

# Projet de recherche : Résultats des générations de résumés

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## Contents

<b>1</b>	<b>Résumé à partir de clusters prédéfinies</b>	<b>4</b>
1.1	Sélection des phrases avec les meilleurs poids par cluster, en fonction de la moyenne des poids des mots	4
1.1.1	Les 20 mots-clés les plus importants du Cluster n°1	4
1.1.2	Les 10 meilleurs phrases sélectionnés du Cluster n°1	5
1.1.3	Les 20 mots-clés les plus importants du Cluster n°2	5
1.1.4	Les 10 meilleurs phrases sélectionnés du Cluster n°2	6
1.1.5	Les 20 mots-clés les plus importants du Cluster n°3	6
1.1.6	Les 10 meilleurs phrases sélectionnés du Cluster n°3	7
1.1.7	Les 20 mots-clés les plus importants du Cluster n°4	7
1.1.8	Les 10 meilleurs phrases sélectionnés du Cluster n°4	8
1.1.9	Les 20 mots-clés les plus importants du Cluster n°5	8
1.1.10	Les 10 meilleurs phrases sélectionnés du Cluster n°5	9
<b>2</b>	<b>Génération de nouveaux clusters par titres</b>	<b>10</b>
2.1	Déroulement de l'algorithme	10
2.2	Pre-processing	10
2.3	Génération de la matrice TF-IDF	11
2.4	Réduction de la matrice TF-IDF avec SVD	11
2.5	Clustering avec K-Means	12
2.6	Résumé généré avec la moyenne des poids de mots	17
2.6.1	Excluant les phrases détaillant les participants à la recherche	17
2.6.2	Les 20 mots-clés les plus importants du Cluster n°1	18
2.6.3	Les 11 meilleurs phrases sélectionnés du Cluster n°1	18
2.6.4	Les 20 mots-clés les plus importants du Cluster n°2	19
2.6.5	Les 12 meilleurs phrases sélectionnés du Cluster n°2	19
2.6.6	Les 20 mots-clés les plus importants du Cluster n°3	20
2.6.7	Les 13 meilleurs phrases sélectionnés du Cluster n°3	20
2.6.8	Les 20 mots-clés les plus importants du Cluster n°4	21
2.6.9	Les 12 meilleurs phrases sélectionnés du Cluster n°4	21
2.6.10	Les 20 mots-clés les plus importants du Cluster n°5	22
2.6.11	Les 11 meilleurs phrases sélectionnés du Cluster n°5	22
2.6.12	Les 20 mots-clés les plus importants du Cluster n°6	23
2.6.13	Les 10 meilleurs phrases sélectionnés du Cluster n°6	23
2.6.14	Les 20 mots-clés les plus importants du Cluster n°7	24
2.6.15	Les 13 meilleurs phrases sélectionnés du Cluster n°7	24
2.6.16	Les 20 mots-clés les plus importants du Cluster n°8	25

2.6.17	Les 12 meilleurs phrases sélectionnés du Cluster n°8 . . . . .	25
2.7	Résumé généré avec la méthode SVD sur les poids de mots . . . . .	26
2.7.1	Excluant les phrases détaillant les participants à la recherche . . . . .	26
2.7.2	Les 20 mots-clés les plus importants du Cluster n°1 . . . . .	27
2.7.3	Les 10 meilleurs phrases sélectionnés du Cluster n°1 . . . . .	27
2.7.4	Les 20 mots-clés les plus importants du Cluster n°2 . . . . .	28
2.7.5	Les 10 meilleurs phrases sélectionnés du Cluster n°2 . . . . .	28
2.7.6	Les 20 mots-clés les plus importants du Cluster n°3 . . . . .	29
2.7.7	Les 10 meilleurs phrases sélectionnés du Cluster n°3 . . . . .	29
2.7.8	Les 20 mots-clés les plus importants du Cluster n°4 . . . . .	30
2.7.9	Les 10 meilleurs phrases sélectionnés du Cluster n°4 . . . . .	30
2.7.10	Les 20 mots-clés les plus importants du Cluster n°5 . . . . .	31
2.7.11	Les 10 meilleurs phrases sélectionnés du Cluster n°5 . . . . .	31
2.7.12	Les 20 mots-clés les plus importants du Cluster n°6 . . . . .	32
2.7.13	Les 10 meilleurs phrases sélectionnés du Cluster n°6 . . . . .	32
2.7.14	Les 20 mots-clés les plus importants du Cluster n°7 . . . . .	33
2.7.15	Les 11 meilleurs phrases sélectionnés du Cluster n°7 . . . . .	33
2.7.16	Les 20 mots-clés les plus importants du Cluster n°8 . . . . .	34
2.7.17	Les 10 meilleurs phrases sélectionnés du Cluster n°8 . . . . .	34
<b>3</b>	<b>Génération de nouveaux clusters par abstracts</b>	<b>35</b>
3.1	Déroulement de l'algorithme . . . . .	35
3.2	Pre-processing . . . . .	35
3.3	Génération de la matrice TF-IDF . . . . .	37
3.4	Réduction de la matrice TF-IDF avec SVD . . . . .	37
3.5	Clustering avec K-Means . . . . .	38
3.6	Résumé généré avec la moyenne des poids de mots . . . . .	42
3.6.1	Excluant les phrases détaillant les participants à la recherche . . . . .	42
3.6.2	Les 20 mots-clés les plus importants du Cluster n°1 . . . . .	43
3.6.3	Les 12 meilleurs phrases sélectionnés du Cluster n°1 . . . . .	43
3.6.4	Les 20 mots-clés les plus importants du Cluster n°2 . . . . .	44
3.6.5	Les 13 meilleurs phrases sélectionnés du Cluster n°2 . . . . .	44
3.6.6	Les 20 mots-clés les plus importants du Cluster n°3 . . . . .	45
3.6.7	Les 12 meilleurs phrases sélectionnés du Cluster n°3 . . . . .	45
3.6.8	Les 20 mots-clés les plus importants du Cluster n°4 . . . . .	46
3.6.9	Les 14 meilleurs phrases sélectionnés du Cluster n°4 . . . . .	46
3.6.10	Les 20 mots-clés les plus importants du Cluster n°5 . . . . .	47
3.6.11	Les 10 meilleurs phrases sélectionnés du Cluster n°5 . . . . .	47
3.6.12	Les 20 mots-clés les plus importants du Cluster n°6 . . . . .	48
3.6.13	Les 10 meilleurs phrases sélectionnés du Cluster n°6 . . . . .	48
3.6.14	Les 20 mots-clés les plus importants du Cluster n°7 . . . . .	49
3.6.15	Les 14 meilleurs phrases sélectionnés du Cluster n°7 . . . . .	49
3.7	Résumé généré avec la méthode SVD sur les poids de mots . . . . .	49
3.7.1	Excluant les phrases détaillant les participants à la recherche . . . . .	50
3.7.2	Les 20 mots-clés les plus importants du Cluster n°1 . . . . .	51
3.7.3	Les 10 meilleurs phrases sélectionnés du Cluster n°1 . . . . .	51
3.7.4	Les 20 mots-clés les plus importants du Cluster n°2 . . . . .	52
3.7.5	Les 10 meilleurs phrases sélectionnés du Cluster n°2 . . . . .	52
3.7.6	Les 20 mots-clés les plus importants du Cluster n°3 . . . . .	53
3.7.7	Les 10 meilleurs phrases sélectionnés du Cluster n°3 . . . . .	53
3.7.8	Les 20 mots-clés les plus importants du Cluster n°4 . . . . .	54
3.7.9	Les 10 meilleurs phrases sélectionnés du Cluster n°4 . . . . .	54

3.7.10	Les 20 mots-clés les plus importants du Cluster n°5 . . . . .	55
3.7.11	Les 10 meilleurs phrases sélectionnés du Cluster n°5 . . . . .	55
3.7.12	Les 20 mots-clés les plus importants du Cluster n°6 . . . . .	56
3.7.13	Les 10 meilleurs phrases sélectionnés du Cluster n°6 . . . . .	56
3.7.14	Les 20 mots-clés les plus importants du Cluster n°7 . . . . .	57
3.7.15	Les 10 meilleurs phrases sélectionnés du Cluster n°7 . . . . .	57

# 1 Résumé à partir de clusters prédéfinies

- $s_i$  is the weight of a given sentence,
- $w_i$  is the weight of a given word,
- $n$  is the number of words in a sentence

## 1.1 Sélection des phrases avec les meilleurs poids par cluster, en fonction de la moyenne des poids des mots

$$s_i = \frac{1}{n} \sum_i^n w_i$$

Immediate cART initiation significantly reduces risk of cancer. The dominant ileum B cell response was to Env gp41. The test group will receive training. The primary outcomes were HIV transmission at 1 week of age in the infant and maternal and infant safety. HIV contributes substantially to child mortality, but factors underlying these deaths are inadequately described.

### 1.1.1 Les 20 mots-clés les plus importants du Cluster n°1

woman	<b>0.054449</b>	disease	<b>0.024078</b>
patient	<b>0.049414</b>	prevalence	<b>0.023820</b>
risk	<b>0.035948</b>	month	<b>0.023242</b>
treatment	<b>0.032350</b>	diagnosis	<b>0.023158</b>
man	<b>0.030817</b>	sexual	<b>0.022565</b>
incidence	<b>0.030449</b>	acute	<b>0.022406</b>
year	<b>0.029035</b>	adult	<b>0.022080</b>
testing	<b>0.026083</b>	positive	<b>0.021920</b>
care	<b>0.025017</b>	test	<b>0.021780</b>
associate	<b>0.024771</b>	health	<b>0.021750</b>

### 1.1.2 Les 10 meilleurs phrases sélectionnés du Cluster n°1

Sentence	Weight
Immediate cART initiation significantly reduces risk of cancer.	<b>0.009412</b>
Early HIV testing is critical to prevention and timely treatment.	<b>0.007812</b>
To determine the incidence of HIV during pregnancy as defined by seroconversion using a repeat HIV rapid testing strategy during late pregnancy.	<b>0.006935</b>
The prevalence of late ART initiation was high.	<b>0.006802</b>
Early HIV diagnosis, enrollment on antiretroviral treatment, and isoniazid prophylaxis treatment should be considered to decrease the TB risk.	<b>0.006790</b>
A delay presentation for human immunodeficiency virus (HIV) patient's care (that is late engagement to HIV care due to delayed HIV testing or delayed linkage for HIV care after the diagnosis of HIV positive) is a critical step in the series of HIV patient care continuum.	<b>0.006688</b>
Genital ulcer disease (GUD) is a major risk factor for human immunodeficiency virus (HIV) transmission.	<b>0.006657</b>
Older age and baseline CD8 cell count were independent predictors of infection-unrelated cancer.	<b>0.006581</b>
These results highlight the substantial risk of transmission during acute HIV infection.	<b>0.006580</b>

### 1.1.3 Les 20 mots-clés les plus importants du Cluster n°2

cell	<b>0.085219</b>	antibody	<b>0.029279</b>
subtype	<b>0.058979</b>	resistance	<b>0.028890</b>
response	<b>0.053972</b>	plasma	<b>0.028825</b>
virus	<b>0.040775</b>	acute	<b>0.028537</b>
viral	<b>0.040014</b>	neutralize	<b>0.028087</b>
isolate	<b>0.039945</b>	level	<b>0.027754</b>
individual	<b>0.033167</b>	env	<b>0.027502</b>
sequence	<b>0.033069</b>	immune	<b>0.027150</b>
primary	<b>0.030091</b>	gag	<b>0.026829</b>
specific	<b>0.030033</b>	associate	<b>0.026642</b>

### 1.1.4 Les 10 meilleurs phrases sélectionnés du Cluster n°2

Sentence	Weight
The dominant ileum B cell response was to Env gp41.	<b>0.012922</b>
SIVmac grew equally well in both cell lines.	<b>0.011398</b>
Regulatory T cells (Tregs) have the potential to control systemic immune activation but also to suppress antigen specific T and B cell response.	<b>0.010153</b>
Primary HIV-1 drug resistance was low.	<b>0.009562</b>
HIV viral loads and peripheral blood CD4+ T cell counts were measured in all subjects.	<b>0.009487</b>
Here, we assessed CD8+ T cell functional evolution from primary to chronic HIV infection.	<b>0.009176</b>
ART was not associated with an increase in CD161++CD8+ T cell frequency.	<b>0.009165</b>
Higher set point viral load, lower early CD4+ cell count, and more-symptomatic acute HIV-1 illness each predicted death.	<b>0.008913</b>
The superinfected individual mounted a neutralizing antibody response to the primary TF virus, which remained TF-specific over time and even after superinfection, did not neutralize the superinfecting variant.	<b>0.008774</b>
Additionally, HIV-specific cytolytic CD4+ T cell responses in acute HIV infection are predictive of disease progression.	<b>0.008612</b>

### 1.1.5 Les 20 mots-clés les plus importants du Cluster n°3

test	<b>0.075072</b>	care	<b>0.033174</b>
ahi	<b>0.066854</b>	positive	<b>0.032452</b>
testing	<b>0.060238</b>	antibody	<b>0.031870</b>
acute	<b>0.039772</b>	risk	<b>0.031413</b>
assay	<b>0.039621</b>	patient	<b>0.030348</b>
sample	<b>0.039450</b>	incidence	<b>0.029061</b>
blood	<b>0.038846</b>	diagnosis	<b>0.028825</b>
rapid	<b>0.037243</b>	detect	<b>0.028673</b>
donor	<b>0.034822</b>	cost	<b>0.028433</b>
participant	<b>0.033388</b>	estimate	<b>0.028138</b>

### 1.1.6 Les 10 meilleurs phrases sélectionnés du Cluster n°3

Sentence	Weight
The test group will receive training.	<b>0.015217</b>
Mobilized participants received clinic-based rapid antibody testing and point-of-care HIV RNA testing.	<b>0.014584</b>
Available antibody testing cannot detect an acute HIV infection, but repeat testing after 2-4 weeks may detect seroconversion.	<b>0.013351</b>
Combo test results were reported as antigen positive, antibody positive, or both.	<b>0.013249</b>
Whole blood was used for Plasmodium falciparum rapid test determination at screening visit.	<b>0.013200</b>
The p24 ELISA antigen test remained positive at 5 pg/mL.	<b>0.012151</b>
Rapid testing was conducted with parallel testing in the clinic and serial testing in the center.	<b>0.012109</b>
Future directions for HIV testing include rapid testing technology and detection of acute HIV infection, self-testing expansion, and partner notification.	<b>0.011754</b>
Assays that detect p24 antigen reduce the diagnostic window period of HIV testing.	<b>0.011280</b>
Concordance of cobas HIV-1/2 Qual test with the comparator serological test and COBAS AmpliPrep/COBAS TaqMan test was $\geq 99.6\%$ with all sample types.	<b>0.011270</b>

### 1.1.7 Les 20 mots-clés les plus importants du Cluster n°4

infant	<b>0.321222</b>	pmtct	<b>0.049729</b>
mother	<b>0.150459</b>	mtct	<b>0.049637</b>
week	<b>0.112531</b>	woman	<b>0.048541</b>
child	<b>0.082790</b>	birth	<b>0.045351</b>
transmission	<b>0.074193</b>	rate	<b>0.044278</b>
expose	<b>0.063175</b>	mortality	<b>0.042816</b>
month	<b>0.061769</b>	diagnosis	<b>0.039777</b>
maternal	<b>0.056052</b>	prophylaxis	<b>0.038537</b>
age	<b>0.052444</b>	test	<b>0.038504</b>
pcr	<b>0.050343</b>	receive	<b>0.038387</b>

### 1.1.8 Les 10 meilleurs phrases sélectionnés du Cluster n°4

Sentence	Weight
The primary outcomes were HIV transmission at 1 week of age in the infant and maternal and infant safety.	<b>0.048036</b>
Earlier diagnosis is necessary to reduce infant mortality.	<b>0.046573</b>
We measured MTCT prevalence at 4-12 weeks post-delivery and evaluated associations between infant HIV infection and maternal and infant characteristics including maternal treatment and infant prophylaxis.	<b>0.042277</b>
HIV is a major contributor to infant mortality.	<b>0.040948</b>
Early initiation of antiretroviral therapy reduces HIV-related infant mortality.	<b>0.040424</b>
Early initiation of antiretroviral therapy depends on an early infant diagnosis and is critical to reduce HIV-related infant mortality.	<b>0.039532</b>
Early infant diagnosis using HIV-RNA/PCR or HIV-DNA/PCR >6 weeks.	<b>0.032818</b>
A significant gap remains between the uptake of infant and maternal antiretroviral regimens and only a minority of HIV-exposed infants receives prophylaxis and safe infant feeding.	<b>0.029961</b>
Early HIV-1 diagnosis with antiretroviral therapy before symptomatic disease is critical for infant survival.	<b>0.029139</b>
Antiretroviral therapy is often initiated too late to impact early HIV-related infant mortality.	<b>0.029108</b>

### 1.1.9 Les 20 mots-clés les plus importants du Cluster n°5

child	<b>0.249055</b>	month	<b>0.046241</b>
mortality	<b>0.129734</b>	diagnosis	<b>0.043173</b>
year	<b>0.097707</b>	associate	<b>0.042511</b>
age	<b>0.075610</b>	tuberculosis	<b>0.036155</b>
patient	<b>0.064384</b>	die	<b>0.035661</b>
infect	<b>0.058968</b>	person	<b>0.034310</b>
death	<b>0.058359</b>	lftu	<b>0.033884</b>
treatment	<b>0.058161</b>	initiation	<b>0.033880</b>
clinical	<b>0.053035</b>	care	<b>0.032937</b>
stage	<b>0.047929</b>	predictor	<b>0.031883</b>



### 1.1.10 Les 10 meilleurs phrases sélectionnés du Cluster n°5

Sentence	Weight
HIV contributes substantially to child mortality, but factors underlying these deaths are inadequately described.	<b>0.023813</b>
All except one child were on antiretroviral treatment, 45% had commenced treatment < 12 months of age.	<b>0.023143</b>
To determine the impact of HIV on child mortality and explore potential risk factors for mortality among HIV-infected and HIV-exposed uninfected children in a longitudinal cohort in rural Uganda.	<b>0.020463</b>
LTFU of HIV infected children was common with an incidence of 32.9 per 1000 child years and occurred early in treatment and risk factors included poverty, low caregiver education, male child and early HIV disease stage.	<b>0.019670</b>
Efforts should be intensified to prevent maternal to child transmission of HIV infection.	<b>0.019589</b>
We assessed overall mortality and stratified by year using random effects models.	<b>0.019496</b>
Increased mortality and attrition were also associated with advanced clinical stage, underweight and diagnosis of tuberculosis at programme entry.	<b>0.019482</b>
Intensified efforts to prevent mother-to-child transmission of HIV and ensure early HIV diagnosis and treatment are required to decrease child mortality caused by HIV in rural Africa.	<b>0.019027</b>
Early HIV testing and ART initiation is recommended to decrease mortality.	<b>0.017052</b>
Median age of antiretroviral treatment commencement was 3.9 years.	<b>0.016493</b>

