

HEDGEYE

# COVID-19 Data Update

March 25, 2020



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Please submit questions\* to  
**qa@hedgeye.com**

\*Answered at the end of the call

# Health Care Position Monitor

For Week of March 23, 2020

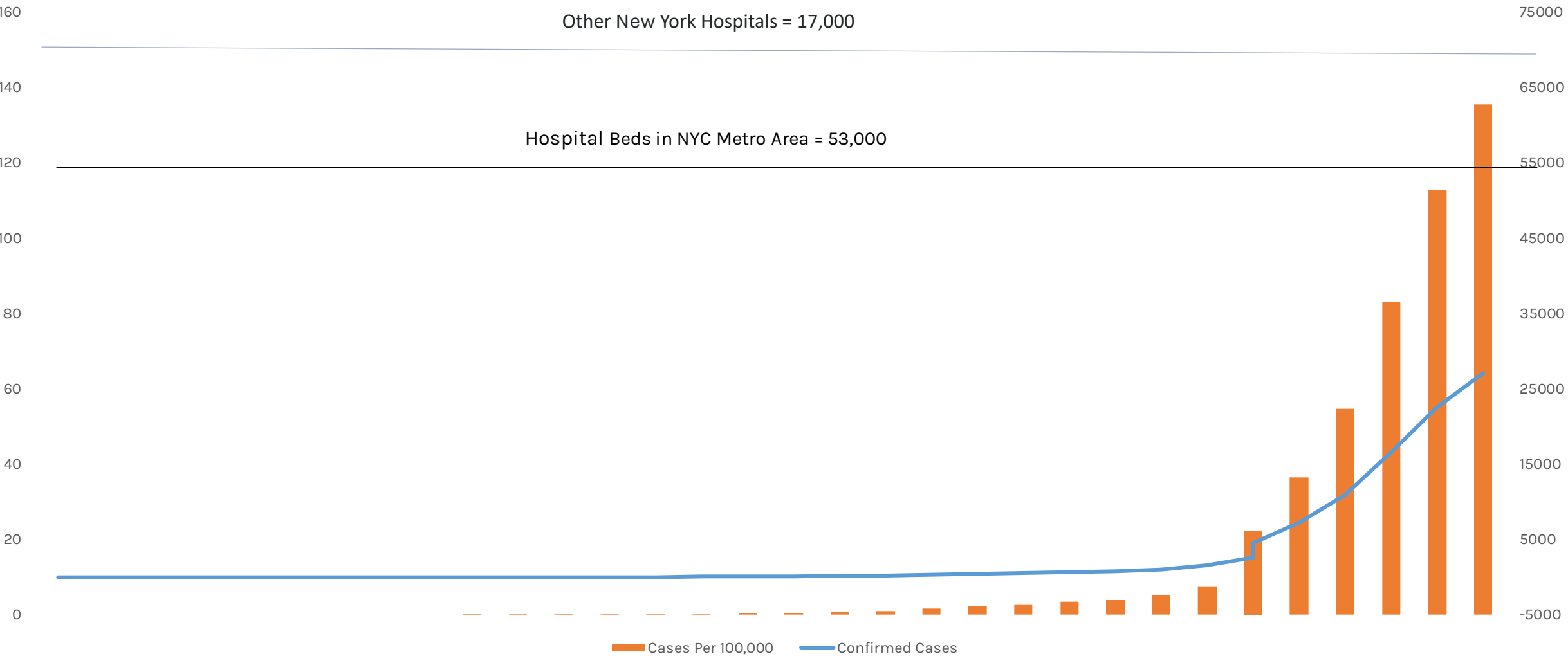
Best Ideas - Longs					Best Ideas - Shorts						
LONG		Price	Mkt Cap (\$B)	Trend	Tail	SHORT		Price	Mkt Cap (\$B)	Trend	Tail
Active Longs						Active Shorts					
TDOC	Teladoc Health, Inc.	\$ 141.74	\$10.3B	✓	✓	EXAS	Exact Sciences Corporation	\$ 51.61	\$7.6B	×	×
AMN	AMN Healthcare Services, Inc.	\$ 62.75	\$2.9B	✓		HQY	HealthEquity Inc	\$ 44.31	\$3.1B	×	×
GH	Guardant Health, Inc.	\$ 64.05	\$6.0B	✓		NVTA	Invitae Corp.	\$ 10.15	\$1.0B	×	×
Long Bias						Short Bias					
ONEM	1Life Healthcare, Inc.	\$ 19.49	\$2.4B			HCA	HCA Healthcare Inc	\$ 78.50	\$26.6B		
						DVA	DaVita Inc.	\$ 64.99	\$8.2B		
										</	

