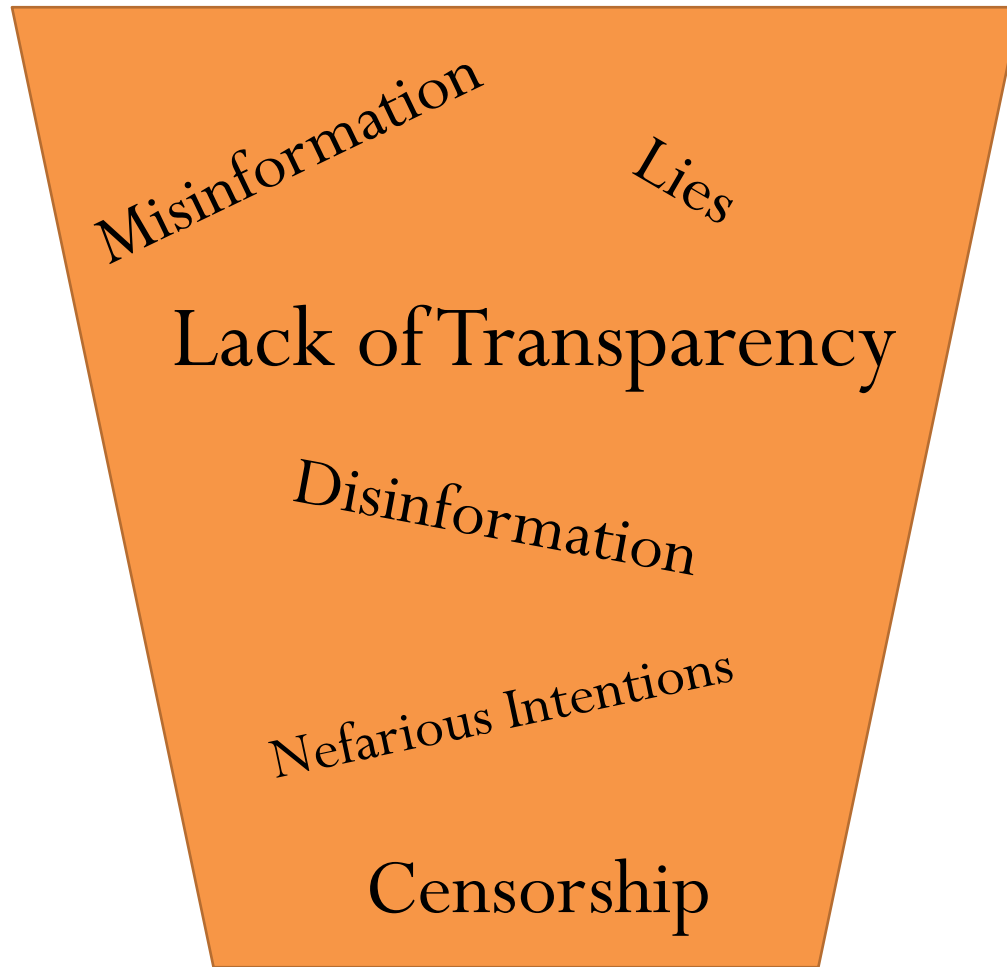


COVID-19: Ivermectin and the TRUTH

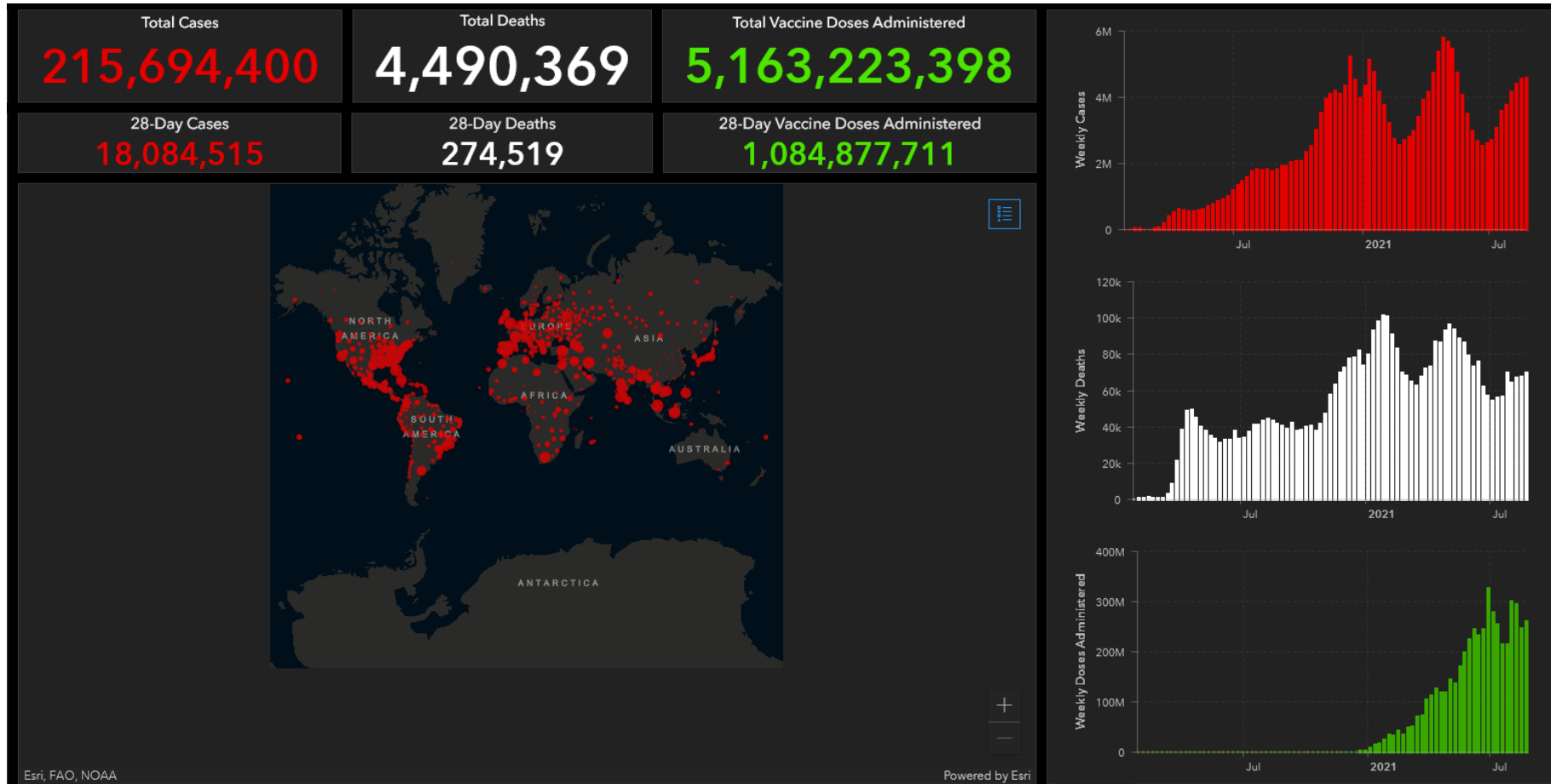


Paul Marik MD, FCCM, FCCP

The Vacuum of Truth



A Global Disaster



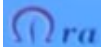
Treatment: Focus on IVERMECTIN

- William Campbell and Satoshi Omura awarded Nobel Prize in 2015 for their 1975 discovery of Ivermectin
- Ivermectin was first used in humans in 1987
- Binds selectively to glutamate-gated chloride ion channels in invertebrate nerve and muscle cells
- Ivermectin is highly lipophilic, rapidly absorbed ($T_{max} = 4$ hours), plasma $T_{1/2}$ 16-28 hrs.
- On World Health Organization's (WHO) list of essential medicines
- Over the past three decades, **approximately 3.7 billion doses of ivermectin** have been distributed
- Broad spectrum anti-parasitic and anti-viral activity
- Potent anti-inflammatory and immune modulating effects
- Safe and well tolerated in humans up to 2000 ug/kg. Minor side effects include pruritis, fever, rash, arthralgia

Nobel Lecture of Prof. Satoshi Omura



Nobel Lecture of Prof. Satoshi Omura