## 2 Génération de nouveaux clusters par titres

### 2.1 Déroulement de l'algorithme

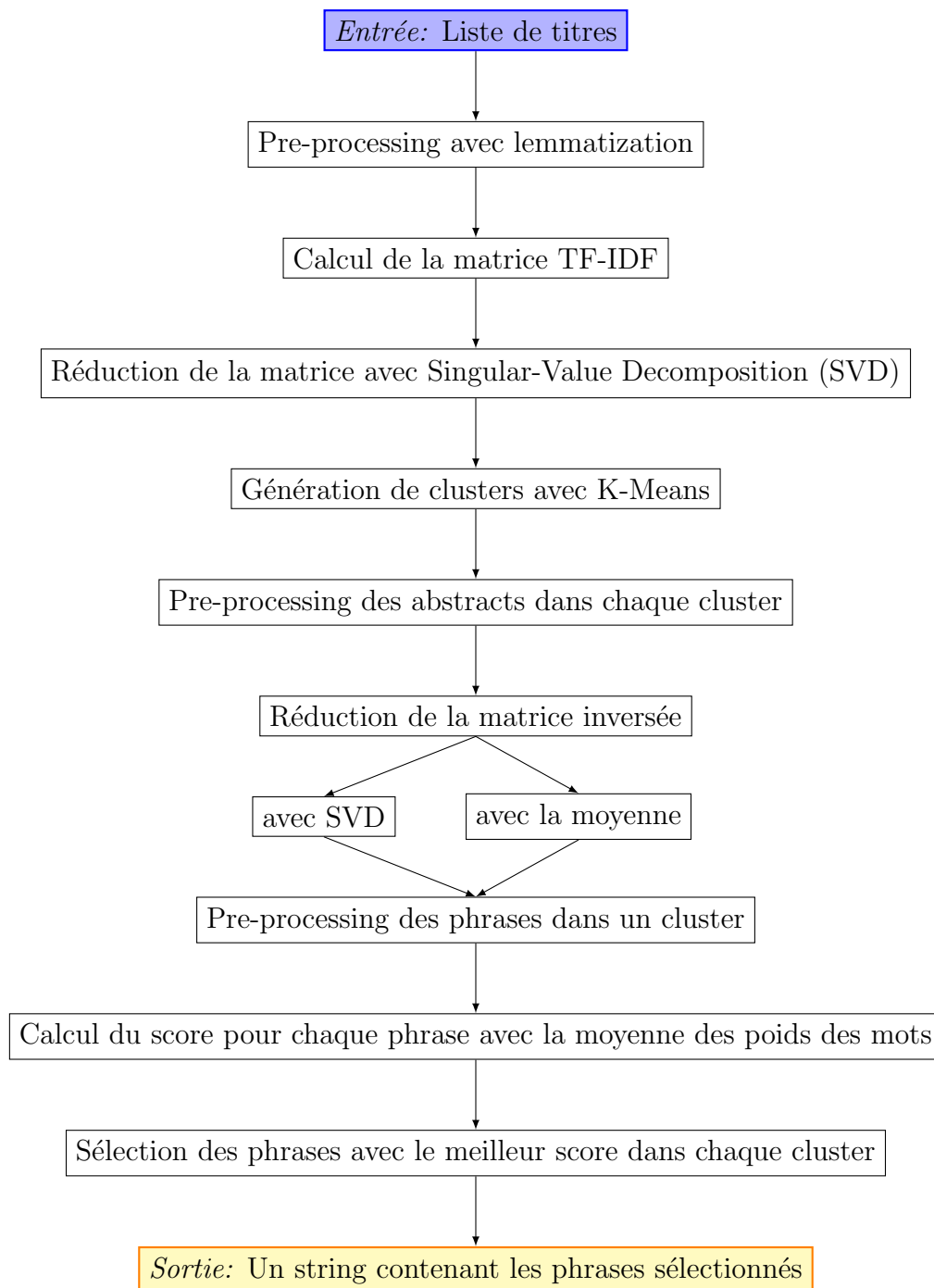


Figure 1: Processus de génération de résumé

### 2.2 Pre-processing

Avant:

- Integrating Enhanced HIV Pre-exposure Prophylaxis Into a Sexually Transmitted Infection Clinic in Lilongwe: Protocol for a Prospective Cohort Study.
- Subtle Longitudinal Alterations in Env Sequence Potentiate Differences in Sensitivity to Broadly Neutralizing Antibodies following Acute HIV-1 Subtype C Infection.

- Evaluation of multi-assay algorithms for cross-sectional HIV incidence estimation in settings with universal antiretroviral treatment.
- Blood Center Testing Allows the Detection and Rapid Treatment of Acute and Recent HIV Infection.
- Determinants of therapy failure among adults on first-line antiretroviral therapy in Asmara, Eritrea: a multicenter retrospective matched case-control study.
- ...

#### Après:

- integration enhancement hiv prophylaxis sexually transmission infection clinic lilongwe protocol prospective cohort study
- subtle longitude alteration env sequence potentiation difference sensitivity broadly neutralization antibody follow acuteness subtype c infection
- evaluation algorithm hiv incidence estimation setting universality antiretroviral treatment
- blood center test allows detection rapidness treatment acuteness recentness hiv infection
- determinant therapy failure among adult antiretroviral therapy asmara eritrea multicenter retrospective match study
- ...

## 2.3 Génération de la matrice TF-IDF

( <b>0</b> , 1319)	0.1950836305165142
( <b>0</b> , 224)	0.2281698065098795
( <b>0</b> , 1097)	0.2837733507379278
...	...
( <b>630</b> , 693)	0.21815162158344456
( <b>630</b> , 1319)	0.17743986539841738
( <b>630</b> , 582)	0.09089348735256757

Les nombres en **gras** représentent l'ID des documents tels que définis dans le df-hover.

## 2.4 Réduction de la matrice TF-IDF avec SVD

<b>0</b>	0.21477022	-0.08277971
<b>1</b>	0.14659218	0.14764311
<b>2</b>	0.16427717	-0.11110283
...	...	...
<b>628</b>	0.11636404	-0.04386011
<b>629</b>	0.20987265	-0.00163095
<b>630</b>	0.09651352	-0.05994855

Les nombres en **gras** représentent l'ID des documents tels que définis dans le df-hover.

## 2.5 Clustering avec K-Means

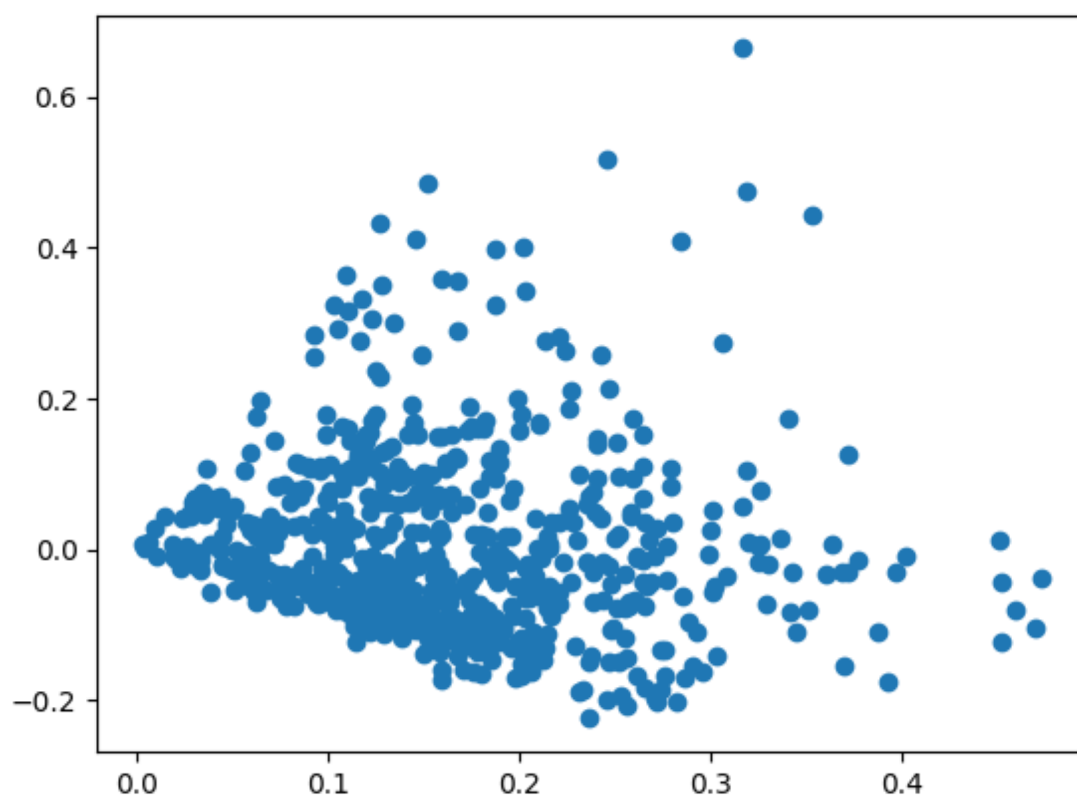


Figure 2: Représentation des documents

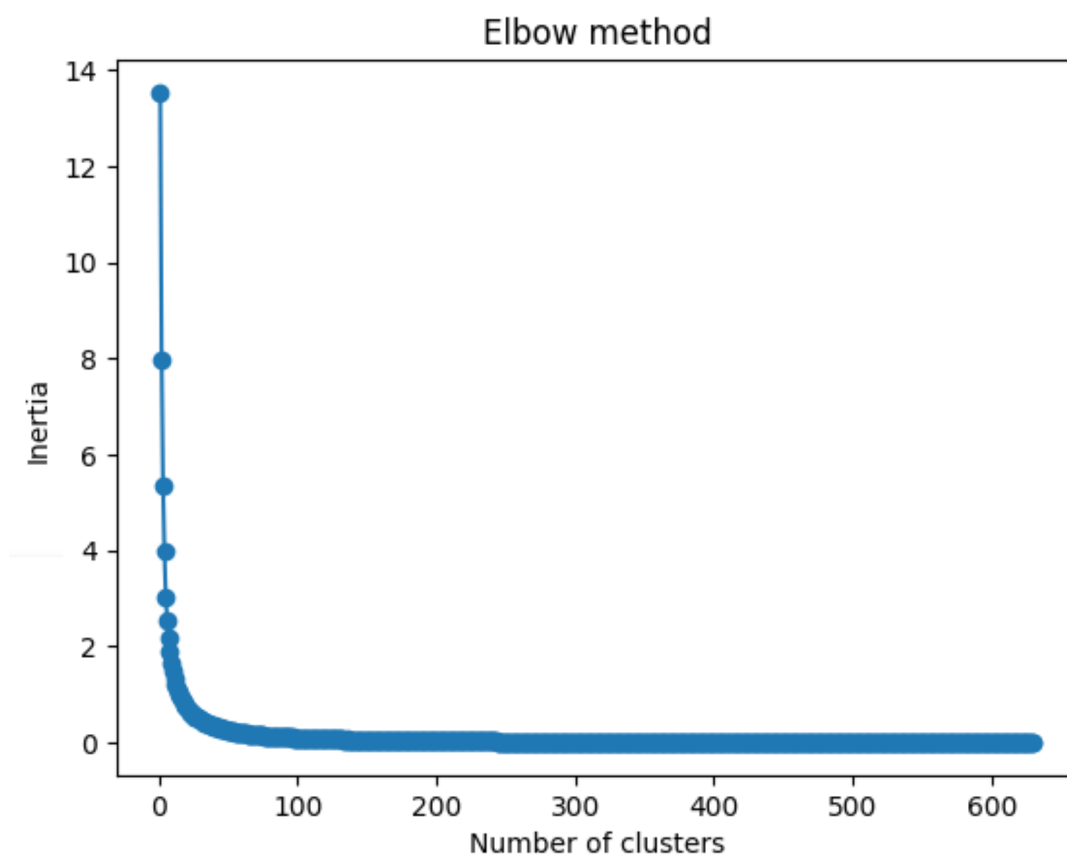


Figure 3: Elbow method pour trouver le K optimale

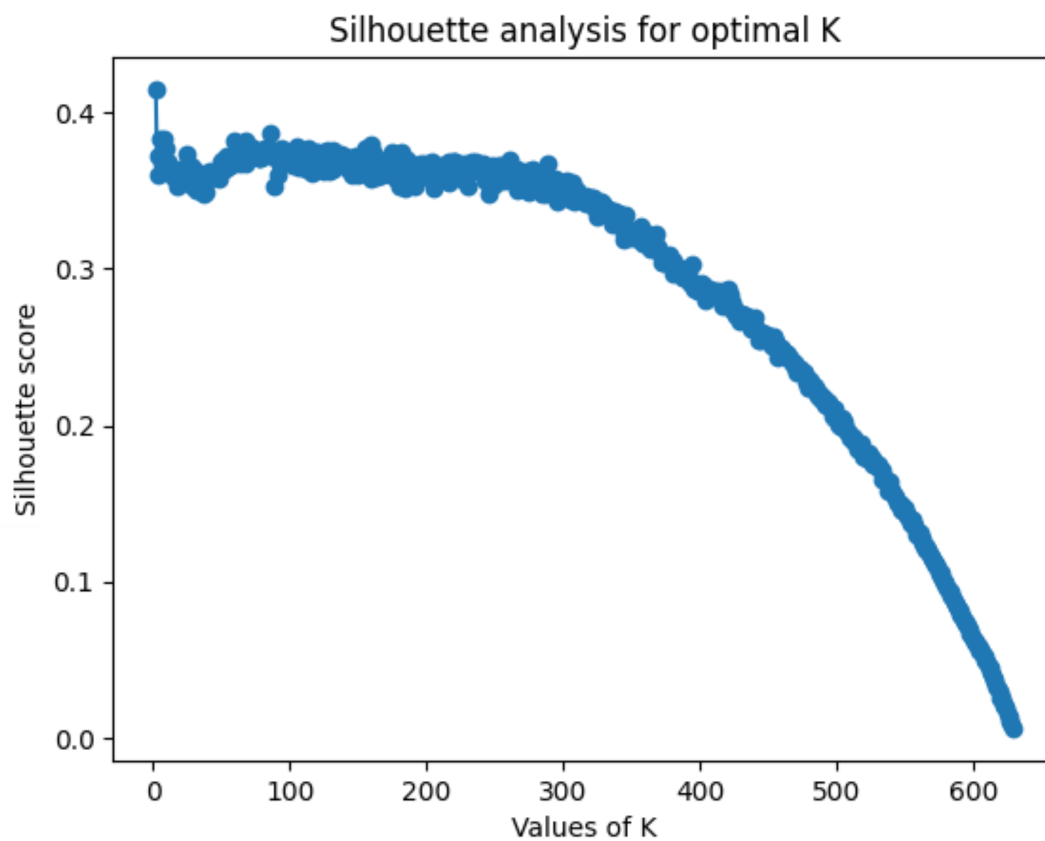


Figure 4: Analyse silhouette pour trouver le K optimale

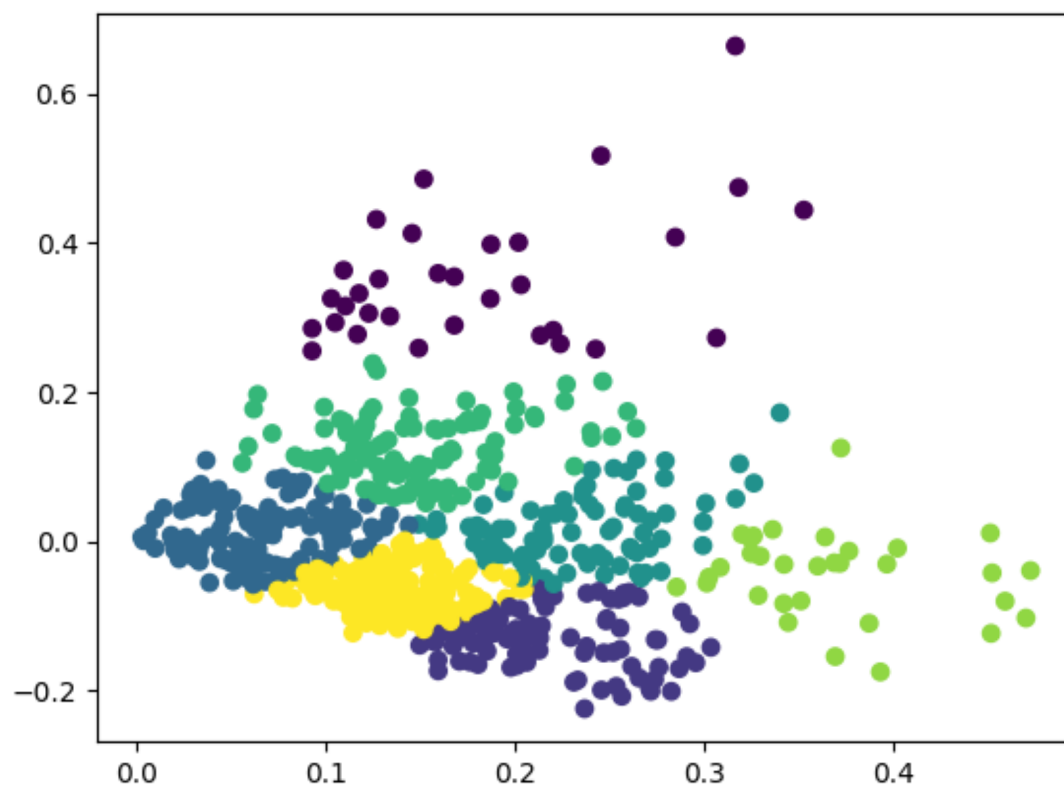


Figure 5: Documents clusterisés

- **Cluster n°1** (*106 documents*)
  - Subtle Longitudinal Alterations in Env Sequence Potentiate Differences in Sensitivity to Broadly Neutralizing Antibodies following Acute HIV-1 Subtype C Infection.
  - Infection with HIV-1 subtype D among acutely infected Ugandans is associated with higher median concentration of cytokines compared to subtype A.
  - A neutralizing antibody target in early HIV-1 infection was recapitulated in rhesus macaques immunized with the transmitted/founder envelope sequence.
  - HIV-1 infections with multiple founders associate with the development of neutralization breadth.
  - ADCC-mediating non-neutralizing antibodies can exert immune pressure in early HIV-1 infection.
  - ...
- **Cluster n°2** (*91 documents*)
  - Integrating Enhanced HIV Pre-exposure Prophylaxis Into a Sexually Transmitted Infection Clinic in Lilongwe: Protocol for a Prospective Cohort Study.
  - Evaluation of multi-assay algorithms for cross-sectional HIV incidence estimation in settings with universal antiretroviral treatment.
  - Determinants of therapy failure among adults on first-line antiretroviral therapy in Asmara, Eritrea: a multicenter retrospective matched case-control study.
  - Maternal retention and early infant HIV diagnosis in a prospective cohort study of HIV-positive women and their children in Malawi.
  - Tuberculosis prevalence, incidence and prevention in a south african cohort of children living with HIV.
  - ...
- **Cluster n°3** (*33 documents*)
  - Blood Center Testing Allows the Detection and Rapid Treatment of Acute and Recent HIV Infection.
  - Testing strategies to detect acute and prevalent HIV infection in adult outpatients seeking healthcare for symptoms compatible with acute HIV infection in Kenya: a cost-effectiveness analysis.
  - Burden of sexually transmitted infections from acute HIV infection among women in South Africa: Evidence from a prospective cohort study.
  - Predictors of testing history and new HIV diagnosis among adult outpatients seeking care for symptoms of acute HIV infection in coastal Kenya: a cross-sectional analysis of intervention participants in a stepped-wedge HIV testing trial.
  - Effect of an opt-out point-of-care HIV-1 nucleic acid testing intervention to detect acute and prevalent HIV infection in symptomatic adult outpatients and reduce HIV transmission in Kenya: a randomized controlled trial.
  - ...
- **Cluster n°4** (*103 documents*)
  - CCR5- $\Delta$ 32 gene variant frequency in the Nigerian and Zimbabwean populations living in North Cyprus.

