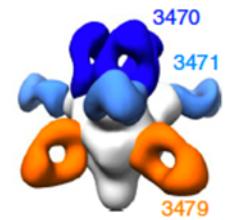
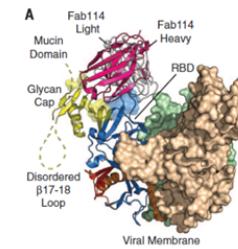
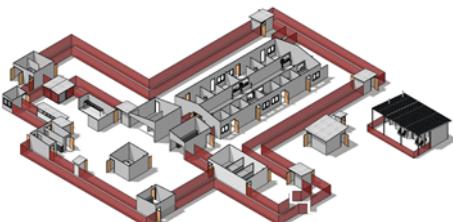


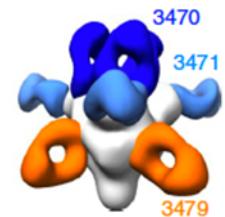
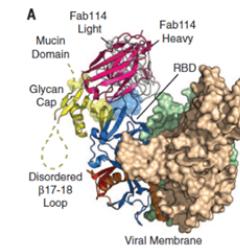
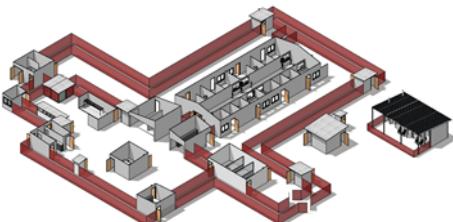
# Ebola Virus Disease (EVD)- Updates on Case Management

## NEW STRATEGY OF CARE



# Maladie à virus Ebola (MVE) - Mises à jour sur la gestion des cas

## NOUVELLE STRATÉGIE DE SOINS



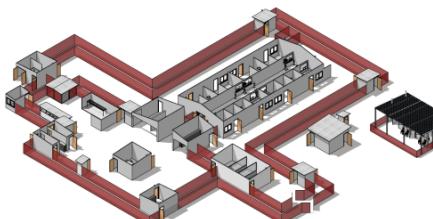


# Une nouvelle stratégie en trois étapes pour sauver des vies

## Design et Biosécurité

Pas une simple unité d'isolement mais un centre construit autour des patients, du personnel, des familles et des communautés.

Un endroit où les patients peuvent recevoir en toute sécurité les meilleurs soins médicaux disponibles



## Soins de supports optimisés pour la maladie à virus Ebola

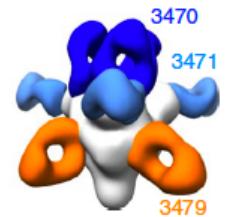
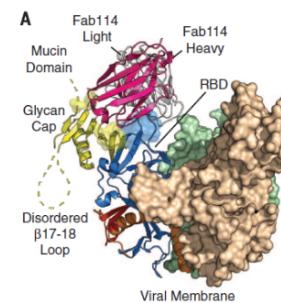
Oxygène et diagnostiques  
Evaluation et réévaluation systématiques  
Réanimation hémodynamique  
Prevention et prise en charge des complications



## Thérapeutiques

Grace à la recherche scientifique, des nouvelles molécules à disposition pour la prise en charge des patients

Inmazeb(REGN-EB3)  
ansuvimab(mAB114, Ebanga)

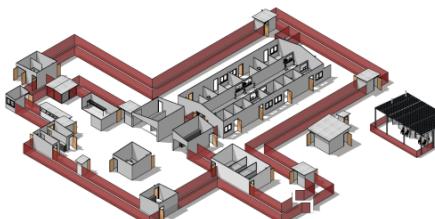


# A new strategy that saves lives

## Design and Biosecurity

Not a simple isolation unit, but rather a centre centered around patients, staff, families and communities.

A place where patients can receive, quality care with all biosecurity and IPC standards in place.



## Optimized supportive care

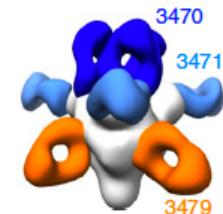
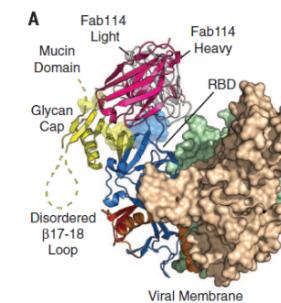
Oxygen and point of care testing (electrolytes, hemoglobin)  
Systematic evaluation et re-evaluation  
Resuscitation with fluids  
Prevention and care of complications



## Therapeutics

Proven in hallmark clinical trial (PALM), there are two new molecules available to care for patients with EVD

Inmazeb(REGN-EB3)  
ansuvimab(mAB114, Ebanga)