Thanks to *Streptomyces avermectinius*

Ivermectin treatments approved (2014):

Onchocerciasis	110 million
Lymphatic filariasis	218 million
Sub-total =	328 million
Combined treatments	73 million
TOTAL =	255 million

Ivermectin treatments administered (2013)

Onchocerciasis	107 million
Lymphatic filariasis	120 million
TOTAL =	227 million


Total treatments approved:

- Onchocerciasis (1987-2014) = 1.4 billion
- Lymphatic filariasis (2000-2014) = 1.2 billion

(Source: MDP, WHO(WER), APOC)



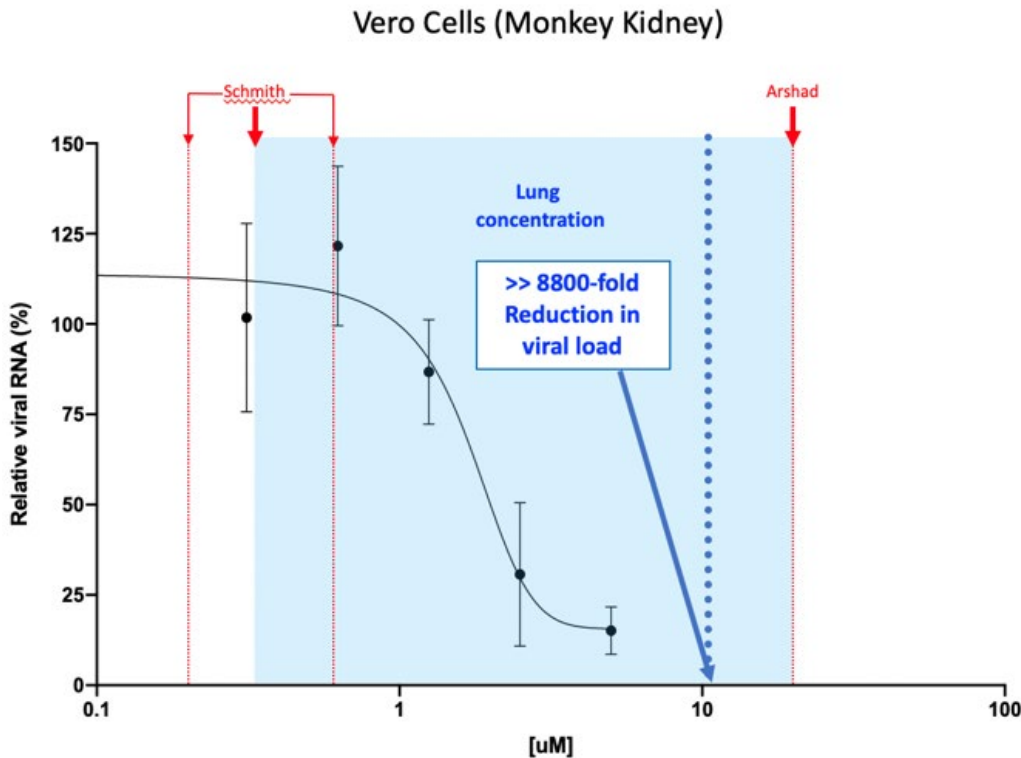
Elucidation of the inhibitory activity of ivermectin with host nuclear importin α and several SARS-CoV-2 targets

Martiniano Bello 

Laboratorio de Diseño y Desarrollo de Nuevos Fármacos e Innovación Biotecnológica de la Escuela Superior de Medicina, Instituto Politécnico Nacional, Ciudad de Mexico, Mexico

System	ΔE_{vdw}
Importin- α -IVM	−40.54 (5.3)
Nsp9-IVM	−41.03 (4.2)
RdRp-IVM	−37.89 (4.9)
RBD-spike-IVM	−36.59 (3.4)
3CL ^{pro} -sub1-IVM	−57.74 (7.6)
3CL ^{pro} -sub2-IVM	−50.75 (3.6)

Ivermectin inhibits SARS-CoV-2 *in vitro*



Relevance of IC₅₀ determined *in vitro* to clinical use?

