Breaking Results: Sermo's COVID-19 Real Time Barometer Study

WAVE I: March 25 - 27

sermo

Table of contents

- Study overview
- Summary of results
- Key findings:
 - Section 1: Peak Timing & Restrictions
 - Section 2: Government Effectiveness
 - Section 3: Top Three Physician Needs
 - Section 4: Average Time for Getting a COVID-19 Test Result
 - Section 5: Treatments & Efficacy
 - Section 6: Prioritizing Patient Treatment in Case of Ventilator Shortage
 - Section 7: Second Wave of Outbreak
 - Section 8: Physician Requests to Life Science Firms to Lessen the Impact of COVID-19
 - Section 9: COVID-19 Concerns



Study overview

Methodology

Wave I of Sermo's COVID-19 Barometer Survey was launched on March 25 and fielded over three days. Physicians were not incentivized to participate in the study. The sample represents physicians registered with Sermo, a secure digital (online) platform designed for physician networking and anonymous survey research. The platform is exclusive to verified and licensed physicians.

Given the strategic importance of this topic, a total of **6,227** physicians across all specialties were sampled. The 30 countries included in the sample are United States, Canada, Argentina, Brazil, Mexico, Germany, Italy, UK, France, Spain, Belgium, Netherlands, Sweden, Turkey, Poland, Russia, Finland, Ireland, Switzerland, Austria, Denmark, Norway, Greece, Taiwan, Japan, South Korea, Australia, China, India and Hong Kong.

Results are reported for individual countries with a minimum sample size of 250. Such a sample size provides for point estimates with a +/- 6% precision at a 94% confidence level. In situations where the sample size for a country is below 250, countries are aggregated to provide a meaningful regional view. No weighting factor was applied to any individual sampling unit either in the selection of physicians who received an invite to participate or in any analysis conducted postdata collection.

Survey Instrument

The survey instrument was created via a collaboration between Sermo management, healthcare professionals, healthcare industry veterans, and market research professionals. The Wave I online survey is divided into four sections covering key COVID-19 issues: (1) **State of the Pandemic:** physicians' opinions on the state of the outbreak in their region/state and the effectiveness of governmental efforts (2) **Resource Needs:** COVID-19 information and resources physicians want from the healthcare industry (3) **Treatments:** physicians' experiences treating COVID-19 patients; insights into the treatments used and their safety and efficacy, and (4) **Im pacts:** ethics related to wartime triaging and medical shortages; personal perspectives on the outbreak's emotional impact.

Prior to a full launch, the survey instrument was pre-tested online among a small sample of physicians on March 23, 2020. Based on the results of this pre-test adjustments were made to questionnaire wording and survey flow. The total survey length was approximately 22 minutes.

Data Analysis

Each respondent's personal identifiable information has been decoupled from the sample survey, and subsequent analysis, is completely anonymous. The data was processed and analyzed to create descriptive statistics summarizing physicians' attitudes about the various survey topics. All results that are cited as statistically significant were evaluated at a 95% confidence interval. In some instances – particularly were 4-point Likert scales were used to evaluate levels of concern or stress – scales were collapsed into high ("very concerned" and "somew hat concerned") versus low ("slightly concerned" and "not at all concerned") categories for comparison.

Summary of findings

Here are just a few key highlights from Wave I:

Treatments & Efficacy:

- 3 most commonly prescribed treatments amongst COVID-19 treaters are 56% analgesics, 41% Azithromycin, and 33% Hydroxychloroquine.
- Hydroxychloroquine usage amongst COVID-19 treaters is 72% in Spain, 49% in Italy, 41% in Brazil, 39% in Mexico, 28% in France, 23% in US, 17% in Germany, 16% in Canada, 13% in UK and 7% in Japan.
- Hydroxychloroquine was overall chosen as the most effective therapy from a list of 15 options (37% of COVID-19 treaters).
 - 75% in Spain, 53% Italy, 44% in China, 43% in Brazil, 29% in France, 23% in US and 13% in UK.
- The two most common treatment regimens for Hydroxychloroguine were:
 - (38%) 400mg twice daily on day one; 400 mg daily for 5 days.
 - (26%) 400mg twice daily on day one; 200mg twice daily for 4 days.
- Outside the US, Hydroxychloroquine was equally used for diagnosed patients with mild to severe symptoms whereas in the US it was most commonly used for high risk diagnosed patients.
- Globally, 19% of physicians prescribed or have seen Hydroxychloroquine prophylactically used for high risk patients, and 8% for low risk patients.



