18ª edición

POSTCROI 2021

Una actualización de la 28ª Conference on Retroviruses and Opportunistic Infections

Vacunas y tratamientos anti COVID-19

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FUNDACIÓN LUCHA CONTRA EL SIDA
Y LAS ENFERMEDADES INFECCIOSAS

FLS SCIENCE

Vacunas

NO datos nuevos

Discusión:

- Acceso global
- Ensayos clínicos

Tratamientos

NO datos nuevos

Discusión:

- Reposicionamiento
- Nuevos fármacos
- Datos actuales

Vacunas (MARTIN DELANEY PRESENTATION)

LINK a la sesión

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VACCINE NATIONALISM IS KILLING US: HOW INEQUITIES IN RESEARCH AND ACCESS TO SARS-CoV-2 VACCINES WILL PERPETUATE THE PANDEMIC

Según COVAX, solamente el 25 % de la población vulnerable estará vacunada a finales de 2021

Sign the Call for Global Vaccine Equity

Started by scientists, public health and legal experts, and community leaders assembled from around the world for the Conference on Retroviruses and Opportunistic Infections (CROI), a working group drafted this call to the global leaders for vaccine equity and welcomes signatures from the wider community.
Read the full text: oneillinstitute.org/COVIDVaccineStatement

* Required

LINK a la declaración

Vacunas (N'GALY-MANN LECTURE)

POSTCROI 2021

LINK a la sesión

Anthony S Fauci

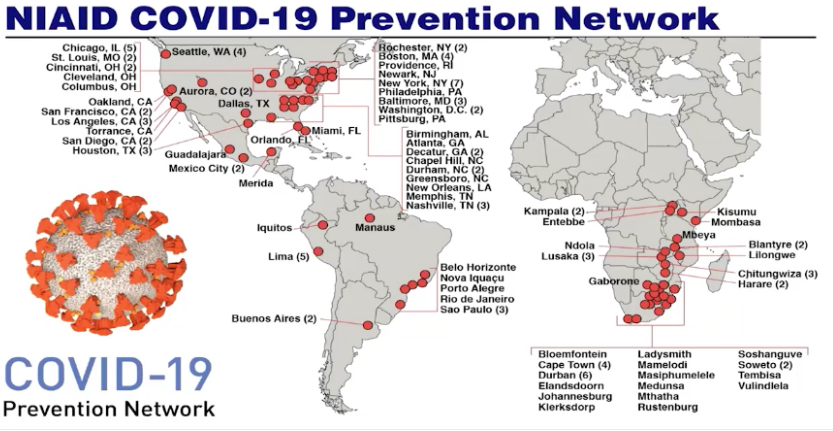
National Institute of Allergy and Infectious Diseases

HIV VACCINE TRIALS NETWORK

IDCRC Infectious Diseases Clinical Research Consortium

HPTN HIV Prevention Trials Network

COVID-19 Prevention Network



Lessons from the Concurrent COVID-19 and HIV Pandemics

- Epidemiology/Natural history
- Non-vaccine prevention
- Vaccine prevention
- Efficacy versus effectiveness
- Denialism

Vacunas (Diseño de ensayos clínicos)

LINK a la sesión

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Lori Dodd

National Institutes of Health

Ideal Characteristics of RCT for treatment (not exhaustive)

1. Blinded, placebo-controlled
2. Randomization stratified by disease severity and hospital site (due to the high variability of disease spectrum/presentation, local standard of care, and health care system capacity)
3. Objectively measured and clinically meaningful endpoints with common follow-up intervals on all participants
4. Efficient trial design
5. Concurrent controls
6. Adequate statistical power
7. Procedures with an acceptable type I error rate
   -includes interim data looks, secondary endpoints and subgroups
8. High-quality data collection that captures safety data
9. Collection of clinically relevant secondary endpoints
10. Statistical analysis plan finalized prior to any interim data looks
11. Trial with sufficient flexibility to adapt to dynamic environment of an outbreak/pandemic but within limits (being too adaptive can compromise scientific rigor)

Summary and Discussion

- Highly successful first-generation COVID vaccine efficacy trial designs
  - Rapid results
  - Definitive answers
  - Adaptive to emerging data

  and resulting in EUA of (3) highly effective COVID vaccines in the US and (2) others approved internationally

- Critical open questions and global need for additional vaccine require **more complex next-generation trial designs**, reflecting
  - Complexity inherent in addressing open questions
  - Optimal trial design in the context of approved/licensed vaccines
  - Uncertainty in mechanisms and predictors of vaccine efficacy

COVID-19

28

Holly Janes

Fred Hutchinson Cancer Research Center

Remdesivir Studies

	Placebo-controlled	Primary Endpoint	Concurrent controls	Adequately powered	Quality for approvals?
Cao study	Yes ✓✓	Time to clinical improvement (28 days) ✓	Yes ✓	No -	?
ACTT-1	Yes ✓✓	Time to recovery (28 days) ✓	Yes ✓	Yes for primary Not for mortality ✓	✓✓
Spinner et al: 5 vs 10 days	No -	Ordinal score at day 11	Yes ✓	Yes for primary, No for other endpoints	?
Solidarity	No -	In-hospital mortality ✓✓	Yes ✓	Yes ✓✓	-
Discovery (subset of Solidarity Trial)	No -	Ordinal score at day 15 ✓✓	Yes ✓	No ?	Unknown to me ?