- CD4 T cells are rapidly depleted from tuberculosis granulomas following acute SIV co-infection.
- Deep sequencing of the HIV-1 polymerase gene for characterisation of cytotoxic T-lymphocyte epitopes during early and chronic disease stages.
- Bringing social context into global biomedical HIV cure-related research: An urgent call to action.
- T cell-tropic HIV efficiently infects alveolar macrophages through contact with infected CD4+ T cells.
- ...
- **Cluster n°5** (*30 documents*)
  - Comparison of two nucleic acid amplification technology systems for detection of human immunodeficiency virus, hepatitis B virus, and hepatitis C virus.
  - Preferential Infection of  $\alpha 4\beta 7$ + Memory CD4+ T Cells During Early Acute Human Immunodeficiency Virus Type 1 Infection.
  - Cost-Effectiveness of Community-based Human Immunodeficiency Virus Self-Testing in Blantyre, Malawi.
  - Dynamics and Correlates of CD8 T-Cell Counts in Africans with Primary Human Immunodeficiency Virus Type 1 Infection.
  - Impact of using different blood donor subpopulations and models on the estimation of transfusion transmission residual risk of human immunodeficiency virus, hepatitis B virus, and hepatitis C virus in Zimbabwe.
  - ...
- **Cluster n°6** (*31 documents*)
  - Peer Mobilization and Human Immunodeficiency Virus (HIV) Partner Notification Services Among Gay, Bisexual, and Other Men Who Have Sex With Men and Transgender Women in Coastal Kenya Identified a High Number of Undiagnosed HIV Infections.
  - Human Immunodeficiency Virus (HIV) Genetic Diversity Informs Stage of HIV-1 Infection Among Patients Receiving Antiretroviral Therapy in Botswana.
  - Novel Criteria for Diagnosing Acute and Early Human Immunodeficiency Virus Infection in a Multinational Study of Early Antiretroviral Therapy Initiation.
  - Evolution and Diversity of Immune Responses during Acute HIV Infection.
  - Human Immunodeficiency Virus (HIV) Drug Resistance, Phylogenetic Analysis, and Superinfection Among Men Who Have Sex with Men and Transgender Women in Sub-Saharan Africa: HIV Prevention Trials Network (HPTN) 075 Study.
  - ...
- **Cluster n°7** (*147 documents*)
  - Prevalence of drug resistant HIV-1 forms in patients without any history of antiretroviral therapy in the Republic of Guinea.
  - Predicting HIV Status among Men Who Have Sex with Men in Bulawayo & Harare, Zimbabwe Using Bio-Behavioural Data, Recurrent Neural Networks, and Machine Learning Techniques.
  - Trends and predictors of modern contraceptive use among married women: Analysis of 2000-2016 Ethiopian Demographic and Health Surveys.

- Quantitative interpretation of Sedia LAg Assay test results after HIV diagnosis.
- Epidemiology of Kaposi's sarcoma in sub-Saharan Africa.
- ...
- **Cluster n°8** (*90 documents*)
  - Clinical signs and symptoms associated with acute HIV infection from an intensely monitored cohort on 2 continents.
  - Brief Report: Blood and Genital Fluid Viral Load Trajectories Among Treated and Untreated Persons With Acute HIV Infection in Malawi.
  - Evaluation of serological assays for the diagnosis of HIV infection in adults.
  - The Role of Inflammasome Activation in Early HIV Infection.
  - Predicting, Diagnosing, and Treating Acute and Early HIV Infection in a Public Sector Facility in Eswatini.
  - ...



## 2.6 Résumé généré avec la moyenne des poids de mots

Sixteen men with acute HIV infection and 25 men with chronic HIV infection were studied. Of these, 864 HIV exposed infants had DNA-PCR HIV test results available. Of the participants 838 were HIV negative, 163 had established HIV infection, and 8 had acute HIV infection. 8 (25%) of the patients were HIV seropositive. Eighty-nine women had multiple viral genotypes, while 67 women had a single genotype at primary infection. Five-hundred and fifty-three men (40.6%) were HIV antibody positive and 24 (1.8%) had acute HIV infection; 23 of 24 acutely infected men were from the STD clinic, where they represented 4.5% of all HIV antibody-negative men and 5.0% of all HIV infections. Overall, the HIV prevalence using the HIVSS test was 8.2% (93/1129). Overall, 30 patients (1.0%) had acute HIV infection, 56 (1.8%) had early HIV infection, and 238 (8%) had established HIV infection.

### 2.6.1 Excluant les phrases détaillant les participants à la recherche

The overall prevalence of HIV infection in this study was 5.35%. For excluding HIV infection (i.e. The overall HIV prevalence among those tested was 56.5% and the prevalence of acute HIV infection was 1.2%. Most HIV-1 infected individuals do not know their infection dates. A general fitness order was observed among 33 HIV-1 isolates; subtype B and D HIV-1 isolates were slightly more fit than the subtype A and dramatically more fit than the 12 subtype C isolates. Acute HIV infection lasts approximately 3 weeks and early HIV infection, which includes acute HIV infection, lasts approximately 7 weeks. Overall, the HIV prevalence using the HIVSS test was 8.2% (93/1129). early HIV infection and LPNT.

*Les mêmes poids de mots-clés sont utilisés pour cette méthode que pour la précédente. Ici, nous filtrons les phrases ne détaillant pas les participants à la recherche, puisqu'ils ressortent les plus souvent. Par la suite, les phrases qui apparaissent dans les tableaux des meilleurs phrases en italiques sont les phrases qui ont été exclus pour cette méthode.*

### 2.6.2 Les 20 mots-clés les plus importants du Cluster n°1

infection	<b>0.076165</b>	subtype	<b>0.029293</b>
hiv	<b>0.062839</b>	individuality	<b>0.027436</b>
cell	<b>0.046514</b>	usage	<b>0.026343</b>
neutralization	<b>0.038795</b>	highness	<b>0.026079</b>
viral	<b>0.037607</b>	acuteness	<b>0.026052</b>
response	<b>0.036963</b>	sequence	<b>0.025165</b>
virus	<b>0.035305</b>	blood	<b>0.023895</b>
antibody	<b>0.033565</b>	transmission	<b>0.023629</b>
primary	<b>0.032573</b>	level	<b>0.023447</b>
earliness	<b>0.031702</b>	woman	<b>0.023441</b>

### 2.6.3 Les 11 meilleurs phrases sélectionnés du Cluster n°1

Sentence	Weight
<i>Sixteen men with acute HIV infection and 25 men with chronic HIV infection were studied.</i>	<b>0.002082</b>
The overall prevalence of HIV infection in this study was 5.35%.	<b>0.002080</b>
A single viral variant is transmitted in the majority of HIV infections.	<b>0.001722</b>
PwD can accurately determine HIV infection recency.	<b>0.001661</b>
TRIM5alphahu levels did not change significantly after infection.	<b>0.019589</b>
During acute HIV infection, HIV actively replicates but seroconversion has not yet occurred.	<b>0.001626</b>
Furthermore, infection is not associated with dysregulation of TRIM5alphahu.	<b>0.001592</b>
Blood viral load in subjects with acute HIV infection was highest about 17 days after infection (mean +/- SE, 6.9 +/- 0.5 log10 copies/ml), while semen viral load peaked about 30 days after infection (4.5 +/- 0.4 log10 copies/ml).	<b>0.001561</b>
We dissected this bi-directional relationship to understand how HIV impacts NK-cell responses during primary HIV-1 infection.	<b>0.001543</b>
To control HIV infection in Nigeria, there is a need to continually screen high-risk groups for early HIV infection and subtypes using very sensitive methods.	<b>0.001503</b>
In this cohort of FSWs, HIV superinfection occurred at a high rate and was similar to that of primary HIV infection.	<b>0.001477</b>

#### 2.6.4 Les 20 mots-clés les plus importants du Cluster n°2

hiv	<b>0.101670</b>	study	<b>0.035668</b>
arty	<b>0.074939</b>	initiation	<b>0.033777</b>
test	<b>0.070804</b>	child	<b>0.032462</b>
infant	<b>0.064053</b>	care	<b>0.032302</b>
ci	<b>0.045334</b>	mortality	<b>0.031614</b>
patience	<b>0.041217</b>	year	<b>0.031547</b>
diagnosis	<b>0.041120</b>	earliness	<b>0.030144</b>
treatment	<b>0.040090</b>	usage	<b>0.029828</b>
infection	<b>0.037566</b>	incidence	<b>0.028615</b>
woman	<b>0.035714</b>	pregnancy	<b>0.028214</b>

#### 2.6.5 Les 12 meilleurs phrases sélectionnés du Cluster n°2

Sentence	Weight
<i>Of these, 864 HIV exposed infants had DNA-PCR HIV test results available.</i>	<b>0.004337</b>
<i>Ninety-eight (71%) infants and children exposed to HIV were diagnosed for HIV infection of which 68(69.4%) initiated ART.</i>	<b>0.003985</b>
For excluding HIV infection (i.e.	<b>0.003920</b>
Dried Blood Spots samples from HIV exposed infants were tested for HIV.	<b>0.003379</b>
To assess the performance of rapid HIV tests in comparison to a laboratory-based HIV ELISA test for determining HIV-exposure and excluding HIV infection during infancy.	<b>0.003375</b>
A pro-poor wealth-related inequality in early HIV testing was observed.	<b>0.003271</b>
Infant HIV status was determined at 3, 24 and 36 weeks by HIV DNA PCR.	<b>0.003262</b>
Of 1966 participants, 616 (31.3%) were HIV infected; 47.6% of these (291) had CD4 counts $\leq$ 250.	<b>0.003179</b>
Late HIV diagnosis was defined as CD4 $\leq$ 250 cells/mm.	<b>0.003131</b>
HIV is a major contributor to infant mortality.	<b>0.003096</b>
Early HIV testing and ART initiation is recommended to decrease mortality.	<b>0.003011</b>
Mobile HIV screening may facilitate early HIV diagnosis.	<b>0.002972</b>

### 2.6.6 Les 20 mots-clés les plus importants du Cluster n°3

hiv	<b>0.148479</b>	participant	<b>0.040976</b>
test	<b>0.114424</b>	rna	<b>0.040970</b>
infection	<b>0.091412</b>	rapidness	<b>0.040947</b>
ahi	<b>0.084485</b>	combo	<b>0.038675</b>
diagnosis	<b>0.059905</b>	usage	<b>0.037860</b>
woman	<b>0.057685</b>	among	<b>0.037468</b>
patience	<b>0.054722</b>	prevalence	<b>0.037301</b>
acuteness	<b>0.054061</b>	counsel	<b>0.036125</b>
detection	<b>0.048960</b>	rt	<b>0.035918</b>
intervention	<b>0.044138</b>	antibody	<b>0.035331</b>

### 2.6.7 Les 13 meilleurs phrases sélectionnés du Cluster n°3

Sentence	Weight
<i>Of the participants 838 were HIV negative, 163 had established HIV infection, and 8 had acute HIV infection.</i>	<b>0.009852</b>
The overall HIV prevalence among those tested was 56.5% and the prevalence of acute HIV infection was 1.2%.	<b>0.008099</b>
Of the 467 HIV antibody-negative samples, four (0.9%) were HIV-1 RNA-positive.	<b>0.007582</b>
To identify, diagnose and counsel patients with acute HIV infection (AHI) during routine HIV testing in South Africa.	<b>0.006581</b>
<i>Among 3,825 pregnant women screened, dual HIV rapid testing indicated that 30.2% were HIV positive, 69.7% were HIV negative, and 0.1% were indeterminate.</i>	<b>0.006337</b>
HIV RNA screening has the potential to identify both acute and chronic HIV infections that are otherwise missed by standard HIV testing algorithms.	<b>0.006311</b>
HIV transmission risk is higher during acute and early HIV infection than it is during chronic infection, but the contribution of early infection to the spread of HIV is controversial.	<b>0.006156</b>
<i>There were 228 HIV-negative men at baseline; 10 were positive for HIV RNA, and 8 seroconverted to HIV at day 28.</i>	<b>0.006064</b>
HIV testing is the first step to stop transmission.	<b>0.006048</b>
HIV testing should be repeated in the third trimester and/or at delivery.	<b>0.005915</b>
Diagnosis of acute HIV infection (AHI) presents an opportunity to prevent HIV transmission during a highly infectious period.	<b>0.005909</b>
Acute HIV infection (prior to antibody seroconversion) represents a high-risk window for HIV transmission.	<b>0.005805</b>
Detection of acute HIV infection is a unique problem that fourth-generation HIV assays were expected to alleviate.	<b>0.005804</b>

### 2.6.8 Les 20 mots-clés les plus importants du Cluster n°4

hiv	<b>0.067381</b>	transmission	<b>0.022963</b>
infection	<b>0.061661</b>	acuteness	<b>0.022360</b>
patience	<b>0.032254</b>	incidence	<b>0.022160</b>
cell	<b>0.030943</b>	earliness	<b>0.021921</b>
response	<b>0.028457</b>	treatment	<b>0.021830</b>
viral	<b>0.025894</b>	test	<b>0.020987</b>
usage	<b>0.025355</b>	highness	<b>0.020931</b>
study	<b>0.025000</b>	woman	<b>0.020387</b>
association	<b>0.024877</b>	estimation	<b>0.020348</b>
individuality	<b>0.024658</b>	virus	<b>0.020291</b>

### 2.6.9 Les 12 meilleurs phrases sélectionnés du Cluster n°4

Sentence	Weight
8 (25%) of the patients were HIV seropositive.	<b>0.001869</b>
Most HIV-1 infected individuals do not know their infection dates.	<b>0.001660</b>
Low-levels of this population were associated with acute and chronic HIV infection.	<b>0.001638</b>
These cells were dramatically increased in chronic HIV infection.	<b>0.001602</b>
The epidemiological and clinical aspects of HIV-2 infection were the same as in HIV-1 infected patients.	<b>0.001470</b>
MBL levels are not altered by HIV infection or AIDS.	<b>0.001436</b>
Sustained viremia after acute HIV infection is associated with profound CD4	<b>0.001386</b>
The impact of acute HIV infection was assessed in 5 individuals recruited within 3 weeks of infection.	<b>0.001353</b>
Participants were enrolled in the acute HIV infection phase, then followed-up during chronic infection up to ART initiation.	<b>0.001320</b>
<i>8 (25%) of the patients tested positive for HIV antibodies.</i>	<b>0.001318</b>
Taking into account multiplicity of HIV infection strengthened these associations.	<b>0.001308</b>
The burden of paediatric HIV infection remains high in resource-poor settings.	<b>0.001266</b>

### 2.6.10 Les 20 mots-clés les plus importants du Cluster n°5

infection	<b>0.070662</b>	association	<b>0.033385</b>
isolates	<b>0.067264</b>	clade	<b>0.032748</b>
neutralization	<b>0.058357</b>	response	<b>0.031450</b>
subtype	<b>0.056844</b>	vaccine	<b>0.031008</b>
viral	<b>0.053869</b>	primary	<b>0.030897</b>
woman	<b>0.051360</b>	usage	<b>0.030849</b>
virus	<b>0.050391</b>	month	<b>0.030389</b>
hiv	<b>0.050107</b>	fitness	<b>0.030265</b>
antibody	<b>0.047622</b>	model	<b>0.029479</b>
cell	<b>0.044120</b>	humanness	<b>0.028997</b>

### 2.6.11 Les 11 meilleurs phrases sélectionnés du Cluster n°5

Sentence	Weight
<i>Eighty-nine women had multiple viral genotypes, while 67 women had a single genotype at primary infection.</i>	<b>0.001649</b>
A general fitness order was observed among 33 HIV-1 isolates; subtype B and D HIV-1 isolates were slightly more fit than the subtype A and dramatically more fit than the 12 subtype C isolates.	<b>0.001548</b>
Primary HIV-1 isolates (10 CRF02_AG, 5 subtype A and 5 subtype G) were obtained from a well-described Cameroonian cohort.	<b>0.001525</b>
All group M isolates were more fit (ex vivo) than the group O isolates.	<b>0.001498</b>
We thus attempted to characterize the replication properties of HIV-1 isolates directly recovered from infected patients (primary isolates) by using a standardized infection assay.	<b>0.001409</b>
Unlike clade B isolates, however, all 16 clade C isolates examined resisted neutralization by 2G12.	<b>0.001368</b>
We found that both SHIV-89.6 and KB9 C4-V3 peptides induced antibodies that neutralized SHIV-89.6 but that only SHIV-KB9 C4-V3 peptide induced antibodies that neutralized SHIV-KB9.	<b>0.001347</b>
Our data show that potent but relatively strain-specific neutralizing antibodies develop within 3 to 12 months of HIV-1 infection.	<b>0.001334</b>
Establishment of persistent human immunodeficiency virus type 1 (HIV-1) reservoirs occurs early in infection, and biomarkers of infected CD4+ T cells during acute infection are poorly defined.	<b>0.001306</b>
It also neutralized 7 of 17 clade C isolates from southern Africa that were difficult to neutralize with other hMAbs and sCD4.	<b>0.001293</b>
In tissue competition experiments, subtype C isolates could compete with and, in some cases, even win over subtype A and D isolates.	<b>0.001235</b>

