

# COVID-19 Medicine Update

## Top 4 Medicines that made headlines lately

Parameters	Favipiravir	Remdesivir	Dexamethasone	Hydroxychloroquine
<b>Type of medicine</b>	Antivirals		Steroid	Antimalarial
<b>How does it work in COVID-19?</b>	<p><b>The Chain Terminators:</b> Work by inhibiting an enzyme called RNA dependent RNA polymerase. This enzyme helps coronavirus make more copies of itself. Restricting it means less viral copies leading to reduced number of viruses, less damage in the body, and quicker recovery.</p>		<p><b>The Immune Suppressor:</b> Works by suppressing the massive immune response evoked by the coronavirus, which may cause damage to lungs and other organs.</p>	<p><b>The Entry Checker:</b> Works by interfering with the process of viral entry into the body's cells.</p>
<b>Current status worldwide</b>	<ul style="list-style-type: none"> <li>Approved in Japan for novel influenza strains unresponsive to available antivirals</li> <li>Unlicensed in US and UK</li> </ul>	<ul style="list-style-type: none"> <li>Granted (only) Emergency Use Authorization (EUA) by Food and Drug Administration (FDA) to treat adults and children hospitalized with severe COVID-19</li> <li>EUA is not the same as FDA-approval.</li> </ul>	<ul style="list-style-type: none"> <li>Approved in UK to treat all people hospitalised with COVID-19, who require oxygen, including those on ventilators</li> <li>Unlicensed in US; exclusive recommendations for use of dexamethasone in people with COVID-19 have been released by the National Institutes of Health.</li> </ul>	<ul style="list-style-type: none"> <li>WHO has stopped clinical trial on hydroxychloroquine (HCQ) on June 17, 2020</li> </ul>
<b>Current status in India</b>	Drug Controller General of India (DCGI) provided approval to a pharmaceutical company (Glenmark, Brand name: Fabiflu) for manufacturing and marketing	Drug Controller General of India (DCGI) provided approval to two pharmaceutical companies, Hetero Health Care (Brand name, Covifor) and Cipla (Brand name, Cipremi), for manufacturing and marketing	<ul style="list-style-type: none"> <li>The Ministry of Health and Family Welfare has included dexamethasone in the updated clinical management protocol for COVID-19, after considering the latest available evidence and expert consultations.</li> <li>ICMR has taken a cautious approach towards the use of dexamethasone and is conducting its own trials since:               <ul style="list-style-type: none"> <li>-As per the experts, in India, the number of patients on ventilators is lower than the number of patients who require oxygen.</li> <li>-Safety profile of corticosteroids in people with COVID-19 and having any preexisting conditions remains unclear</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Phase 3 trial is being conducted to check role of hydroxychloroquine for prevention of new infection and adverse outcomes following COVID-19 infection</li> <li>Only approved for prophylaxis in high-risk exposures and contacts</li> </ul>
<b>Who would benefit from it?</b>	People having mild-to-moderate Coronavirus disease	Emergency use for the treatment of people hospitalized with COVID-19.	People who are hospitalised with severe respiratory complications of COVID-19, put on ventilator or oxygen support	Prevention of infection in asymptomatic healthcare workers, frontline workers and high-risk household contacts of confirmed positive cases.
<b>Cautions</b>	<ul style="list-style-type: none"> <li>Hypersensitivity to Favipiravir</li> <li>Pregnancy and breastfeeding mothers</li> <li>Elderly and children, unless advised by your doctor</li> </ul>	<ul style="list-style-type: none"> <li>Hypersensitivity to Remdesivir</li> <li>Severe impairment in kidney functions</li> <li>High level of liver enzymes</li> <li>Pregnant and lactating women</li> <li>Children below 12 years of age</li> </ul>	<ul style="list-style-type: none"> <li>Systemic fungal infections</li> <li>Hypersensitivity to dexamethasone</li> <li>Cerebral malaria</li> <li>Caution in certain conditions like cirrhosis, myasthenia gravis, renal insufficiency, or ulcerative diseases such as peptic ulcer disease or ulcerative colitis. and people at higher risk for osteoporosis</li> <li>Cautious use during pregnancy and lactation</li> </ul>	<ul style="list-style-type: none"> <li>Hypersensitivity to HCQ (or similar compounds), retinopathy, G6PD deficiency, pre-existing cardiomyopathy and cardiac rhythm disorders</li> <li>Prophylaxis in children under 15 years of age</li> <li>Pregnancy and breastfeeding mothers</li> </ul>

**References:**

1. RECOVERY Trial, Oxford University News Release.
2. Hydroxychloroquine & COVID-19. WHO.
3. Clinical Trials Registry, India.
4. COVID-19 Clinical Management Protocol. MoHFW.