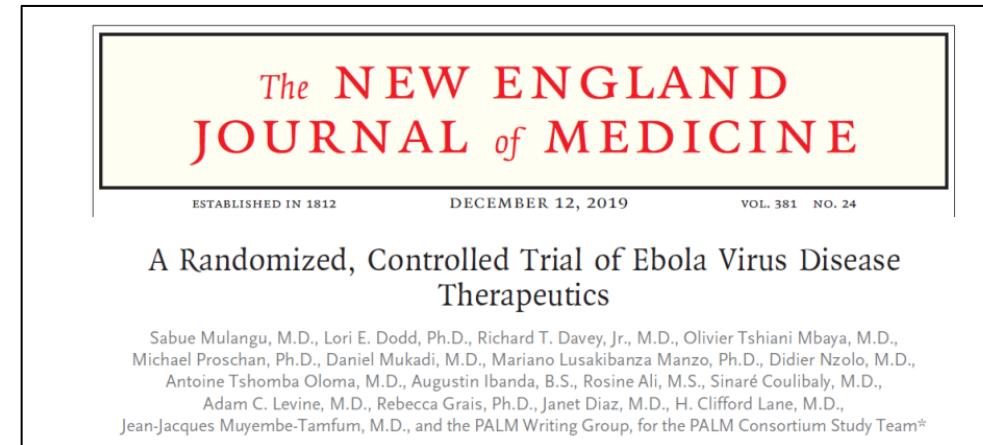


# PALM: PAMOJA TULINDE MAISHA- Randomized Clinical trial of EVD therapeutics



PALM trial sponsored by Institute National pour la Recherche Biomedical (INRB) from Democratic Republic of Congo and National Institutes of Health (NIH)/National Institute of Allergy and Infectious diseases (NIAID), USA.

- The PALM study was a **randomized clinical trial** that investigated the safety and efficacy of Ebola virus-specific therapeutics in patients with EVD in DRC.
- It compared each of two monoclonal antibody-based (**mab114, REGN-EB3**) and one small molecule antiviral (**remdesivir**) treatment with a control arm that included the **Zmapp** cocktail of monoclonal antibodies.
- Importantly, patients receiving these investigational therapeutics as part of the RCT also received **optimized supportive care** that included clinical and laboratory monitoring



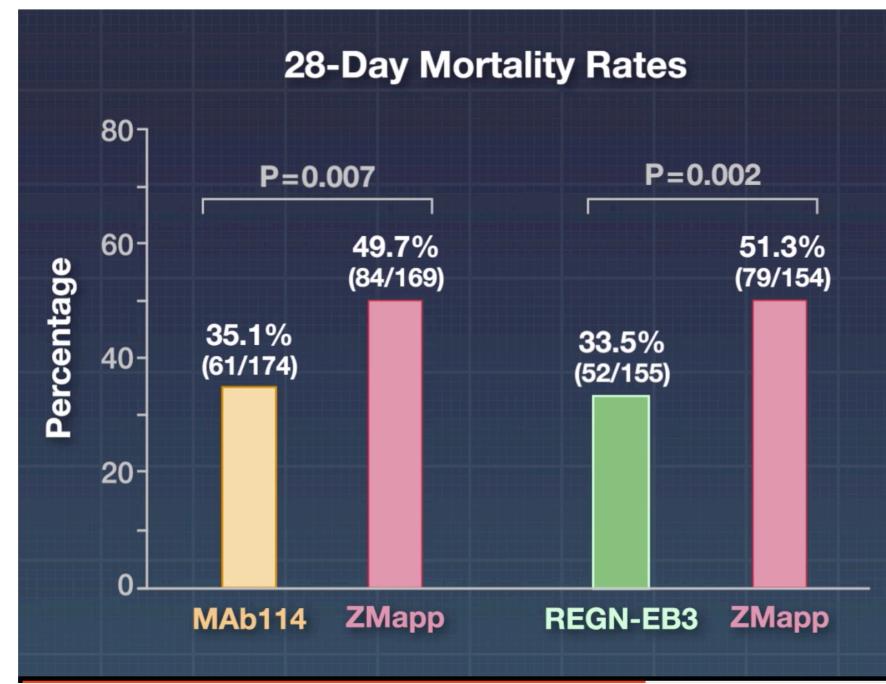
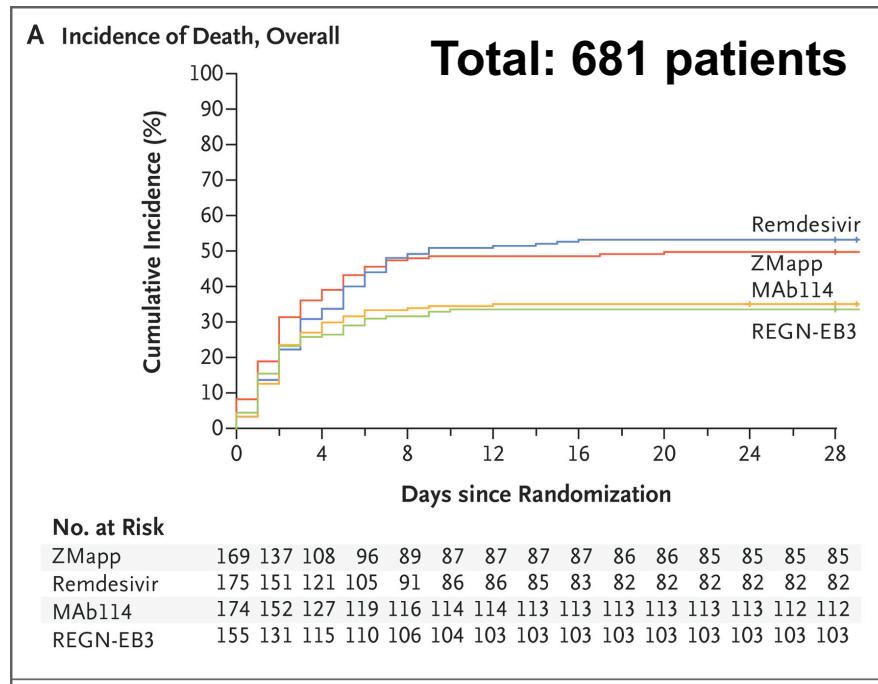
Mulangu et al, NEJM (2019)