- In vitro assay very different from clinical situation
 - Vero/hSLAM cells- monkey kidney- do not produce IFN
 - Lack immune responses
- Ivermectin accumulates in lungs and other tissues (3x-10x serum levels)
- Human lung cells- better IC₅₀
- Short exposure vs extended exposure
- Single dose vs repeat dosing
- Taken with food (3x level)

Red- peer-reviewed, published modelling of IVM lung concentration after 200ug/kg dose

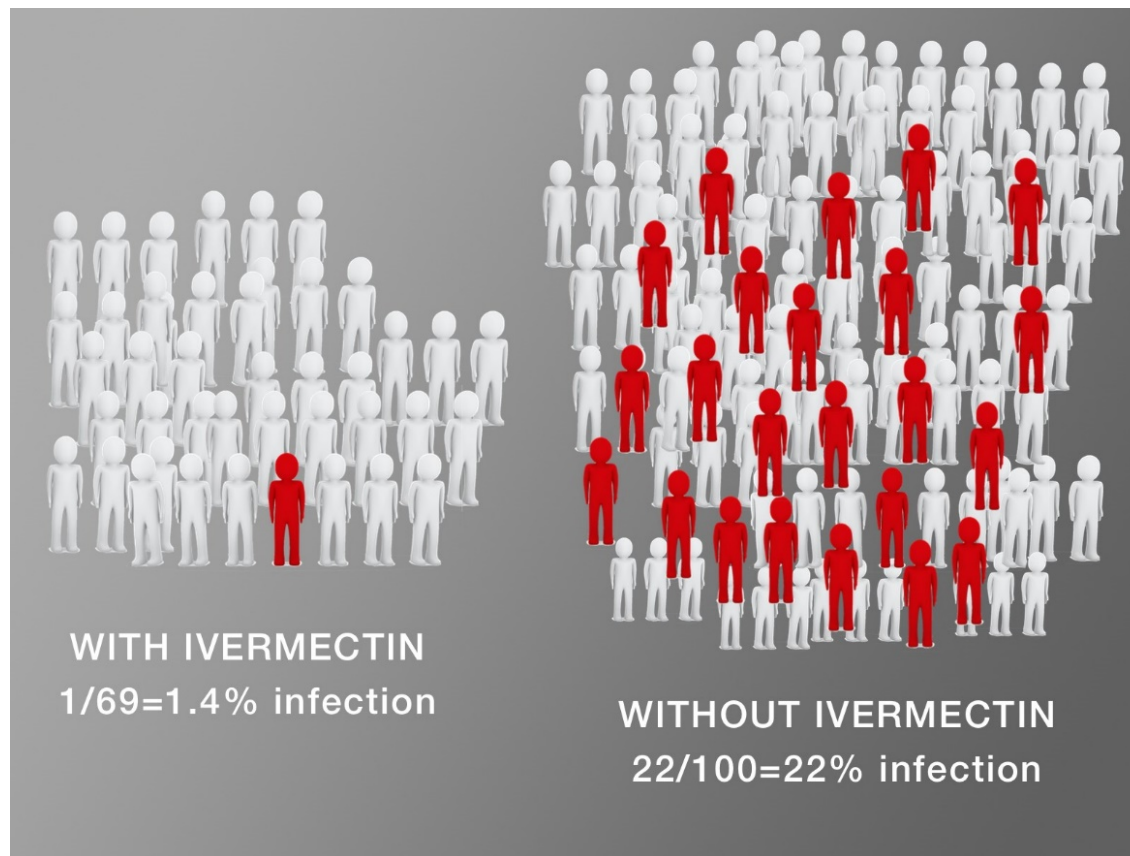
Pharmacology

- 400ug/kg $C_{max} \sim 120$ ug/ml (fasted)
- 400ug/kg C_{max} about 300 ug/ml (with meal)
- 400ug/kg Lung concentration 360 ug/g tissue (fasted)
- 400ug/kg Lung concentration 900 ug/g tissue (with meal)
- IC_{50} for alveolar cells 0.41 uM (307 ug/g)
(uM to ng/ml conversion: $1\text{uM} = 750\text{ ng/ml}$)

Use of Ivermectin is Associated with Lower Mortality in Hospitalized Patients with COVID-19 (ICON study)

Juliana Cepelowicz Rajter, M.D., Michael S. Sherman, M.D., FCCP, Naaz Fatteh, M.D., Fabio Vogel, Pharm. D, BCPS, Jamie Sacks, Pharm. D., Jean-Jacques Rajter,

RESULTS	RESULT		P	CI	OR
MORTALITY	15%	25.2%	0.03	0.29-0.96	0.52
MORTALITY (SEVERE)	38.8%	80.1%	0.001	0.05-0.47	0.15
EXTUBATION	36.1%	15.4%	0.07	0.88-11.00	3.11
AFTER ADJUSTMENT MORTALITY	OR 0.27		0.03	0.09-0.80	0.27



Long term Care Facility A

Long term Care Facility B+C+D

IVERMECTIN FOR COVID-19

71 TRIALS, 675 SCIENTISTS, 50,180 PATIENTS

31 RANDOMIZED CONTROLLED TRIALS

83% IMPROVEMENT IN 16 PROPHYLAXIS TRIALS RR 0.17 [0.11-0.27]

66% IMPROVEMENT IN 29 EARLY TREATMENT TRIALS RR 0.34 [0.24-0.47]

34% IMPROVEMENT IN 26 LATE TREATMENT TRIALS RR 0.66 [0.53-0.81]

52% IMPROVEMENT IN 32 MORTALITY RESULTS RR 0.48 [0.37-0.63]

57% IMPROVEMENT IN 31 RANDOMIZED CONTROLLED TRIALS RR 0.43 [0.31-0.61]