Summary of findings, continued

Here are just a few key highlights from Wave I:

Second Wave of Outbreak:

Second global outbreak is anticipated by 83% of global physicians, 90% of US physicians but only 50% of Chinese physicians.

Peak Timing & Restrictions:

In the US, 63% of physicians recommend restrictions be lifted sixor more weeks from now and 66% believe the peak is at least 3-4 weeks away.

Average Time for COVID-19 Test:

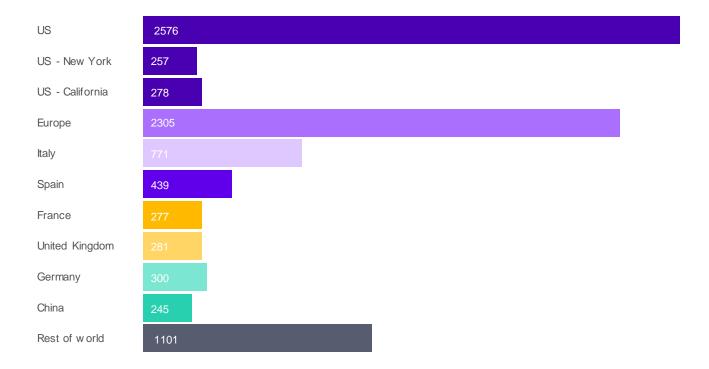
- On average tests in the US take 4-5 days, and in 10% of cases the wait is more than 7 days.
- 14% of US physicians and over 50% in all of Europe and Japan report getting test results in 24 hours; in China 73% of doctors get tests back in 24 hours, while 8% get tests back within the hour.

Prioritizing Patient Treatment in Case of Ventilator Shortage:

- In all countries except China, the top criteria for deciding who should receive a ventilator first was patients with the high est chance of recovery (47%) followed by those most ill and at highest risk of death (21%), then first responders (15%).
 - In China the priorities were reversed as the most ill and highest risk of death received ventilators.
 - First responders were more important in the US.
 - France, Japan, and Italy prioritized age.
 - Brazil and Russia prioritized higher risk patients.



Sample geographic distribution

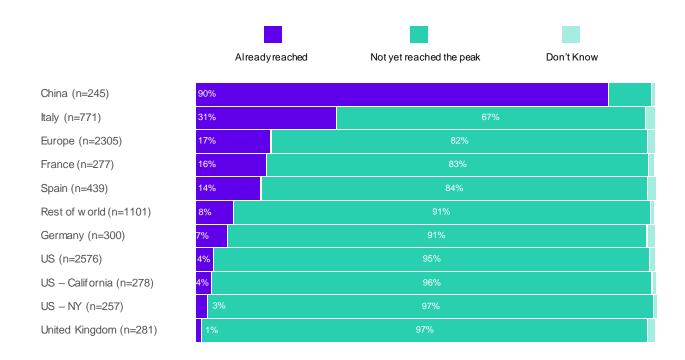




SECTION 1 Peak Timing & Restrictions sermo

When do you thinkthat your region will pass the peak of the outbreak?

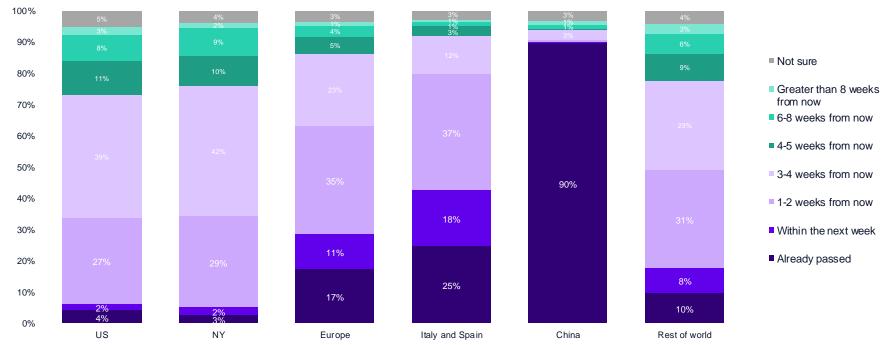
With the notable exception of China, most physicians believe that the peak of the outbreak is still ahead.





When do you think your region will reach the peak of the outbreak?

With the exception of China, the majority of physician expect that the peak of the outbreak is still 3-8 weeks away. 66% of US physicians believe the peak is at least 3-4 weeks away.