After starting in November (2018), the trial was conducted at four different sites, then was stopped in August (2019) when the data safety and monitoring board determined that two of the therapeutics (**mab114, REGN-EB3**) were safe and **more effective**.

Guidance For Managing  
Ethical Issues  
In Infectious Disease  
Outbreaks

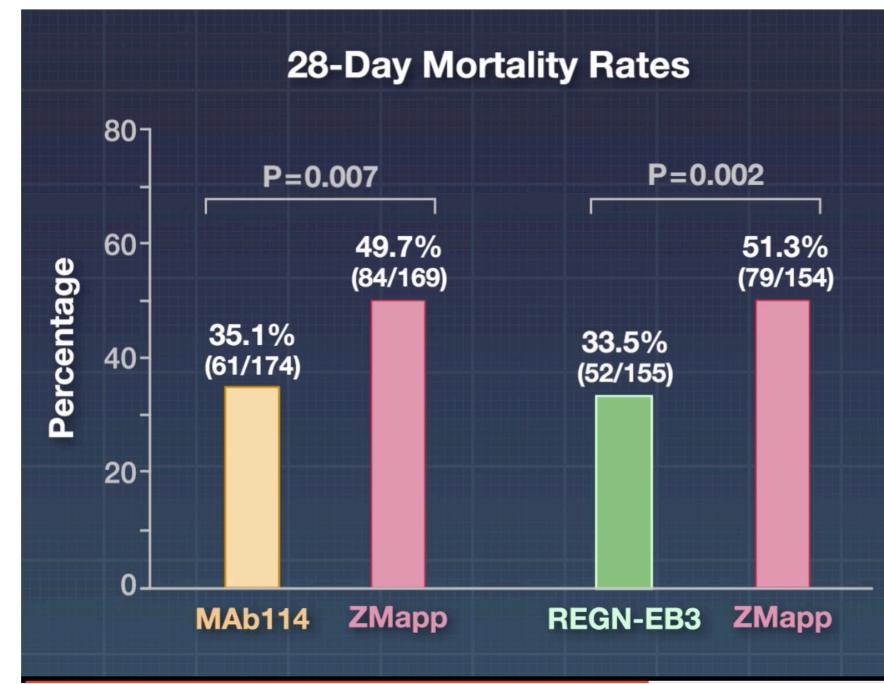
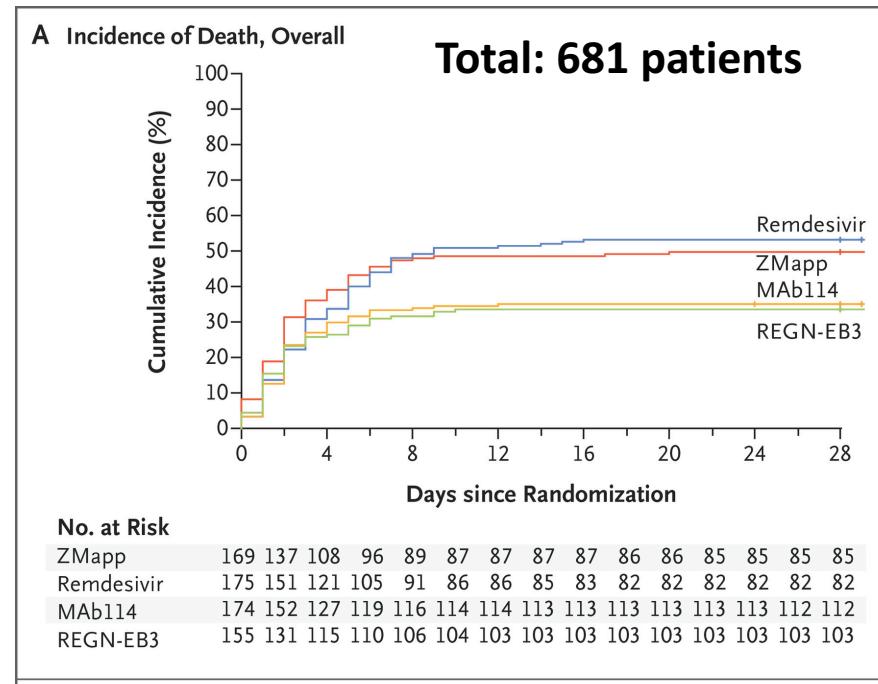
# PALM RCT: Mab114 et REGN-EB3 efficacité globale dans MVE