SUMMARY OF RESULTS REPORTED IN IVERMECTIN TRIALS FOR COVID-19. 12/24/21. IVMMETA.COM



Network meta-analysis of interventions on hospital mortality

metaEvidence - COVID-19

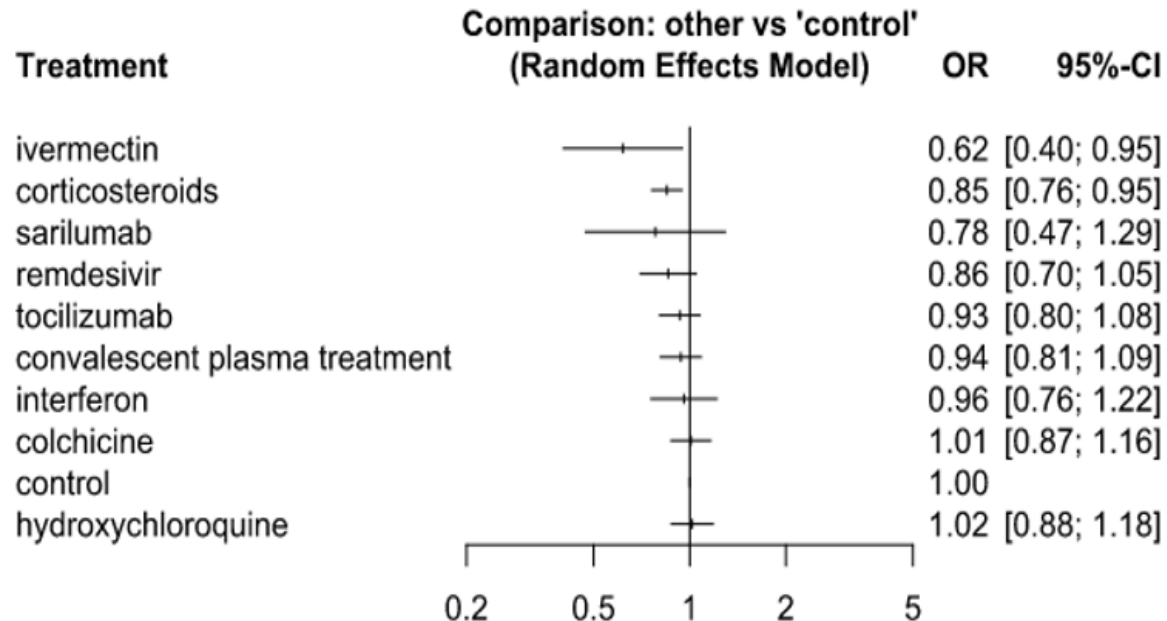
Living meta-analysis and evidence synthesis of therapies for COVID19

noteworthy treatments ▾

COVID 19 hospitalized ▾

All RCTs ▾

deaths ▾



Tweets

Tweets & replies

Media

Likes

📌 Pinned Tweet



U.S. FDA ✓ @US_FDA · 9h

...

You are not a horse. You are not a cow. Seriously, y'all. Stop it.



Why You Should Not Use Ivermectin to Treat or Prevent COVID-19

Using the Drug ivermectin to treat COVID-19 can be dangerous and even lethal. The FDA has not approved the drug for that purpose.

🔗 [fda.gov](https://www.fda.gov)

Horowitz: FDA disseminates dangerous and libelous misinformation against lifesaving COVID treatment

DANIEL HOROWITZ | August 23, 2021

f t in ✉



VigiAccess™



WHO Collaborating Centre for
International Drug Monitoring

Medicine	Year started reporting	Deaths	Adverse events
Ivermectin	1992	18	4 669
Remdesivir	2020	579	7 798
Tocilizumab	2005	786	47 345
COVID-19 vaccines	2021	13 361	2 620 423
Tetanus vaccine	1968	32	14 697
Measles vaccine	1992	35	3 696
Acetaminophen (Tylenol)	1968	3 865	> 146 000



Over 25 Years of Clinical Experience With Ivermectin: An Overview of Safety for an Increasing Number of Indications

- Cannot be used in collie dogs due to increased BB permeability to Ivermectin
- Negligible adverse reaction in humans
- **Not a single death directly related to IVERMECTIN**
- Robust safety profile, can be used in children as young as 6 months of age
- Allergic reaction due to the death of microfilaria (itching, rash)
- Encephalopathy, rarely in patients with Loa Loa
- Not recommended in pregnancy or lactation
- Drug-drug interactions, caution with calcineurin inhibitors