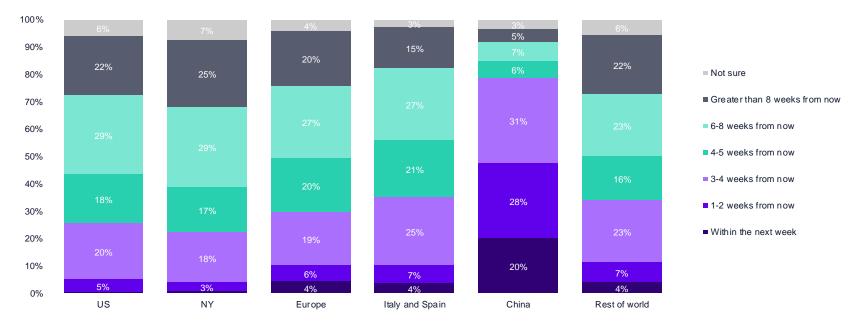




PROPRIETARY AND CONFIDENTIAL Question 2; N=6227

When do you expect your region will be able to lift current restrictions on movements?

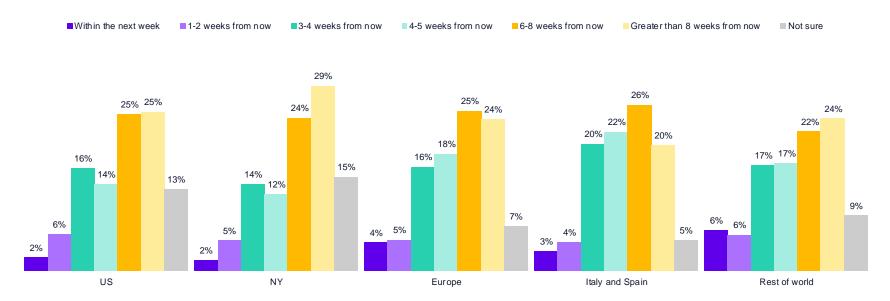
With the exception of China, about half of physicians feel that their region will not be able to lift restrictions within the next six weeks.





When would you recommend your region lift the current restrictions on movements?

Half of US physicians recommend current restrictions on movement stay in place for six weeks or more, even though 41% believe the peak is at least 3-4 weeks away.





PROPRIETARY AND CONFIDENTIAL Question 4; N=5963

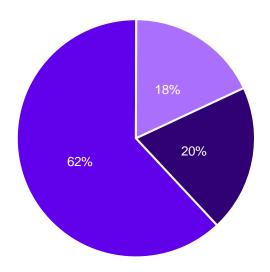
SECTION 2

Government Effectiveness

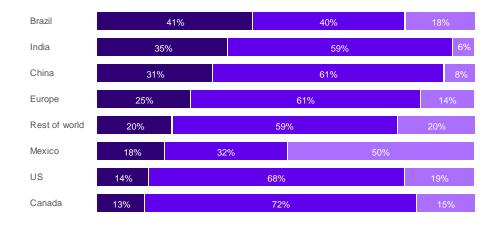
sermo

Which of the following statements best reflects your opinion about your region's response to the COVID-19 outbreak?

Overall the majority of physicians perceive their region is appropriately balancing public health with economic impact.



Physicians perceptions of how well their region is balancing public health vs economics varies widely by region. In Brazil MDs report too much weight on public health and in Mexico MDs report too much weight on economics.



Our region is giving too much weight to public health concerns over economic impact

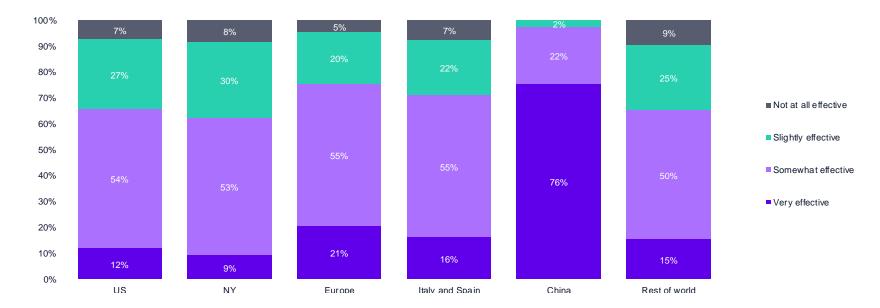
Our region is weighting public health concerns and economic impact appropriately

Our region is giving too much weight to economic impact over public health concerns



How effective have the actions taken by your local, regional and national health authorities been at reducing the spread of COVID-19?