À retenir: Mab114 et REGN-EB3 ont amélioré les **taux de mortalité à 28 jours** (par rapport au bras témoin Zmapp) et ont été **bien tolérés**



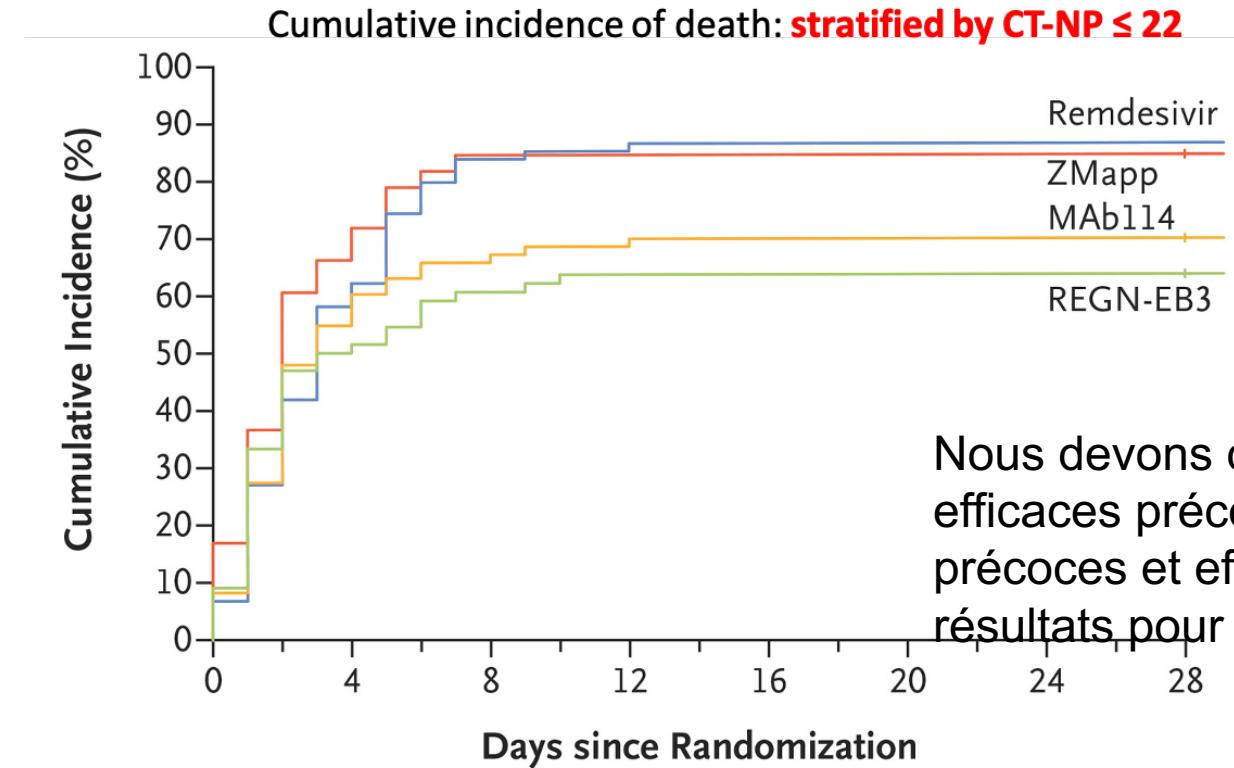
# PALM RCT: overall efficacy of Mab114 and REGN-EB3 in EVD

