“A disruptive antiviral strategy: protection from infection, not treatment to cure.”

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Viral infections pose a major threat to human health. Vaccines protect from specific infections, yet newly emerging or pandemic viral strains that exhibit genetic drift or reassortment of genes preclude immediate responses using a vaccine strategy. Moreover, for SARS CoV-2, although current vaccines reduce severity of disease, they do not protect from re-infection, resulting in persistent community transmission and outbreaks. The emergence of drug resistance also mitigates against pathogen-specific antiviral drugs. A complementary strategy focusing on the host not the pathogen is the basis for development of broad-spectrum antivirals.