Tocilizumab Studies

	Placebo-controlled	Primary Endpoint	Concurrent controls	Adequately powered	Quality for approvals
Recovery	No	Mortality (28 days)	Yes	Yes	?
REMAP-CAP	No	Resp and organ-free support (day 21)	Response-adaptive randomization	Yes	?
COVACTA	Yes	Intubation/death (Day 28)	Yes	Yes	?
BACC Bay	Yes	Intubation or death (Day 28)	Yes	Yes	?
EMPACTA	No	Intubation/death (Day 28)	Yes	Yes	?
TOCIBRAS	No	Ordinal scale (Day 15)	Yes	No	?
CORIMUNO-19	No	Survival without vent (Day 28)	Yes	No	?
RCT-TCZ-COVID-19	No	Intubation/death/clinical aggravation	Yes	No	?

-Diseño de ensayos de nuevas vacunas contra variantes?

-Como optimizarlos en el tiempo?

Tratamientos (Review)

Tratamientos (Review)

Tratamientos (Nuevas estrategias)

LINK a la sesión

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SARS-CoV-2-TREATMENT-CLINICAL-INTERVENTIONS

Avifavir (favipiravir)
1200-1600 mg/day

940 participants

Remdesivir
200 mg/day

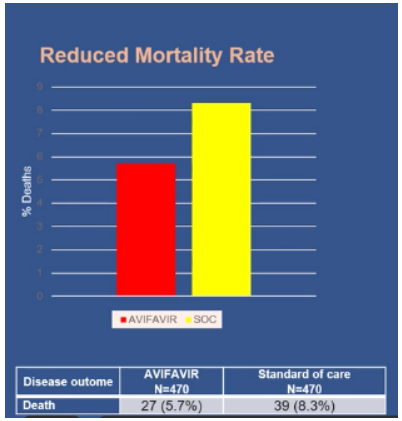
1767 participants

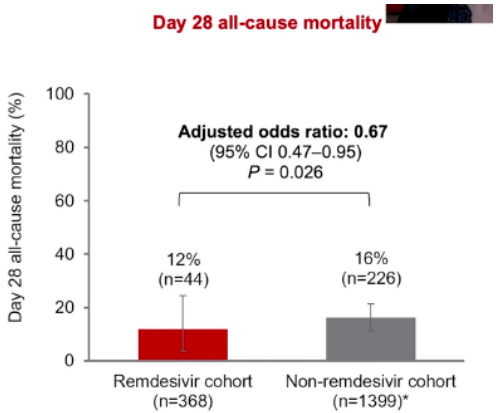
Convalescent plasma
B-cell depleted individuals

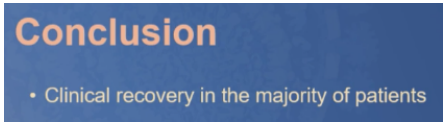
23 individuals

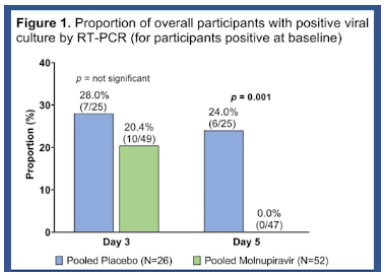
Molnupiravir
200-800 mg/day

52 participants









Tratamientos (Nuevas estrategias, anticuerpos)

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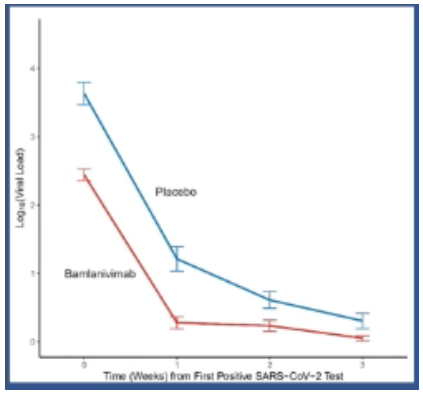
LINK a la sesión

