Covid-19 Vaccines and Treatments in Development - Updated Jan 12, 2021
Listed in Alphabetical Order

Altimmune
Based on intranasal vaccine proprietary technology; Uses PER-C6 Aborted fetal cells
https://www.globenewswire.com/news-release/2020/02/28/1992600/0/en/Altimmune-Completes-First-Development-Milestone-Toward-a-Single-Dose-Intranasal-COVID-19-Vaccine.html
And Patent:
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10,183,069.PN.&OS=PN/10,183,069&RS=PN/10,183,069

AstraZeneca
Vaccine candidate: ChAdOx1 and AZD1222 Uses HEK-293 cells and MRC-5 cells
(Also partnered with University of Oxford listed below)
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5516308/
And
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3396660/

Athersys – Multistem - Treatment
Uses Bone Marrow Adult Stem Cells
https://seekingalpha.com/article/4332788-athersys-now-in-play-for-covidminus-19-fda-fast-tracked-therapy-for-ards

AVM Biotech – AVM-0703 Treatment/Preventative
Steroid supercharge patient immune system
Steroid supercharges immune system, targeting T-cells, NKT cells which attack Covid-19 virus**.**
www.avmbiotech.com

BCG Vaccine: No cells involved
https://www.fda.gov/media/78331/download
And
https://www.tribuneindia.com/news/nation/bcg-vaccine-to-be-tested-in-covid-19-battle-71090

BioNTech and Pfizer
Uses K562 cells in protein expression; Patent No. 10,669,322
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10,669,322.PN.&OS=PN/10,669,322&RS=PN/10,669,322
NOTE: Tested on HEK-293; not in the product
https://www.biorxiv.org/content/10.1101/2020.09.08.280818v1.full.pdf

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/

CanSino Biologics
Vaccine candidate: Ad5-nCoV http://www.cansinotech.com/html/1///179/180/408.html
Using HEK 293 cells (See page 25)
http://www.jshealth.com/jgzn/zzjg/ymlcpjs/ymlcpjs_gzdt/201612/W020161214426550507006.pdf

Codagenix and Serum Institute
CDX-CoV – Morally produced - Uses Vero Cells
https://patents.google.com/patent/US20190233476A1/en?assignee=codagenix&oq=codagenix

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

Inovio Pharmaceuticals
Vaccine candidate: **INO-4800 Uses HEK-293 cells Patent no. 10,548,971 Feb 4, 2020**
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10,548,971.PN.&OS=PN/10,548,971&RS=PN/10,548,971

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/

Israel – Pluristem
Using placenta donated from newborn babies
https://www.pluristem.com/the-placenta-difference/
https://www.jpost.com/health-science/israeli-cell-therapy-to-treat-acute-covid-19-patients-prevent-ards-621016

Johnson & Johnson/Janssen Tech.
Ad-Vac – Uses aborted fetal PER C6
https://www.jnj.com/johnson-johnson-announces-a-lead-vaccine-candidate-for-covid-19-landmark-new-partnership-with-u-s-department-of-health-human-services-and-commitment-to-supply-one-billion-vaccines-worldwide-for-emergency-pandemic-use
And
https://www.janssen.com/infectious-diseases-and-vaccines/patented-technologies
And
Johnson & Johnson/Emergent Biosolutions
https://investors.emergentbiosolutions.com/news-releases/news-release-details/emergent-biosolutions-signs-agreement-be-us-manufacturing?field_nir_news_date_value[min]=

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

Lindsley F. Kimball Research Inst, NY Blood Ctr & Beijing Inst Microbiology & Epidemiology
Uses HEK-293 cells
https://www.nature.com/articles/s41423-020-0400-4#Sec1

Massachusetts Eye and Ear
Using HEK-293
AAV Covid Adenovirus vector
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=12&f=G&l=50&co1=AND&d=PTXT&s1=Vandenberghe&OS=Vandenberghe&RS=Vandenberghe

Medicago/GSK/Dynavax
Uses VLPs produced in plant cells (CoVLP)
https://www.ctvnews.ca/health/coronavirus/the-hunt-for-a-vaccine-canadian-company-begins-human-testing-of-covid-19-candidate-1.5022960
And with GSK adjuvant
https://www.medicago.com/en/newsroom/gsk-and-medicago-announce-collaboration-to-develop-a-novel-adjuvanted-covid-19-candidate-vaccine/

Merck and IAVI
Using Merck's Ervebo
(Ebola Vaccine Platform)
Uses Vero cells
https://www.businesswire.com/news/home/20200526005274/en/