**Take-home: Mab114 and REGN-EB3 improved 28 day mortality rates (versus the Zmapp control arm) and were well-tolerated**



# PALM RCT: patients avec des charges virales élevées

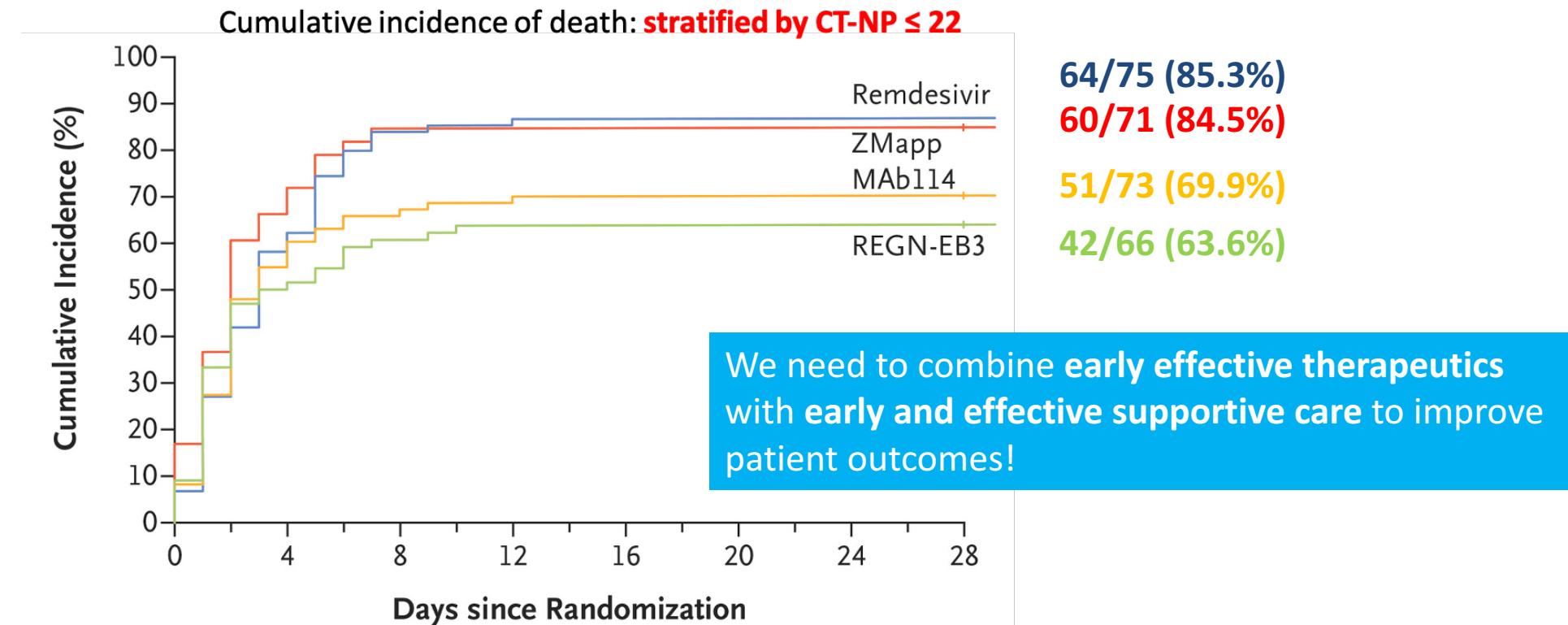
**CFR 64-85% malgré les thérapeutiques spécifiques à EBOV, même les plus efficaces!**



Nous devons combiner des traitements efficaces précoce avec des soins de soutien précoce et efficace pour améliorer les résultats pour les patients!