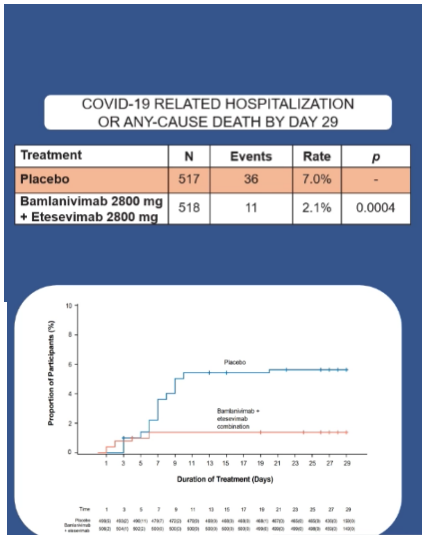
NEW-WEAPONS-AGAINST-SARS-CoV-2-AND-HIV

Bamlanivimab
(targeting RBD)
4200 mg
Early infection
1175 participants



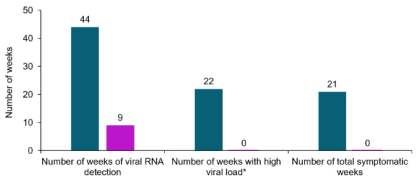
Bamlanivimab + Etesevimab
(targeting RBD)

Early infection
155 participants



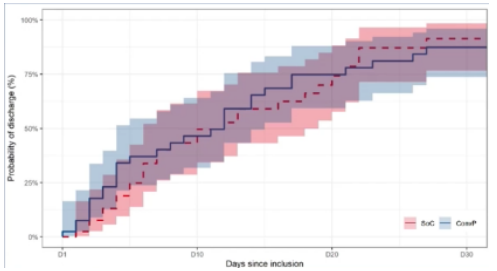
REGEN-COV
Targeting RBD

Early infection
409 individuals



Convalescent plasma

Severe infection
87 individuals



Tratamientos (futuro)

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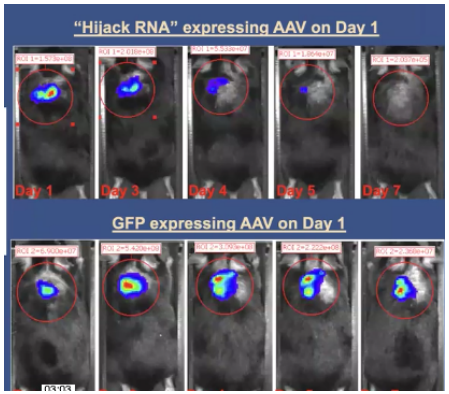
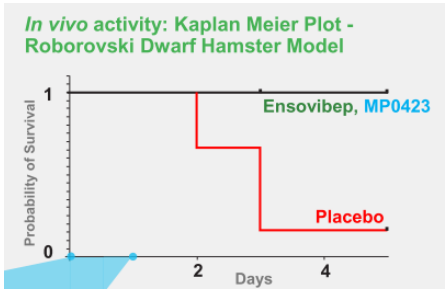
LINK a la sesión

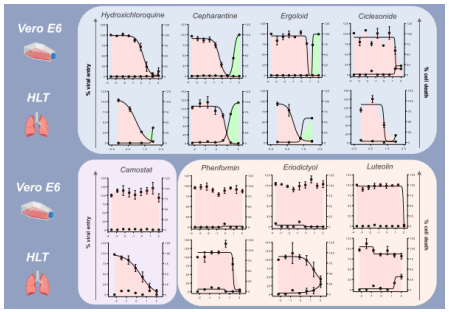
NOVEL TREATMENTS FOR SARS-CoV-2: STARTING AT THE BENCH

RNA de cadena negativa
Codifica para la toxina diftérica
Administrados como AAV

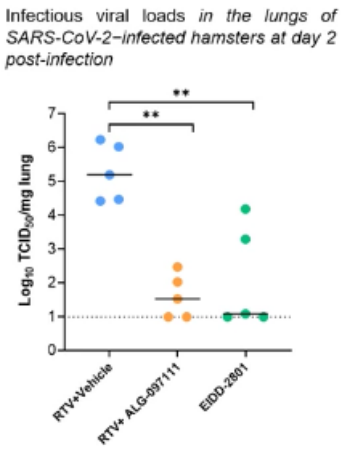


Inhibidores de entrada
(múltiples estrategias)





Inhibidores de la proteasa
ALG-097111 (hamsters)



Bemcentimib
AXL TYr Kinasa inhibitor

Clinical studies

Bemcentinib is currently being evaluated in two ongoing phase 2 studies for the treatment of COVID-19 in hospitalized patients

- EudraCT 2020-001736-95 [UK]
- CTRI/2020/10/028602 [India] and DOH-27-092020-6170 [South Africa])

Info adicional

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COVID-19-CLINICAL-CONTROVERSIES	LINK
SARS-CoV-2-AND-THE-HOST-IMMUNE-RESPONSE-GOOD-VS-BAD-IMMUNITY	LINK
COVID-19-FAR-MORE-THAN-JUST-THE-LUNGS	LINK
EVOLUTION-OF-ANTIBODY-RESPONSES-TO-SARS-CoV-2-INFECTION	LINK
CELLULAR-IMMUNE-RESPONSES-TO-SARS-CoV-2	LINK

¡MUCHAS GRACIAS!

Por vuestra atención y vuestras contribuciones al CROI !!

Julià Blanco, PhD Senior Researcher IrsiCaixa/IGTP/UVIC-UCC