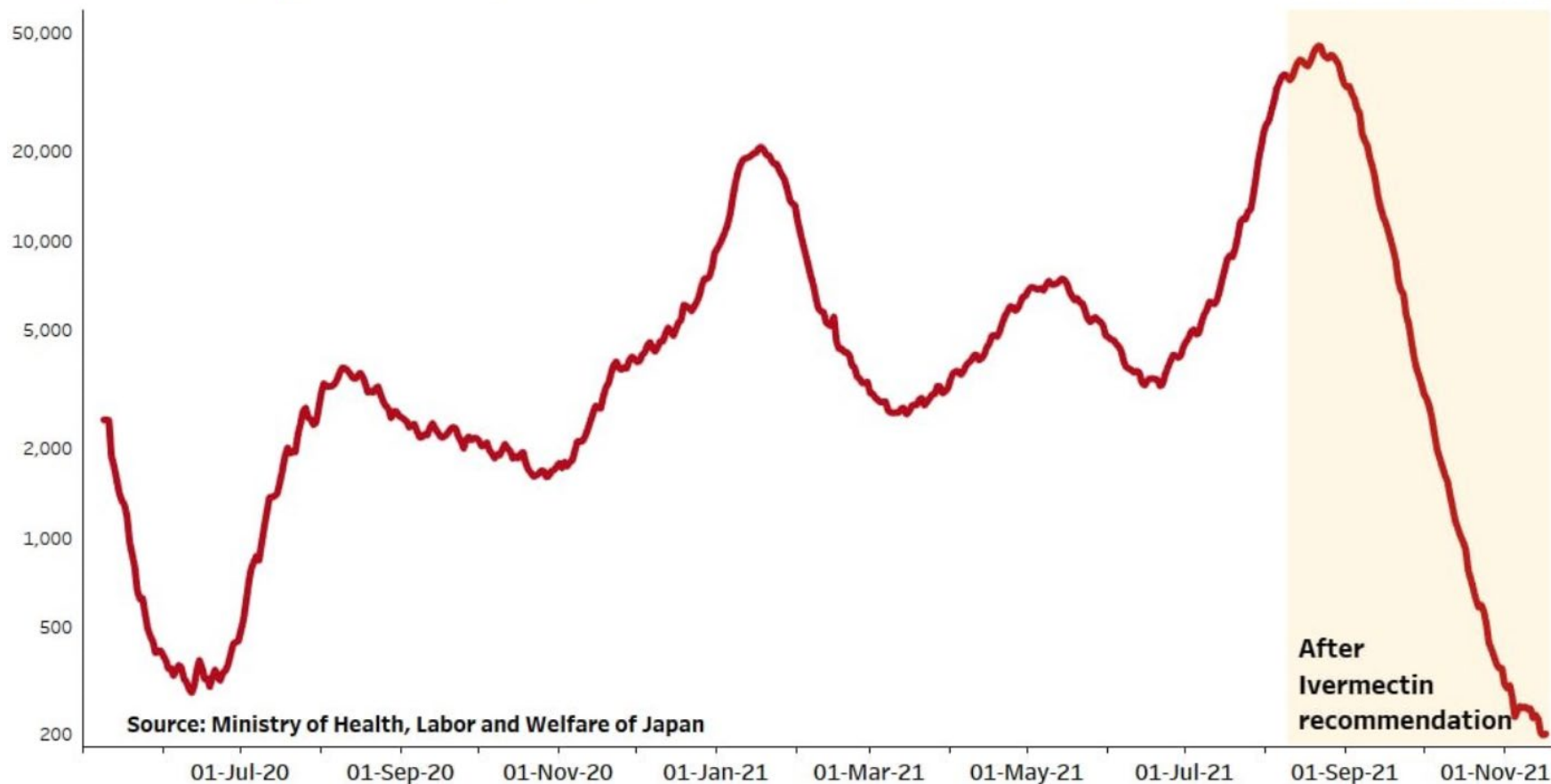
Tokyo Medical Chairman holds press conference recommending Ivermectin to all doctors, for all Covid patients. Japan's government is one of the most conservative and cautious in the world. The data is clear.

22nd August 2021

COVID-19 in Tokyo Japan

COVID-19 Hospitalized Patients

Analyst: Juan J Chamie



Source: Ministry of Health, Labor and Welfare of Japan

After
Ivermectin
recommendation

On August 13 [Tokyo Medical Association](#) announced that **Ivermectin** is amazingly effective at stopping COVID-19.

They recommend to ALL Doctors in Japan using Ivermectin to treat COVID.

ICMR Includes Ivermectin for COVID-19 Indication in National List of Essential Medicines



TrialSite Staff

September 5, 2021



6 Comments



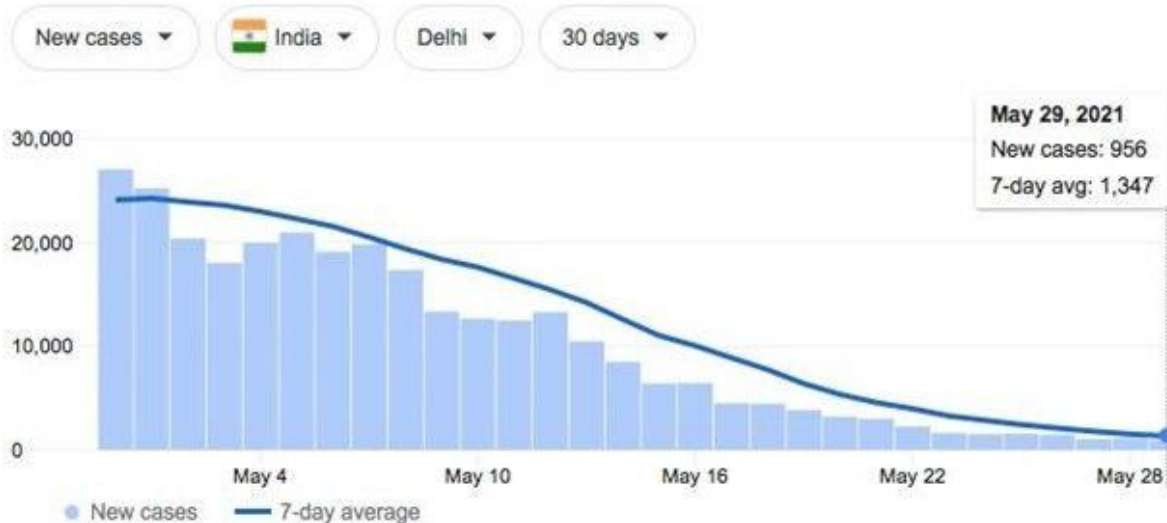
The Indian government recently slashed the price of 39 important drugs covering a range of therapeutic drugs from cancer to COVID-19 as part of the revised Indian National List of Essential Medicines (NLEM). TrialSite reports among the commonly used drugs prominently on the list are ivermectin indicated for SARS-CoV-2, the virus

Ivermectin obliterates 97 percent of Delhi cases

By Justus R. Hope, MD Jun 1, 2021 Updated Jun 7, 2021 24

New cases and deaths

From [JHU CSSE COVID-19 Data](#) · Last updated: 2 days ago



A 97% decline in Delhi cases with Ivermectin is decisive - period. It represents the last word in an epic struggle to save lives and preserve human rights. This graph symbolizes the victory of reason over corruption, good over evil, and right over wrong. It is as significant as David's victory over Goliath. It is an absolute vindication of Ivermectin and early outpatient treatment. It is a clear refutation of the WHO, FDA, NIH, and CDC's policies of "wait at home until you turn blue" before you get treatment.

