

PATENTS, LICENSING AND COVID-19



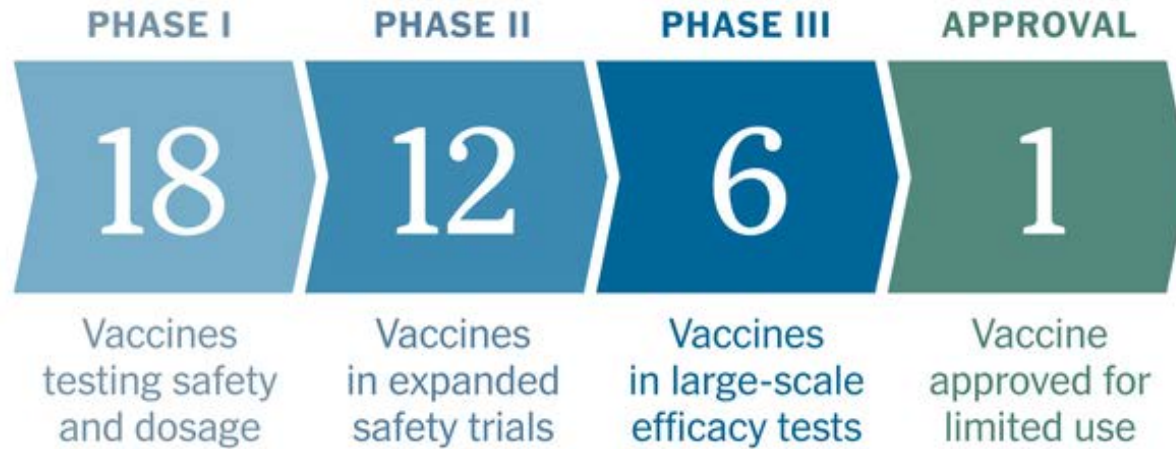
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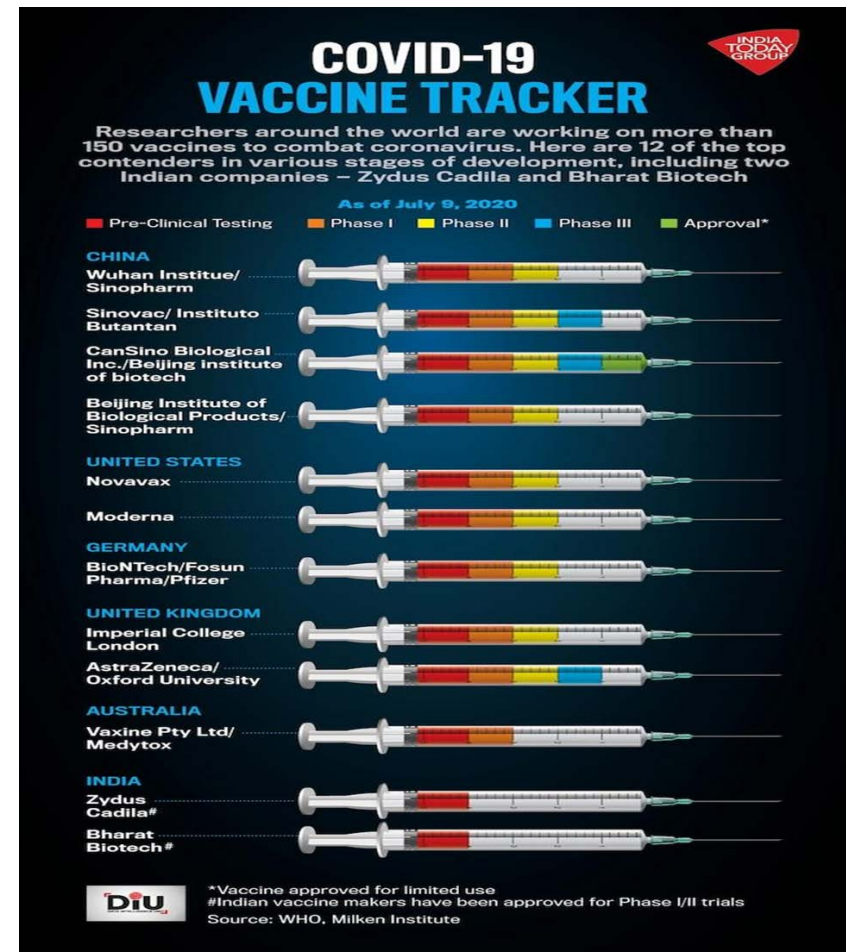
30 July 2020

More than **165 coronavirus vaccines**
are under development:



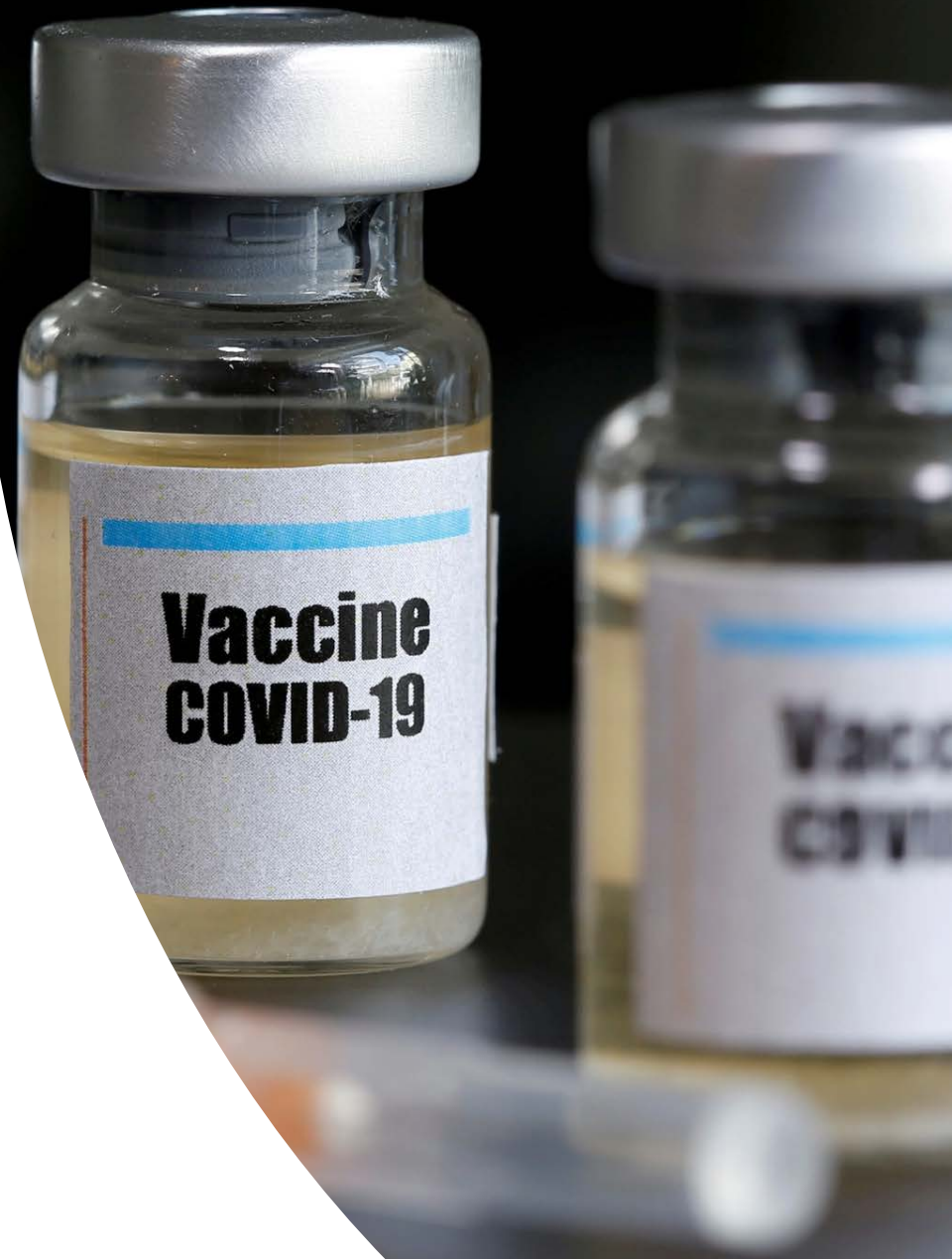
Race for the treatment and vaccine

- The promising treatments for COVID-19 are patented:
 - Favipiravir (used to treat influenza)
 - Lopinavir and Ritonavir combination (aka Kaletra, to treat HIV/Aids)
 - Remdesvir (a medicine developed for Ebola).
- The leading vaccines all contain patented processes and products



Vaccines are complex

- Typical pharma product patented by a single company
- Vaccines contain many components that may be developed by several industry partners
- Common elements
 - Antigen (ie using dead virus cells to trigger immune learning and response)
 - Adjuvants or pharmacological agents (boost immune response)
 - Excipients (substances that stabilize active ingredients or improve their solubility)



Options for Licensing

- Intellectual property may impact the price and accessibility of treatment – what can governments and policymakers do to unlock potential solutions?
 - Open source (AbbVie waived patent rights associated with the Kaletra; UNAID and Oxfam letter calling for all vaccines, treatments and tests to be patent-free and available to all)
 - Patent pools/blanket licence agreements/C-TAP/COVID pledge (Costa Rica, EU)
 - Compulsory licence (Chile)
 - Government use/march-in rights
 - Public-private partnerships
 - Industry cross-licensing

Will pharma commit to delivering affordable therapeutics against COVID-19?

by Yannis Natsis | Apr 6, 2020 | COVID-19, Universal Access and Affordable Medicines | Analysis & Opinion



Beyond the headlines...

