

Oncology In The Age Of COVID: Cancer Treatments Get Highly Specialised & Drive Innovative Investment Solutions

Portfolio Attribution

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immediate eyond the medical complications of COVID-19 (SARS-CoV-2) infections, the sweeping changes to global healthcare systems during the Global Corona Crisis ("GCC") have seen nonemergent oncological tests and screenings postponed, with the true impact of delayed care yet to be fully appreciated.

Cite:- <u>Healthcare Sector May Not Be So</u> Healthy For Investors As Global Risks Loom, 9 August 2017

Cite:- Bill Gates Vs. Donald Trump, 21 May

Investing in emerging biotechnology sectors requires a confluence of financial and scientific expertise, alongside an indepth and adept understanding of how private and public capital in-flows affect healthcare systems and highly specialised talent pool; all of whom are being pulled between the needs of oncologists and those of newly lauded virologists.

Watch:- <u>Infinity Black Guest Associate</u> <u>Professor Dr Michael Ben-Meir & Kwame</u> Owusu Discussing Australia's COVID-19 Epidemic, 23 March 2020

Watch:-Infinity Black Guests Alec Margolin Paul Hopper Discussing Australian Biotechnology, 11 February 2019

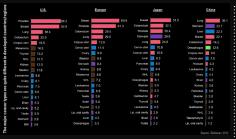
Understandably, patients with cancer are avoiding hospitals to limit COVID-19 exposure, however, they may also be delaying appropriate care for cancerrelated complications; the pandemic largely has put a pause on cancer care across the world and potentially led to increased cancer-related deaths by up to twenty percent according to one respected study recently conducted in the United

Albeit morbid, it is imperative to remember that even though 2.6 million people have passed due to SARS-CoV-2 infections since 2019, in the balance, circa seven million people perish to cancer every single year around the world.

Notwithstanding, the silver lining of these seismic shifts in transnational healthcare systems is that COVID-19 advancements are leading to new and original solutions for oncology; for instance, advancements in synthetic biology championing **mRNA** technologies have helped clinicians find faint signals of cancer in high noise environments like the bloodstream.

Cite: COVID-19 Vaccinations - Efficacy, Economic + Financial Markets Bet Like No Other, 6 December 2020

Cite:- A 2021 COVID-19 Vaccine Likely But Remains Underpriced: Ignore the Pollyannas & Identify The Winners, Early, 25 August 2020



Contemporary therapy expanded bevond traditional chemotherapeutics, radiation therapy and surgery to include targeted therapies as well as immunotherapy and the central conundrum for support in the era of SARS-CoV-2 is how to deliver optimal care with fewer resources and at the lowest possible

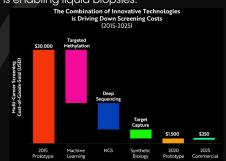
Even before the pandemic, over the past two decades, there has been a rapid increase in cancer survival, with >400,000 new survivors each year.

Much of this survivorship has been driven by the use of novel anticancer therapies, including the nearly one hundred and sixty new therapies approved since 2000 alone, nevertheless, the biotech purple patch that has seen Novel Coronavirus vaccines developed in less than a year is spurring faster therapeutic innovations in oncology at the same time.

Cite:- Biotech & Life Sciences, 25 July 2018 Cite: Joe Hockey's Medical Research Future Fund Plan Better Than None, 20 May

Above and beyond the obvious risk mitigation step of shifting to telehealth visits online as a dominant undertaking for many medical specialties, newer optimisation techniques to minimise general practitioner or hospital visits has led to single blood tests being able to detect "multi-cancers" via a of early-stage cancers than previously went

Specifically, along with somatic mutations, circulating proteins and immune signatures, machine learning algorithms have surfaced DNA methylation as a novel and highly sensitive biomarker for earlier cancer detection and the rapid cost decline of next-generation DNA sequencing ("NGS") is enabling liquid biopsies.



The innovative convergence of technologies has pushed the cost of multicancer screening down by 20-fold from US\$30,000 in 2015 to US\$1,500 today and it should drop another eighty percent to US\$250 by 2025.

As a result, the multi-cancer screening market, led in the United States, will likely scale to US\$150 billion by 2026, with multicancer screening protocols averting up to sixty-six thousand cancer fatalities per annum in the US alone and 1.4 million lives globally each year.

Cite:- Late-Cycle Opportunities In New Cancer Treatment, 12 October 2019

Also, thanks to Artificial Intelligence (AI), gene-editing and NGS, failure rates and time-to-market should fall, accelerating innovation and biotechnology's investors Return On Capital ('ROC').

While AstraZeneca [AZN:US] has coveted headlines with their COVID-19 vaccine travails, it is actually expected that the company's oncology franchise key oncology products being Lynparza, Tagrisso & Imfinzi - will continue to drive the company's growth, with forecasted nine percent product sales growth of US\$28.9bn and core Earnings Per Share ('EPS') of US\$4.95 during first quarter, 2021.

Adagene [ADAG:US], Amgen Inc. [AMGN:US] and CRISPR Therapeutics [CRSP:US] are all biotech vanguards spearheading oncology innovations partially or full sponsored by the developments championed by speedy advancements seen throughout SARS-CoV-2 virology.

If cancer is detected early enough it can sometimes be treated with surgery or

Neoadjuvant therapy (before surgery to shrink the tumour), adjuvant therapy (after surgery) and periadjuvant (both before and after surgery) therapy is also employed to try to control tumour growth and prevent the disease from coming back or relapsing.

To combat these, beyond chemotherapy a number of drugs have received approval in the adjuvant setting since the incipience of the Global Corona Crisis, including Roche's [ROC:SW] Herceptin, Perjeta, and Kadcyla (all for breast cancer) and Pfizer Inc.'s [PFE:US] Sutent (for kidney cancer), establishing a precedent for potential future

For the savvy global investor seeking nascent investment opportunities in the emerging biotechnology sectors stoked by the unprecedented advancements seen in virology during 2020 and early 2021, the dominant paradigm in contemporary oncology relies on the idea that propinguity to precipitate advances in novel coronaviral virology heeds innovative solutions that affords the observant early investor opportunities that would have otherwise taken decades to have been realised and commercialised.

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