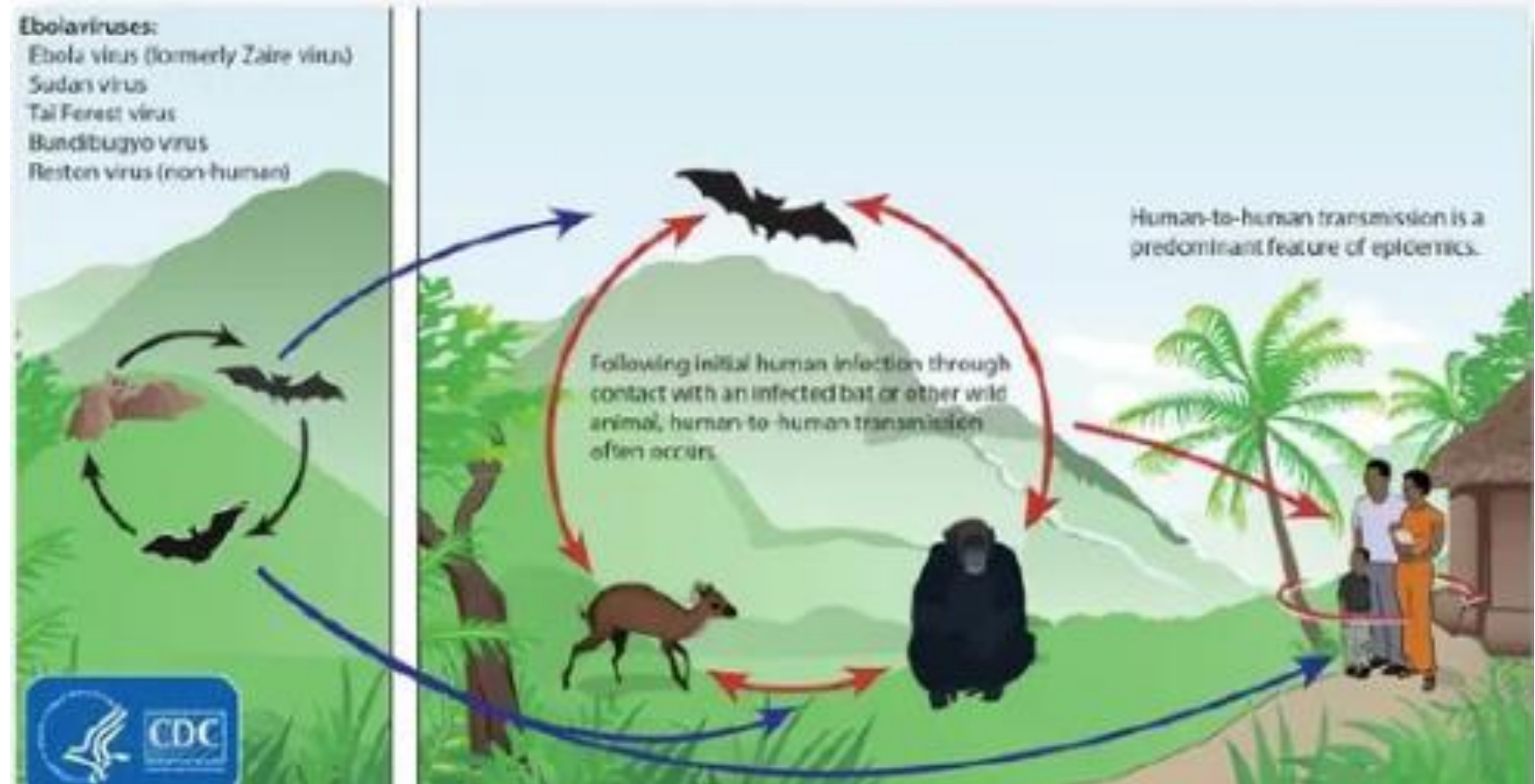


Ebola Bundibugyo, clinique et terrain

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28 mai 2026

Mode de transmission - Bundibugyo

- Spill over animal ?
- Transmission interhumaine via les liquides biologiques
 - Salive, sang, sueur, sperme, liquide vaginal, lait maternel
- Risque de transmission nosocomiale +++