### 2.6.12 Les 20 mots-clés les plus importants du Cluster n°6

infection	<b>0.119637</b>	subtype	<b>0.036016</b>
hiv	<b>0.116063</b>	participant	<b>0.035502</b>
acuteness	<b>0.056263</b>	among	<b>0.034617</b>
woman	<b>0.053427</b>	association	<b>0.034449</b>
response	<b>0.049188</b>	test	<b>0.034392</b>
viral	<b>0.047035</b>	highness	<b>0.034249</b>
cell	<b>0.043709</b>	ci	<b>0.034132</b>
load	<b>0.042164</b>	seroconverters	<b>0.033302</b>
plasma	<b>0.039516</b>	immunity	<b>0.033126</b>
earliness	<b>0.039250</b>	arty	<b>0.032023</b>

### 2.6.13 Les 10 meilleurs phrases sélectionnés du Cluster n°6

Sentence	Weight
<i>Five-hundred and fifty-three men (40.6%) were HIV antibody positive and 24 (1.8%) had acute HIV infection; 23 of 24 acutely infected men were from the STD clinic, where they represented 4.5% of all HIV antibody-negative men and 5.0% of all HIV infections.</i>	<b>0.006024</b>
Acute HIV infection lasts approximately 3 weeks and early HIV infection, which includes acute HIV infection, lasts approximately 7 weeks.	<b>0.005781</b>
The effects of early HIV infection on the risk of HPV infection and HPV-related disease were evaluated.	<b>0.005069</b>
Seroconverters had significantly lower HPV infection prevalence than women with prevalent HIV infection before and at seroconversion (41.8% and 45.9%, respectively) but had similar HPV infection prevalence to women with prevalent HIV infection after seroconversion (49.4%).	<b>0.004640</b>
Early HIV infection was defined as the first visit during which a woman tested HIV antibody positive.	<b>0.004385</b>
Many testing and blood screening algorithms detect HIV antibodies about 3 weeks after HIV infection.	<b>0.004021</b>
No participant was positive for CHIKV infection.	<b>0.003972</b>
Viral load is the key modifiable risk factor for HIV transmission and peaks during acute and early HIV infection.	<b>0.003948</b>
Haematologic parameters were assessed before infection and at regular intervals in the first twelve months of HIV infection.	<b>0.003929</b>
Empirical evidence characterizing the impact of acute and early HIV infection on the spread of the HIV epidemic are limited.	<b>0.003878</b>
Here, we assessed CD8+ T cell functional evolution from primary to chronic HIV infection.	<b>0.003798</b>

### 2.6.14 Les 20 mots-clés les plus importants du Cluster n°7

hiv	<b>0.083017</b>	ci	<b>0.027136</b>
test	<b>0.041524</b>	woman	<b>0.026909</b>
arty	<b>0.040662</b>	risk	<b>0.025011</b>
infection	<b>0.039736</b>	diagnosis	<b>0.023797</b>
child	<b>0.034833</b>	association	<b>0.023339</b>
patience	<b>0.033264</b>	earliness	<b>0.023011</b>
study	<b>0.029086</b>	mortality	<b>0.022599</b>
treatment	<b>0.028490</b>	among	<b>0.022304</b>
usage	<b>0.028395</b>	participant	<b>0.021987</b>
care	<b>0.028276</b>	prevalence	<b>0.021909</b>

### 2.6.15 Les 13 meilleurs phrases sélectionnés du Cluster n°7

Sentence	Weight
Overall, the HIV prevalence using the HIVSS test was 8.2% (93/1129).	<b>0.002808</b>
Reactivity with all HIV genotypes was 100%.	<b>0.002300</b>
HIV self-screening (HIVSS) is acceptable to adults, but there is limited data on HIVSS feasibility in community programmes.	<b>0.002180</b>
All households were offered 6-monthly home-based HIV testing.	<b>0.002164</b>
<i>221 incident syphilis infections were reported: 46 (21%) in men with HIV (incidence 1.10 per 100 person-years), 76 (34%) in men without HIV (1.09), 54 (24%) in women with HIV (0.77), and 45 (24%) in women without HIV (1.11).</i>	<b>0.002034</b>
<i>At enrolment, 1575 (53%) men with HIV and 560 (32%) men without HIV were circumcised; an additional 69 (4%) men with HIV and 132 (5%) men without HIV were circumcised during study follow-up.</i>	<b>0.001994</b>
Unsupervised HIVSS was by far the most selected and utilised HIVSS method.	<b>0.001988</b>
This review considered studies that included the following outcome: 'late HIV testing', 'late HIV diagnosis' and 'late presentation for HIV care after testing'.	<b>0.001932</b>
Of those newly diagnosed with HIV, 16% (12/75) were initiated on ART.	<b>0.001912</b>
<i>Overall, 52% of the women reported testing for HIV.</i>	<b>0.001902</b>
HIV programs in Senegal should intensify early HIV diagnosis for effective test-and-treat.	<b>0.001881</b>
The stages were early HIV disease, late HIV disease and AIDS.	<b>0.001870</b>
It commonly affects women infected with HIV.	<b>0.001841</b>



### 2.6.16 Les 20 mots-clés les plus importants du Cluster n°8

hiv	<b>0.113375</b>	usage	<b>0.033127</b>
test	<b>0.065661</b>	risk	<b>0.032758</b>
infection	<b>0.064397</b>	assay	<b>0.029457</b>
ahi	<b>0.063523</b>	transmission	<b>0.029357</b>
earliness	<b>0.041064</b>	study	<b>0.028585</b>
diagnosis	<b>0.039455</b>	incidence	<b>0.028332</b>
woman	<b>0.034973</b>	sample	<b>0.027448</b>
detection	<b>0.034084</b>	ci	<b>0.027448</b>
arty	<b>0.034042</b>	participant	<b>0.027270</b>
acuteness	<b>0.033728</b>	patience	<b>0.026694</b>

### 2.6.17 Les 12 meilleurs phrases sélectionnés du Cluster n°8

Sentence	Weight
<i>Overall, 30 patients (1.0%) had acute HIV infection, 56 (1.8%) had early HIV infection, and 238 (8%) had established HIV infection.</i>	<b>0.004966</b>
early HIV infection and LPNT.	<b>0.004674</b>
<i>Twenty-one participants (1.45%) had AHI, 588 had established HIV infection, and 839 were HIV-negative.</i>	<b>0.004363</b>
The Defer/Test strategy averted the most HIV infections.	<b>0.004333</b>
It further identified different risk factors for prevalent HIV infection (HIV seropositivity) compared with incident HIV (HIV seroconversion).	<b>0.004211</b>
Individuals with acute (preseroconversion) HIV infection (AHI) are important in the spread of HIV.	<b>0.003973</b>
29% of HIV infected individuals were at the early stages of infection.	<b>0.003934</b>
Detection of early HIV infections (EHIs), including acute HIV infection (AHI), is important for individual health, prevention of HIV transmission, and measurement of HIV incidence.	<b>0.003736</b>
Fourth-generation HIV assays detect both antigen and antibody, facilitating detection of acute/early HIV infection.	<b>0.003732</b>
HIV testing identified 978 seroconverter cases.	<b>0.003578</b>
Acute HIV infection (AHI) is the time of virus acquisition until the appearance of HIV antibodies.	<b>0.003563</b>
Characterization of NAAT-positive samples revealed that 0.04% (95% CI: 0.000-0.001) had AHI, 0.3% (95% CI: 0.1-0.4) had early HIV infection, and 0.5% (95% CI: 0.5-0.7) had chronic HIV infection.	<b>0.003299</b>

## 2.7 Résumé généré avec la méthode SVD sur les poids de mots

Broadly neutralizing antibodies (bNAbs) for HIV-1 prevention or cure strategies must inhibit transmitted/founder and reservoir viruses. Pre-exposure prophylaxis (PrEP) reduces HIV acquisition risk by >90% and is a critical lever to reduce HIV incidence. Blood donations in South Africa are tested for HIV RNA using individual donation NAT (ID-NAT), allowing detection and rapid antiretroviral therapy (ART) of acute HIV infections. The cystine-cystine chemokine receptor 5 (CCR5) is the primary HIV co-receptor involved in the viral entry process into human cells. Human immunodeficiency virus (HIV) and hepatitis B virus (HBV) are endemic in South Africa while hepatitis C virus (HCV) infection is rare. Human immunodeficiency virus (HIV) partner notification services (HPN), peer mobilization with HIV self-testing, and acute and early HIV infection (AEHI) screening among gay, bisexual, and other men who have sex with men (GBMSM) and transgender women (TGW) were assessed for acceptability, feasibility, and linkage to antiretroviral therapy (ART) and preexposure prophylaxis (PrEP) services. To study the structure of human immunodeficiency virus (HIV)-1 drug resistance (DR) in patients with newly diagnosed infection. Define the clinical presentation of acute human immunodeficiency virus infection (AHI) among men and women from 2 continents to create a clinical scoring algorithm. Comparison of incident sign and symptom between those with and without AHI. At-risk human immunodeficiency virus (HIV) negative men and women in Thailand, Kenya, Tanzania, and Uganda underwent twice-weekly testing for HIV.

### 2.7.1 Excluant les phrases détaillant les participants à la recherche

Broadly neutralizing antibodies (bNAbs) for HIV-1 prevention or cure strategies must inhibit transmitted/founder and reservoir viruses. Pre-exposure prophylaxis (PrEP) reduces HIV acquisition risk by >90% and is a critical lever to reduce HIV incidence. Blood donations in South Africa are tested for HIV RNA using individual donation NAT (ID-NAT), allowing detection and rapid antiretroviral therapy (ART) of acute HIV infections. The cystine-cystine chemokine receptor 5 (CCR5) is the primary HIV co-receptor involved in the viral entry process into human cells. Human immunodeficiency virus (HIV) and hepatitis B virus (HBV) are endemic in South Africa while hepatitis C virus (HCV) infection is rare. Between April and August 2019, peer mobilizers mobilized clients by offering HIV oral self-tests and immediate clinic referral for clients with AEHI symptoms. To study the structure of human immunodeficiency virus (HIV)-1 drug resistance (DR) in patients with newly diagnosed infection. Define the clinical presentation of acute human immunodeficiency virus infection (AHI) among men and women from 2 continents to create a clinical scoring algorithm. Comparison of incident sign and symptom between those with and without AHI. At-risk human immunodeficiency virus (HIV) negative men and women in Thailand, Kenya, Tanzania, and Uganda underwent twice-weekly testing for HIV.

*Les mêmes poids de mots-clés sont utilisés pour cette méthode que pour la précédente. Ici, nous filtrons les phrases ne détaillant pas les participants à la recherche, puisqu'ils ressortent les plus souvent.*

### 2.7.2 Les 20 mots-clés les plus importants du Cluster n°1

infection	<b>0.854598</b>	individuality	<b>0.308689</b>
hiv	<b>0.671667</b>	acuteness	<b>0.296456</b>
cell	<b>0.542281</b>	highness	<b>0.296015</b>
response	<b>0.443371</b>	subtype	<b>0.286545</b>
viral	<b>0.434537</b>	level	<b>0.282176</b>
neutralization	<b>0.420392</b>	control	<b>0.277925</b>
virus	<b>0.365781</b>	usage	<b>0.267526</b>
antibody	<b>0.364494</b>	woman	<b>0.264764</b>
earliness	<b>0.360894</b>	load	<b>0.258679</b>
primary	<b>0.326259</b>	sequence	<b>0.255156</b>

### 2.7.3 Les 10 meilleurs phrases sélectionnés du Cluster n°1

Sentence	Weight
Broadly neutralizing antibodies (bNAbs) for HIV-1 prevention or cure strategies must inhibit transmitted/founder and reservoir viruses.	-
The role of AnAbs in preventing superinfection and in restricting virus replication is reexamined in the context of recent data.	-
In both HIV-infected and 15 uninfected controls, the frequency of activated cells was uniformly distributed among early differentiated (ED; CD45RO(+)CD27(+)), late differentiated (CD45RO(+)CD27(-)), and fully differentiated effector (CD45RO(-)CD27(-)) memory CD4(+) T cells.	-
In HIV-1-infected individuals, activated CD4(+) T cells significantly correlated with viremia at 3 mo postinfection ( $r = 0.79$ , $p = 0.0007$ ) and also harbored more gag provirus DNA copies than nonactivated cells ( $p = 0.04$ ).	-
Moreover, Gag-specific ED CD4(+) T cells inversely associated with plasma viral load ( $r = -0.87$ , $p < 0.0001$ ).	-
Overall, we show that low copy numbers of gag provirus and plasma RNA copies associated with low CD4 activation as well as accumulation of ED HIV-specific CD4(+) memory.	-
Significant positive correlations between 3 and 12 mo activation and memory events highlighted that a steady state of CD4(+) T cell activation and memory maturation was established during primary infection and that these cells were unlikely to be involved in influencing the course of viremia in the first 12 mo of HIV-1 infection.	-
It has long been known that autologous neutralizing antibodies (AnAbs) exert pressure on the envelope of HIV, resulting in neutralization escape.	-
However, recently, progress has been made in uncovering the precise targets of these potent early antibodies.	-
AnAbs primarily target variable regions of the HIV-1 envelope, explaining the strain-specificity of these antibodies.	-

#### 2.7.4 Les 20 mots-clés les plus importants du Cluster n°2

hiv	<b>1.034439</b>	initiation	<b>0.361819</b>
arty	<b>0.790470</b>	study	<b>0.346250</b>
infant	<b>0.754435</b>	child	<b>0.335455</b>
test	<b>0.713967</b>	pregnancy	<b>0.328864</b>
ci	<b>0.472052</b>	mortality	<b>0.328782</b>
diagnosis	<b>0.437624</b>	care	<b>0.328362</b>
patience	<b>0.411549</b>	year	<b>0.322953</b>
infection	<b>0.375078</b>	earliness	<b>0.302214</b>
woman	<b>0.369599</b>	week	<b>0.038387</b>
treatment	<b>0.362735</b>	risk	<b>0.269442</b>

#### 2.7.5 Les 10 meilleurs phrases sélectionnés du Cluster n°2

Sentence	Weight
Pre-exposure prophylaxis (PrEP) reduces HIV acquisition risk by >90% and is a critical lever to reduce HIV incidence.	-
We analyzed data from 173,245 patients (61% female, 8% children aged < 16 years) who started ART between 2004 and 2010.	-
The overall KS incidence rate was 164/100,000 pys [95% confidence interval (CI): 151 to 178].	-
The incidence rate was highest 30-90 days after ART initiation (413/100,000 pys; 95% CI: 342 to 497) and declined thereafter [86/100,000 pys (95% CI: 71 to 105), > 2 years after ART initiation].	-
Male sex [adjusted hazard ratio (HR): 1.34; 95% CI: 1.12 to 1.61], low current CD4 counts ( $\geq 500$ versus $< 50$ cells/ $\mu$ L, adjusted HR: 0.36; 95% CI: 0.23 to 0.55), and age (5-9 years versus 30-39 years, adjusted HR: 0.20; 95% CI: 0.05 to 0.79) were relevant risk factors for developing KS.	-
Despite ART, KS risk in HIV-infected persons in Southern Africa remains high.	-
Early HIV testing and maintaining high CD4 counts is needed to further reduce KS-related morbidity and mortality.	-
Antiretroviral therapy is often initiated too late to impact early HIV-related infant mortality.	-
Earlier treatment requires an earlier diagnosis, and the currently recommended 6-week HIV polymerase chain reaction (PCR) test needs reconsideration.	-
This study aims to identify (1) optimal testing intervals to maximize the number of perinatal HIV infections diagnosed and (2) programmatic issues that impact diagnosis.	-

### 2.7.6 Les 20 mots-clés les plus importants du Cluster n°3

hiv	<b>0.900271</b>	intervention	<b>0.272879</b>
test	<b>0.732481</b>	rna	<b>0.272373</b>
infection	<b>0.523630</b>	combo	<b>0.255293</b>
ahi	<b>0.499901</b>	participant	<b>0.239104</b>
patience	<b>0.365747</b>	rt	<b>0.238388</b>
diagnosis	<b>0.358482</b>	antibody	<b>0.231974</b>
woman	<b>0.337544</b>	usage	<b>0.219585</b>
acuteness	<b>0.329243</b>	prevalence	<b>0.216873</b>
detection	<b>0.296824</b>	counsel	<b>0.216832</b>
rapidness	<b>0.274139</b>	antigen	<b>0.216339</b>

### 2.7.7 Les 10 meilleurs phrases sélectionnés du Cluster n°3

Sentence	Weight
Blood donations in South Africa are tested for HIV RNA using individual donation NAT (ID-NAT), allowing detection and rapid antiretroviral therapy (ART) of acute HIV infections.	-
The yield of screening for acute HIV infection among general medical patients in resource-scarce settings remains unclear.	-
It is possible to perform routine diagnosis and counselling for acute HIV infection in a limited-resource setting.	-
Results and counselling were delivered to 62.3% of participants and all six patients with AHI.	-
Six (0.67%) were diagnosed with AHI.	-
902 participants were enrolled over the course of 1 year, reporting high levels of sexual risk behaviour, including 66.7% who did not use a condom at last sex.	-
Patients with AHI were additionally visited at home.	-
Text message reminders and phone calls were employed to encourage patients to return for results.	-
Results were made available at 1 week.	-
Patients with sexually transmitted infection and clients undergoing voluntary counselling and testing who were negative on rapid HIV antibody tests at a public youth clinic were recruited to the study and tested using HIV-1 PCR and third-generation ELISA.	-

### 2.7.8 Les 20 mots-clés les plus importants du Cluster n°4

hiv	<b>0.722625</b>	transmission	<b>0.255027</b>
infection	<b>0.695229</b>	woman	<b>0.237573</b>
cell	<b>0.342571</b>	estimation	<b>0.229674</b>
patience	<b>0.315767</b>	test	<b>0.229241</b>
response	<b>0.307706</b>	highness	<b>0.224187</b>
viral	<b>0.287279</b>	earliness	<b>0.224086</b>
association	<b>0.279777</b>	incidence	<b>0.220916</b>
individuality	<b>0.262792</b>	acuteness	<b>0.214922</b>
usage	<b>0.262456</b>	immunity	<b>0.206966</b>
study	<b>0.257471</b>	resultant	<b>0.206773</b>