The majority of physicians report that their local, regional and national health authorities have been at least somewhat effective. In China, most believe their authorities have been very effective.





SECTION 3

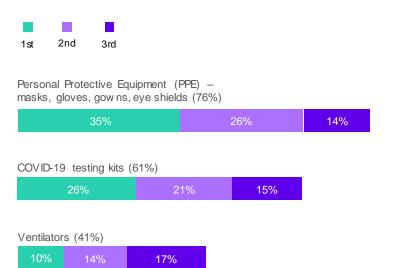
Top 3 Physician Needs

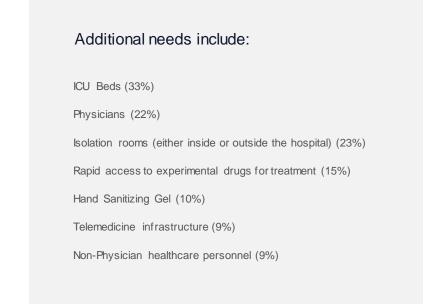
sermo



What are the three most critical needs that your region has to effectively deal with the COVID-19 outbreak?

Overall, personal protective equipment, COVID-19 testing kits and ventilators are the most critical needs.

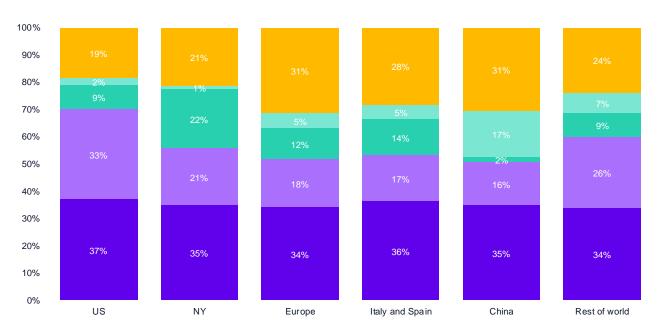






What are the three most critical needs that your region has to effectively deal with the COVID-19 outbreak?

Aside from PPE, the US in particular needs testing kits; NY specifically needs ventilators.



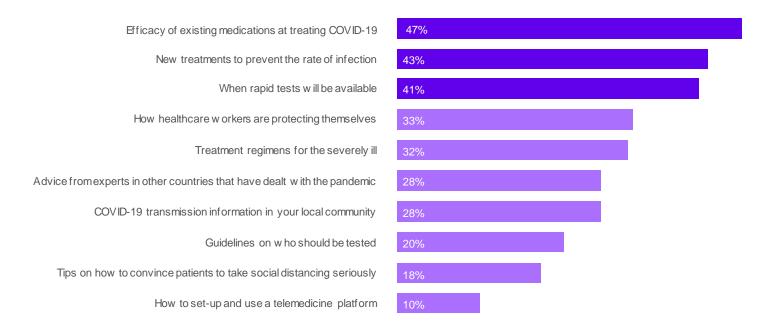
- Others
- Isolation rooms
- Ventilators
- COVID-19 testing kits
- Personal Protective Equipment (PPE)



PROPRIETARY AND CONFIDENTIAL Question 6; N=6227

What are the top three COVID-19 topics you want more information about?

Physicians most want more information about efficacy of existing medications, new treatments to prevent the rate of infection, and the availability of rapid tests.

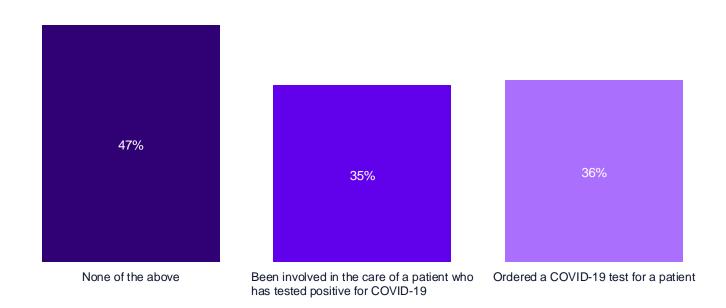




SECTION 4 Average Time for Getting a COVID-19 Test Result sermo

Which of the following activities have you personally done?

