatment initiation and at least once during follow-up

- **Non-inclusion criteria**

- Treatment duration <6 months

VarBVA: résultats principaux

- **Natural history**
 - Misclassification of HBsAg-status can occur, especially during inactive forms of infection¹
- **Treatment interruption:**
 - Increase of HIV-associated morbidity, especially bacterial infections²
- **Virological response³**
 - LAM: low incidence of antiviral resistance, possibly due to lower HBV DNA replication
 - TDF: viral persistence most likely due to poor adherence
- **Serological responses⁴**
 - Rates comparable to industrialized countries
 - Quantifiable HBsAg remains stable for most patients

¹Boyd A et al., *Diag Microbiol Inf Dis*, 2015; ²Boyd A. et al. *Am J Trop Med Hyg* 2017, submitted; ³Boyd A et al., *Antiviral Ther*, 2015; ⁴Boyd A et al., *J Gastroenterol Hepatol*, 2016

VarBVA: questions de recherche en cours

- **Natural history**
 - How stable are HBV replication and genetic variability?
 - How does HBsAg quantification change?
- **Predictors of viral replication**
 - How do other less costly markers compare to quantifying HBV viral load?
- **Genetic variability**
 - How do *precore* mutations affect virological response?
 - How do mutations on the “a” determinant of the S-gene affect quantifiable HBsAg?

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