### 2.7.9 Les 10 meilleurs phrases sélectionnés du Cluster n°4

Sentence	Weight
The cystine-cystine chemokine receptor 5 (CCR5) is the primary HIV co-receptor involved in the viral entry process into human cells.	-
Strong HIV-specific cellular and humoral immune responses were elicited in mice immunized with each individual vaccine candidate.	-
RNase H mutations Q509L and Q547K were found in non-CRF02_AG strains.	-
A high HIV-1 diversity was already present in Cameroon in the early 90s, when the subjects were likely infected.	-
Primary HIV-1 drug resistance was low.	-
Occurrence of RNase H mutations with proven phenotypic effect on susceptibility to antiretrovirals encourages further assessment of their impact in treatment outcome in the context of complex HIV genetic diversity and in a subtype-specific fashion.	-
We previously described the polymorphism in the interferon regulatory factor-1 (IRF-1) gene as a novel correlate of resistance to HIV-1 infection in a Kenyan female sex worker cohort.	-
However, the underlying mechanisms likely mediating this association remained to be elucidated.	-
The initiation of HIV-1 long terminal repeat (LTR) transcription in peripheral blood mononuclear cells (PBMCs) from subjects with different IRF-1 haplotypes, representing protective, intermediate and the least protective IRF-1 allele combinations, were investigated here.	-
A single-cycle pseudovirus construct expressing vesicular stomatitis virus envelop G-protein (VSV-G) and having an HIV-1 pNL4.3 backbone with luciferase insert was used to infect PBMCs with different IRF-1 haplotypes.	-

### 2.7.10 Les 20 mots-clés les plus importants du Cluster n°5

isolates	<b>0.490968</b>	fitness	<b>0.225961</b>
neutralization	<b>0.411281</b>	hiv	<b>0.196195</b>
subtype	<b>0.400905</b>	response	<b>0.188640</b>
infection	<b>0.379390</b>	primary	<b>0.183977</b>
antibody	<b>0.328767</b>	vaccine	<b>0.174657</b>
viral	<b>0.322633</b>	month	<b>0.169522</b>
woman	<b>0.280695</b>	association	<b>0.164046</b>
virus	<b>0.278921</b>	highness	<b>0.161946</b>
cell	<b>0.272426</b>	humanness	<b>0.160026</b>
clade	<b>0.232733</b>	study	<b>0.148814</b>

### 2.7.11 Les 10 meilleurs phrases sélectionnés du Cluster n°5

Sentence	Weight
Human immunodeficiency virus (HIV) and hepatitis B virus (HBV) are endemic in South Africa while hepatitis C virus (HCV) infection is rare.	-
This high frequency of cross-neutralization differed significantly from the ability of South African clade C serum samples to neutralize clade B isolates but did not differ significantly from results of other combinations of clade B and C reagents tested in checkerboard assays.	-
Here, we showed in rhesus macaques that the very same vaccines that had entered clinical trials in Oxford and Nairobi, plasmid pTHr.HIVA DNA and recombinant modified vaccinia virus Ankara MVA.HIVA in a prime-boost protocol (Hanke & McMichael, Nature Medicine 6, 951-955, 2000), induced cellular immune responses specific for multiple HIV-derived epitopes.	-
The minimum requirement for candidate human immunodeficiency virus (HIV) vaccines to enter clinical evaluation in humans should be their demonstrable immunogenicity in non-human primates: induction of antibodies neutralizing primary HIV isolates or elicitation of broad T cell-mediated immune responses.	-
The clustering of shared neutralization determinants on clade C primary HIV-1 isolates from South Africa suggests that neutralizing antibodies induced by vaccines will have less epitope diversity to overcome at a regional level.	-
Our results suggest that clades B and C are each comprised of multiple neutralization serotypes, some of which are more clade specific than others.	-
Other individual serum samples showed a significant clade preference in their neutralizing activity.	-
Notably, two clade C serum samples obtained after less than 2 years of infection neutralized a broad spectrum of clade B and C isolates.	-
Once detectable, extensive cross-neutralization of heterologous clade C isolates from South Africa was observed, suggesting an unusual degree of shared neutralization determinants at a regional level.	-
These results have both boosted our expectations for the performance of these vaccines in humans and increased our confidence about the choice of these assays as the primary readouts in the on-going human trials.	-

### 2.7.12 Les 20 mots-clés les plus importants du Cluster n°6

infection	<b>0.748627</b>	association	<b>0.214856</b>
hiv	<b>0.721501</b>	ci	<b>0.198503</b>
acuteness	<b>0.378082</b>	hvp	<b>0.195961</b>
woman	<b>0.322984</b>	highness	<b>0.195526</b>
viral	<b>0.281694</b>	test	<b>0.195112</b>
load	<b>0.264120</b>	among	<b>0.191445</b>
response	<b>0.254284</b>	subtype	<b>0.190197</b>
plasma	<b>0.248952</b>	prevalence	<b>0.178349</b>
earliness	<b>0.233904</b>	seroconversion	<b>0.176336</b>
cell	<b>0.225763</b>	study	<b>0.174162</b>

### 2.7.13 Les 10 meilleurs phrases sélectionnés du Cluster n°6

Sentence	Weight
Human immunodeficiency virus (HIV) partner notification services (HPN), peer mobilization with HIV self-testing, and acute and early HIV infection (AEHI) screening among gay, bisexual, and other men who have sex with men (GBMSM) and transgender women (TGW) were assessed for acceptability, feasibility, and linkage to antiretroviral therapy (ART) and preexposure prophylaxis (PrEP) services.	-
Prospective cohort of 188 African women with primary HIV-1 infection.	-
Hormonal contraception was not associated with either the HIV-1 plasma setpoint or cervical loads during early infection.	-
Subtype C infection, nonviral sexually transmitted infections, having a partner spending nights away from home, recent unprotected sex, and shorter time since infection were associated with higher cervical HIV-1 loads.	-
Subtype D infection, pregnancy, breastfeeding, and older age at the time of infection were associated with higher plasma viral setpoint.	-
Cervical loads were significantly higher (0.7-1.1 log10 copies/swab) during acute infection than subsequently.	-
We estimated the mean HIV-1 plasma setpoint to be 4.20 log10 HIV-1 RNA copies/ml [95% confidence interval (CI) 4.04-4.35] at 121 days (95% CI 91-137) from infection; an analogous mean cervical viral setpoint was 1.64 log10 HIV-1 RNA copies/swab (95% CI 1.46-1.82) at 174 days (95% CI 145-194) from infection.	-
We used the Loess procedure to estimate the magnitude and timing of viral setpoints in plasma and cervical secretions and generalized estimating equations (GEE) to identify predictors of plasma and cervical viral setpoints.	-
HIV-uninfected and infected women were followed quarterly; we tested serial plasma specimens by HIV PCR to estimate infection dates.	-
High levels of HIV-1 viremia exist in peripheral blood during acute and early infection; however, data on HIV-1 viral loads in female genital secretions during this period are sparse.	-



### 2.7.14 Les 20 mots-clés les plus importants du Cluster n°7

hiv	<b>1.067051</b>	study	<b>0.351905</b>
arty	<b>0.567922</b>	woman	<b>0.347271</b>
test	<b>0.539154</b>	risk	<b>0.338121</b>
infection	<b>0.493191</b>	mortality	<b>0.324774</b>
child	<b>0.490969</b>	age	<b>0.304563</b>
patience	<b>0.399721</b>	diagnosis	<b>0.303193</b>
care	<b>0.368786</b>	year	<b>0.295337</b>
ci	<b>0.363725</b>	tb	<b>0.292380</b>
treatment	<b>0.362870</b>	association	<b>0.291356</b>
usage	<b>0.352776</b>	incidence	<b>0.289140</b>

### 2.7.15 Les 11 meilleurs phrases sélectionnés du Cluster n°7

Sentence	Weight
To study the structure of human immunodeficiency virus (HIV)-1 drug resistance (DR) in patients with newly diagnosed infection.	-
Adapted education and support for children and their families would also be important.	-
Increased mortality and attrition were also associated with advanced clinical stage, underweight and diagnosis of tuberculosis at programme entry.	-
The highest mortality and attrition rates (98.85 and 244.00 per 1000 person-years), and relative ratios (adjusted hazard ratio [aHR] = 1.92, 95% CI 1.56-2.37; incidence ratio [aIR] = 2.10, 95% CI 1.86-2.37, respectively, compared with the 5- to 14-year group) were observed amongst the youngest children.	-
At programme entry, 45.3% were underweight and 12.6% were in clinical stage 4.	-
Six thousand two hundred and sixty-one patients contributed 9500 person-years; 27.1% were aged < 2 years, 30.1% were 2-4, and 42.8% were 5-14 years old.	-
Associations between outcomes and age and other individual-level factors were studied using multiple Cox proportional hazards (mortality) and Poisson (attrition) regression models.	-
Two-year mortality and programme attrition rates per 1000 person-years stratified by age group (<2, 2-4 and 5-15 years) were calculated.	-
Longitudinal analysis of data from patients enrolled in HIV care.	-
To examine age differences in mortality and programme attrition amongst paediatric patients treated in four African HIV programmes.	-

### 2.7.16 Les 20 mots-clés les plus importants du Cluster n°8

hiv	<b>1.158117</b>	arty	<b>0.299375</b>
ahi	<b>0.743884</b>	sample	<b>0.295186</b>
test	<b>0.738407</b>	risk	<b>0.292824</b>
infection	<b>0.650917</b>	participant	<b>0.291785</b>
earliness	<b>0.424870</b>	assay	<b>0.284965</b>
diagnosis	<b>0.416723</b>	ci	<b>0.279880</b>
detection	<b>0.399738</b>	rapidness	<b>0.274455</b>
acuteness	<b>0.355326</b>	incidence	<b>0.273427</b>
usage	<b>0.313401</b>	transmission	<b>0.271960</b>
woman	<b>0.304020</b>	study	<b>0.268379</b>

### 2.7.17 Les 10 meilleurs phrases sélectionnés du Cluster n°8

Sentence	Weight
Define the clinical presentation of acute human immunodeficiency virus infection (AHI) among men and women from 2 continents to create a clinical scoring algorithm.Comparison of incident sign and symptom between those with and without AHI.At-risk human immunodeficiency virus (HIV) negative men and women in Thailand, Kenya, Tanzania, and Uganda underwent twice-weekly testing for HIV.	-
Available data in acquired immune deficiency syndrome (AIDS)-defining cancers further suggest that FDG-PET/CT imaging may be useful for prognostication of cervical cancer and for identifying appropriate sites for biopsy, staging, and monitoring lymphoproliferative activity owing to HIV-associated Kaposi sarcoma and multicentric Castleman disease.	-
Of these five AHI cases, four were diagnosed among the 241 patients with fever (prevalence 1.7%, 95% CI 0.5-4.2%), vs. one among 265 non-febrile patients (prevalence 0.4%, 95% CI 0.0-2.0%, P = 0.1).	-
Malaria was confirmed by PCR in four (1.7%) of the 241 febrile patients.	-
AHI was as common as confirmed malaria in young febrile adults seeking care.	-
An AHI detection strategy targeting young febrile adults seeking care at pharmacies and health facilities is feasible and should be considered as an HIV-prevention strategy in high-transmission settings.	-
Few studies have investigated the long-term dynamics in health-related quality of life (HRQoL) among HIV-positive persons from acute infection.	-
From 2004, 160 women were enrolled into the CAPRISA 002 Acute Infection study at two sites in the province of KwaZulu-Natal and underwent 3-6 monthly HRQoL assessments using the functional assessment of HIV infection (FAHI) instrument.	-
Overall and 5 sub-scale FAHI scores [physical well-being (PWB), emotional well-being (EWB), functional and global well-being (FGWB), social well-being (SWB) and cognitive functioning (CF)] were calculated up to antiretroviral therapy (ART) initiation and scores at enrollment were compared to the acute, early and established infection phases.	-
Mixed-effects regression models adjusting for behavioral and clinical factors were applied to assess HRQoL trends and the proportion of women meeting minimally important differences was calculated.	-

### 3 Génération de nouveaux clusters par abstracts

#### 3.1 Déroulement de l'algorithme

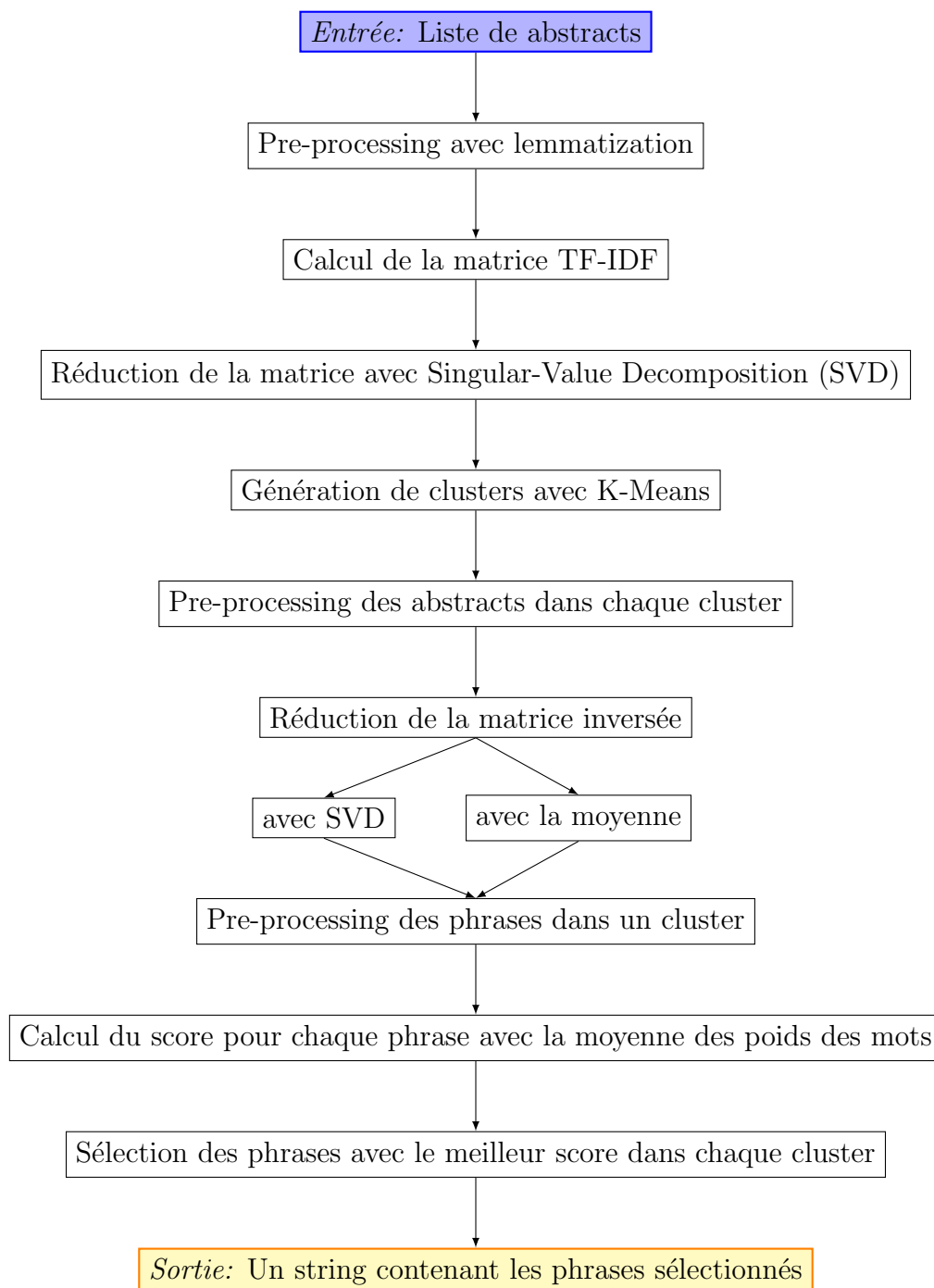


Figure 6: Processus de génération de résumé

#### 3.2 Pre-processing

**Avant:** Pre-exposure prophylaxis (PrEP) reduces HIV acquisition risk by >90% and is a critical lever to reduce HIV incidence. Identifying individuals most likely to benefit from PrEP and retaining them on PrEP throughout HIV risk is critical to realize PrEP's prevention potential. Individuals with sexually transmitted infections (STIs) are an obvious priority PrEP population, but there are no data from sub-Saharan Africa (SSA) confirming the effectiveness of integrating PrEP into STI clinics. Assisted partner notification may further enhance STI clinic-based PrEP

programming by recruiting PrEP users from the pool of named sexual partners of individuals presenting with an incident STI. However, the acceptability, feasibility, and effectiveness of these integrated and enhanced strategies are unknown.

This study aims to describe the implementation outcomes of acceptability, feasibility, and effectiveness (regarding PrEP uptake and persistence) of integrating an enhanced PrEP implementation strategy into an STI clinic in Malawi.

The enhanced PrEP STI study is a prospective cohort study enrolling patients who are eligible for PrEP (aged  $\geq 15$  years) who are seeking STI services at a Lilongwe-based STI clinic. Data collection relies on a combination of in-depth interviews, patient and clinic staff surveys, and clinic record review. All enrolled PrEP users will be screened for acute HIV infection and receive quarterly testing for *Neisseria gonorrhea*, *Chlamydia trachomatis*, and syphilis. Participants will be asked to name recent sexual partners for assisted notification; returning partners will be screened for PrEP eligibility and, if interested, enrolled into the cohort of PrEP initiators. We will also enroll patients who are eligible for PrEP but choose not to initiate it, from the STI clinic. Patient participants will be followed for 6 months; we will assess self-reported PrEP use, PrEP refills, sexual behaviors, perceived HIV risk, and incident STIs. Clinic staff participants will be interviewed at baseline and at approximately 6 months and will complete surveys examining the perceived acceptability and feasibility of the integrated and enhanced PrEP strategy.

Enrollment began in March 2022 and is projected to continue until February 2023, with patient participant follow-up through August 2023. The results of this study are expected to be reported in 2024.

This study will generate important evidence regarding the potential integration of PrEP services into STI clinics in SSA and preliminary data regarding the effectiveness of an enhanced intervention that includes assisted partner notification as a strategy to identify potential PrEP users. Furthermore, this trial will provide some of the first insights into STI incidence among PrEP users recruited from an STI clinic in SSA—critical data to inform the use of etiologic STI testing where syndromic management is the current standard. These findings will help to design future PrEP implementation strategies in SSA.