01/09/2021

PRESS RELEASE

To: All Media Houses

URGENT PRESS RELEASE ON THE USE OF IVERMECTIN FOR COVID-19

As the recent Covid-19 wave wanes, the Botswana Doctors Union would like to share its professional views on the medical and clinical management of Covid-19 disease. We have resolved that due to Botswana's Covid-19 response and/or capacity to curb and respond, it would be prudent to incorporate all potentially beneficial treatment regimens in the management of moderate to severe disease regardless of vaccination status.

We have had several meetings with the panel of experts in the Botswana Covid-19 Ivermectin Intervention Group (BCIIG) and have studied the scientific data and rational views of their recommendations and those of others on the incorporation of Ivermectin in the management of Covid-19. We, therefore, wish to categorically state the following:

We, the Botswana Doctors Union are in full support of the safe prescribing and "off-label use" of Ivermectin in conjunction with other treatment agents in the management of Sars-Cov-2 disease for the following reasons:

1. The evidence that supports the effectiveness of Ivermectin in the recovery of Sars-2-Cov patients is irrefutable and it is available.
2. Safe and open prescribing practices by licensed clinicians help ensure appropriate drug stewardship and patient safety.
3. Drug regulation, abuse, and adverse effects can be adequately monitored.
4. In addition to vaccination efforts, alternative treatments can further serve to alleviate morbidity and prevent mortality.
5. However small the impact may be, a life salvaged is a life saved, and that is significant.
6. Human-dosed Ivermectin has a profound safety profile, which is unlikely to reach toxicity levels if used correctly.

PERFECTLY

SAFE



IN

COUNTRIES

UNSAFE IN USA?

FLCCC.org

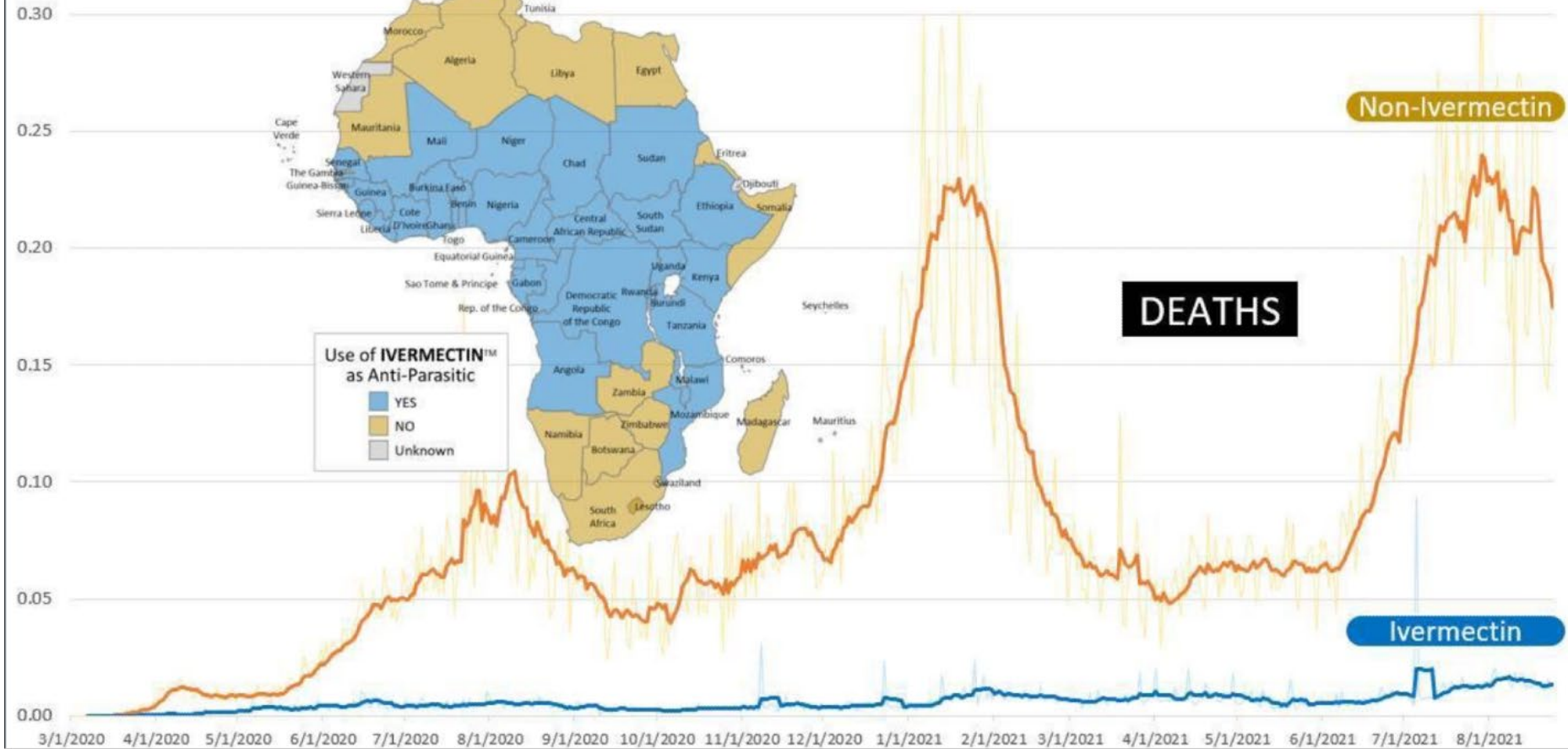
FLCCC
ALLIANCE

Africa Daily DEATHS/100K, Ivermectin Countries vs. Non-Ivermectin Countries

Source: Johns Hopkins CSSE (github)