Disclaimer

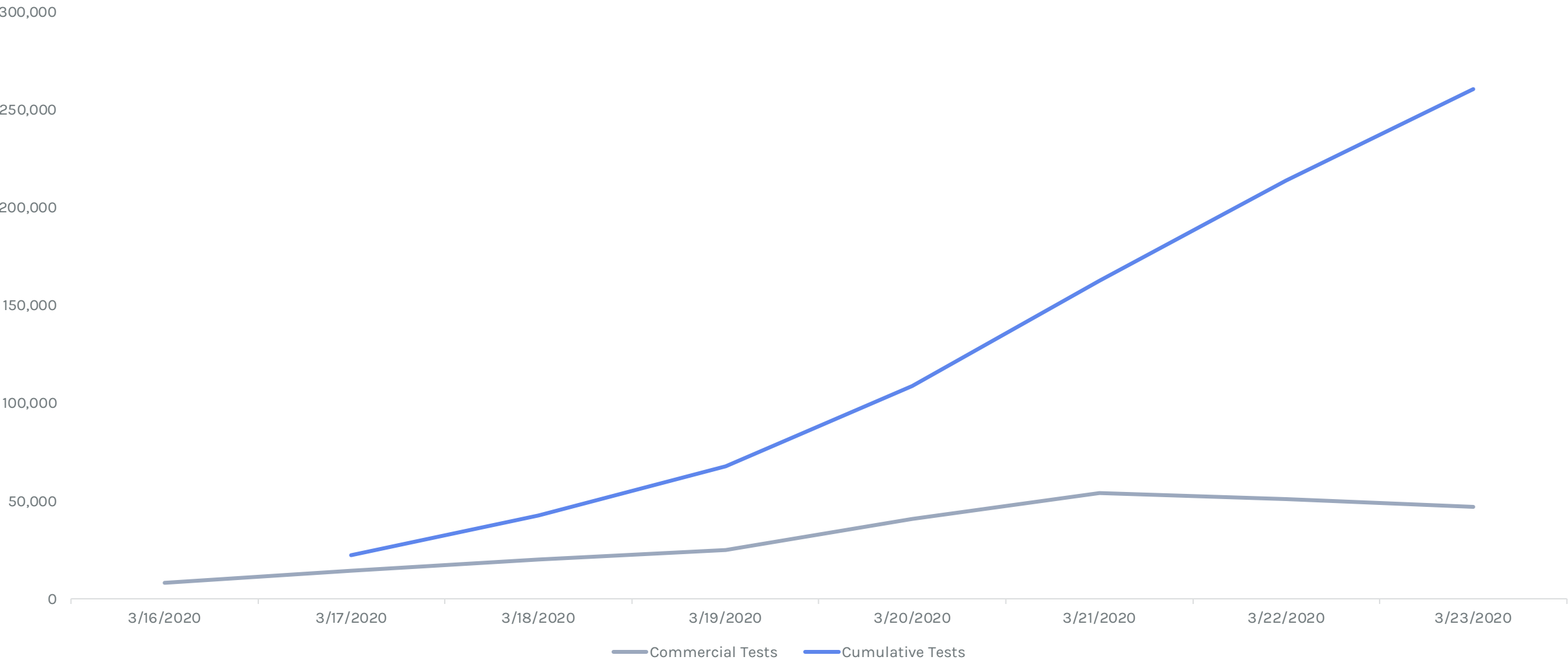
Hedgeye’s “bias” represents Hedgeye’s outlook on companies currently under Hedgeye’s review, or for which timing is not right for greater coverage. Hedgeye may or may not provide further commentary on any or all companies represented on the bench and representation of a company on the bench does not forecast whether Hedgeye will or will not issue any additional material on that company.