# PALM RCT: patients with high viral loads

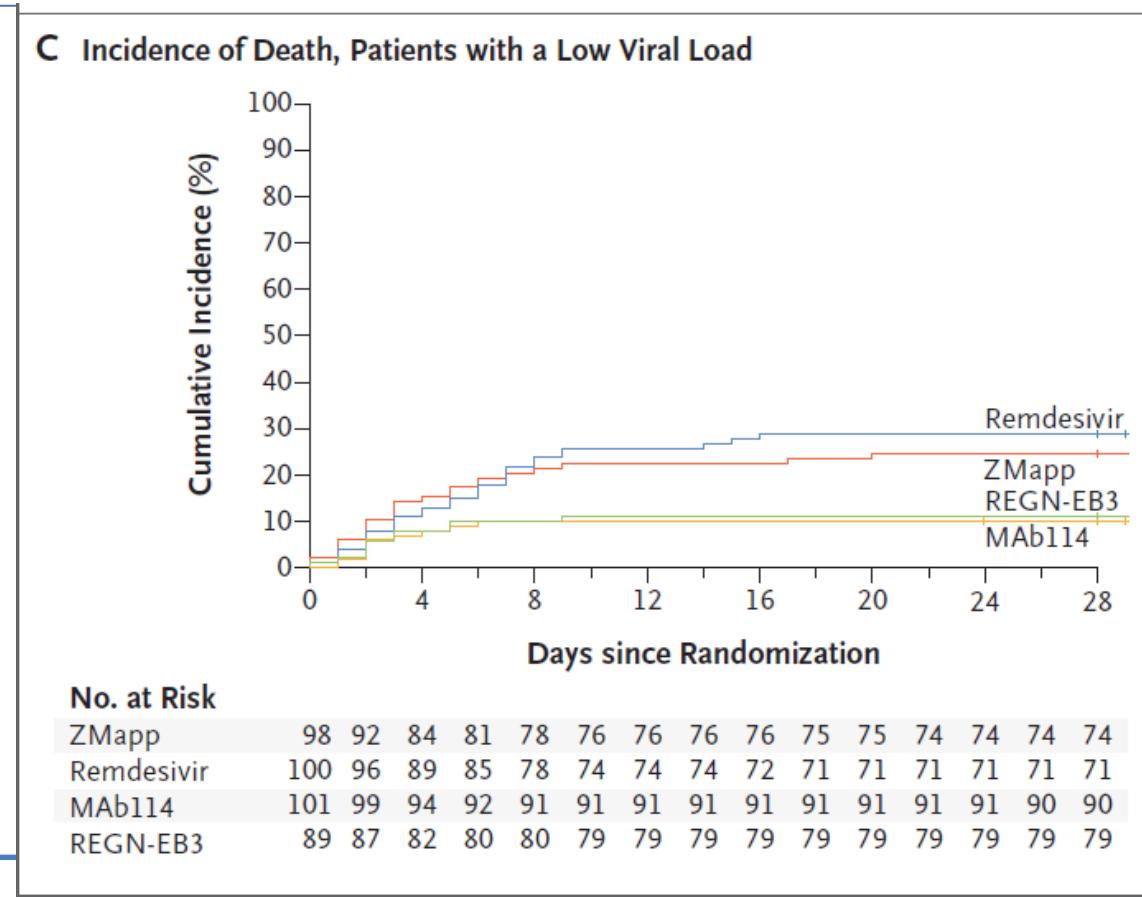
**CFR 64-85% despite EBOV-specific therapeutic, even the most effective ones!**



