

# Experimental COVID-19 Therapies

## Administration in Cases of Swallowing Difficulties

Charts produced 13 March 2020

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Please check [www.covid19-druginteractions.org](http://www.covid19-druginteractions.org) for updates.

No recommendation to use experimental therapy for COVID-19 is made.

Data for many agents are limited or absent; therefore, risk-benefit assessment for any individual patient rests with prescribers.

Drug	Formulation	Comments
Darunavir/cobicistat	Tablets	Manufacturer does not recommend crushing of tablets. However, a recent clinical study in healthy volunteers showed that crushing a tablet containing DRV/c did not significantly impact DRV/c concentrations. (Brown K, et al. <i>Clin Pharmacol Drug Dev</i> , 2019, 8(4):541-548.)
Lopinavir/ritonavir	Tablets	Manufacturer does not recommend crushing of tablets. Use oral solution if unable to swallow tablets. Exposure of lopinavir can be reduced by 45% when the tablet is crushed. (Best BM, et al. <i>J Acquir Immune Defic Syndr</i> , 2011, 58(4):385-91.)
	Oral solution	<ul style="list-style-type: none"> <li>Administer syrup without dilution otherwise there is a risk of precipitation. Rinse the administration feeding tube with milk (not water).</li> <li>Contains propylene glycol (15.3%) and alcohol (42% v/v).</li> <li>As the oral solution contains ethanol and propylene glycol, it is not recommended for use with polyurethane feeding tubes due to potential incompatibility. Feeding tubes that are compatible with ethanol and propylene glycol, such as silicone and polyvinyl chloride (PVC) feeding tubes, can be used.</li> <li>As the oral solution contains alcohol, disulfiram-like reactions may occur with disulfiram or other drugs that produce this reactions (e.g. metronidazole). Coadministration is contraindicated with disulfiram or metronidazole in the SmPC due to the potential risk of toxicity from propylene glycol.</li> </ul> (Kaletra Oral Solution <i>Summary of Product Characteristics</i> , October 2019. Kaletra <i>Prescribing Information</i> , December 2019.)
Remdesivir	IV	IV formulation – recommendations for swallowing difficulties are not applicable.
Favipiravir	Tablets	Tablets can be crushed and mixed with liquid. (Sissoko D, et al. <i>PLoS Med</i> , 2016, 13(3):e1001967.)
Chloroquine	Tablets	It is preferable to avoid crushing tablets; however, chloroquine tablets may be crushed and mixed with jam, honey, pasteurised yoghurt, or similar foods. (National Pharmacy Association, <i>Chloroquine</i> , July 2018.)
	Syrup	Contains propylene glycol, but no recommendations are given in the product label as to compatibility with feeding tubes. (Malarivon <i>Summary of Product Characteristics</i> , November 2018.)
Hydroxychloroquine	Tablets	Manufacturer does not recommend crushing of tablets. (Plaquenil <i>Patient Information Leaflet</i> , Zentiva, March 2018.) However, some sources suggest that tablets can be crushed and dispersed in water. (Healthline, <i>Hydroxychloroquine oral tablet</i> , January 2018.)
Nitazoxanide	Tablets	Use oral suspension if unable to swallow tablets.
	Oral suspension	<ul style="list-style-type: none"> <li>Reconstitute the powder according to instructions in the Prescribing Information.</li> <li>Once mixed, keep container tightly closed, and shake the suspension well before each administration. The reconstituted suspension may be stored for 7 days at room temperature, after which any unused portion must be discarded.</li> </ul> (Alinia <i>Prescribing Information</i> , Romark, April 2017.)
Ribavirin	Capsules	The capsules should not be opened, crushed or broken. Note: ribavirin is a known teratogen. (Rebetol <i>Summary of Product Characteristics</i> , February 2019. Rebetol <i>Prescribing Information</i> , January 2020.)
	Oral solution	Contains propylene glycol, but no recommendations are given in the product label as to compatibility with feeding tubes. (Rebetol <i>Summary of Product Characteristics</i> , February 2019.)