Mode de transmission - Bundibugyo

- Transmission sexuelle
- Risque de constitution d'un réservoir viral (similitude avec EBOV)

Article

Resurgence of Ebola virus in 2021 in Guinea suggests a new paradigm for outbreaks

Hypothèses :

« cas index » = porteur sain de 2014-2016

- résurgence chez cet individu
- contamination par transmission sexuelle

=> Epidémie Ebola 2021

Ebola Virus Transmission Caused by Persistently Infected Survivors of the 2014–2016 Outbreak in West Africa

Lorenzo Subissi,¹ Mory Keita,² Samuel Mesfin,² Giovanni Rezza,³ Boubacar Diallo,⁴ Steven Van Gucht,¹ Emmanuel Onucho Musa,⁴ Zabulon Yoti,⁴ Sakoba Keita,⁵ Mamoudou Harouna Djingarey,² Amadou Bailo Diallo,² and Ibrahima Soce Fall⁶

THE NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Ebola RNA Persistence in Semen of Ebola Virus Disease Survivors — Final Report

Ebola Virus Ribonucleic Acid Detection in Semen More Than Two Years After Resolution of Acute Ebola Virus Infection

William A. Fischer,¹ Jerry Brown,⁴ David Alain Wohl,² Amy James Loftis,² Sam Tozay,⁴ Edwina Reeves,⁴ Korto Pewu,⁴ Galapaki Gorvego,⁴ Saturday Quellie,⁵ Coleen K. Cunningham,⁶ Carson Merenbloom,² Sonia Napravnik,² Karine Dube,³ David Adjason,⁷ Erin Jones,⁷ Korlia | Aller à la page 1 | vid Hoover⁷

Présentation clinique Bundibugyo

Incubation médiane 6 jours
(2-21 jours)

Table. Demographic characteristics and signs and symptoms for 56 case-patients who had laboratory-confirmed EHF, Bundibugyo District, Uganda, in 2007*

Characteristic	Case-patients confirmed by acute-phase sample, n = 43			Total no. confirmed case-patients, n = 56
	No. survived, n = 26	No. died, n = 17	p value	
Mean age, y (range)	33 (12–50)	42(20–70)	0.039†	37.4 (11–70)
Male sex (%)	16 (62)	8 (47)	>0.100‡	30 (54)
Mean incubation period, d (95% CI)§	5.7 (4.4–7.0)	7.4 (5.4–9.3)	>0.100†	6.3 (5.2–7.3)
Signs and symptoms, no. reporting/no. available (%)¶				
Fever	26/26 (100)	16/16 (100)	>0.100	55/55 (100)
Fatigue	22/23 (96)	14/14 (100)	>0.100	49/50 (98)
Headache	21/25 (84)	14/15 (93)	>0.100	48/53 (91)
Nausea/vomiting	24/26 (92)	13/15 (87)	>0.100	48/54 (89)
Abdominal pain	23/26 (88)	13/14 (93)	>0.100	47/53 (89)
Muscle/joint pain	19/23 (83)	12/14 (86)	>0.100	44/50 (88)
Diarrhea	24/26 (92)	13/15 (87)	>0.100	47/54 (87)
Anorexia/weight loss	19/23 (83)	12/15 (80)	>0.100	43/51 (84)
Difficulty swallowing	10/23 (43)	6/15 (60)	>0.100	27/51 (53)
Rash	9/26 (35)	5/15 (33)	>0.100	25/54 (46)
Difficulty breathing	6/23 (26)	8/14 (57)	0.085	23/50 (46)
Hiccups	4/23 (17)	6/15 (40)	>0.100	16/51 (31)
Bleeding#	11/26 (42)	9/17 (53)	>0.100	30/56 (54)

Présentation clinique Ebola Zaire (EBOV)