# New York Metro Area Caseload and Supply

Data Source: Hedgeye, CMS, New York State Department of Health



# Commercial Lab Test Volume



# Change In Focus for Testing

## **1** Limit Access to Inpatient Admissions

- Reflects need for testing to diagnosis and treat disease
- Protects hospital staff
- Conserves PPE

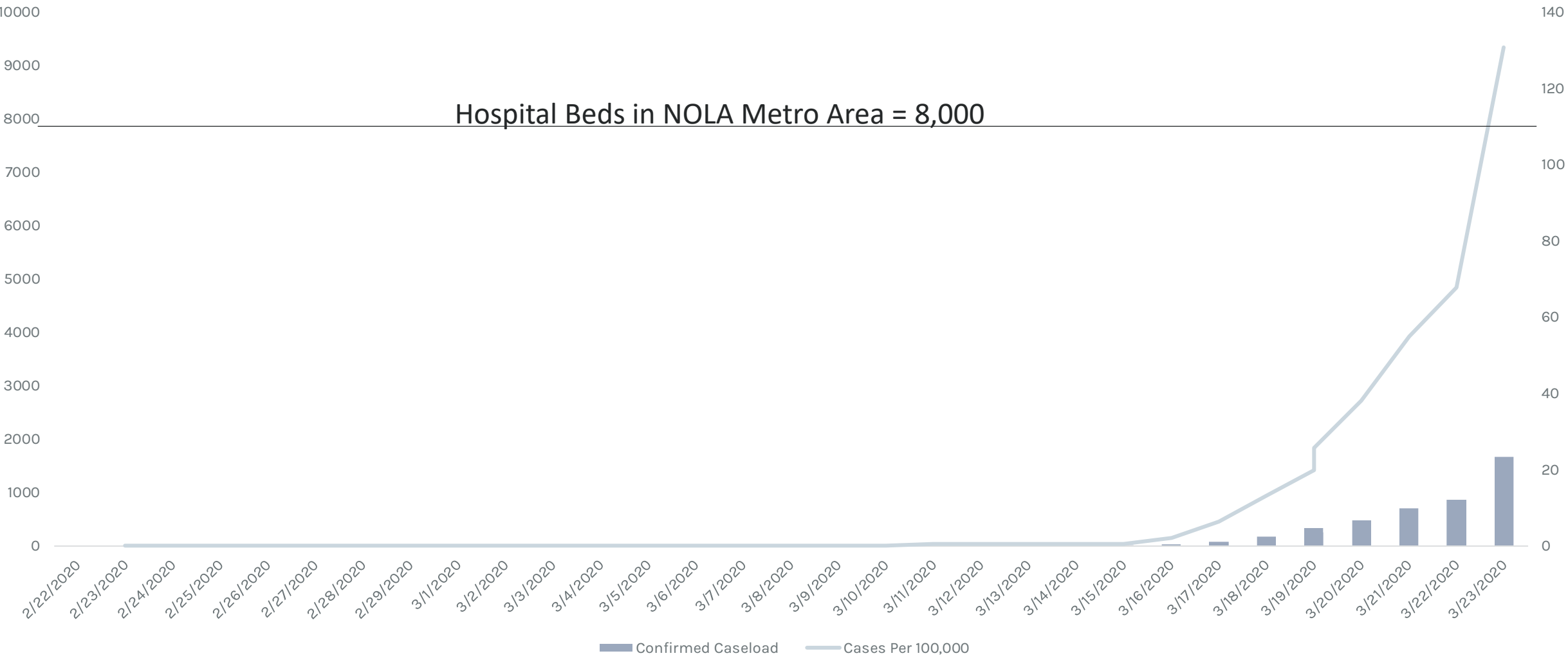
## **2** Discourage the Worried Well/Well Managed

- Keep people out of health care setting
- Protects health care workers
- Point-of-Care test developing