ClinicalTrials.gov NCT05307991; <https://clinicaltrials.gov/ct2/show/NCT05307991>. DERR1-10.2196/37395.

**Après:** prophylaxis prep reduces hiv acquisition risk crisis leverage reduction hiv incidence identification individuality likeliness benefit prep retention prep throughout hiv risk crisis realization prep prevention potentiality individuality sexually transmission infection stis obviousness priority prep population data africa ssa confirmation effectiveness integration prep sti clinic assistant partner notification may enhancement sti prep program recruiting prep user pool name sex partner individuality presentment incidence sti however acceptability feasibility effectiveness integration enhancement strategy unknown study aim description implement outcome acceptability feasibility effectiveness regard prep uptake persistence integration enhancement prep implement strategy sti clinic malawi enhancement prep sti study prospective cohort study enrolment patience eligibility prep age year seek sti service sti clinic data collection relies combination interview patience clinic staff survey clinic record review enrolment prep user screen acuteness hiv infection reception quarterly test neisseria gonorrhea chlamydia trachomatis syphilis participant ask name recentness sex partner assistant notification return partner screen prep eligibility interestedness enrolment cohort prep initiator also enrollment patience eligibility prep choose initiation sti clinic patience participant follow month ass prep usage prep refill sex behavior perception hiv risk incidence stis clinic staff participant interviewed baseline approximately month completion survey examination perception acceptability feasibility integration enhancement prep strategy enrollment begin march projection continuation february patience participant august result study expectation reportage study generation important evidence regard potentiality integration prep service sti clinic ssa preliminary data regard effec-

tiveness enhancement intervention include assistant partner notification strategy identification  
 potentiality prep user furthermore try provision first insight sti incidence among prep user re-  
 cruitment sti clinic data informant usage etiology sti test syndromic manage currency standard  
 finding help design future prep implement strategy ssa http

### 3.3 Génération de la matrice TF-IDF

( <b>0</b> , 2175)	0.036925213186693034
( <b>0</b> , 1895)	0.02538785016730649
( <b>0</b> , 1226)	0.022892292113539835
...	...
( <b>630</b> , 2122)	0.12454771107996537
( <b>630</b> , 3739)	0.14871579966867624
( <b>630</b> , 3844)	0.05361881974577664

Les nombres en **gras** représentent l'ID des documents tels que définis dans le df-hover.

### 3.4 Réduction de la matrice TF-IDF avec SVD

<b>0</b>	0.17463025	-0.05961566
<b>1</b>	0.09339271	0.16727474
<b>2</b>	0.16475986	0.0486627
...	...	...
<b>628</b>	0.2791554	-0.01904742
<b>629</b>	0.16739643	0.00459276
<b>630</b>	0.32905012	-0.09261019

Les nombres en **gras** représentent l'ID des documents tels que définis dans le df-hover.

### 3.5 Clustering avec K-Means

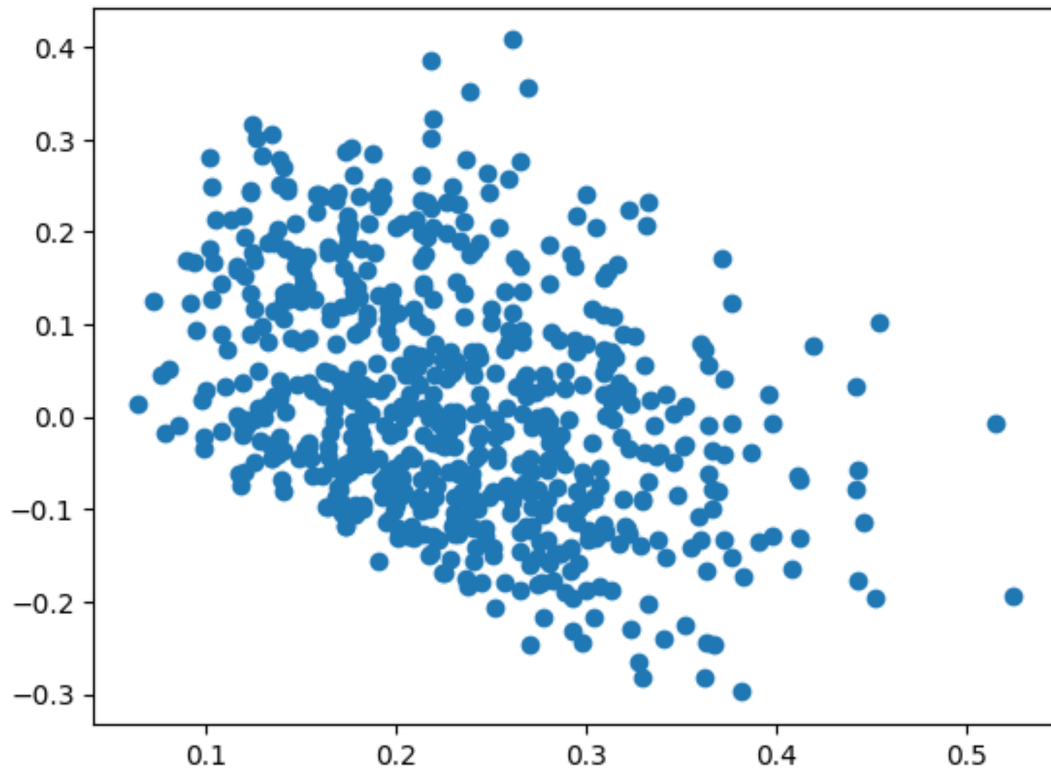


Figure 7: Représentation des documents

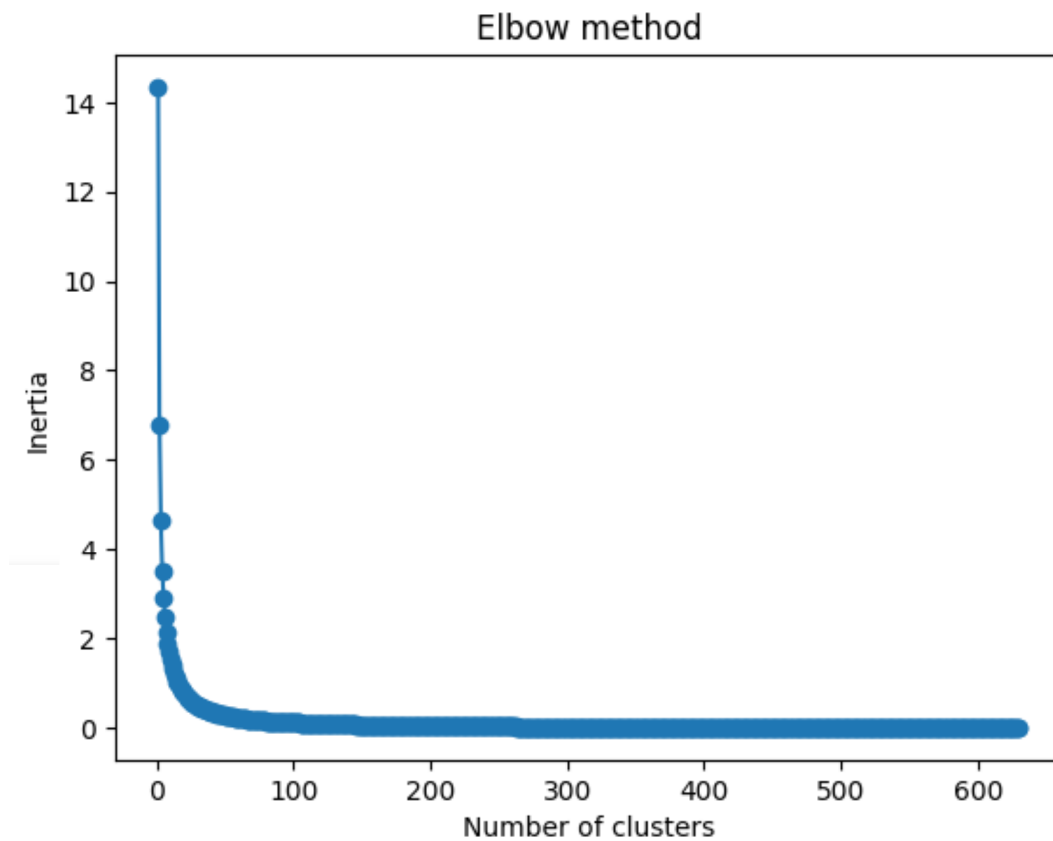


Figure 8: Elbow method pour trouver le K optimale

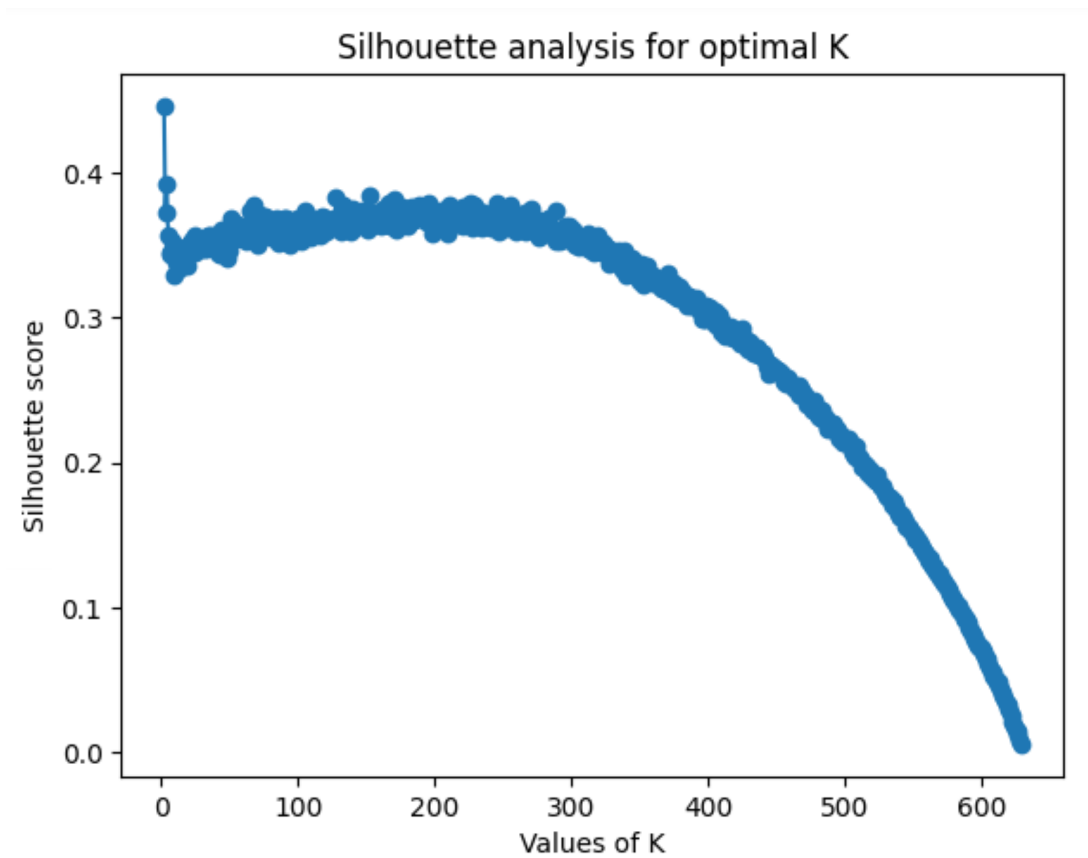


Figure 9: Analyse silhouette pour trouver le K optimale

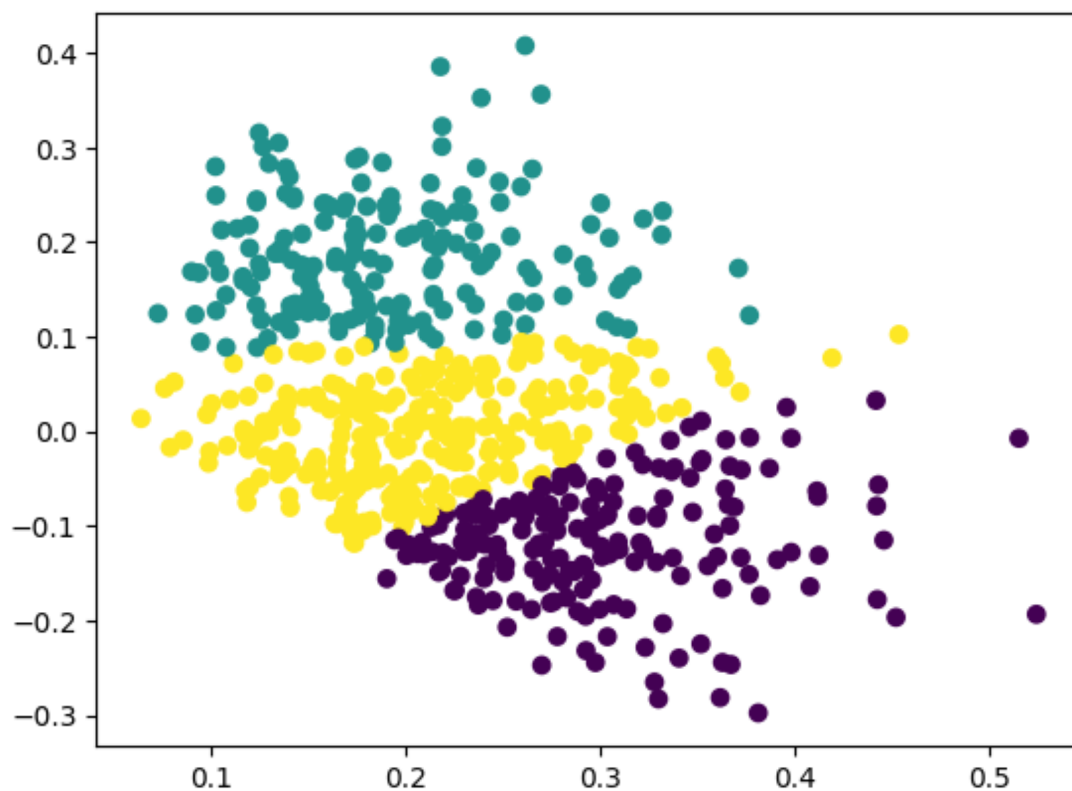


Figure 10: Documents clusterisés

- **Cluster n°1** (*86 documents*)
  - Prevalence of drug resistant HIV-1 forms in patients without any history of antiretroviral

therapy in the Republic of Guinea.

- Quantitative interpretation of Sedia LAg Assay test results after HIV diagnosis.
- Expression of type I interferon-associated genes at antiretroviral therapy interruption predicts HIV virological rebound.
- Virologic Response to Very Early HIV Treatment in Neonates.
- A Novel Sample Selection Approach to Aid the Identification of Factors That Correlate With the Control of HIV-1 Infection.
- ...
- **Cluster n°2** (*132 documents*)
  - Subtle Longitudinal Alterations in Env Sequence Potentiate Differences in Sensitivity to Broadly Neutralizing Antibodies following Acute HIV-1 Subtype C Infection.
  - CCR5-Δ32 gene variant frequency in the Nigerian and Zimbabwean populations living in North Cyprus.
  - Infection with HIV-1 subtype D among acutely infected Ugandans is associated with higher median concentration of cytokines compared to subtype A.
  - CD4 T cells are rapidly depleted from tuberculosis granulomas following acute SIV co-infection.
  - A neutralizing antibody target in early HIV-1 infection was recapitulated in rhesus macaques immunized with the transmitted/founder envelope sequence.
  - ...
- **Cluster n°3** (*69 documents*)
  - Integrating Enhanced HIV Pre-exposure Prophylaxis Into a Sexually Transmitted Infection Clinic in Lilongwe: Protocol for a Prospective Cohort Study.
  - Evaluation of multi-assay algorithms for cross-sectional HIV incidence estimation in settings with universal antiretroviral treatment.
  - Prevalence of drug resistant HIV-1 forms in patients without any history of antiretroviral therapy in the Republic of Guinea.
  - Predicting HIV Status among Men Who Have Sex with Men in Bulawayo & Harare, Zimbabwe Using Bio-Behavioural Data, Recurrent Neural Networks, and Machine Learning Techniques.
  - Trends and predictors of modern contraceptive use among married women: Analysis of 2000-2016 Ethiopian Demographic and Health Surveys.
  - ...
- **Cluster n°4** (*121 documents*)
  - Integrating Enhanced HIV Pre-exposure Prophylaxis Into a Sexually Transmitted Infection Clinic in Lilongwe: Protocol for a Prospective Cohort Study.
  - Evaluation of multi-assay algorithms for cross-sectional HIV incidence estimation in settings with universal antiretroviral treatment.
  - Prevalence of drug resistant HIV-1 forms in patients without any history of antiretroviral therapy in the Republic of Guinea.
  - Predicting HIV Status among Men Who Have Sex with Men in Bulawayo & Harare, Zimbabwe Using Bio-Behavioural Data, Recurrent Neural Networks, and Machine Learning Techniques.



- Trends and predictors of modern contraceptive use among married women: Analysis of 2000-2016 Ethiopian Demographic and Health Surveys.
- ...
- **Cluster n°5** (*86 documents*)
  - Integrating Enhanced HIV Pre-exposure Prophylaxis Into a Sexually Transmitted Infection Clinic in Lilongwe: Protocol for a Prospective Cohort Study.
  - Evaluation of multi-assay algorithms for cross-sectional HIV incidence estimation in settings with universal antiretroviral treatment.
  - Prevalence of drug resistant HIV-1 forms in patients without any history of antiretroviral therapy in the Republic of Guinea.
  - Predicting HIV Status among Men Who Have Sex with Men in Bulawayo & Harare, Zimbabwe Using Bio-Behavioural Data, Recurrent Neural Networks, and Machine Learning Techniques.
  - Trends and predictors of modern contraceptive use among married women: Analysis of 2000-2016 Ethiopian Demographic and Health Surveys.
  - ...
- **Cluster n°6** (*74 documents*)
  - Integrating Enhanced HIV Pre-exposure Prophylaxis Into a Sexually Transmitted Infection Clinic in Lilongwe: Protocol for a Prospective Cohort Study.
  - Evaluation of multi-assay algorithms for cross-sectional HIV incidence estimation in settings with universal antiretroviral treatment.
  - Prevalence of drug resistant HIV-1 forms in patients without any history of antiretroviral therapy in the Republic of Guinea.
  - Predicting HIV Status among Men Who Have Sex with Men in Bulawayo & Harare, Zimbabwe Using Bio-Behavioural Data, Recurrent Neural Networks, and Machine Learning Techniques.
  - Trends and predictors of modern contraceptive use among married women: Analysis of 2000-2016 Ethiopian Demographic and Health Surveys.
  - ...
- **Cluster n°7** (*63 documents*)
  - Integrating Enhanced HIV Pre-exposure Prophylaxis Into a Sexually Transmitted Infection Clinic in Lilongwe: Protocol for a Prospective Cohort Study.
  - Evaluation of multi-assay algorithms for cross-sectional HIV incidence estimation in settings with universal antiretroviral treatment.
  - Prevalence of drug resistant HIV-1 forms in patients without any history of antiretroviral therapy in the Republic of Guinea.
  - Predicting HIV Status among Men Who Have Sex with Men in Bulawayo & Harare, Zimbabwe Using Bio-Behavioural Data, Recurrent Neural Networks, and Machine Learning Techniques.
  - Trends and predictors of modern contraceptive use among married women: Analysis of 2000-2016 Ethiopian Demographic and Health Surveys.
  - ...