	Temps l'apparition des symptômes	Caractéristiques cliniques	Patient typique
Début fébrile or stade léger	0-3 jours	Caractéristiques non spécifiques: fièvre, faiblesse, léthargie et myalgie	Ambulatoire, capable de compenser les pertes de fluide; aucune indication pour l'administration de liquides IV
Atteinte gastro-intestinale	3-10 jours	Idem au stade précoce plus diarrhée, vomissements, ou les deux, ou douleur abdominale	Incapable de compenser les pertes de fluide en raison de vomissements ou de pertes de volume importantes; indication de l'administration de liquide IV
Étape compliquée	7-12 jours	Identique au stade de l'atteinte gastro-intestinale plus hémorragie, choc, insuffisance organique et complications neurologiques	Gravement malade, généralement hypovolémique, souvent avec confusion ou convulsions

Présentation biologique EBOV

Hematology, median [IQR]

Hemoglobin — g/dl	14 [12;15]	301
Hematocrit — %	40 [36;45]	298
Platelets — G/l	145 [97;222]	294
Leucocytes — G/l	10 [5;21]	300
Lymphocytes — G/l	3 [1;6]	232
Neutrophils — G/l	5 [3;12]	224
Monocytes — G/l	0.4 [0.2;1.0]	222

Renal function, median [IQR]

Urea — mg/dl	18 [9;48]	553
Creatinine — mg/dl	1.1 [0.7;3.6]	548

Electrolytes and Biochemistry, median [IQR]

CRP — mg/l	39 [11;109]	517
CPK — U/liter	674 [267;2116]	519
Sodium — mmol/l	131 [128;134]	551
Potassium — mmol/l	4.2 [3.7;4.8]	469

Amylase — U/liter	106 [72;177]	534
Corrected calcemia— mmol/l ^f	2.3 [2.2;2.5]	554
Albumine — g/l	28 [23;33]	556
Glycemia — mg/dl	97 [79;121]	556

Liver function, median [IQR]

Bilirubin — mg/dl	0.6 [0.5;1.1]	511
ALT — U/liter	212 [60;589]	544
AST — U/liter	292 [93;1018]	378

Virology, n (%)

EBOV RT-PCR NP Ct value \leq 22	356 (54%)	655
EBOV RT-PCR GP Ct value \leq 22	83 (13%)	644

Jaspard et al, e clin med, 2022

PREDS score : estimation of risk for death at D28, EBOV

Risk factors	Categories	Points
ALT > 5N (U/L)	No	0
	Yes	3
Age (years)	< 50	0
	≥ 50	1
Creatinine (mg/dL)	≤ 1.3	0
	> 1.3	3
Time from 1st symptom to admission (days)	< 4	0
	≥ 4	1
mNEWS2 score > 4	No	0
	Yes	2
EBOV RT-PCR NP Ct value ≤ 22	No	0
	Yes	3
Score category^a	Low	0–5 Points
	Medium	6–9 Points
	High	10–13 Points

Table 4: Points associated with each of the categories of the PREDS score and risk categorization.

^a The score is obtained by adding the points obtained by individual risk factors.