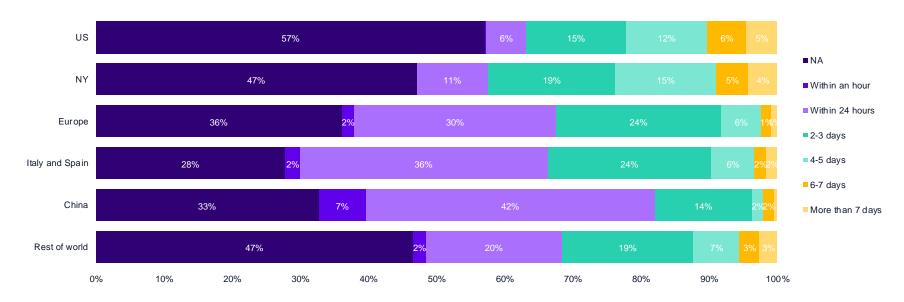
Half of physicians in this sample have personally ordered a COVID-19 test for a patient and/or been involved in care of patient who has tested positive.





How long is the average time in your setting for getting back a COVID-19 test result?

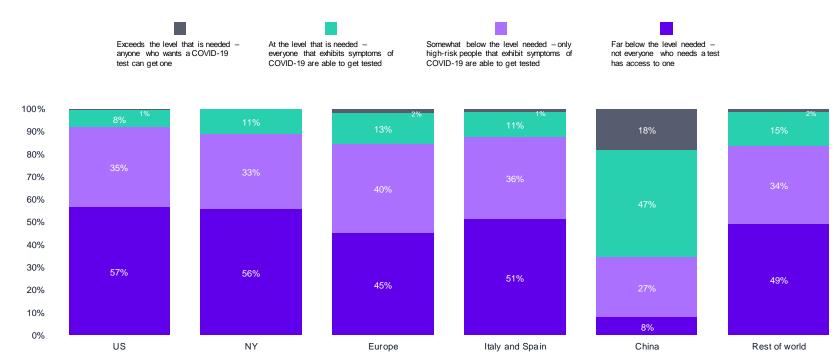
85% of US physicians report testing takes 2-5 days or longer, while nearly half of international physicians report testing is completed within just 24 hours





How would you describe the status of testing for COVID-19 in your region?

Physicians everywhere except China report the availability of testing is below the level that is needed. 91% of US physicians and 83% of international physicians say the status of testing is far to somewhat below what is needed.





SECTION 5

Treatments & Efficacy





Note: data provided is not meant to be the basis of a medical recommendation/treatment plan; if you think you have COVID-19 please follow local protocols and contact a medical professional.

Please indicate which medications, if any, you have personally prescribed or have seen used in your setting to fight COVID-19?

3 most commonly prescribed treatments from a list of 15 options are analgesics (56%), Azithromycin (41%) and Hydroxychloroquine (33%).

	Analgesics (e.g., Paracetamol /	Azithromycin or similar antibiotics	Hydroxychloro quine or Chloroquine	Cough medications	Expectorants (e.g., Mucinex)	Nothing
US	42%	31%	21%	29%	23%	44%
Brazil	63%	48%	35%	24%	13%	20%
Canada	56%	24%	15%	12%	15%	41%
Germany	55%	31%	16%	40%	27%	28%
Spain	81%	64%	61%	34%	31%	11%
France	63%	38%	20%	23%	12%	21%
UK	50%	26%	8%	17%	8%	44%
Italy	62%	53%	50%	26%	23%	17%
Japan	19%	36%	19%	33%	17%	29%
Mexico	73%	40%	38%	13%	17%	13%
NY	53%	38%	23%	33%	22%	33%
China	46%	42%	43%	50%	52%	7%
Rest of w	57%	37%	36%	36%	25%	23%
Overall	56%	41%	33%	30%	24%	27%



Of the medications you have personally prescribed or have seen used, please indicate which ones are most effective.

37% of physicians who have treated COVID-19 patients believe Hydroxychloroquine is the most effective therapy of a list of 15 options.

