# **THE EVOLVING COVID-19** TREATMENT LANDSCAPE

By Rhoda Schmuecking, President, Ipsos Global Therapy Monitors, Ipsos Virology & Vaccine CoE

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# THE OTHER SIDE OF THE STORY

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Right now, vaccines are still claiming the majority of public attention – but safe and effective treatments are a critical weapon in our battle against COVID-19. Although only a few treatments have been approved for use so far, the COVID-19 therapy development space is a hive of activity, with numerous manufacturers working on repurposing existing drugs and innovating new treatments.

### WHY ARE TREATMENTS SO IMPORTANT?

Emerging news on the real-world impact of COVID-19 vaccines is more positive than we dared to expect a year ago – but they cannot be the only answer to the problem. In some countries, the vaccine rollout is still in its infancy and this will not change overnight. Even when availability is there, anti-vaccination beliefs and vaccine hesitancy mean that many are simply unwilling to vaccinate. (Recent Ipsos/World Economic Forum research among nearly 10,000 unvaccinated adults in 15 countries found that an average of 29% disagreed that they would get a vaccine for COVID-19 if it were available to them – see the full results <u>here</u>.) Then there are those who *cannot* be vaccinated due to conditions that compromise their immune responses. Underlying all of this, no vaccine is 100% effective and a percentage of people who have been vaccinated will still get COVID-19.

Treatments, however, can enable us to minimize the severity of disease, offering hopes of turning a potentially fatal virus into an inherently manageable one. As is happening now with some success, treatments can be used in a hospital setting to reduce the need for emergency measures like ventilation and, ultimately, to reduce deaths. Optimally, an at-home treatment could be used in the early stages of disease

Recent Ipsos/World Economic Forum research among nearly 10,000 unvaccinated adults in 15 countries found that an average of 29% disagreed that they would get a vaccine for COVID-19 if it were available to them to stop infections from advancing, thus reducing hospitalizations – and the overburdening of our healthcare systems – in the first place. We will need the availability of both types of treatment. Furthermore, the rise of new variants is likely to require the availability of multiple effective treatments that could fight the escape mechanism adopted by the virus.

None of this even takes account of post-COVID syndrome, or 'long COVID'. So much about this condition is still unknown and researchers are working hard to pinpoint the prevalence, causes and implications, but one thing is abundantly clear: finding an effective treatment for post-COVID syndrome is paramount.

### THE FOCUS FOR TREATMENT DEVELOPMENT

In general, current development efforts for COVID-19 therapeutics are focused on the following areas:

- Antivirals, which prevent the virus from reproducing
- Immune modulators, including steroids, which help prevent excessive immunological responses to the virus (known as cytokine storms) that are the main cause of organ failure and hospitalization
- Monoclonal antibody (mAb) therapy, where antibodies produced in a lab mimic the immune system's ability to fight off the virus
- Treatments for long COVID, spanning a wide range of approaches.

In addition to private clinical trials being conducted by pharma companies, there are also large-scale, public sector-led trials underway, including the UK Government's <u>Recovery trial</u> (the world's largest clinical trial) and the World Health Organisation's <u>Solidarity trial</u>.

## THE CURRENT COVID-19 TREATMENT LANDSCAPE

As mentioned earlier, several medications have already been approved and are currently available to treat COVID-19. At the time of writing, these include pre-existing drugs used to treat other conditions, e.g. the steroid dexamethasone<sup>1</sup> and the antiviral favipiravir<sup>2</sup>, and drugs newly developed and launched specifically to

treat COVID-19, e.g. the antiviral remdesivir<sup>3</sup>. Additionally, there have been approvals for several mAbs, including sotrovimab, and casirivimab<sup>4</sup> and imdevimab<sup>5</sup>, designed to be delivered together.

The severity of a patient's COVID-19 infection will dictate whether or not they need hospitalization and the type of treatment they are given. While many initial treatments were prescribed in the The focus on drug development is moving towards the creation of a safe and effective at-home early-stage treatment that would defeat COVID-19 in its tracks.

hospital setting, and antivirals such as remdesivir are still only given in the hospital setting, the mAbs are most effective at limiting the spread of infection when administered in the early stages of disease.

The development and approval of these drugs represent a remarkable achievement in terms of pharma's accelerated response to a novel, emerging disease. Collectively, they offer different options with demonstrated efficacy in reducing disease severity and symptoms. The focus on drug development is now moving towards the creation of a safe and effective at-home early-stage treatment that would defeat COVID-19 in its tracks.

## WHAT'S HAPPENING IN REAL-WORLD CLINICAL PRACTICE?

So which treatments are actually being administered to COVID-19 patients in the real world? At the beginning of 2021, Ipsos launched our Syndicated COVID-19 Therapy Monitor to understand the real-world use of COVID-19 treatments, together with treating doctors' perceptions of existing and pipeline drugs (see About the Research for details on methodology).

According to perceptual data from our participating doctors in the US (Jan – Feb 2021), moderate non-hospitalized patients were typically treated with over-thecounter medications, quarantine and rest, with only one in five (20%) receiving a prescription medication. Eight in ten (81%) hospitalized patients were being treated with remdesivir and dexamethasone, respectively, while one in five (20%) were being given bamlanivimab, a monoclonal antibody. (Note: Since the data were collected, both the FDA and its manufacturer Eli Lilly have withdrawn bamlanivimab from the market.)<sup>6</sup> When we looked at actual treatment data provided by participants on their managed patients, clear differences between hospitalized and non-hospitalized patients were again apparent. In line with doctor perceptions, 80% of hospitalized patients were receiving dexamethasone and 75% remdesivir, while 31% of non-hospitalized patients were recorded as receiving steroids.

Additionally, we found that one in five patients seen by participating doctors was considered to have 'long COVID' or 'post-COVID syndrome', with lingering symptoms and/or other health issues arising in the post-acute phase of the illness. Characteristics included an average age of 59 and a BMI of nearly 29, with hypertension being the most common existing co-morbidity. Half were current or previous smokers. Fatigue was considered to be the most frequent persistent symptom.

## THE FUTURE OUTLOOK

The global vaccine roll-out continues, and all signs thus far point to an extremely positive impact, but there remains a critical need for bespoke treatments – both for use in infected patients and to help manage longer-term effects of infection. An optimized 'two-pronged' approach of vaccination plus targeted treatments will ultimately be needed to enable us to defeat this pandemic.



### **ABOUT THE RESEARCH**

The Ipsos COVID-19 Therapy Monitor is a physician-reported syndicated patient record database, capturing prescribing of treatments in hospitalized and non-hospitalized COVID-19 patients. Participating physicians (specialists and primary care physicians) are required to treat a minimum number of patients in a typical month and to personally manage treatment for patients diagnosed with COVID-19. Each wave, participants provide demographic information, de-identified information on a predefined quota of patients seen retrospectively (Patient Record Form), and responses to a perceptual questionnaire.

Data used in this article were provided by 244 physicians in the US reporting on 732 COVID-19 patients seen in consultation between January 2021 – February 2021. Data were collected online.

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