Moderna And NIAID
Vaccine candidate: **mRNA-1273**
Uses HEK 293 aborted fetal cells in design, development, protein production and testing
https://www.nejm.org/doi/full/10.1056/NEJMoa2022483
And
https://www.nature.com/articles/s41586-020-2622-0
And
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10,583,203.PN.&OS=PN/10,583,203&RS=PN/10,583,203
And
https://www.biocentury.com/article/304254/moderna-novavax-among-biotechs-working-on-novel-virus-but-vaccine-at-least-a-year-out
And
https://science.sciencemag.org/content/367/6483/1260.full
And
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10,583,203.PN.&OS=PN/10,583,203&RS=PN/10,583,203
And – full facts in one document:
https://cogforlife.org/2020/11/16/moderna-covid-19-vaccine-facts-not-fiction/

Novavax – NVX-CoV2373
https://ir.novavax.com/news-releases/news-release-details/novavax-identifies-coronavirus-vaccine-candidate-accelerates
Uses Insect cells:
https://www.novavax.com/page/8/vaccine-technology
Matrix uses Saponin:
https://www.novavax.com/page/10/matrix-m-adjuvant-technology
Tested on HEK aborted fetal cells:
https://www.biorxiv.org/content/10.1101/2020.08.06.234674v1.full

Pfizer
See BioNTech/Pfizer listing above

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:
https://patents.google.com/patent/US8080248B2/en

Regeneron
Antibody Treatment for Covid-19 REGN-CoV2 – Uses Blood donor and Chinese Hamster Ovary (CHO) in the product
Used HEK-293 to develop Spike Protein and in testing
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=10,787,501.PN.&OS=PN/10,787,501&RS=PN/10,787,501
And
https://science.sciencemag.org/content/sci/suppl/2020/06/15/science.abd0831.DC1/abd0831_Baum_SM.pdf

Sanofi Pasteur Sars-CoV – insect cells
https://www.hhs.gov/about/news/2020/02/18/hhs-engages-sanofis-recombinant-technology-for-2019-novel-coronavirus-vaccine.html
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

Sinovac Biotech
PiCoVacc – Uses Vero Cells
https://www.news-medical.net/news/20200421/PiCoVacc-vaccine-candidate-for-COVID-19-effective-in-animal-trials.aspx
UPDATE - HEK cells used to test final product:
https://science.sciencemag.org/content/sci/suppl/2020/05/05/science.abc1932.DC1/abc1932_Gao_SM.pdf

Sorrento Therapeutics
STI-6991 is an I-Cell™ COVID-19 cellular vaccine made of K562 cells from 53 year old female cancer patient
https://finance.yahoo.com/news/sorrento-launches-novel-cell-covid-140059499.html
And
https://www.sciencedirect.com/science/article/pii/S2590098620300130?via%3Dihub

Symvivo
Uses e-Coli and Bifidobacterium
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=2&f=G&l=50&co1=AND&d=PTXT&s1=symvivo&OS=symvivo&RS=symvivo

The University of Oxford
Vaccine candidate: ChAdOx1 and AZD1222 Uses HEK-293 cells and MRC-5 cells
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5516308/
And
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3396660/

The University of Oxford - partnership with Merck Germany:
(Note: Merck Germany is not the same as Merck USA)
https://www.prnewswire.com/in/news-releases/merck-supports-jenner-institute-to-reach-first-milestone-in-covid-19-vaccine-manufacturing-891225678.html

With AstraZeneca AZD1222
https://www.astrazeneca.com/content/astraz/media-centre/press-releases/2020/astrazeneca-and-oxford-university-announce-landmark-agreement-for-covid-19-vaccine.html
And
https://www.bitchute.com/video/AmUWT3xEZt7F/

University of Pittsburgh
Using HEK-293
https://pittsburgh.cbslocal.com/2020/04/02/university-of-pittsburgh-medical-school-coronavirus-potential-vaccine-unveiled/
Linked in the article: Materials and Methods
https://www.thelancet.com/pdfs/journals/ebiom/PIIS2352-3964(20)30118-3.pdf

Valneva
VLA2001
Uses Vero (monkey kidney) cells
https://www.precisionvaccinations.com/vaccines/vla2001-covid-19-vaccine

Vaxart VXA-CoV2-1
AD5 vector patent – HEK-293
http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=9&f=G&l=50&co1=AND&d=PTXT&s1=vaxart&OS=vaxart&RS=vaxart