	Overall (2171)	US (580)	NY (112)	Europe (827)	Italy & Spain (671)	China (109)	Rest of world (543)
Hydroxychloroquine or Chloroquine	37%	23%	25%	37%	62%	44%	55%
Azithromycin or similar antibiotics	32%	18%	25%	32%	45%	33%	48%
Nothing	32%	51%	42%	29%	16%	4%	18%
Analgesics (e.g., Paracetamol/Acetaminophen)	31%	21%	29%	34%	37%	20%	39%
Anti-HIV drugs (e.g. Lopinavir plus Ritonavir)	16%	5%	6%	15%	28%	42%	25%
Cough medications	13%	13%	15%	12%	8%	22%	11%
Compassionate use of experimental drugs (e.g. Remdisivir)	13%	10%	8%	12%	20%	35%	14%
Drugs used to treat flu (e.g., Oseltamivir)	12%	4%	11%	9%	10%	39%	19%
Expectorants (e.g., Mucinex	10%	10%	9%	8%	8%	28%	10%
Interferon-beta	7%	1%	3%	3%	11%	41%	15%
Antihistamines/Decongestants	7%	7%	6%	5%	5%	17%	8%
Plasma from patients who have recovered from COVID-19	7%	3%	6%	4%	6%	48%	6%
Vitamin D	6%	4%	6%	6%	5%	12%	7%
Zinc tablets	5%	6%	10%	4%	2%	8%	4%
Glycopyrolate inhaler	3%	2%	3%	1%	1%	19%	3%



Note: data provided is not meant to be the basis of a medical recommendation/treatment plan; if you think you have COVID-19 please follow local protocols and contact a medical professional.

How have you prescribed hydroxychloroquine or seen it used in your setting in response to COVID-19?

Of global physicians who have treated a COVID-19 patient, 19% prescribed or have seen Hydroxychloroquine prophylactically used for high risk patients, and 8% for low risk patients.

To treat patients that have been diagnosed with COVID-19 and are experiencing severe symptoms



To treat patients that have been diagnosed with COVID-19 and are experiencing mild symptoms



As a prophylaxis for high risk patients



To treat patients that have not been diagnosed with COVID-19 but are experiencing severe symptoms



To treat patients that have not been diagnosed with COVID-19 but are experiencing mild symptoms



As a prophylaxis for low risk patients

8%

symptoms whereas in the US it was most commonly used for high risk diagnosed patients.

Outside the US, Hydroxychloroquine

was equally used for diagnosed

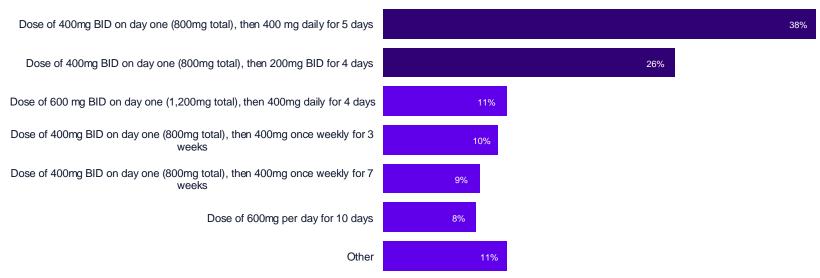
patients with mild to severe



What hydroxychloroquine treatment regimens have you prescribed or have seen used in your setting?

The two most common treatment regimens for Hydroxychloroquine were:

- (38%) 400mg twice daily on day one; 400 mg daily for 5 days.
- (26%) 400mg twice daily on day one; 200mg twice daily for 4 days.





Note: data provided is not meant to be the basis of a medical recommendation/treatment plan; if you think you have COVID-19 please follow local protocols and contact a medical professional.



If COVID-19 results in a ventilator shortage, what do you personally believe should be the hierarchy of criteria for deciding which patients receive a ventilator?

In the event of a ventilator shortage, the top criteria for deciding who should receive a ventilator first was patients with the highest chance of recovery (47%) followed by those most ill and at highest risk of death (22%), then first responders (15%).





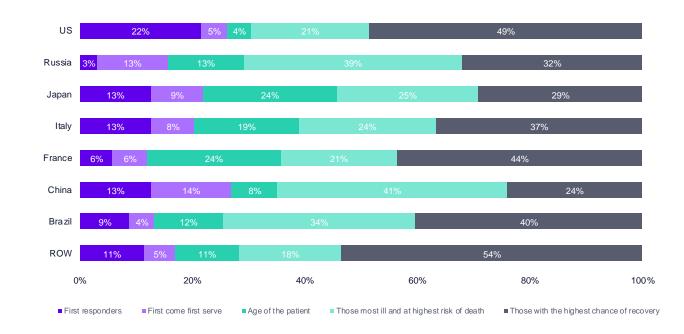
If COVID-19 results in a ventilator shortage, what do you personally believe should be the hierarchy of criteria for deciding which patients receive a ventilator?

