



Cover Story

Chained Globalisation

702 **Prof. Johan G. (Hans) Blickman:**
On the Threats to Imaging...Should We
Be Worried?

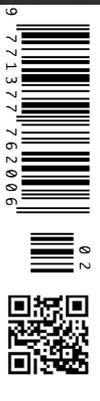
706 **Dr Christina Åkerman:**
Restoring Healthcare to Its Purpose

712 **Prof Henrique MG Martins:**
Digital Health Diplomacy in Chained
Globalised Health Context

716 **Prof. Arch. Simona Agger Ganassi:**
From Globalisation to a Health
Supportive Global Planet

728 **Dr Susan Henshall:**
Elevating Cancer Care to Global Level

746 **Dr Teresa Perillo, Dr Lorenzo
Ugga, Dr Renato Cuocolo:**
Radiomics in the Imaging of Brain
Gliomas: Current Role and Future
Perspectives





Coronavirus, Tensegrity and CSR: Year of Living Dangerously

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The COVID-19 vaccine development is currently central news globally. With recently reported successes, however, the focus is shifting from the very availability of a vaccine to manufacturing and distribution aspects. It is the pharmaceutical sector that will be playing the key role in freeing the world from the disease. A business expert argues that companies should embrace the corporate social responsibility ethos to subside their corporate interests for the greater benefit of the humanity.



Key Points

- The race for a coronavirus vaccine is coming closer to the finishing line.
- Pharmaceutical companies are aware of the role they will play in jumpstarting the next chapter of our world.
- CSR might function as a way to attenuate the commercial drive of the companies into a social interest to promote general prosperity.

Factor for Globalised Acceleration

COVID-19 has contributed, since early 2020, to global business acceleration. The spread of this virus has reminded us of the globalised nature of our existence, and just how interrelated countries and continents are. And how vulnerable they have become.

We can borrow Scott Galloway's concept that the coronavirus acts as an accelerator of change, forcing the technology to speed up its cycle of innovation (Galloway 2020). What was going to happen in two or three years, is happening right now. If certain sectors were losing momentum, or stalling, it is clear that the pandemic has pushed for a need to wake up, shake up and innovate. With no choice.

The economy in general and certain sectors in particular have suffered enormous losses. The pharmaceutical and life sciences sectors have, on their own, benefitted from a fair growth spurt even if in the past they had fallen victim to scandals and been seen as villains, unethical and ruthless players in the market. Now, many companies in the sectors are enjoying their place in the sun.

An unusual American architect and an accidental inventor, Buckminster Fuller coined, around the 1960s, the term 'tensegrity': a contraction of 'tensional integrity', a notion

of stable self-balance structures, based on the fact that while being in constant tension, they achieve mechanical stability and compression without disassembling. We can picture the current coronavirus vaccine race as a tensegrity moment, where multiple forces are creating tension, and while all of the forces are constantly pulling, a certain stability is achieved.

This article aims to give an overview of how COVID-19 and the vaccine developments will be influenced by corporate social responsibility (CSR) and how the future months will require a constant exercise of 'tensegrity'.

Solution Remains the Same

The cornerstone of the COVID-19 solution has always been, since the appearance of the virus, the discovery of a vaccine. Measures such as lockdowns or forms of social distancing have been applied, but they all seem too unnatural for the population: people believe the only real alternative will be the traditional vaccine.

In these last months, we have witnessed how medical innovation around the production of vaccines and clinical trials has, luckily, been influenced by technology, such as AI-empowered drug repurposing (Mohanty et al. 2020).

Traditionally, vaccines take many years to develop, and in

this case the goal is to manufacture (and distribute) one in less than 18 months. In the hopes of speeding things up, funding, in many cases, has been provided by the companies themselves but also by governments and other related entities (the Pfizer and BioNTech initiative has been operating without government help).

This is why the use of new technologies (such as AI) is essential in the fast production of the new vaccines, as they will speed up the process (Kaushik and Raj 2020). At the same time, companies have understood that the pandemic conditions them to act innovatively.

COVID-19: Game Changer Not Without Risk

The rules of secrecy between pharmaceutical companies might have to be put on hold, so as to allow constant and balanced developments in R&D from all competing firms. More intense government regulation will probably appear in the months to come, in order to prevent abuses from producers and other companies in the supply chain.

Some companies (Roche, Sanofi and Johnson & Johnson), in the context of the complexities of the first clinical trials, were able to produce statements engaging themselves to share resources and clinical trial data in order to increase testing capacity and develop treatments.

Gilead Sciences has recently obtained an emergency use authorisation for Veklury (remdesivir), which allowed them to raise up to €736 million (\$873 million) in revenue, becoming the second best-selling drug in the third quarter (behind its HIV drug). There have also been discussions on the pricing strategy that some argue has been a price hike (up to €2,615/\$3,100), as well as the obtention of the priority review voucher, obtained without a clear efficacy in reducing deaths, which has been the source of criticism for the price strategy as well. Finally, on 20 November, WHO recommended against the use of remdesivir given its unconfirmed therapeutic effect in randomised controlled trials (WHO 2020; Hsu 2020).

Recent information of promising vaccine developments from Pfizer and Moderna has triggered a statement from Doctors Without Borders (2020), serving as a reminder of the importance of not enforcing patents and of sharing all intellectual property information in order to fast-track the scaling-up of production, while making sure that the price can remain fair and affordable. This criticism is mainly based on the fact that the R&D and manufacturing of the vaccine has been partially offset by public institutions, with at least €2.11 billion (\$2.5 billion) from the U.S. government.

Time for Redemption?

