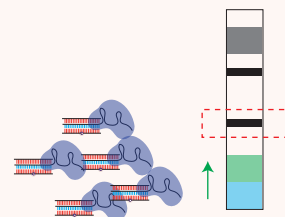
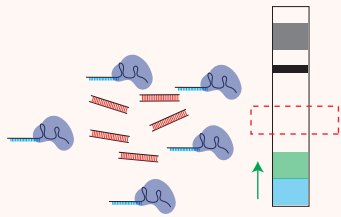


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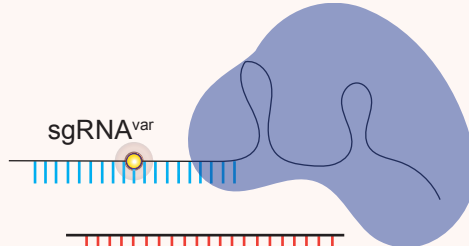
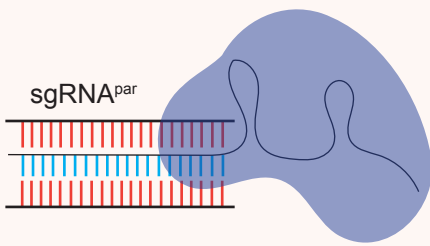
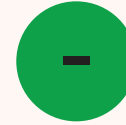
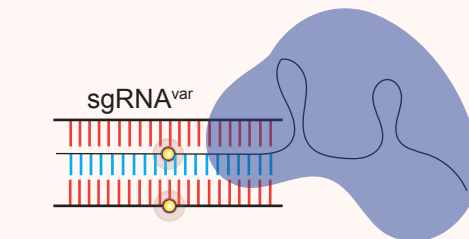
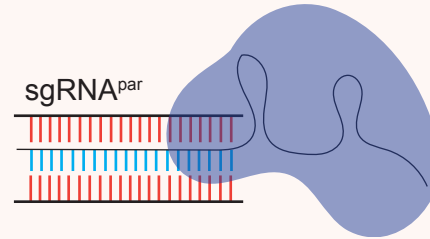
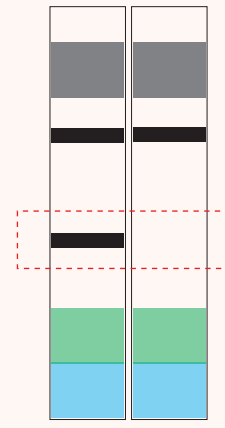
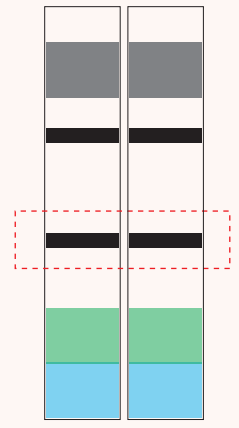
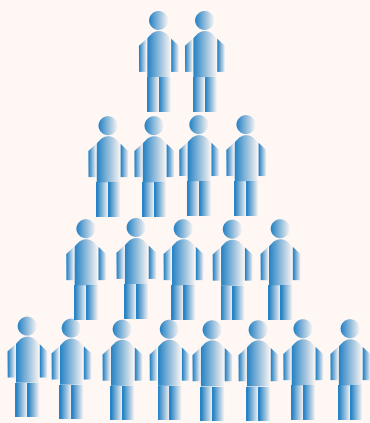
Supplementary appendix

This appendix formed part of the original submission. We post it as supplied by the authors.

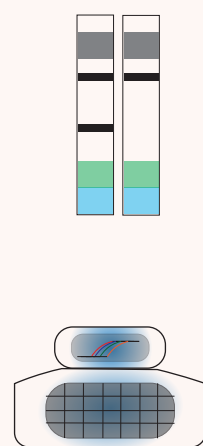
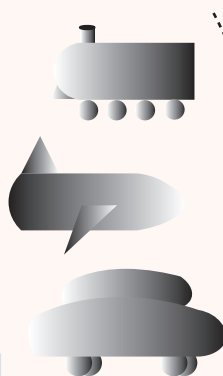
Supplement to: Chakraborty D, Agrawal A, Maiti S. Rapid identification and tracking of SARS-CoV-2 variants of concern. *Lancet* 2021; published online March 22.
[http://dx.doi.org/10.1016/S0140-6736\(21\)00470-0](http://dx.doi.org/10.1016/S0140-6736(21)00470-0).

ANo target recognition,
no signalTarget recognition,
signal on LFA

CRISPRDx readout

Parent strain locus 1
(not mutated)Parent strain locus 2
(not mutated)Mutant strain locus 1
(not mutated)Variant strain locus 2
(mutated)locus 1 locus 2
Parent strainlocus 1 locus 2
Variant strain**B**

International/domestic passengers



CoV2 + Variant -

CoV2 + Variant +

CoV2 - Variant -

Soft
quarantineHard
quarantineNo
quarantine

First pass variant
screening
(low resolution, rapid)
[CRISPRDx, genotyping qPCR]
e.g. N501Y, E484K etc.

Subsequent management
protocol
(sequencing/follow-up based
on presence of variants
or disease severity)

Figure legend

Schematic for early detection of CoV2 variants of concern. **(A)** A lateral flow assay using CRISPRDx for the identification of a prominent signature in a variant is shown. A highly specific Cas protein can distinguish between the parent and variant strains and can be coupled to a paper strip based readout⁵. **(B)** Early detection of variants at entry points for domestic and international passengers can be used for streamlined courses of action. Based on presence of signature mutations, appropriate quarantine measures can be adopted as shown.