### 3.6 Résumé généré avec la moyenne des poids de mots

Of the participants 838 were HIV negative, 163 had established HIV infection, and 8 had acute HIV infection. Reactivity with all HIV genotypes was 100%. Of these, 864 HIV exposed infants had DNA-PCR HIV test results available. 8 (25%) of the patients were HIV seropositive. These cells were dramatically increased in chronic HIV infection. TRIM5 $\alpha$  levels did not change significantly after infection. Overall, 30 patients (1.0%) had acute HIV infection, 56 (1.8%) had early HIV infection, and 238 (8%) had established HIV infection.

#### 3.6.1 Excluant les phrases détaillant les participants à la recherche

The Defer/Test strategy averted the most HIV infections. Reactivity with all HIV genotypes was 100%. Overall, the HIV prevalence using the HIVSS test was 8.2% (93/1129). 91% tested positive for HIV. These cells were dramatically increased in chronic HIV infection. TRIM5 $\alpha$  levels did not change significantly after infection. Of the 467 HIV antibody-negative samples, four (0.9%) were HIV-1 RNA-positive.

*Les mêmes poids de mots-clés sont utilisés pour cette méthode que pour la précédente. Ici, nous filtrons les phrases ne détaillant pas les participants à la recherche, puisqu'ils ressortent les plus souvent. Par la suite, les phrases qui apparaissent dans les tableaux des meilleurs phrases en italiques sont les phrases qui ont été exclus pour cette méthode.*

### 3.6.2 Les 20 mots-clés les plus importants du Cluster n°1

hiv	<b>0.103874</b>	usage	<b>0.033166</b>
infection	<b>0.094421</b>	estimation	<b>0.033165</b>
test	<b>0.055722</b>	sample	<b>0.030911</b>
woman	<b>0.043747</b>	study	<b>0.030054</b>
acuteness	<b>0.039664</b>	antibody	<b>0.029987</b>
transmission	<b>0.039516</b>	highness	<b>0.029183</b>
detection	<b>0.038750</b>	individuality	<b>0.028646</b>
viral	<b>0.036067</b>	donor	<b>0.027983</b>
assay	<b>0.035927</b>	earliness	<b>0.027939</b>
blood	<b>0.033654</b>	association	<b>0.027700</b>

### 3.6.3 Les 12 meilleurs phrases sélectionnés du Cluster n°1

Sentence	Weight
<i>Of the participants 838 were HIV negative, 163 had established HIV infection, and 8 had acute HIV infection.</i>	<b>0.005836</b>
The Defer/Test strategy averted the most HIV infections.	<b>0.004956</b>
Between 1 and 2% of subjects had undetected acute HIV infection.	<b>0.004304</b>
The overall prevalence of HIV infection in this study was 5.35%.	<b>0.004215</b>
<i>Sixteen men with acute HIV infection and 25 men with chronic HIV infection were studied.</i>	<b>0.004207</b>
Fourth-generation HIV assays detect both antigen and antibody, facilitating detection of acute/early HIV infection.	<b>0.004027</b>
We found 563 people with undiagnosed HIV infection.	<b>0.003963</b>
Most HIV-1 infected individuals do not know their infection dates.	<b>0.003806</b>
This implies that most acute HIV infections will be missed with this assay.	<b>0.003764</b>
Low-levels of this population were associated with acute and chronic HIV infection.	<b>0.003763</b>
The median blood HIV was 209,000 copies/ml, more than 10 times higher than in subjects with established HIV infection.	<b>0.003701</b>
Most point-of-care HIV assays have poor sensitivity to diagnose acute HIV infection as they only detect antibodies against HIV-1 and HIV-2 (HIV-1/2).	<b>0.003699</b>

### 3.6.4 Les 20 mots-clés les plus importants du Cluster n°2

hiv	<b>0.078424</b>	study	<b>0.031192</b>
arty	<b>0.045965</b>	woman	<b>0.029068</b>
test	<b>0.044462</b>	usage	<b>0.029052</b>
ahi	<b>0.041584</b>	tb	<b>0.028919</b>
patience	<b>0.040262</b>	intervention	<b>0.028258</b>
treatment	<b>0.039078</b>	participant	<b>0.027060</b>
diagnosis	<b>0.035750</b>	care	<b>0.026879</b>
child	<b>0.035506</b>	among	<b>0.026794</b>
infection	<b>0.031869</b>	infancy	<b>0.025114</b>
ci	<b>0.031685</b>	health	<b>0.024638</b>

### 3.6.5 Les 13 meilleurs phrases sélectionnés du Cluster n°2

Sentence	Weight
Reactivity with all HIV genotypes was 100%.	<b>0.002051</b>
early HIV infection and LPNT.	<b>0.001934</b>
<i>Overall, 52% of the women reported testing for HIV.</i>	<b>0.001842</b>
<i>221 incident syphilis infections were reported: 46 (21%) in men with HIV (incidence 1.10 per 100 person-years), 76 (34%) in men without HIV (1.09), 54 (24%) in women with HIV (0.77), and 45 (24%) in women without HIV (1.11).</i>	<b>0.001840</b>
Mobile HIV screening may facilitate early HIV diagnosis.	<b>0.001828</b>
HIV diagnosis was made during hospitalisation in 23 (30%) of the 76 patients.	<b>0.001821</b>
<i>At enrolment, 1575 (53%) men with HIV and 560 (32%) men without HIV were circumcised; an additional 69 (4%) men with HIV and 132 (5%) men without HIV were circumcised during study follow-up.</i>	<b>0.001792</b>
HIV programs in Senegal should intensify early HIV diagnosis for effective test-and-treat.	<b>0.001791</b>
A pro-poor wealth-related inequality in early HIV testing was observed.	<b>0.001756</b>
The median age at HIV diagnosis was 2.1 years.	<b>0.001735</b>
Number of medical visits, up to 5 years preceding HIV diagnosis, at which HIV testing had been indicated, according to Swiss HIV testing recommendations.	<b>0.001629</b>
It commonly affects women infected with HIV.	<b>0.001604</b>
Of these, 16 (3.5%) were HIV newly diagnosed, including 2 (0.4%) with AEHI.	<b>0.001592</b>

### 3.6.6 Les 20 mots-clés les plus importants du Cluster n°3

hiv	<b>0.137950</b>	infection	<b>0.045163</b>
infancy	<b>0.094466</b>	care	<b>0.044275</b>
arty	<b>0.093477</b>	initiation	<b>0.040837</b>
test	<b>0.089468</b>	study	<b>0.040742</b>
ci	<b>0.057291</b>	year	<b>0.039902</b>
child	<b>0.056982</b>	age	<b>0.037830</b>
mortality	<b>0.050101</b>	among	<b>0.037727</b>
diagnosis	<b>0.049543</b>	earliness	<b>0.037302</b>
woman	<b>0.049107</b>	pregnant	<b>0.036265</b>
patience	<b>0.048914</b>	treatment	<b>0.035193</b>

### 3.6.7 Les 12 meilleurs phrases sélectionnés du Cluster n°3

Sentence	Weight
<i>Of these, 864 HIV exposed infants had DNA-PCR HIV test results available.</i>	<b>0.007952</b>
Overall, the HIV prevalence using the HIVSS test was 8.2% (93/1129).	<b>0.007934</b>
<i>Ninety-eight (71%) infants and children exposed to HIV were diagnosed for HIV infection of which 68(69.4%) initiated ART.</i>	<b>0.007272</b>
For excluding HIV infection (i.e.	<b>0.007029</b>
All households were offered 6-monthly home-based HIV testing.	<b>0.006782</b>
Of those newly diagnosed with HIV, 16% (12/75) were initiated on ART.	<b>0.006393</b>
Infant HIV status was determined at 3, 24 and 36 weeks by HIV DNA PCR.	<b>0.006198</b>
Dried Blood Spots samples from HIV exposed infants were tested for HIV.	<b>0.006172</b>
HIV is a major contributor to infant mortality.	<b>0.006113</b>
To assess the performance of rapid HIV tests in comparison to a laboratory-based HIV ELISA test for determining HIV-exposure and excluding HIV infection during infancy.	<b>0.006067</b>
HIV self-screening (HIVSS) is acceptable to adults, but there is limited data on HIVSS feasibility in community programmes.	<b>0.005876</b>
This review considered studies that included the following outcome: 'late HIV testing', 'late HIV diagnosis' and 'late presentation for HIV care after testing'.	<b>0.005742</b>

### 3.6.8 Les 20 mots-clés les plus importants du Cluster n°4

hiv	<b>0.058655</b>	blood	<b>0.021386</b>
patience	<b>0.035819</b>	incidence	<b>0.021273</b>
infection	<b>0.033226</b>	association	<b>0.020897</b>
usage	<b>0.027610</b>	bed	<b>0.020265</b>
test	<b>0.025415</b>	highness	<b>0.019160</b>
risk	<b>0.025282</b>	donor	<b>0.019056</b>
study	<b>0.024285</b>	transmission	<b>0.018888</b>
disease	<b>0.022853</b>	woman	<b>0.018762</b>
model	<b>0.022403</b>	treatment	<b>0.018496</b>
earliness	<b>0.021872</b>	count	<b>0.017951</b>

### 3.6.9 Les 14 meilleurs phrases sélectionnés du Cluster n°4

Sentence	Weight
<i>8 (25%) of the patients were HIV seropositive.</i>	<b>0.001577</b>
91% tested positive for HIV.	<b>0.001402</b>
<i>8 (25%) of the patients tested positive for HIV antibodies.</i>	<b>0.001100</b>
280 adults were tested for HIV antibodies.	<b>0.001081</b>
<i>Researchers did not retest any of the seronegative patients for HIV.</i>	<b>0.000946</b>
Frequent retesting for HIV among persons at increased risk of HIV infection is critical to early HIV diagnosis of persons and delivery of combination HIV prevention services.	<b>0.000913</b>
Of those tested, 14 (4.0%) were HIV-1 infected.	<b>0.000875</b>
CD4+ T-lymphocyte count was used as a marker of HIV disease progression.	<b>0.000861</b>
HIV voluntary counselling and testing (VCT) is important for prevention, detection and treatment of HIV infection.	<b>0.000855</b>
The lack of acute and early HIV infection (AEHI) diagnosis and care contributes to high HIV incidence in resource-limited settings.	<b>0.000789</b>
We tested finger prick blood samples for HIV.	<b>0.000789</b>
The primary outcome was retesting for HIV at both 3 and 6 months.	<b>0.000775</b>
PwD can accurately determine HIV infection recency.	<b>0.000775</b>

### 3.6.10 Les 20 mots-clés les plus importants du Cluster n°5

infection	<b>0.062318</b>	acuteness	<b>0.028983</b>
hiv	<b>0.048567</b>	primary	<b>0.027288</b>
cell	<b>0.036399</b>	usage	<b>0.027219</b>
virus	<b>0.034895</b>	association	<b>0.026624</b>
subtype	<b>0.034843</b>	immunity	<b>0.025499</b>
viral	<b>0.033374</b>	earliness	<b>0.023927</b>
response	<b>0.031083</b>	antibody	<b>0.023911</b>
sequence	<b>0.030072</b>	study	<b>0.023308</b>
isolates	<b>0.029958</b>	analysis	<b>0.022477</b>
individuality	<b>0.029632</b>	highness	<b>0.022368</b>

### 3.6.11 Les 10 meilleurs phrases sélectionnés du Cluster n°5

Sentence	Weight
These cells were dramatically increased in chronic HIV infection.	<b>0.001347</b>
Sustained viremia after acute HIV infection is associated with profound CD4	<b>0.001177</b>
MBL levels are not altered by HIV infection or AIDS.	<b>0.001106</b>
We conclude that AM-derived HIV isolates are T-tropic and can enter macrophages through contact with an infected CD4+ T cell, which results in productive infection of AMs.	<b>0.001062</b>
However, these isolates productively infected macrophages when co-cultured with HIV-infected CD4+ T cells.	<b>0.001059</b>
Taking into account multiplicity of HIV infection strengthened these associations.	<b>0.001009</b>
Only 2 of these 12 viruses showed a syncytium-inducing phenotype after infection of primary peripheral blood mononuclear cells (PBMCs) and were infectious for the T cell line C8166.	<b>0.001003</b>
In addition, we provide evidence that T-tropic HIV is transmitted from infected CD4+ T cells to the AM cytosol.	<b>0.000996</b>
Additionally, HIV-specific cytolytic CD4+ T cell responses in acute HIV infection are predictive of disease progression.	<b>0.000975</b>
Samples were available for 32 uninfected subjects and 28 infected persons, all within 1 year of infection.	<b>0.000957</b>

### 3.6.12 Les 20 mots-clés les plus importants du Cluster n°6

infection	<b>0.101071</b>	earliness	<b>0.035978</b>
neutralization	<b>0.072379</b>	acuteness	<b>0.035143</b>
cell	<b>0.071468</b>	individuality	<b>0.034822</b>
hiv	<b>0.060770</b>	primary	<b>0.033779</b>
response	<b>0.058958</b>	vaccine	<b>0.033673</b>
antibody	<b>0.055884</b>	epitope	<b>0.032689</b>
viral	<b>0.051052</b>	highness	<b>0.031891</b>
virus	<b>0.045151</b>	load	<b>0.030571</b>
subtype	<b>0.044052</b>	level	<b>0.029487</b>
woman	<b>0.038934</b>	plasma	<b>0.029396</b>

### 3.6.13 Les 10 meilleurs phrases sélectionnés du Cluster n°6

Sentence	Weight
TRIM5alphahu levels did not change significantly after infection.	<b>0.002869</b>
Primary HIV infection (PHI) and subsequent chronic infection alter B-cell compartment.	<b>0.002849</b>
Furthermore, infection is not associated with dysregulation of TRIM5alphahu.	<b>0.002762</b>
Here, we assessed CD8+ T cell functional evolution from primary to chronic HIV infection.	<b>0.002582</b>
Establishment of persistent human immunodeficiency virus type 1 (HIV-1) reservoirs occurs early in infection, and biomarkers of infected CD4+ T cells during acute infection are poorly defined.	<b>0.002458</b>
As infection progressed expression of perforin was maintained in HIV-specific CD8+ T cells with high levels of T-bet, but not necessarily in the population of T-betLo HIV-specific CD8+ T cells that expand as infection progresses.	<b>0.002438</b>
Analyses of immune cells before and after HIV infection revealed an increase in both NK-cell activation and KIR expression, but reduced cytotoxicity during acute infection.	<b>0.002384</b>
We characterized CD8(+) T-cell responses in 20 acutely infected, antiretroviral-naïve individuals with HIV-1 subtype C infection using the interferon- $\gamma$ enzyme-linked immunosorbent spot assay.	<b>0.002345</b>
We dissected this bi-directional relationship to understand how HIV impacts NK-cell responses during primary HIV-1 infection.	<b>0.002344</b>
Over 50% of this infection and its associated deaths occurred in Sub-Saharan Africa.	<b>0.002279</b>



### 3.6.14 Les 20 mots-clés les plus importants du Cluster n°7

hiv	<b>0.178047</b>	arty	<b>0.042432</b>
infection	<b>0.093059</b>	detection	<b>0.041624</b>
test	<b>0.083526</b>	rapidness	<b>0.040636</b>
ahi	<b>0.064331</b>	rna	<b>0.039096</b>
acuteness	<b>0.049286</b>	usage	<b>0.037494</b>
incidence	<b>0.046777</b>	men	<b>0.036040</b>
earliness	<b>0.045822</b>	ci	<b>0.034779</b>
woman	<b>0.045674</b>	participant	<b>0.034643</b>
diagnosis	<b>0.045673</b>	patience	<b>0.034238</b>
risk	<b>0.044609</b>	sex	<b>0.033766</b>

### 3.6.15 Les 14 meilleurs phrases sélectionnés du Cluster n°7

Sentence	Weight
<i>Overall, 30 patients (1.0%) had acute HIV infection, 56 (1.8%) had early HIV infection, and 238 (8%) had established HIV infection.</i>	<b>0.011557</b>
Of the 467 HIV antibody-negative samples, four (0.9%) were HIV-1 RNA-positive.	<b>0.010837</b>
It further identified different risk factors for prevalent HIV infection (HIV seropositivity) compared with incident HIV (HIV seroconversion).	<b>0.010171</b>
<i>Five-hundred and fifty-three men (40.6%) were HIV antibody positive and 24 (1.8%) had acute HIV infection; 23 of 24 acutely infected men were from the STD clinic, where they represented 4.5% of all HIV antibody-negative men and 5.0% of all HIV infections.</i>	<b>0.009451</b>
<i>Twenty-one participants (1.45%) had AHI, 588 had established HIV infection, and 839 were HIV-negative.</i>	<b>0.009172</b>
Individuals with acute (preseroconversion) HIV infection (AHI) are important in the spread of HIV.	<b>0.008858</b>
29% of HIV infected individuals were at the early stages of infection.	<b>0.008723</b>
<i>There were 228 HIV-negative men at baseline; 10 were positive for HIV RNA, and 8 seroconverted to HIV at day 28.</i>	<b>0.008428</b>
Detection of early HIV infections (EHIs), including acute HIV infection (AHI), is important for individual health, prevention of HIV transmission, and measurement of HIV incidence.	<b>0.008412</b>
HIV transmission risk is higher during acute and early HIV infection than it is during chronic infection, but the contribution of early infection to the spread of HIV is controversial.	<b>0.008237</b>
Acute HIV infection lasts approximately 3 weeks and early HIV infection, which includes acute HIV infection, lasts approximately 7 weeks.	<b>0.008070</b>
HIV testing identified 978 seroconverter cases.	<b>0.007992</b>
Acute HIV infection (AHI) is the time of virus acquisition until the appearance of HIV antibodies.	<b>0.007987</b>
HIV RNA screening has the potential to identify both acute and chronic HIV infections that are otherwise missed by standard HIV testing algorithms.	<b>0.007827</b>

## 3.7 Résumé généré avec la méthode SVD sur les poids de mots

To study the structure of human immunodeficiency virus (HIV)-1 drug resistance (DR) in patients with newly diagnosed infection. Information on treatment failure (TF) in People living with

HIV in a data-poor setting is necessary to counter the epidemic of TF with first-line combined antiretroviral therapies (cART) in sub-Saharan Africa (SSA). Post-partum loss to follow-up and lack of early HIV infant diagnosis (EID) can significantly affect the efficiency of programs for the prevention of mother-to-child transmission. Pre-exposure prophylaxis (PrEP) reduces HIV acquisition risk by >90% and is a critical lever to reduce HIV incidence. Broadly neutralizing antibodies (bNAbs) for HIV-1 prevention or cure strategies must inhibit transmitted/founder and reservoir viruses. The observation that HIV-1 subtype D progresses faster to disease than subtype A prompted us to examine cytokine levels early after infection within the predominant viral subtypes that circulate in Uganda and address the following research questions: (1) Do cytokine levels vary between subtypes A1 and D? Blood donations in South Africa are tested for HIV RNA using individual donation NAT (ID-NAT), allowing detection and rapid antiretroviral therapy (ART) of acute HIV infections.