“IP is not a problem... it is IP management, that is a problem.”

- Martin Friede, WHO
Coordinator of the Initiative
for Vaccine Research



Option: Compulsory Licensing

- Compulsory licensing
 - Not possible in all areas (eg CLs in EU are only for export)
 - Restrictions on ability to import under a CL
 - Test data protection
 - Technical skill and know-how is not transferred
 - Impact on continuing R&D and innovation



Option: Exerting Rights under a Public-Private Partnership

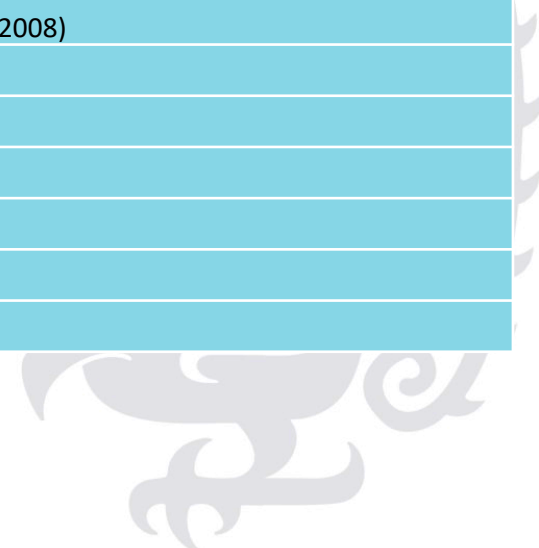
- Public-private partnerships
 - Moderna and NIH
 - Sinopharm and government lab/military
 - Several universities involved in many efforts
- Joint ownership of the patents
 - What are the exploitation and licensing rights of each owner?



Can a joint owner exploit *without* the consent of the other, and paying no royalty to the other?

- Scientists from different organisations collaborate – such collaborations should be encouraged but could create difficulties and problems with commercialisation ...

Australia	Yes	Section 16(1) Patents Act 1990
Canada	Yes	<i>Forget v. Specialty Tools of Canada Inc</i> (1995) 62 CPR (3d) 537
China	Yes	Article 99(3) Patent Act
France	Yes	Article L. 613-29 Intellectual Property Code
Germany	Yes	Section 743(2) German Civil Code
Great Britain	Yes	Section 36(2)(a) Patents Act 1977
Hong Kong	Yes	Section 54(2) Patents Ordinance
India	Yes	Section 50(2) Patents Act 1970
Italy	Yes	Italian general law
Japan	Yes	Article 73(2) The Patent Law
Malaysia	Yes	Article 15 Patent Law (as amended 2008)
New Zealand	Yes	Section 63(2) Patents Act 1953
Singapore	Yes	Section 46(2)(a) Patents Act
South Africa	No	Section 49(2)(a) Patents Act 1978
Sth Korea	Yes	Section 40 Patents Act 1983
Thailand	Yes	Section 40 Patent Act BE 2522
United States	Yes	35 USC 262



- Can a joint owner license that joint owner's share of a patent **without** the consent of the other?

- Can a joint owner assign that joint owner's share of a patent **without** the consent of the other?

Australia	Yes	Section 16(1) Patents Act 1990
Canada	Yes	<i>Forget v. Specialty Tools of Canada Inc</i> (1995) 62 CPR (3d) 537
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France	Yes	Article L. 613-29 Intellectual Property Code
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Australia	No	Section 16(2) Patents Act 1990
Canada	Yes	<i>Forget v. Specialty Tools of Canada Inc</i> (1995) 62 CPR (3d) 537
China	No	Article 15 Patent Law (assignment = exercise a right)
France	Yes	Article L.613-29 Intellectual Property Code (co-owners pre-emption)
Germany	Yes	Section 747 German Civil Code
Great Britain	No	Section 36(3) Patents Act 1977
Hong Kong	No	Section 54(3) Patents Ordinance
India	No	Section 50(3) Patents Act 1970
Italy	Yes	AIPPI – Italian general law
Japan	No	Article 73(1) The Patent Law
Malaysia	Yes	Section 40 Patents Act 1983
New Zealand	No	Section 63(3) Patents Act 1953
Singapore	No	Section 46(3) Patents Act
South Africa	No	Section 49(2)(b) Patents Act 1978
Sth Korea	No	Article 99(2) Patent Act
Thailand	No	Section 40 Patent Act BE 2522
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Option: Cross-licensing in the industry

- Several pros and cons
 - Fair and equitable remuneration
 - Enhanced access via quick production
 - Wide distribution within each territory
 - Potential for infringement claims
 - Competition issues



Conclusion: Trilogy of Problems

- The problem – patents?
- A bigger problem – production and distribution networks
- Another problem – vaccine nationalism
 - Pre-purchasing commitments and export bans
 - Quick approval of home-grown vaccine
 - Geopolitics of vaccines (as a strategic asset)