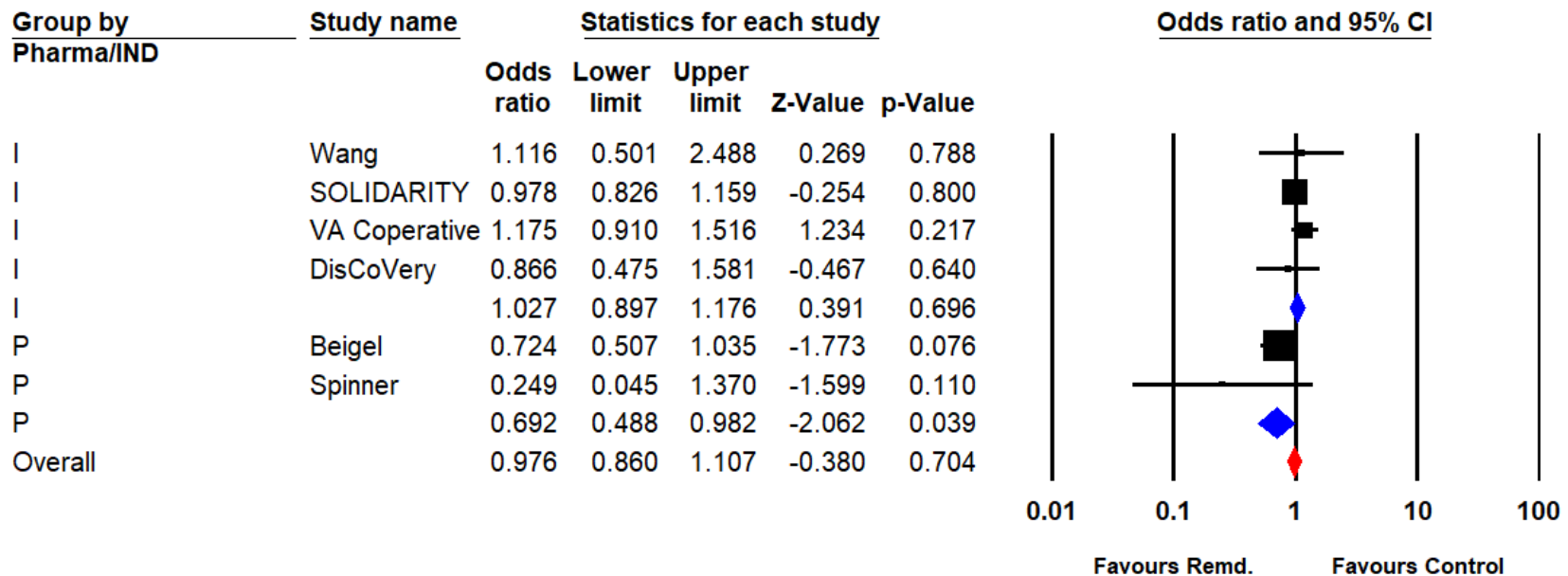
<https://www.medrxiv.org/content/10.1101/2021.03.26.21254377v1.full.pdf>

@birb_k



Remdesivir for treatment of COVID-19: Grouped By Pharma Controlled vs Independent

Meta-analysis of Mortality



Meta Analysis

REMDESIVIR VS IVERMECTIN

COMPARISONS	REMDESIVIR	IVERMECTIN
COST	\$ 3,000.00	PENNIES
LOWER DEATH RATE IN STUDIES	NO	YES 50% +
SIMPLE ACCESS AT HOME	NO	YES
CAUSES ORGAN DAMAGE	YES	NO
STUDIES NEEDED FOR APPROVAL	1 and approved	60 + and not considered
MAJOR CONFLICTS OF INTEREST	YES	NO
SUPPORT OF FDA AND FAUCI	YES	NO



A patient cured is a customer lost.



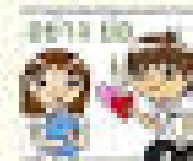
BIG PHARMA EXECUTIVE

- **Ivermectin** ^{1 tab} 6 mg
Strongid Plus

2 : 200 μ g/kg/day

2 : 2 tab/day (BW ~ 60 kg)

