Covid-19 Vaccines and Treatments in Development - Updated Sept 9, 2020

Yellow – Morally Produced

**AVM Biotech – AVM-0703**
Treatment/Preventative
Steroid supercharge patient immune system
Steroid supercharges immune system, targeting T-cells, NKT (Natural Killer T) cells which attack and kill Covid-19 virus. [www.avmbiotech.com](http://www.avmbiotech.com)

**Israel – Pluristem**
Using placenta donated from newborn babies
[https://www.pluristem.com/the-placenta-difference/](https://www.pluristem.com/the-placenta-difference/)

**BCG Vaccine: No cells involved**
[https://www.fda.gov/media/78331/download](https://www.fda.gov/media/78331/download)

**British American Tobacco (BAT)**
Tobacco company in Australia – morally produced using tobacco leaves. [https://www.telegraph.co.uk/business/2020/04/01/cigarette-maker-claims-coronavirus-vaccine-breakthrough/](https://www.telegraph.co.uk/business/2020/04/01/cigarette-maker-claims-coronavirus-vaccine-breakthrough/)

**Novavax – NVX-CoV2373**
Uses Insect cells:
[https://www.novavax.com/page/8/vaccine-technology](https://www.novavax.com/page/8/vaccine-technology)
Matrix uses Sapaonin:
[https://www.novavax.com/page/10/matrix-m-adjuvant-technology](https://www.novavax.com/page/10/matrix-m-adjuvant-technology)

**Athersys – Multistem - Treatment**
Uses Bone Marrow Adult Stem Cells

**Sorrento Therapeutics**
STI-6991 is an I-CellTM COVID-19 cellular vaccine made of K562 cells expressing membrane-bound S1 protein of the SARS-CoV-2 virus
K562 cells – from 53 year old female cancer patient
And

Red – Uses Aborted Fetal Cells

**Moderna And NIAID**
Vaccine candidate: mRNA-1273
HEK 293 in Development and Testing;
NIAID using HEK in Spike Protein
And
[https://www.nature.com/articles/s41586-020-2622-0](https://www.nature.com/articles/s41586-020-2622-0)
And
And
And
[https://science.sciencemag.org/content/367/6483/1260.full](https://science.sciencemag.org/content/367/6483/1260.full)

**Johnson & Johnson/Janssen Tech.**
Ad-Vac – uses aborted fetal PER C6
And
And

**Johnson & Johnson/Emergent Biosolutions**

**Inovio Pharmaceuticals**
Vaccine candidate: INO-4800
Uses HEK-293 cells in MERS-HCoV Platform
Patent no. 10,548,971 Feb 4, 2020
Sanofi Pasteur Sars-CoV – insect cells
And

Sanofi Partners with GSK
Insect cells and AS03 adjuvant
https://www.wsj.com/articles/glaxosmithkline-sanofi-team-up-for-coronavirus-vaccine-11586875480?mod=lead_feature_below_a_pos1

Codagenix and Serum Institute
CDX-CoV – Uses Vero Cells

JPII Medical Research Inst. And CET (Cellular Engineering Technology)
Uses stem cell from postnatal placental tissue
https://www.jp2mri.org/

Sinovac Biotech
PiCoVacc – Uses Vero Cells

Regeneron – Sanofi
Treatment for Covid-19
Kevzara – Uses Blood donor and Chinese Hamster Ovary (CHO cells)
Package insert:
http://products.sanofi.us/Kevzara/Kevzara.pdf
And Patent:

The University of Oxford
Vaccine candidate: ChAdOx1 and AZD1222
Uses HEK-293 cells.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5516308/
And
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3396660/

And partnership with Merck Germany:

With AstraZeneca AZD1222 – HALTED DUE TO ADVERSE REACTIONS IN TRIALS
And vaccine name change:
https://www.precisionvaccinations.com/vaccines/azd1222-sars-cov-2-vaccine

CanSino Biologics
Vaccine candidate: Ad5-nCoV
http://www.cansinotech.com/html/1///179/180/408.html
Using HEK 293 cells (See page 25)

University of Pittsburgh
Using HEK-293
And partnership with Merck Germany:

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Merck and IAVI
Using Merck’s Ervebo (Ebola Vaccine) Platform
Uses Vero cells

BioNTech and Pfizer
Uses K562 cells in protein expression
Patent No. 10,669,322

Institute of Microbiology, Chinese Academy of Sciences, Zhifei Longcom
RBD-Dimer Uses Chinese Hamster Ovary cells
https://theprint.in/health/cansino-moderna-novavax-a-list-of-covid-vaccines-under-clinical-trials-across-the-world/454051/

Medicago/GSK/Dynavax
Uses VLPs produced in plant cells

Curevac
mRNA uses patients muscle cells to build antibody; imitates the natural viral infection and activates our own immune defense system.
https://www.curevac.com/covid-19

Massachusetts Eye and Ear
Using HEK-293 AAV Covid Adenovirus vector

Lindsay F. Kimball Research Institute, New York Blood Center and Beijing Institute of Microbiology and Epidemiology
Uses HEK-293 cells
https://www.nature.com/articles/s41423-020-0400-4#Sec1