## **3** Ask Labs to Fast Track COVID-19 Cases

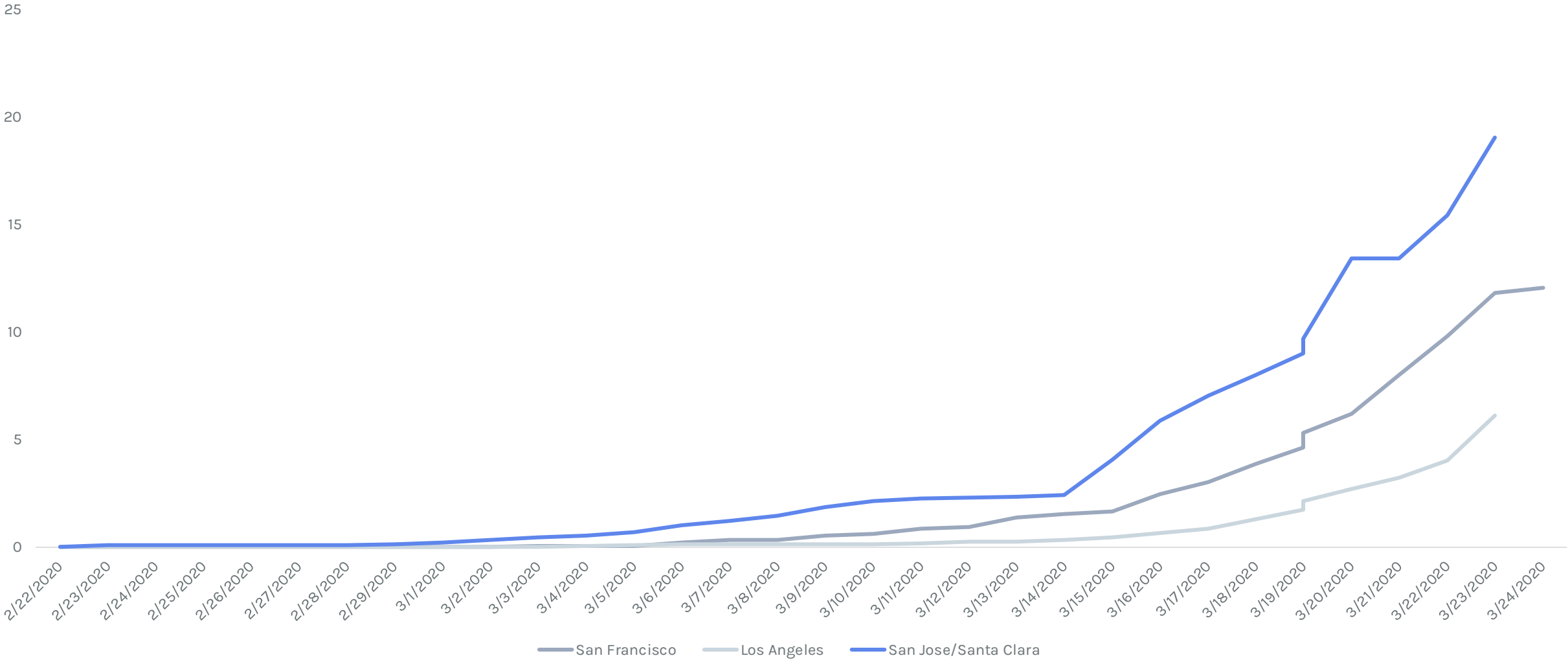
- Labs constrained by capacity especially robots
- Other tests will be put at end of the line