In China the priorities were reversed as the most ill and highest risk of death received ventilators.

First responders were more important in the US.

France, Japan, and Italy prioritized age.

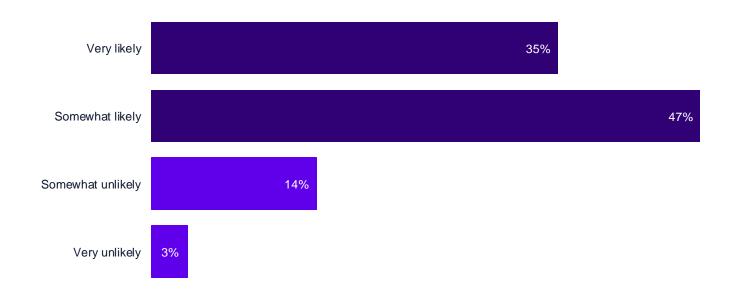
Brazil and Russia prioritized higher risk patients.



SECTION 7 **Second Wave** of Outbreak sermo

How likely are we to see a second wave of COVID-19 in your country?

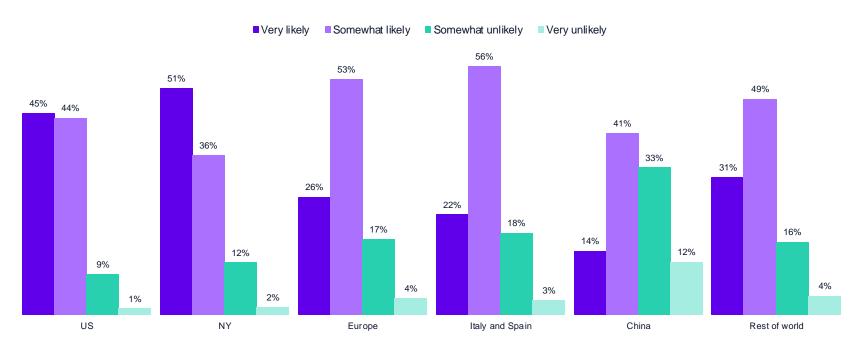
Globally, a great majority of respondents anticipate a second wave of COVID-19 in their country.





How likely are we to see a second wave of COVID-19 in your country?

Second outbreak is anticipated by 89% of US physicians versus 83% globally. In China, only half of physicians believe a second outbreak is likely.