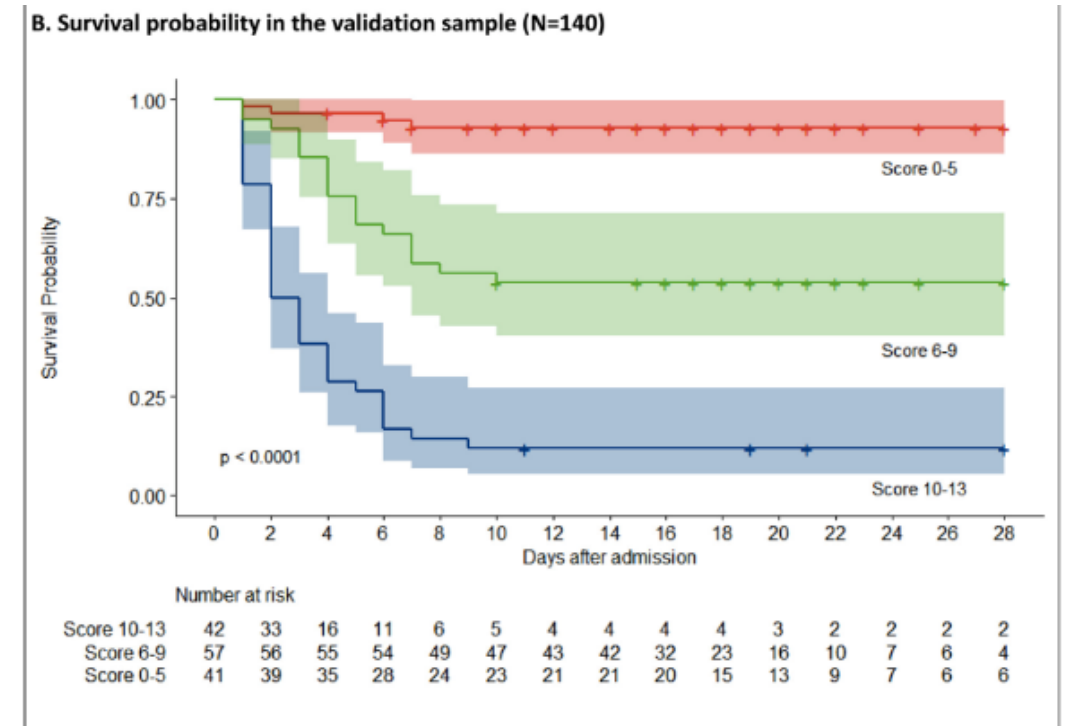


Figure 3. Estimated risk of death and survival probability for a low (Score 0–5), Medium (Score 6–9), or High (Score 10–13) PREDS score.

Prise en charge thérapeutique - Bundibugyo

- Aucun traitement spécifique validé
- Aucun vaccin spécifique validé
- Isolement +++
- Soins de support +++

Soins de support MVE

- 2014-2016 Afrique de l'ouest
 - Pas d'analyse biologique
 - Pas de traitement IV
- 2018 Nord Kivu (RDC)
 - CUBE
 - Biologie standard quotidienne
 - Monitoring continu TA
 - Echographie
 - Traitement symptomatique (ATB, antipaludique ...)
 - Transfusion sanguine
 - Oxygénothérapie
 - ...

Conakry Septembre 2014









MVE : réponse opérationnelle en RDC, 2019

- 10^{ème} épidémie de MVE en RDC (Nord Kivu) : août 2018-juin 2020
- Déploiement des équipes d'ALIMA à Beni, Katwa et Butembo
 - 3 CTE + centres de transit
- Participation au l'essai thérapeutique PALM
- Développement de techniques spécifiques concernant les soins de support











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Development of the PREDS score to predict in-hospital mortality of patients with Ebola virus disease under advanced supportive care: Results from the EVISTA cohort in the Democratic Republic of the Congo

eClinicalMedicine
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Results

- 711 included patients (Aug 18-Dec 19)
 - 32 pregnant women
 - 85 children \leq 5 years
- 45% in-hospital mortality rate
 - Median 2 days (IQR 1-5)
 - 91% death among the 87 patients who did not receive specific treatment
- 33% declared to be previously vaccinated
 - 31% for more than 10 days

	Number (N=711)	n
Supportive care		
Antibiotics, n (%)	636 (100%)	638
Duration (days), median [IQR]	8 [4;14]	
Inotropes, n (%)	111 (16%)	711
Oxygen therapy, n (%)	250 (38%)	661
Duration (days), median [IQR]	2 [1;3]	188
Highest flow, n (%)		218
< 10 l/min	154 (71%)	
≥ 10 l/min	64 (29%)	
Transfusion, n (%)	101 (14%)	711
Volume (ml), median [IQR]	450 [250;525]	99
Urinary catheter, n (%)	199 (32%)	628
Feeding tubes, n (%)	45 (7%)	654
UltraSound, n (%)	15 (2%)	711
Intraosseus catheter, n (%)	7 (1%)	659
Hospitalized in cube, n (%)	560 (85%)	656
Investigational treatment		
Investigational treatment received, n (%)	623 (88%)	710
Program, n (%)		
MEURI ⁽³⁾	170 (27%)	
PALM RCT ⁽⁴⁾	453 (73%)	
Drugs, n (%)		
MAb114	197 (32%)	
Regeneron	191 (31%)	
Remdesivir	122 (20%)	20
Zmann	107 (17%)	