# New Orleans Caseload

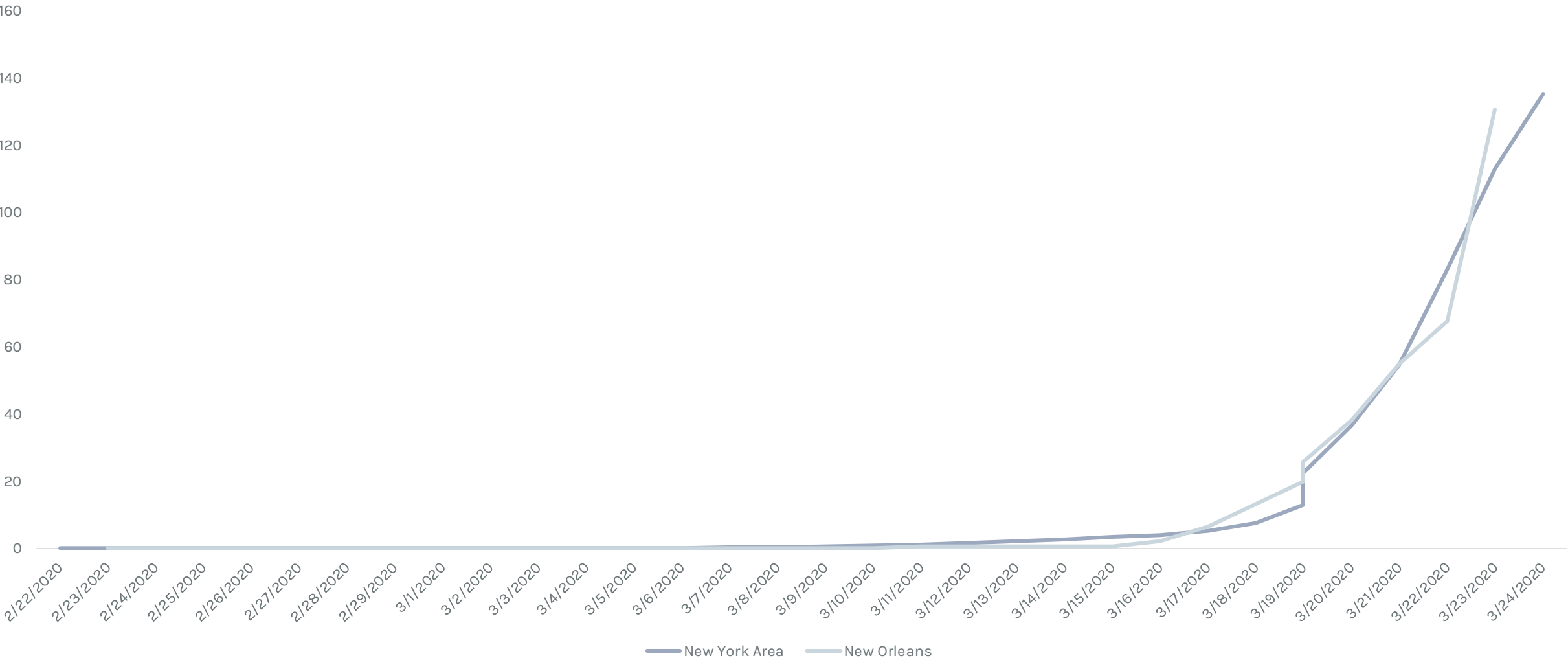




# California Cases Per 100,000

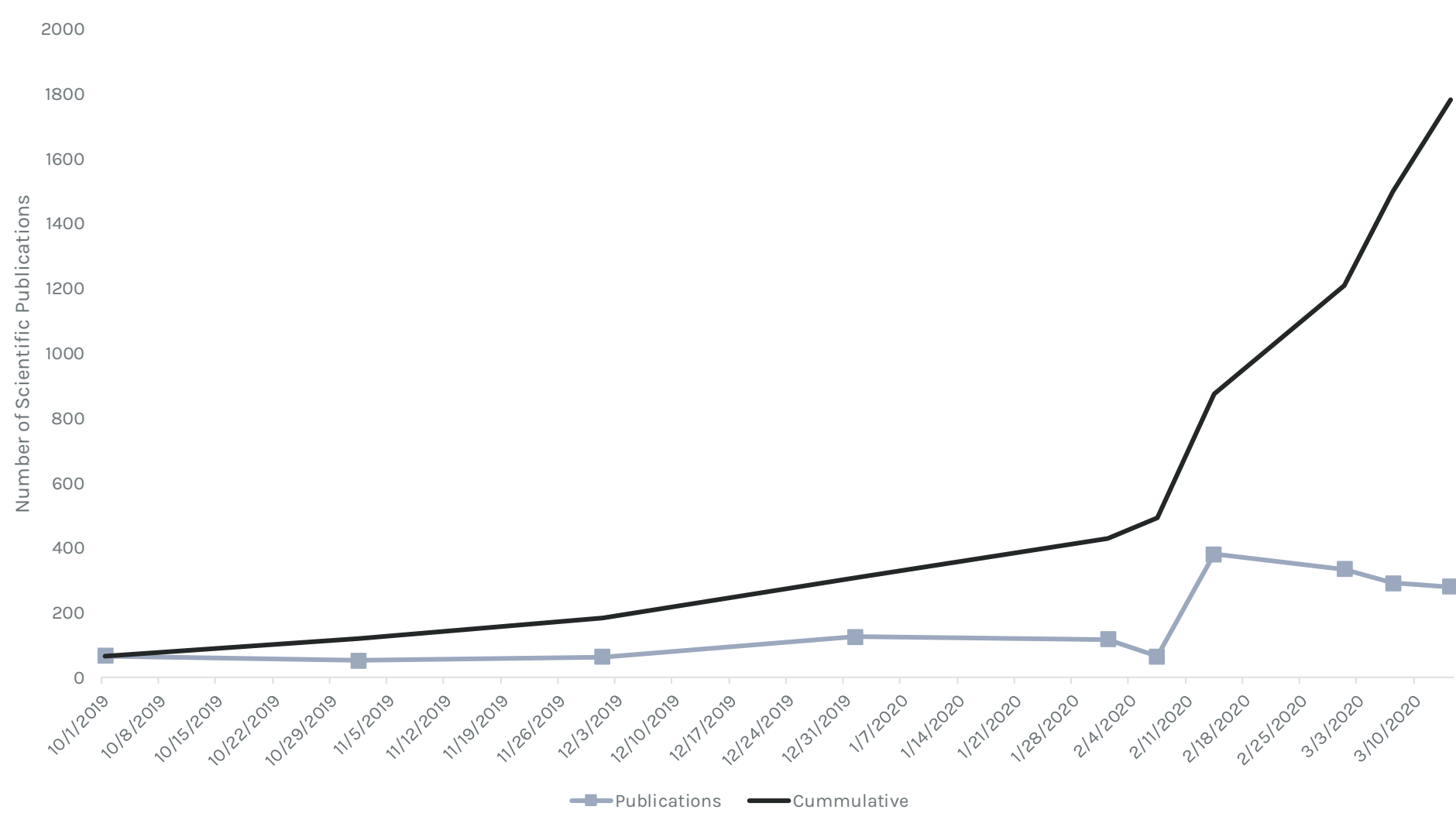


