Twitter Thread by Roland Baker

Roland Baker
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Moderna's mRNA-1273 & Pfizer's BNT162b2 consist of mRNA 3821 nucleotides long encoding *all* 1273 amino acids of the Spike including a 2 Proline-stabilized RBD. This is a plain English Description of the code: https://t.co/w7koHyMJjL

The article mentions a “10 nucleotide linker” (GCAUAUGACU) in the poly-A tail. This is described in the patent link below (Modification of RNA, producing an increased transcript stability and translation efficiency)
https://t.co/pC8nynqjNv

Here is a link to the full mRNA code if you wish to download it, blast it or make up a batch in your garage lab:
https://t.co/SrTUKYleGn

> The mRNA sequences used for Moderna mRNA-1273 & Pfizer BNT162b2 mRNA vaccines for COVID-19 (Direct link in Word Format). WHO International Nonproprietary Name Program # 11889 "Messenger RNA encoding the full-length SARS-CoV-2 spike glycoprotein"https://t.co/zTb7B0Apic pic.twitter.com/8tZxAZWI5S
>
> — Roland Baker (@RolandBakerIII) December 24, 2020

An overview of the encoded spike protein:
https://t.co/4hSPjnwd6m

> Moderna's mRNA-1273 & Pfizer's BNT162b2 consist of mRNA 3821 nucleotides long encoding *all* 1273 amino acids of the Spike including a 2 Proline-stabilized RBD and this includes the NTD (blue in monomer, dark gray in trimer attached to antibodies). AA 64, 66, 187, 213, 214 red. pic.twitter.com/4MX1ByAsrR
>
> — Roland Baker (@RolandBakerIII) December 19, 2020

Initial mouse studies:
https://t.co/6WwNBrkIU6

> News: NIH-Moderna investigational COVID-19 vaccine shows promise in mouse studies https://t.co/7JYuUyZT45

— NIH (@NIH) August 5, 2020

The Pfizer-BioNTech vaccine’s brand name is now Comirnaty. koe mir' na tee
https://t.co/aITEWhBnaH

The backstory on mRNA vaccines:
https://t.co/t8kY76pbQc

More History:
https://t.co/R4dvvSofB2

Understanding optimized Modulation of untranslated regions (UTRs):
https://t.co/RttDHCO11j

Understanding codon optimization and why we prefer G & C
https://t.co/NQ3W2RaV3Z