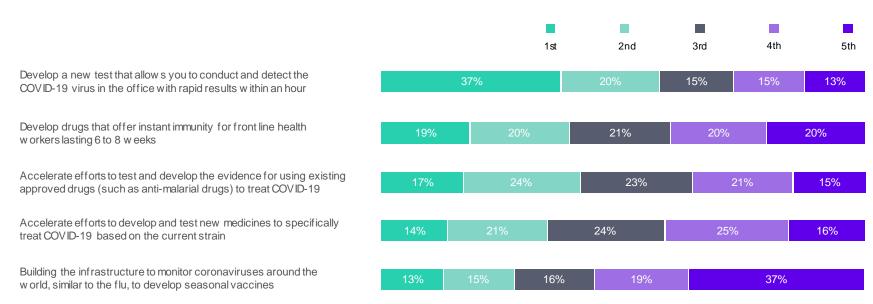
SECTION 8

Physician Requests to Life Science Firms to Lessen the Impact of COVID-19

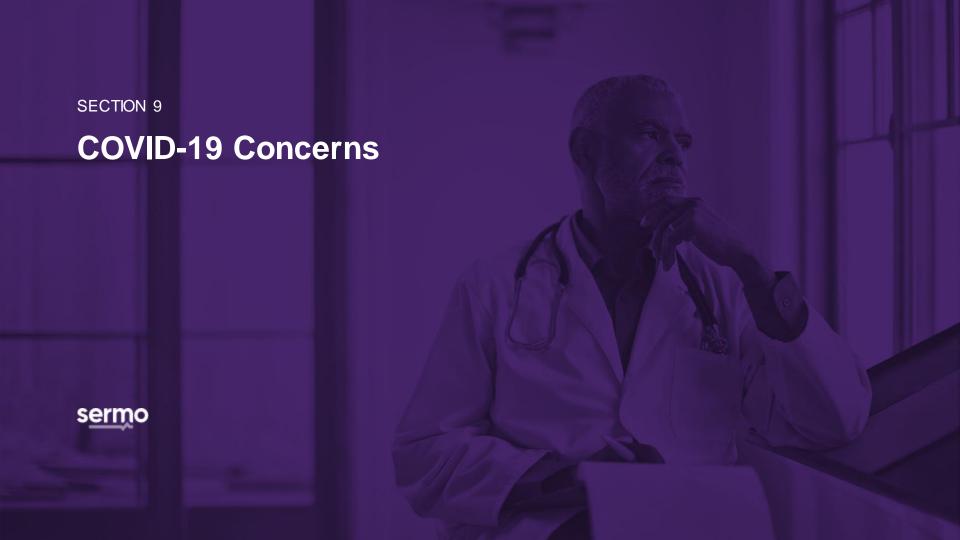
sermo

Which activities should life science firms focus on to lessen the impact of the COVID-19 pandemic?

Physicians most request life science firms develop new rapid tests for COVID-19, followed by new drugs that offer immunity to front-line workers and accelerate efforts to test existing drugs to treat COVID-19.

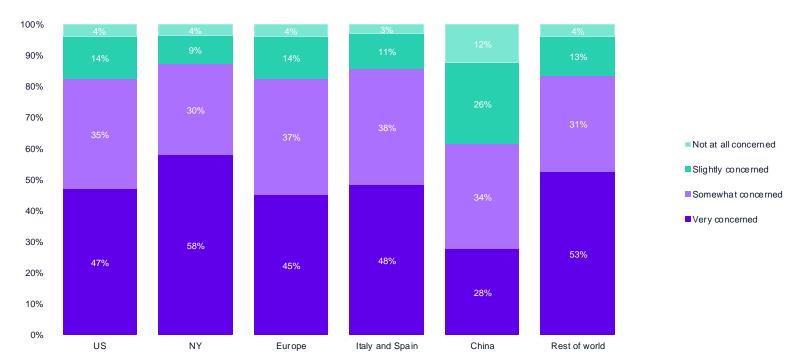






How concerned are you about catching COVID-19 in the next 2 months?

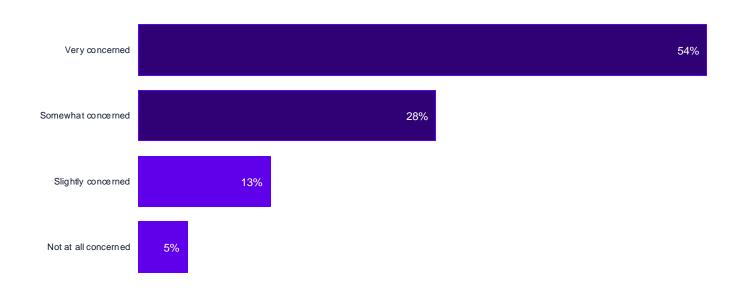
Most physicians are concerned about catching COVID-19 themselves in every region, though a bit less in China.





How concerned are you about giving COVID-19 to your family members in the next 2 months?

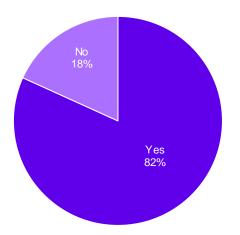
Physicians are deeply concerned about giving COVID-19 to their family members





Have you taken any special precautions at home to limit the possibility of spreading COVID-19 to your family members?

The great majority of physicians report taking special precautions to limit the possibility of spreading COVID-19 to family members.



Special precautions taken include:

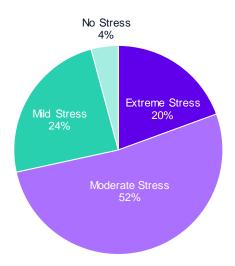
- Handwashing
- Social distancing
- Changing their clothes
- Showering before joining family
- Stay in isolation
- Masks
- Hygiene
- Limiting contact
- Living/sleeping separately from their family



As a result of the COVID-19 pandemic, how would you rate your personal level of stress and that of your patients?

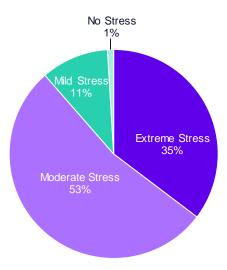
Personal Stress Level

A large majority of MDs in every country report that they themselves are under extreme or moderate stress.



Patient Stress Level

A great majority of physicians in every country report that their patients are moderately or extremely stressed.





Thank you

Please visit <u>sermo.com</u> for more information on the

COVID-19 Real Time Barometer Study and access to

Wave II data next week