# PALM RCT: patients avec des charges virales élevées

**Le CFR 10% est plus bas chez les patients ayant une charge virale plus faible  
(CT-NP>22)**

Nous devons faire le diagnostic précoce

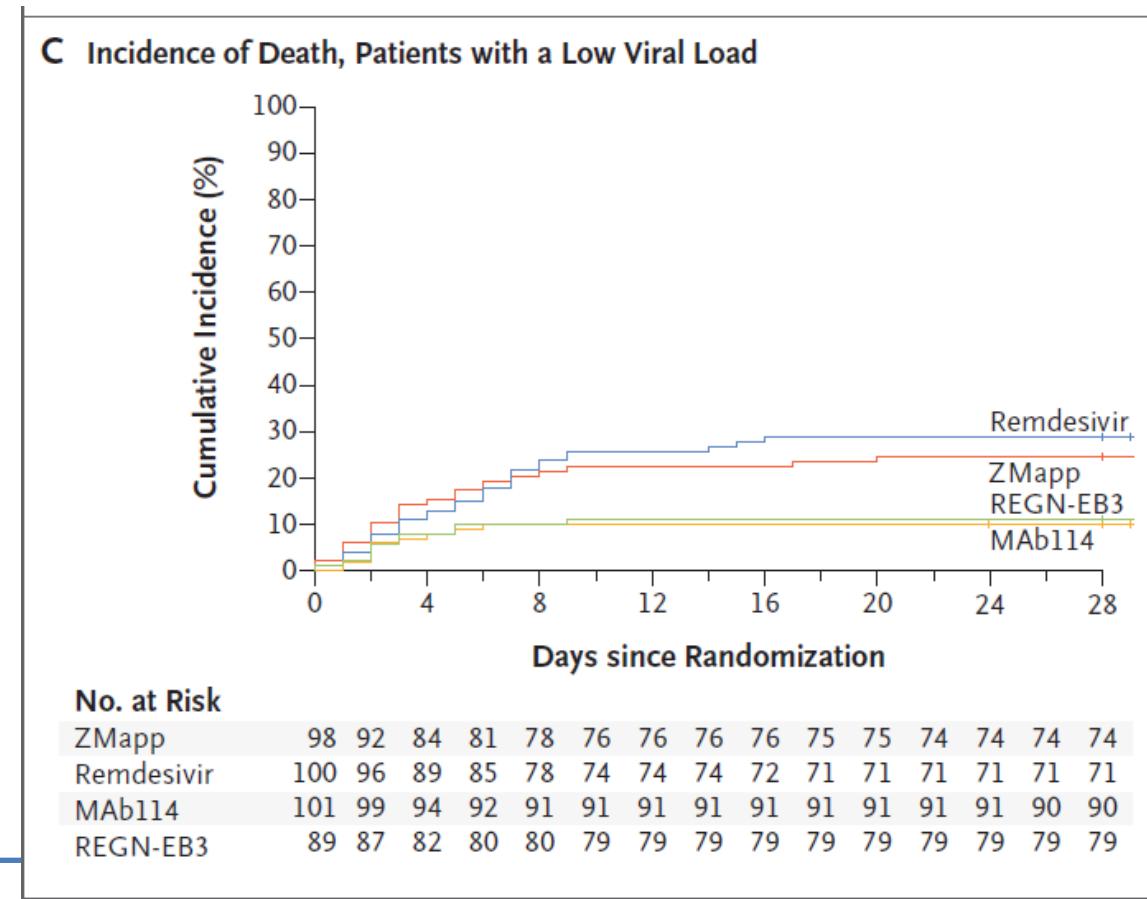


**24/98 (24.5%)**  
**29/100 (29%)**  
**10/101 (9.9%)**  
**10/89 (11.2%)**

# PALM RCT: patients with low viral loads

**The CFR 10% is lower in patients with lower viral loads (CT-NP>22)**

We need to make early diagnosis and early treatment!



**24/98 (24.5%)**

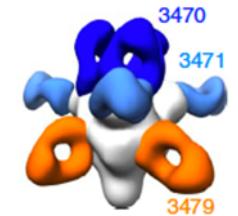
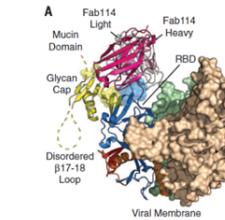
**29/100 (29%)**

**10/101 (9.9%)**

**10/89 (11.2%)**

# Steps to take for therapeutics

- **Global level: IND label thus need protocol**
  - WHO to support coordination function with drug developers.
  - Protocols for expanded use (EAP-MEURI) are available.
  - Informed consent available with protocol and Investigator Brochure
- **National level:**
  - Designate a national PI (responsible), submit protocol to Ethical Review committee
  - Obtain import permits (regulatory bodies)
  - Implementation teams within CM comprehensive strategy (MoH, Partners, V)
  - Standardized data collection (WHO CRFs available, REDCAP tablet based data entry)