Perspectives de recherche - Bundibugyo

- Thérapeutiques

- MBP 134 (anticorps monoclonal panEbolavirus)
- Remdesivir (antiviral direct)

=> Essai thérapeutique SOLIDARITY PARTNERS (WHO - Oxford)

- Vaccin

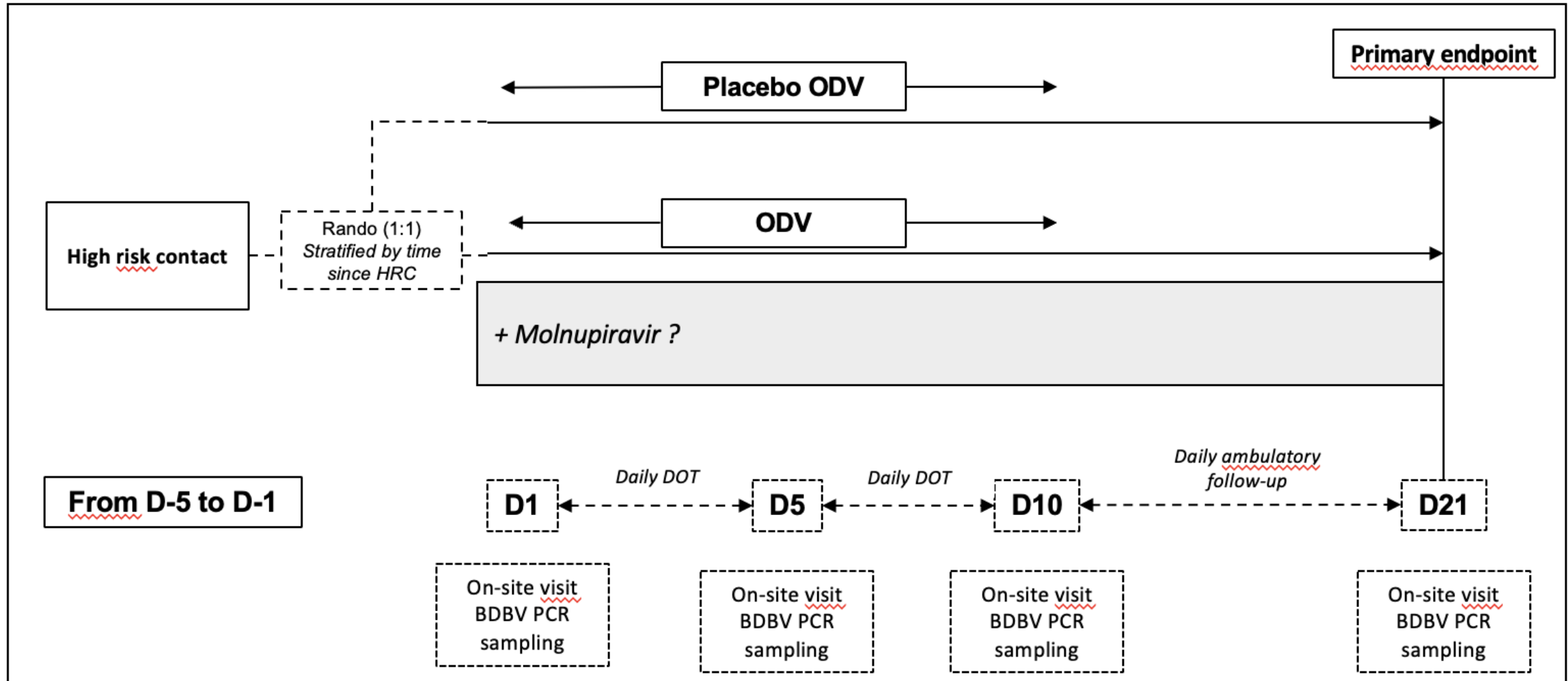
- Réactivité croisée possible avec le vaccin contre Ebola Zaire (ERVEBO[®], MSD) à confirmer
- rVSV-BDBV-GP, rVSV-panfilo-GP, ChAdOx1 BDBV

- Prophylaxie post exposition

- Obeldesivir (GILEAD)

=> Essai EBO-PEP

EBO-PEP-Bundi



Merci pour votre attention