

Life Science Innovations Fight COVID-19

Nearly 200 million people across the globe have contracted COVID-19 with millions of lives ending too soon. Trillions of dollars have been spent combating the pandemic. Getting life back to normal has been largely dependent on reliable tests, treatments and vaccines developed by life science companies - many located here in California. These researchers, scientists, and manufacturers are working tirelessly, in an unprecedented spirit of collaboration, to develop lifesaving medical innovations to help diagnose, treat and prevent this deadly virus so we can get our lives and our economy back on track.

3*

FDA-Approved
Vaccines

389*+

FDA-Approved
Tests

10*

FDA-Approved
Treatments

6,225*

Total
Clinical Trials

Where are companies with FDA-approved vaccines, tests and treatments located?

Northern California

Abbott
Baxter
Cepheid
Eli Lilly
Fresenius Medical Care
Gilead
Grifols
Johnson & Johnson
Pfizer

Los Angeles Region

Baxter
Gilead
Grifols
Johnson & Johnson
Pfizer
Regeneron

San Diego Region

Cue Health
Eli Lilly
Genalyte Inc.
Gilead
Grifols
Johnson & Johnson
Pfizer
Quidel Corporation
Thermo Fisher Scientific



VACCINES

The best weapon to combat COVID-19 and prevent transmission is a vaccine. Vaccines typically require years of research and testing before reaching patients. But over the past year, multiple biopharma companies, embarked on a race to produce safe and effective coronavirus vaccines in record time. To date, three vaccinations have met the FDA's rigorous scientific standards to gain emergency use authorization (EUA) and more than 300 more vaccines are in clinical trials or development.

Biopharma companies are collaborating together in an unprecedented way to increase manufacturing capacity to produce as many COVID-19 vaccine shots as possible. As the life science companies that developed the vaccines are quickly ramping up their own manufacturing capabilities, other biopharma companies are supporting their efforts with increased vaccine production and manufacturing.



TESTING

In the beginning of the pandemic, the most immediate need in the battle against COVID-19 was the development of diagnostic tests to quickly and effectively determine if individuals are infected or were infected with the virus. Companies both large and small swiftly developed these tests, with several receiving emergency use authorization from the U.S. Food and Drug Administration (FDA). Inexpensive test kits or home kits that offer quick results will be the key to curbing the outbreak. Several at home testing kits have been approved by the FDA both prescription and over the counter with many more convenient diagnostic tests on the horizon.



TREATMENTS

There is no cure for COVID-19. Only one treatment has been FDA approved for the disease. Emergency use authorization has been granted for some other treatments with varying effectiveness. Every day, biopharmaceutical researchers are examining existing drugs and developing new therapies to treat severe respiratory symptoms, prevent the virus from growing in the body and alleviating symptoms. Existing medicines are being given to patients with COVID-19, and novel treatments are moving through the clinical trial process and will be available very soon. These antibody and antiviral-based drugs and other treatments will:

- Work to interfere with ways the virus infects cells and reproduces
- Mobilize the immune system against the virus
- Help those in the worst throws of the disease
- Most importantly, lower the overall mortality rate

Biopharma Companies with a CA Presence Developing Diagnostics, Treatments and Vaccines**

Company	Testing	Treatments	Vaccines	Co-manufacturing
Abbott	x			x
AbbVie		x		
Amgen		x		x
Arcturus Therapeutics			x	
AstraZeneca		x	x	x
Augmenta Bioworks		x		
Baxter		x		
Boehringer Ingelheim		x		
Bristol Myers Squibb	x	x	x	
BioN Tech			x	
CalciMedica		x		
Capricor		x		
Cepheid	x			
CSL Behring		x	x	
Cue Health	x			
Eli Lilly		x		x
ExThera Medical		x		
Fresenius Medical Care		x		
Genalyte Inc.	x			

Company	Testing	Treatments	Vaccines	Co-manufacturing
Genentech		x		
Gilead Sciences		x		x
GlaxoSmithKline		x	x	x
Grifols	x	x	x	x
Inovio Pharmaceuticals			x	
Johnson & Johnson		x	x	x
Palisade Bio		x		
Merck		x		x
Novartis		x		x
Pfizer		x	x	x
Quidel Corporation	x			x
Regeneron		x		
Roche Diagnostics	x			x
Roivant Sciences		x		
Takeda		x		x
Thermo Fisher Scientific	x			x
UCB		x		
Vaxart			x	
Vir Biotechnology		x		

Partial List



FUNDING, EQUIPMENT & PARTNERSHIPS

In addition to applying scientific expertise to find ways to tackle the virus, the life sciences industry is providing billions of dollars in funding and in-kind donations to organizations who are on the front lines of combatting COVID-19. They are collaborating with U.S. and global public health leaders on accelerated research and development and are providing medicine, personal protection equipment, testing materials and other critical medical supplies to support patients, healthcare workers, first responders and local governments in addressing this deadly virus. They are also increasing output of existing medicines and expanding manufacturing capabilities and ramping up production capacity, so health authorities are prepared to rapidly supply vaccines and treatments to the public as successful candidates are identified.

"Today, we're seeing the same type of collaboration when it comes to getting this virus under control. I said we ought to treat this like a war. So, I want to thank the [companies] for showing how we can come together to defeat this virus by putting patriotism and public health first."

- President Joe Biden