# Forms for clinical monitoring Ebola Virus Disease (EVD): ADMISSION, DAILY, DISCHARGE and THERAPEUTICS

<p>Version 1.5, 16 February 2021</p> <p><b>Formulaire de Perfusion de Ansumivab (Ebanga, formerly known as MAb114)</b></p> <p>Compléter ce formulaire le 1<sup>er</sup> jour de la perfusion pour documenter l'étude de perfusion + la collecte des données requises.</p> <p>NUMERO D'IDENTIFICATION DU PATIENT: [ ]-[ ]-[ ]-[ ]-[ ]-[ ]-[ ]</p> <p>Date d'administration: (jj/mm/aaaa) ____ / ____ / ____</p> <p>Le participant a-t-il signé le formulaire de consentement? <input type="checkbox"/>Oui <input type="checkbox"/>Non</p> <p><b>Pré-perfusion:</b></p> <p>Enregistrer les signes vitaux dans les 30 minutes précédant la perfusion.</p> <p>1. Heure d'obtention des signes vitaux: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td>:</td><td> </td><td> </td></tr></table> (Utilisez l'horloge de 24 heures)</p> <p>2. Pression artérielle: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td><td>/</td><td> </td><td> </td><td> </td></tr></table> (battements / minute)      3. Pouls: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td></tr></table></p> <p>4. Température corporelle: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td></tr></table>      5. Fréquence respiratoire: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td></tr></table></p> <p>6. Saturation en oxygène: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td></tr></table> %</p> <p><b>Signes et symptômes ciblés avant la perfusion.</b></p> <p>Demandez au participant s'il présente actuellement l'un des signes ou symptômes ci-dessous. Pour chacun, notez la sévérité maximale. Utilisez le tableau DAIDS pour Evaluer la Sévérité des Effets Indésirables chez l'Adulte et l'Enfant.</p>			:						/														<p>Version 1.5, 16 February 2021</p> <p><b>Formulaire de Perfusion de Inmazeb (atoltivimab, maftivimab and odesivimab-ebgn; previously known as REGN-EB3)</b></p> <p>Compléter ce formulaire le 1<sup>er</sup> jour de la perfusion pour documenter l'étude de perfusion + la collecte des données requises.</p> <p>NUMERO D'IDENTIFICATION DU PATIENT: [ ]-[ ]-[ ]-[ ]-[ ]-[ ]</p> <p>Date d'administration: (jj/mm/aaaa) ____ / ____ / ____</p> <p>Le participant a-t-il signé le formulaire de consentement? <input type="checkbox"/>Oui <input type="checkbox"/>Non</p> <p><b>Pré-perfusion:</b></p> <p>Enregistrer les signes vitaux dans les 30 minutes précédant la perfusion.</p> <p>1. Heure d'obtention des signes vitaux: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td>:</td><td> </td><td> </td></tr></table> (Utilisez l'horloge de 24 heures)</p> <p>2. Pression artérielle: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td><td>/</td><td> </td><td> </td><td> </td></tr></table> (battements / minute)      3. Pouls: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td></tr></table></p> <p>4. Température corporelle: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td><td> </td></tr></table>      5. Fréquence respiratoire: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td></tr></table></p> <p>6. Saturation en oxygène: <table border="1" style="display: inline-table;"><tr><td> </td><td> </td></tr></table> %</p> <p><b>Signes et symptômes ciblés avant la perfusion.</b></p> <p>Demandez au participant s'il présente actuellement l'un des signes ou symptômes ci-dessous. Pour chacun, notez la sévérité maximale. Utilisez le tableau DAIDS pour Evaluer la Sévérité des Effets Indésirables chez l'Adulte et l'Enfant.</p>			:						/													
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# Une thérapeutique efficace doit aller de pair avec des soins de support optimisés!



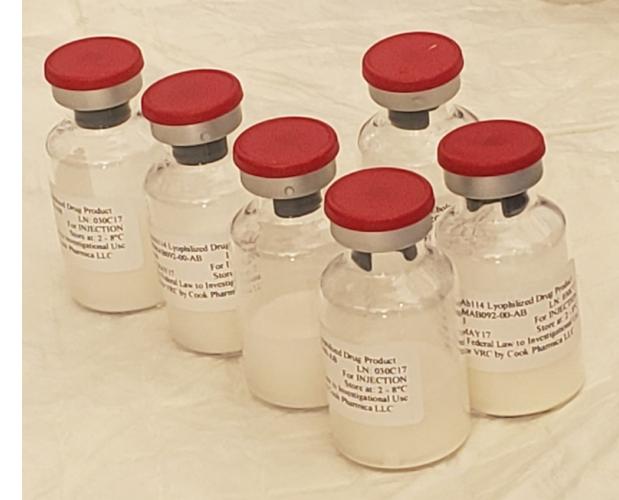
Source: WHO Case Management

# Effective therapy must go hand in hand with Optimized supportive care!



# Post exposure prophylaxis for HCW: Use of New therapeutics (mAB114)

The new therapeutics have been used as Post Exposure Prophylaxis For Health Care workers that have had an EVD High-risk exposure



## USE OF ANSUVIMAB WITH HIGH RISK EVD EXPOSURE

- Those presenting with a high-risk EBOV exposure **should not receive an Ebola vaccine and ansuvimab treatment concurrently.**
- For high-risk exposures occurring in an **already vaccinated person**:
  - if the vaccination occurred **≥ 10 days** before the exposure event, ansuvimab could be considered (the response team will evaluate);
  - if the vaccination occurred **< 10 days** before the exposure event, there are a number of different factors that would need to be weighed to decide how to proceed with an individual patient. The response team should **consult the study PI** in these instances



A doctor cares for a patient inside an isolate cube at The Alliance for International Medical Assistance (ALIMA) treatment center in Beni, North Kivu province, Democratic Republic of Congo September 6, 2018. REUTERS/Fiston Mahamba/File Photo

**Early diagnosis!  
Rapid treatment!  
Optimized supportive care?  
Patient centered and safe treatment  
centre (care for children and pregnant  
women included)**



# FORMATION AVANCÉE POUR LA GESTION D'UN CENTRE D'EBOLA

**SOINS DE SUPPORTS OPTIMISÉS POUR LA  
MALADIE À VIRUS ÉBOLA (MVE)**

**UNE FORMATION HOLISTIQUE**

créé sur la base des dernières directives, des plus récentes découvertes scientifiques et des meilleures innovations développées lors d'épidémies précédentes