# NOLA and NYC Area Case Per 100,000



# COVID-19 Research

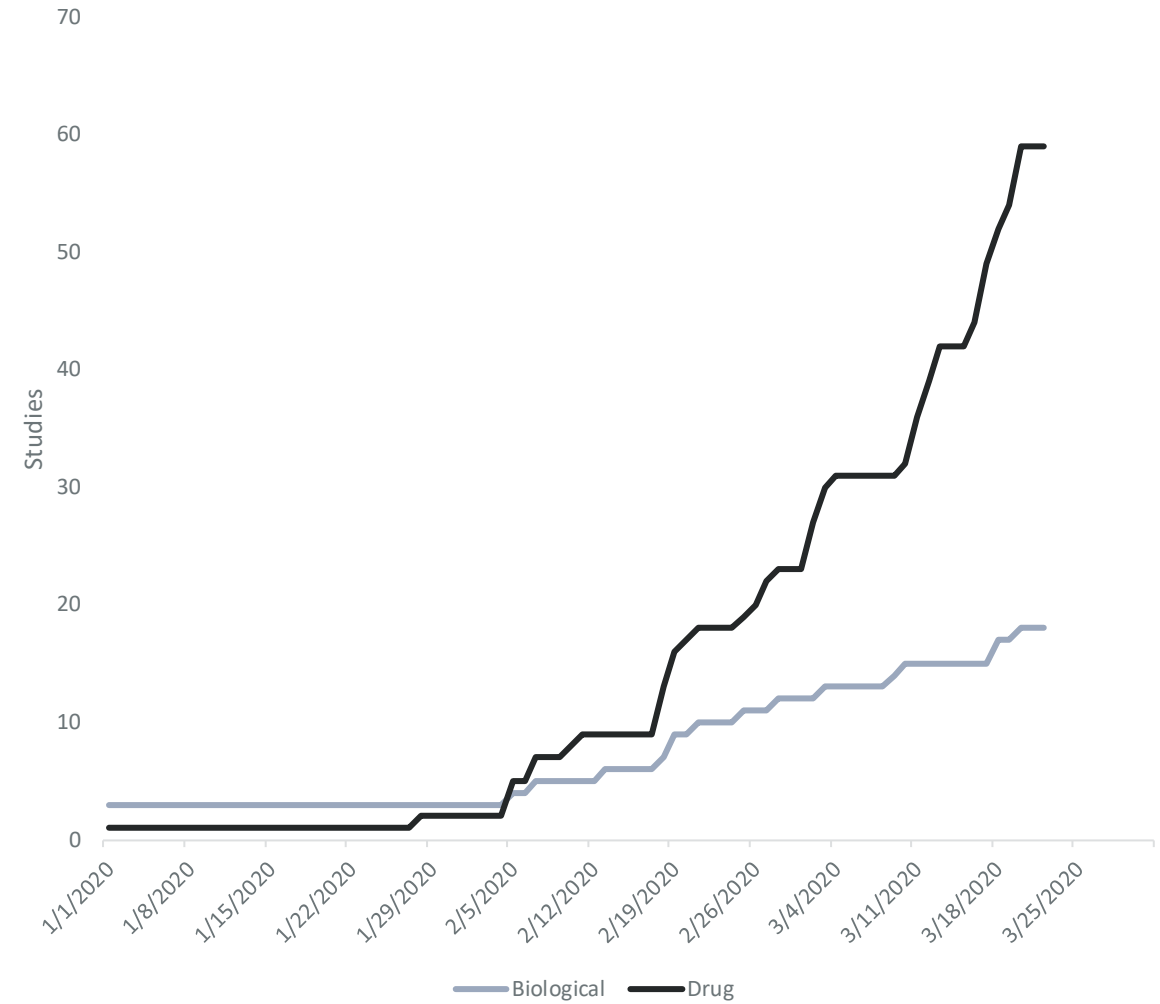
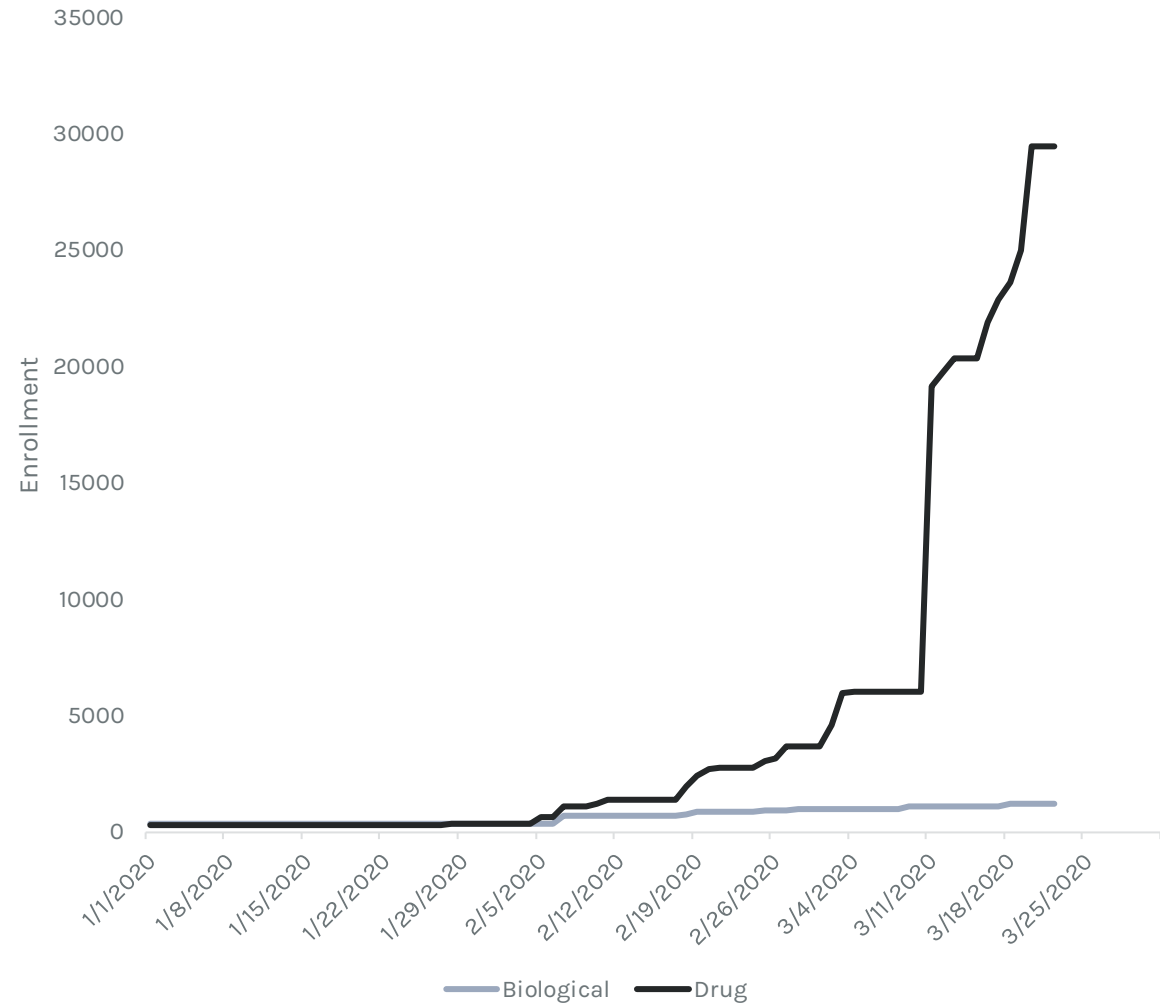
Scientists have published 1,800 studies since October 2019



Research and collaboration has been on display as the global scientific community responds to the COVID-19 crisis.