### 3.7.1 Excluant les phrases détaillant les participants à la recherche

To study the structure of human immunodeficiency virus (HIV)-1 drug resistance (DR) in patients with newly diagnosed infection. Information on treatment failure (TF) in People living with HIV in a data-poor setting is necessary to counter the epidemic of TF with first-line combined antiretroviral therapies (cART) in sub-Saharan Africa (SSA). Post-partum loss to follow-up and lack of early HIV infant diagnosis (EID) can significantly affect the efficiency of programs for the prevention of mother-to-child transmission. Pre-exposure prophylaxis (PrEP) reduces HIV acquisition risk by >90% and is a critical lever to reduce HIV incidence. Broadly neutralizing antibodies (bNAbs) for HIV-1 prevention or cure strategies must inhibit transmitted/founder and reservoir viruses. The observation that HIV-1 subtype D progresses faster to disease than subtype A prompted us to examine cytokine levels early after infection within the predominant viral subtypes that circulate in Uganda and address the following research questions: (1) Do cytokine levels vary between subtypes A1 and D? Blood donations in South Africa are tested for HIV RNA using individual donation NAT (ID-NAT), allowing detection and rapid antiretroviral therapy (ART) of acute HIV infections.

*Les mêmes poids de mots-clés sont utilisés pour cette méthode que pour la précédente. Ici, nous filtrons les phrases ne détaillant pas les participants à la recherche, puisqu'ils ressortent les plus souvent.*

### 3.7.2 Les 20 mots-clés les plus importants du Cluster n°1

hiv	<b>1.014094</b>	viral	<b>0.325885</b>
infection	<b>0.920726</b>	sample	<b>0.322968</b>
test	<b>0.585414</b>	estimation	<b>0.319332</b>
acuteness	<b>0.412104</b>	usage	<b>0.318007</b>
detection	<b>0.411193</b>	combo	<b>0.310969</b>
woman	<b>0.390559</b>	study	<b>0.277806</b>
assay	<b>0.374073</b>	sensitivity	<b>0.276503</b>
transmission	<b>0.362994</b>	highness	<b>0.275194</b>
antibody	<b>0.328457</b>	antigen	<b>0.274724</b>
blood	<b>0.326338</b>	positivity	<b>0.268177</b>

### 3.7.3 Les 10 meilleurs phrases sélectionnés du Cluster n°1

Sentence	Weight
To study the structure of human immunodeficiency virus (HIV)-1 drug resistance (DR) in patients with newly diagnosed infection.	-
Cervical loads were significantly higher (0.7-1.1 log10 copies/swab) during acute infection than subsequently.	-
Subtype C infection, nonviral sexually transmitted infections, having a partner spending nights away from home, recent unprotected sex, and shorter time since infection were associated with higher cervical HIV-1 loads.	-
Hormonal contraception was not associated with either the HIV-1 plasma setpoint or cervical loads during early infection.	-
Cervical HIV-1 viral loads were highest during acute infection and then declined up to 6 months following infection, when a 'setpoint' was attained.	-
The prognostic value of a cervical 'setpoint' on future transmission risk remains unclear.	-
An enzyme immunoassay to detect recent HIV-1 infection (EIA-RI) of less than 6 months is routinely performed on diagnoses reported to the National HIV case surveillance in France.	-
We assessed the performance of the EIA-RI infection on this country population scale by measuring its agreement with other indicators of time since infection that were obtained through clinical, biological or testing history recorded on the surveillance reporting form.	-
We used data from the National HIV case surveillance from its debut in March 2003 to June 2007.	-
Infection within 6 months was defined as a negative test reported within 6 months prior to diagnosis.	-

### 3.7.4 Les 20 mots-clés les plus importants du Cluster n°2

hiv	<b>0.896458</b>	infection	<b>0.376747</b>
ahi	<b>0.553200</b>	study	<b>0.360529</b>
arty	<b>0.514886</b>	intervention	<b>0.349843</b>
test	<b>0.505890</b>	participant	<b>0.341627</b>
patience	<b>0.476675</b>	usage	<b>0.333316</b>
treatment	<b>0.464863</b>	woman	<b>0.322671</b>
diagnosis	<b>0.422244</b>	care	<b>0.314278</b>
child	<b>0.383657</b>	among	<b>0.310905</b>
tb	<b>0.378501</b>	incidence	<b>0.291897</b>
ci	<b>0.378351</b>	health	<b>0.280750</b>

### 3.7.5 Les 10 meilleurs phrases sélectionnés du Cluster n°2

Sentence	Weight
Information on treatment failure (TF) in People living with HIV in a data-poor setting is necessary to counter the epidemic of TF with first-line combined antiretroviral therapies (cART) in sub-Saharan Africa (SSA).	-
While documentation of clinical staging remained stable, the completeness of CD4+ cell count and haemoglobin data declined with time.	-
Participants were theoretically sampled and consisted of individuals who had immigrated from Ethiopia and Eritrea.	-
This study was performed in an attempt to understand the barriers for early HIV testing in a migrant population from Ethiopia and Eritrea in Stockholm, Sweden.	-
If found to be HIV positive, and if the immune system is already significantly affected, this will compromise the treatment outcome.	-
There is also evidence that many immigrants come late for their first HIV test.	-
Studies confirm that if treatment of HIV is initiated when the immune system is not severely affected by the virus the prognosis for the outcome is significantly better.	-
The outcome of HIV treatment has dramatically improved since the introduction of antiretroviral therapy.	-
The paradox of successful scaling up HIV services but deteriorating quality of data underscores the importance of data management training and quality improvement efforts.	-
Yet, as clinical services expanded, data collection quality declined.	-

### 3.7.6 Les 20 mots-clés les plus importants du Cluster n°3

hiv	<b>1.158951</b>	patience	<b>0.397143</b>
infancy	<b>0.875320</b>	care	<b>0.363281</b>
arty	<b>0.766659</b>	initiation	<b>0.350684</b>
test	<b>0.737016</b>	study	<b>0.344313</b>
child	<b>0.491448</b>	year	<b>0.338213</b>
ci	<b>0.475891</b>	mother	<b>0.329258</b>
mortality	<b>0.438131</b>	age	<b>0.327127</b>
diagnosis	<b>0.420170</b>	pregnant	<b>0.324751</b>
infection	<b>0.410375</b>	earliness	<b>0.309948</b>
woman	<b>0.402281</b>	among	<b>0.308826</b>

### 3.7.7 Les 10 meilleurs phrases sélectionnés du Cluster n°3

Sentence	Weight
Post-partum loss to follow-up and lack of early HIV infant diagnosis (EID) can significantly affect the efficiency of programs for the prevention of mother-to-child transmission.	-
We assessed a strategy to diagnose AHI among young adult patients seeking care.	-
This study aims to identify (1) optimal testing intervals to maximize the number of perinatal HIV infections diagnosed and (2) programmatic issues that impact diagnosis.	-
A mathematical model was developed to simulate antiretroviral prophylaxis uptake and health outcomes in 240,000 HIV-exposed South African infants.	-
The model considered routine early testing with 1 PCR (at birth, 6, 10, or 14 weeks of age) and with 2 PCR tests (at birth and at 6, 10, or 14 weeks of age).	-
A single 6-week test would diagnose the same number of perinatal HIV infections as birth testing ( $P = 0.92$ ) but fewer infections than a 10-week test ( $P < 0.01$ ).	-
Ten-week testing identifies the highest number of perinatally infected infants ( $P < 0.01$ compared with a single test at all other ages) but does not save additional life years compared with birth testing ( $P = 0.27$ ).	-
Performing 2 PCR tests (at birth and 10 weeks) would identify the highest number of perinatal infections ( $P < 0.01$ versus a second 6- or 14-week test).	-
However, 25% of perinatal HIV infections would remain undiagnosed, largely because of failure to return PCR test results to caregivers.	-
Six weeks may no longer be the optimal age to diagnose perinatal HIV infections.	-

### 3.7.8 Les 20 mots-clés les plus importants du Cluster n°4

hiv	<b>0.654527</b>	bed	<b>0.288895</b>
patience	<b>0.394632</b>	study	<b>0.263782</b>
infection	<b>0.378677</b>	donation	<b>0.259044</b>
usage	<b>0.328923</b>	estimation	<b>0.250662</b>
risk	<b>0.306885</b>	disease	<b>0.245327</b>
donor	<b>0.306477</b>	assay	<b>0.237229</b>
test	<b>0.302405</b>	transmission	<b>0.236214</b>
model	<b>0.298026</b>	earliness	<b>0.228329</b>
blood	<b>0.295502</b>	association	<b>0.217100</b>
incidence	<b>0.289483</b>	highness	<b>0.213280</b>

### 3.7.9 Les 10 meilleurs phrases sélectionnés du Cluster n°4

Sentence	Weight
Pre-exposure prophylaxis (PrEP) reduces HIV acquisition risk by >90% and is a critical lever to reduce HIV incidence.	-
The article is based on more than 50 semi-structured interviews with a range of participants affiliated with HIV/AIDS organisations (e.g.	-
As Zambian churches built ties to external actors, however, they gained autonomy in their HIV/AIDS responses.	-
Overlapping personal networks between civil society and state elites in Ghana urged early HIV/AIDS church-related actions, while state co-optation and civil-society divisions in Zambia limited early HIV/AIDS activities.	-
The elite and professional nature of Ghana's churches promoted early HIV/ AIDS activities, but may have prevented these activities from responding to the needs of people with HIV or AIDS.	-
The analysis finds that continued HIV/AIDS stigma hampered Ghanaian church activities, while a decline in stigma opened up space for church-related HIV/AIDS responses in Zambia.	-
The article uses three levels of analysis - society, state, and international - to explicate these different patterns.	-
It analyses why long-term interest in HIV and AIDS has declined in Ghana but increased in Zambia, and why church involvement in promoting access to HIV/AIDS treatment has been less apparent in Ghana than in Zambia.	-
This article compares Ghanaian and Zambian church mobilisation on HIV and AIDS.	-
These data provide evidence that in utero transmission of HIV might be higher among women who seroconvert during pregnancy.	-

### 3.7.10 Les 20 mots-clés les plus importants du Cluster n°5

infection	<b>0.582834</b>	primary	<b>0.267111</b>
hiv	<b>0.442489</b>	usage	<b>0.263940</b>
cell	<b>0.333337</b>	association	<b>0.253082</b>
subtype	<b>0.329037</b>	acuteness	<b>0.244584</b>
virus	<b>0.320268</b>	immunity	<b>0.243469</b>
isolates	<b>0.314299</b>	earliness	<b>0.239156</b>
viral	<b>0.314084</b>	study	<b>0.233144</b>
sequence	<b>0.304746</b>	strain	<b>0.220245</b>
response	<b>0.283425</b>	analysis	<b>0.209773</b>
individuality	<b>0.276931</b>	gene	<b>0.204094</b>

### 3.7.11 Les 10 meilleurs phrases sélectionnés du Cluster n°5

Sentence	Weight
Broadly neutralizing antibodies (bNAbs) for HIV-1 prevention or cure strategies must inhibit transmitted/founder and reservoir viruses.	-
The progress of antiretroviral treatment roll-out programs in developing countries requires extensive monitoring of primary drug resistance prior to initiation of therapy.	-
Samples were available for 32 uninfected subjects and 28 infected persons, all within 1 year of infection.	-
HIV-1-positive participants had higher levels of IFN- $\beta$ ( $P = 0.0005$ ), MxA ( $P = 0.007$ ), and TRIM22 ( $P = 0.01$ ) and lower levels of huTRIM5 $\alpha$ ( $P < 0.001$ ) than did HIV-1-negative participants.	-
TRIM22 but not huTRIM5 $\alpha$ correlated positively with type 1 IFN (IFN- $\alpha$ , IFN- $\beta$ , and MxA) (all $P < 0.0001$ ).	-
In a multivariate model, increased MxA expression showed a significant positive association with viral load ( $P = 0.0418$ ).	-
Furthermore, TRIM22 but not huTRIM5 $\alpha$ , IFN- $\alpha$ , IFN- $\beta$ , or MxA showed a negative correlation with plasma viral load ( $P = 0.0307$ ) and a positive correlation with CD4(+) T-cell counts ( $P = 0.0281$ ).	-
In vitro studies revealed that HIV infection induced TRIM22 expression in PBMCs obtained from HIV-negative donors.	-
Stable TRIM22 knockdown resulted in increased HIV-1 particle release and replication in Jurkat reporter cells.	-
Collectively, these data suggest concordance between type 1 IFN and TRIM22 but not huTRIM5 $\alpha$ expression in PBMCs and that TRIM22 likely acts as an antiviral effector in vivo.	-

### 3.7.12 Les 20 mots-clés les plus importants du Cluster n°6

infection	<b>0.901233</b>	earliness	<b>0.321180</b>
cell	<b>0.631606</b>	acuteness	<b>0.319317</b>
neutralization	<b>0.626963</b>	individuality	<b>0.307811</b>
response	<b>0.553473</b>	epitope	<b>0.296857</b>
hiv	<b>0.544698</b>	vaccine	<b>0.286793</b>
antibody	<b>0.483842</b>	load	<b>0.283515</b>
viral	<b>0.460182</b>	primary	<b>0.281347</b>
virus	<b>0.383474</b>	highness	<b>0.277704</b>
woman	<b>0.357174</b>	plasma	<b>0.265688</b>
subtype	<b>0.349458</b>	level	<b>0.262733</b>

### 3.7.13 Les 10 meilleurs phrases sélectionnés du Cluster n°6

Sentence	Weight
The observation that HIV-1 subtype D progresses faster to disease than subtype A prompted us to examine cytokine levels early after infection within the predominant viral subtypes that circulate in Uganda and address the following research questions: (1) Do cytokine levels vary between subtypes A1 and D?	-
Finally, the existence of several distinct overlapping epitopes in CBD1 is confirmed by murine monoclonal antibodies that we generated against the CBM-derived chimeric peptides.	-
Human TRIM5alpha (TRIM5alphahu), a member of the tripartite motif protein family, displays some anti-human immunodeficiency virus type 1 (HIV-1) activity in vitro, although it is substantially less potent than its rhesus monkey counterpart (TRIM5alpharh).	-
The effects of levels of TRIM5alphahu on prevention or control of HIV-1 infection in vivo are unknown.	-
We used a quantitative real-time polymerase chain reaction (PCR) assay to measure levels of TRIM5alphahu expression in peripheral blood mononuclear cells (PBMCs) obtained from a cohort of individuals at high risk for HIV-1 infection in Durban, South Africa.	-
Samples were available from 38 infected subjects (with all these samples obtained within 1 year of infection) and from 57 uninfected persons.	-
Matched preinfection and postinfection samples were available from 13 individuals.	-
TRIM5alphahu messenger RNA levels were lower in the PBMCs of HIV-1-infected subjects than in those of uninfected subjects ( $P < .001$ ).	-
Seroconverters had lower preinfection levels of TRIM5alphahu than did nonseroconverters ( $P < .001$ ).	-
TRIM5alphahu levels did not change significantly after infection.	-



### 3.7.14 Les 20 mots-clés les plus importants du Cluster n°7

hiv	<b>1.504043</b>	woman	<b>0.341844</b>
infection	<b>0.764961</b>	detection	<b>0.340479</b>
test	<b>0.708890</b>	rna	<b>0.335332</b>
ahi	<b>0.541931</b>	arty	<b>0.291773</b>
acuteness	<b>0.430375</b>	usage	<b>0.290701</b>
incidence	<b>0.377779</b>	men	<b>0.286842</b>
earliness	<b>0.377720</b>	ci	<b>0.284030</b>
rapidness	<b>0.375592</b>	participant	<b>0.283997</b>
diagnosis	<b>0.356884</b>	patience	<b>0.276027</b>
risk	<b>0.354601</b>	study	<b>0.259860</b>

### 3.7.15 Les 10 meilleurs phrases sélectionnés du Cluster n°7

Sentence	Weight
Blood donations in South Africa are tested for HIV RNA using individual donation NAT (ID-NAT), allowing detection and rapid antiretroviral therapy (ART) of acute HIV infections.	-
Acute HIV infections were more prevalent at sites with higher HIV prevalence and lower malaria endemicity.	-
The yield of screening for acute HIV infection among general medical patients in resource-scarce settings remains unclear.	-
Our objective was to evaluate the strategy of using pooled HIV plasma RNA to diagnose acute HIV infection in patients with negative or discordant rapid HIV antibody tests in Durban, South Africa.	-
We prospectively enrolled patients with negative or discordant rapid HIV antibody tests from a routine HIV screening programme in an out-patient department in Durban with an HIV prevalence of 48%.	-
Study participants underwent venipuncture for pooled qualitative HIV RNA, and, if this was positive, quantitative RNA, enzyme immunoassay and Western blot (WB).	-
Patients with negative or indeterminate WB and positive quantitative HIV RNA were considered acutely infected.	-
Those with chronic infection (positive RNA and WB) despite negative or discordant rapid HIV tests were considered to have had false negative rapid antibody tests.	-
Nine hundred and ninety-four participants were enrolled with either negative (n=976) or discordant (n=18) rapid test results.	-
Eleven [1.1%; 95% confidence interval (CI) 0.6-2.0%] had acute HIV infection, and an additional 20 (2.0%; 95% CI 1.3-3.1%) had chronic HIV infection (false negative rapid test).	-