Even if the recent vaccine developments as of late November 2020 are very encouraging (Johnson 2020), the concrete effectiveness and actual challenge will be to give access to the vaccine to as many people as possible and at the highest speed (Thomas 2020).

The pharmaceutical sector sees a chance now, an open avenue to potentially become the messiah of salvation in the near future, the carrier of the promised healing potion, and the key to bringing everything back to how it was before.

The sector faces the chance to redeem itself and be part of jumpstarting the planet, economically, politically and emotionally.

In this context of a perfect storm, many companies might try to recalibrate and reassess their CSR policies, not only in view of the current COVID-19 situation, but also in light of the upcoming day after (Kramer 2020).

Invisible Hand of CSR

As we unfold world events from these past months, we have a clearer understanding of how CSR can (and should) affect the pharmaceutical sector, especially in view of the magnitude, with which the pandemic has struck in most countries.

The eventual vaccine development and deployment will certainly imply the hope of a cure but also equally trigger the effects of a globalised world where suffering is echoed immediately and solutions only impact a happy few. The upcoming vaccine will accentuate the disparities, inequalities and the factual power prerogatives from certain states, something that is already happening in how future vaccine licensing contracts are being allotted (The Economist 2020).

CSR can help a company become socially accountable to itself, its stakeholders and the public; businesses have a moral responsibility to the society in which they operate (Godfrey et al. 2020). In theory, companies should be motivated to promote a general prosperity, beyond profit and shareholder financial performance. CSR promotes direct benefits not only for the company but also for the industry competitors, and finally a drive to do the right thing, as a basic moral imperative.

In connection to these ideas, the Organisation for Economic Co-operation and Development (OECD) has put together a note describing the responsible business conduct in relation to the COVID-19 crisis (OECD 2020), laying out “the expectation that businesses contribute to sustainable development, while avoiding and addressing adverse impacts of their activities, including throughout their supply chains”. This attention allows companies to identify, mitigate and address potential adverse impacts.

This pandemic has triggered a global reaction, similar to reacting to a natural disaster – everyone wants to help. Companies should use the COVID-19 situation as a trampoline to showcase solutions (“proactive steps” in the OECD language) to protect employees, secure supply chains, build long-term value and resilience, which will ultimately translate into long-term positive repercussions when recovery arrives.

The generalised effect of the pandemic on companies is reflected in the fact that many employees are working from



home, something that can imply an imbalance between their personal and professional life. Privacy issues, data protection and general cybersecurity must be reconsidered from a company and employee perspective. The eagerness in the creation of alternative processes in view of the pandemic could lead to pressed decisions with lack of, or not enough, due diligence or risk assessments. Companies might therefore neglect protection and workers' well-being in exchange for faster processes.

In the note on COVID-19 and responsible business conducts, the OECD has set concrete steps to include responsible business conducts in the emergency response to the crisis. They include: connecting with procurement and sustainability teams; understanding vulnerabilities in link with continuity planning; dealing with critical supply chain disruptions creating a rapid response supplier due diligence; dealing with demand-side disruptions; assessing the impacts of cancellations or suspensions.

Virtuous Collaboration

There are new approaches, like [Digital Transformation Institute](#), the public-private consortium started by C3.ai gathering Princeton, Carnegie Mellon, MIT, University of Illinois at Urbana-Champaign, University of California, Berkeley and the University of Chicago, as well as Microsoft (Darzi 2020). It has brought together academia, technology and supercomputers in a [research entity](#) dedicated to the acceleration of the application of artificial intelligence to coronavirus vaccines.

An additional factor must be noted: the use of artificial intelligence in the development of vaccines is key, thanks to technology and the large quantities of data that can be analysed rapidly. The sharing of the genome of SARS-CoV-2 virus showed a collective and positive approach in this sense (Kames et al. 2020).

Facing the complexities of international pricing, allocation and mass production of the future vaccine and therapeutics, a part of the pharmaceutical industry will have to rely on self-regulation, avoiding fierce competition, as well as collaboration and the sharing of information. Pharmaceutical companies should team up at the supply chain in the near future to jointly manufacture at higher speeds in

order to meet global demand, something that will certainly become a reality in the years to come.

Many companies have understood the current stakes and the way, in which a CSR approach could make a difference. AstraZeneca has donated over nine million face masks to different countries dealing with the virus. Eli Lilly decided to accompany diabetic patients by reaching out to them with newspaper ads to create awareness on available support during the unstable economic times, to guarantee the supply of insulin. The laboratory has also donated 300,000 vials of the antibody Bamlanivimab, with no out-of-pocket costs for patients, as well as shared data with Incyte on the use of Baricitinib in combination with Remdesivir and the effect of reduced recovery time and improved clinical outcomes for patients with COVID-19. Janssen Pharmaceutica of Johnson & Johnson has launched a joint large-scale, multi-country vaccine development, with the commitment of holding the pledge to "high ethical scientific principles", granting complete access to the details of the totality of the study's protocol.

And as a global initiative, the Coalition for Epidemic Preparedness Innovations (CEPI) has announced partnerships with five clinical sample testing laboratories to create a centralised global network to assess and compare the immunological responses generated by COVID-19 vaccine candidates.

New Hope

We have probably realised, perhaps the hard way, that governments have painstakingly tried to contain and control the pandemic, which would shift the attention to entities like hospitals, universities and pharmaceutical companies. The pharmaceutical companies have understood that, in the current crisis, it is they who play a key role in our global society, realising their positions in becoming the artifices of the solution and the way out of this crisis, with the insight needed for future pandemics.

Conflict of Interest

The author certifies that he has no affiliations or involvement with any entity mentioned in the subject matter discussed in this document. ■

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