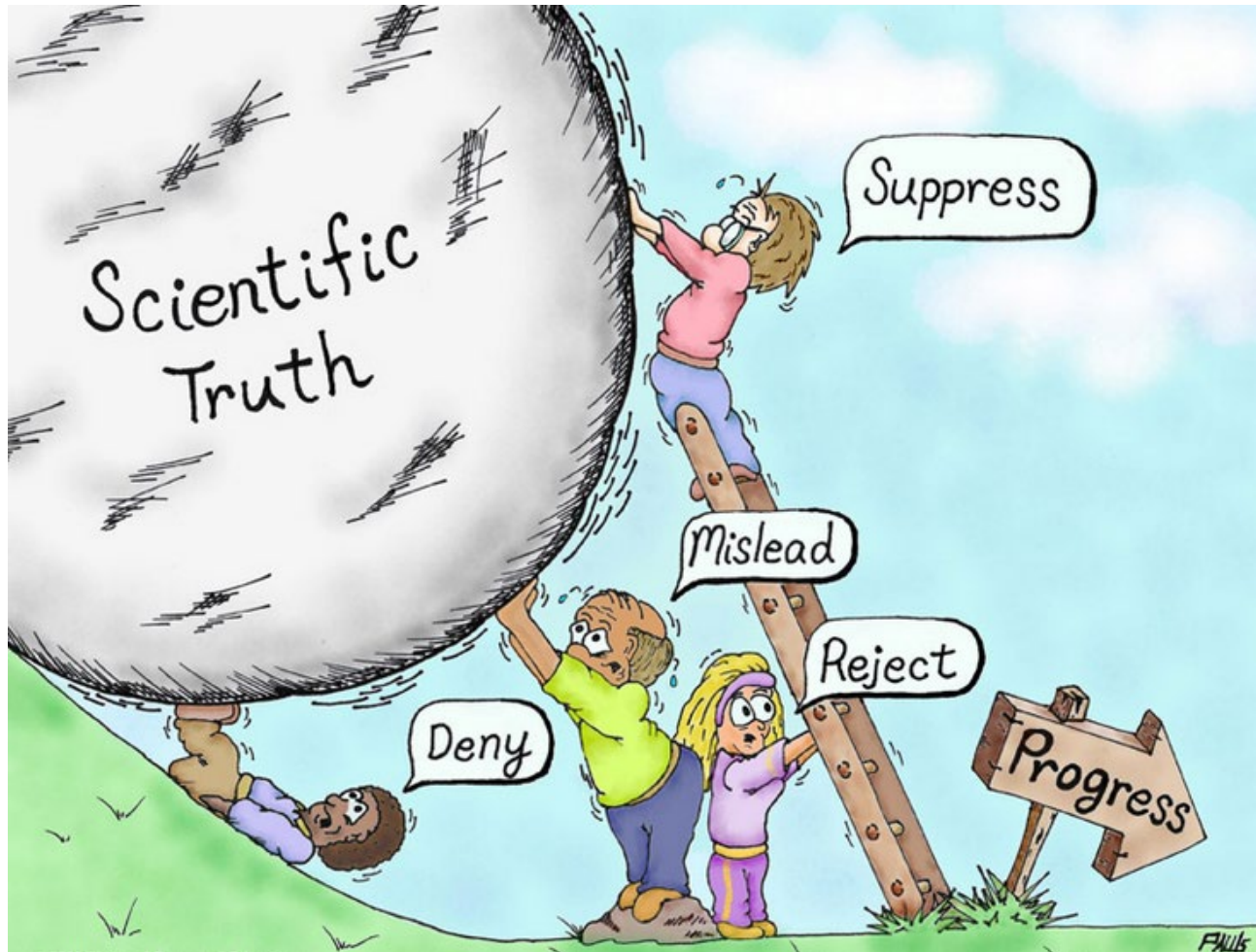
2 : 2 Day

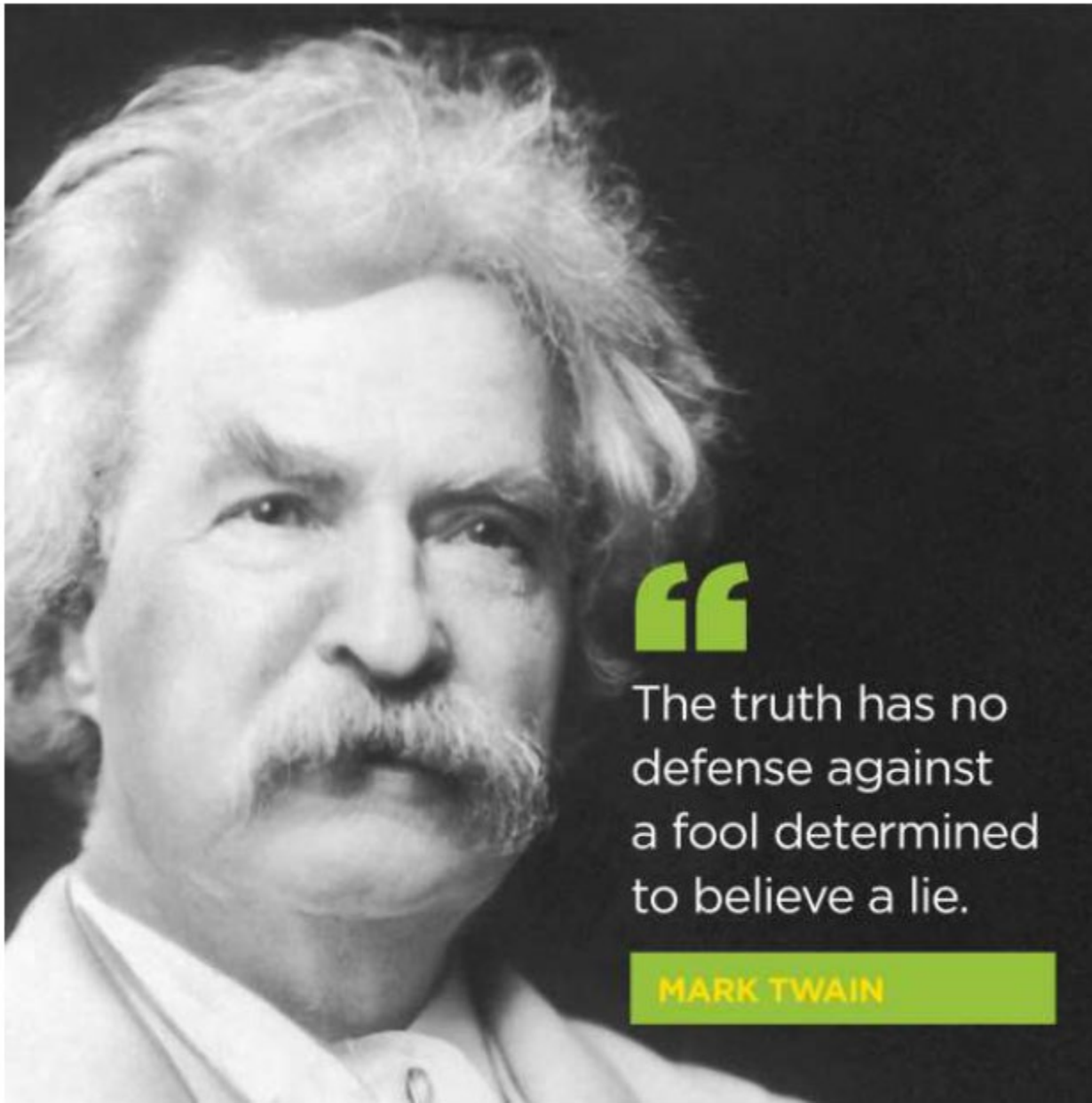


@ 6
บาท/กล่อง

2 : 2 cents a tab
(WHO Pricing)

COVID-19 Misinformation...





“

The truth has no
defense against
a fool determined
to believe a lie.

MARK TWAIN