# Clinical trials COVID-19

Studies and enrollment are ramping, #Remdesivir, #Hydrochloroquine, data still weeks away



# Drugs treatments coming into focus

Dampen the patient acuity and mortality and we might spare the system

New Results

[Comment on this paper](#)

## A SARS-CoV-2-Human Protein-Protein Interaction Map Reveals Drug Targets and Potential Drug-Repurposing

David E. Gordon, Gwendolyn M. Jang, Mehdi Bouhaddou, Jiewei Xu, Kirsten Obernier, Matthew J. O'Meara, Jeffrey Z. Guo, Danielle L. Swaney, Tia A. Tummino, Ruth Huttenhain, Robyn Kaake, Alicia L. Richards, Beril Tutuncuoglu, Helene Foussard, Jyoti Batra, Kelsey Haas, Maya Modak, Minkyu Kim, Paige Haas, Benjamin J. Polacco, Hannes Braberg, Jacqueline M. Fabius, Manon Eckhardt, Margaret Soucheray, Melanie Brewer, Merve Cakir, Michael J. McGregor, Qiongyu Li, Zun Zar Chi Naing, Yuan Zhou, Shiming Peng, Ilsa T. Kirby, James E. Melnyk, John S. Chiorba, Kevin Lou, Shizhong A. Dai, Wenqi Shen, Ying Shi, Ziyang Zhang, Inigo Barrio-Hernandez, Danish Memon, Claudia Hernandez-Armenta, Christopher J.P. Mathy, Tina Perica, Kala B. Pilla, Sai J. Ganesan, Daniel J. Saltzberg, Rakesh Ramachandran, Xi Liu, Sara B. Rosenthal, Lorenzo Calviello, Srivats Venkataramanan, Yizhu Lin, Stephanie A. Wankowicz, Markus Bohn, Raphael Trenker, Janet M. Young, Devin Caverio, Joe Hiatt, Theo Roth, Ujjwal Rathore, Advait Subramanian, Julia Noack, Mathieu Hubert, Ferdinand Roesch, Thomas Vallet, Björn Meyer, Kris M. White, Lisa Miorin, David Agard, Michael Emerman, Davide Ruggero, Adolfo García-Sastre, Natalia Jura, Mark von Zastrow, Jack Taunton, Olivier Schwartz, Marco Vignuzzi, Christophe d'Enfert, Shaeri Mukherjee, Matt Jacobson, Harmit S. Malik, Danica G. Fujimori, Trey Ideker, Charles S. Craik, Stephen Floor, James S. Fraser, John Gross, Andrej Sali, Tanja Kortemme, Pedro Beltrao, Kevan Shokat, Brian K. Shoichet, Nevan J. Krogan

doi: <https://doi.org/10.1101/2020.03.22.002386>

## Abstract

An outbreak of the novel coronavirus SARS-CoV-2, the causative agent of COVID-19 respiratory disease, has infected over 290,000 people since the end of 2019, killed over 12,000, and caused worldwide social and economic disruption. There are currently no antiviral drugs with proven efficacy nor are there vaccines for its prevention. Unfortunately, the scientific community has little knowledge of the molecular details of SARS-CoV-2 infection. To illuminate this, we cloned, tagged and expressed 26 of the 29 viral proteins in human cells and identified the human proteins physically associated with each using affinity-purification mass spectrometry (AP-MS), which identified 332 high confidence SARS-CoV-2-human protein-protein interactions (PPIs). Among these, we identify 66 druggable human proteins or host factors targeted by 69 existing FDA-approved drugs, drugs in clinical trials and/or preclinical compounds, that we are currently evaluating for efficacy in live SARS-CoV-2 infection assays. The identification of host dependency factors mediating virus infection may provide key insights into effective molecular targets for developing broadly acting antiviral therapeutics against SARS-CoV-2 and other deadly coronavirus strains.