Life Science Report 2025

Turning evidence into excellence

Munich RE

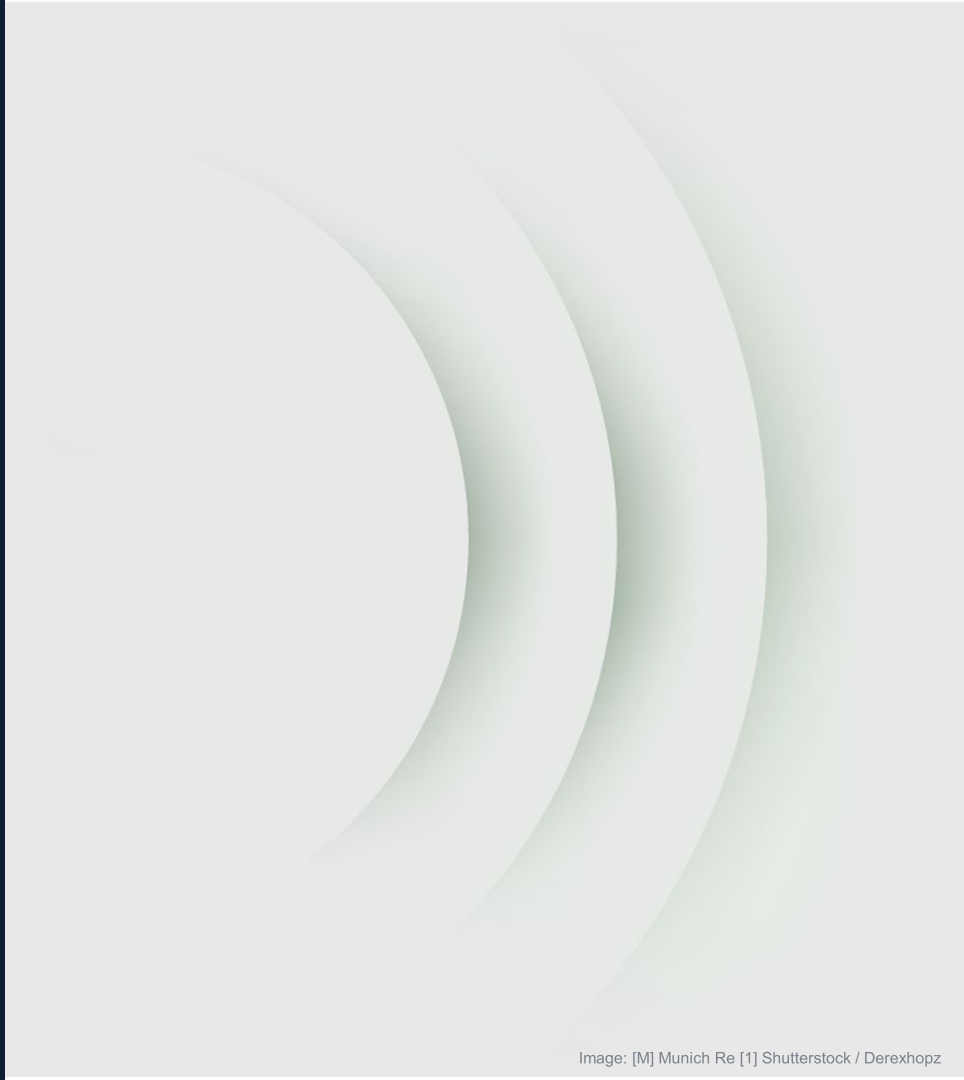

Image: [M] Munich Re [1] Shutterstock / Derexhopz

Life Science Report
Editorial

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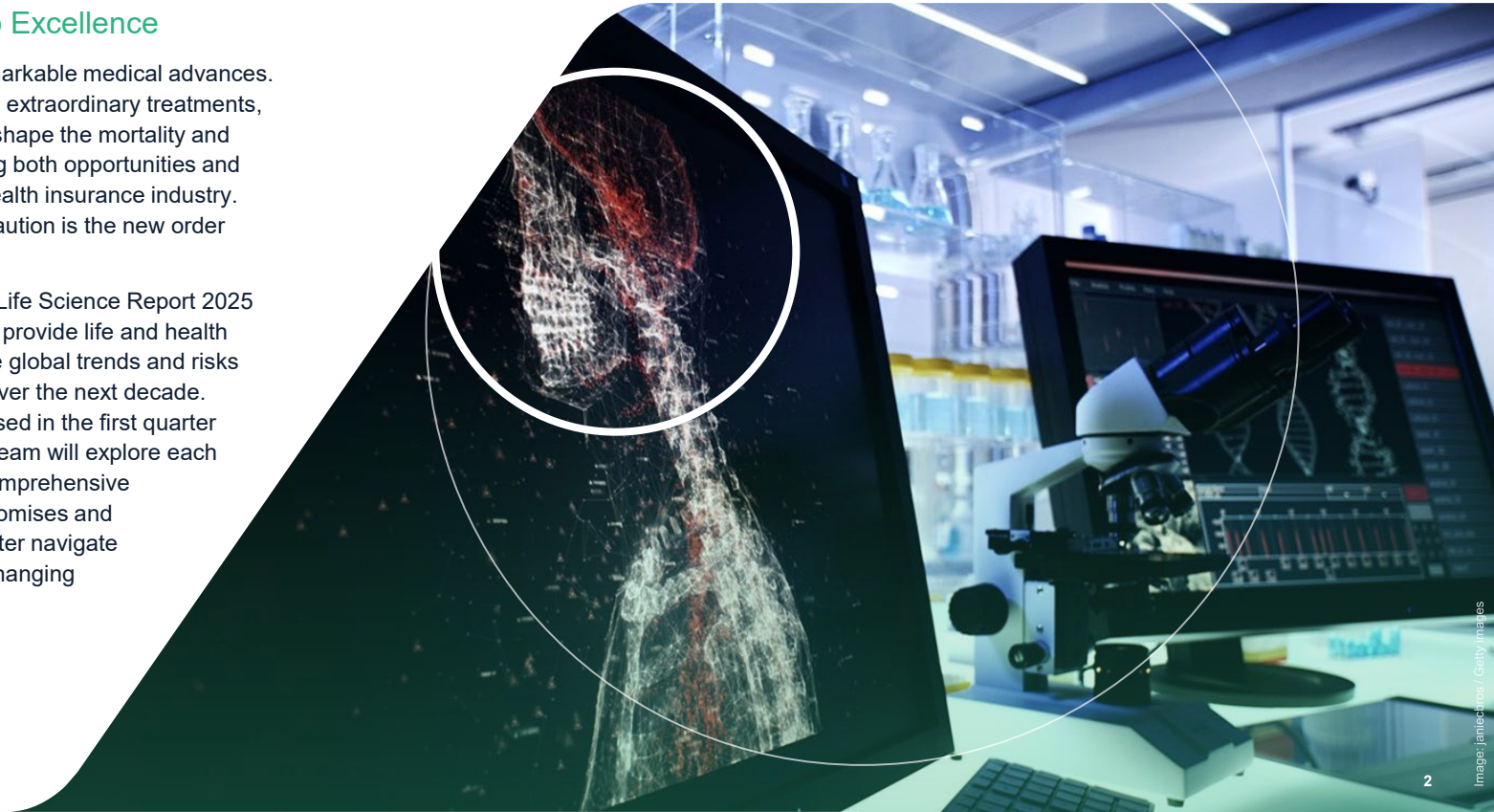
Turning Evidence into Excellence

Recent years have seen remarkable medical advances. From new diagnostic tests to extraordinary treatments, they have the potential to reshape the mortality and morbidity landscape, creating both opportunities and challenges for the life and health insurance industry. Enthusiasm balanced with caution is the new order of the day.

In this context, Munich Re's Life Science Report 2025 has been carefully crafted to provide life and health insurers with insights into the global trends and risks that will shape the industry over the next decade. In five tailored editions released in the first quarter of 2025, our global medical team will explore each area in depth, providing a comprehensive understanding of both the promises and pitfalls to help our clients better navigate in this new environment of changing mortality and morbidity risks.



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Life Science Report
Editorial

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AI in Healthcare

The chapter on **Artificial Intelligence in Healthcare** examines the future impact of AI on medicine, focusing on the traditional domains of prevention, diagnosis, and treatment.

It also describes its impact on foundational medical knowledge, and the implications for life and health insurance.

Improving Cancer Outcomes

Advances in our understanding of cancer, along with novel treatments, continue to improve the survival rates of individuals with cancer.

The chapter on **Improving Cancer Outcomes** describes how progress in cancer genetics will change cancer classification, how new diagnostic tests will diagnose cancer sooner, and how innovative treatments will improve cancer survival rates.

Improvements in mortality and morbidity are on the horizon that will significantly change the future of life and health insurance.

Prevention

The **Prevention** chapter examines how insurers can develop prevention strategies for insured lives, based on a comprehensive understanding of insured portfolios and with the aid of personalized risk profiling, digital risk scores, and advanced analytics.

Insurers are now poised to assume a new role: as active participants in the well-being of their policyholders, which has the potential to transform life and health insurance from settling claims to actually improving lives.

Obesity

According to projections, by 2035, more than half of the global population will be overweight or obese.

The **Obesity** chapter assesses the potential of recently released anti-obesity medications to reverse this upward obesity trend, and to reduce mortality and morbidity from a wide variety of medical conditions.

The impact of these newer medications on the population is potentially enormous, as is their contribution to mortality improvement in the future.

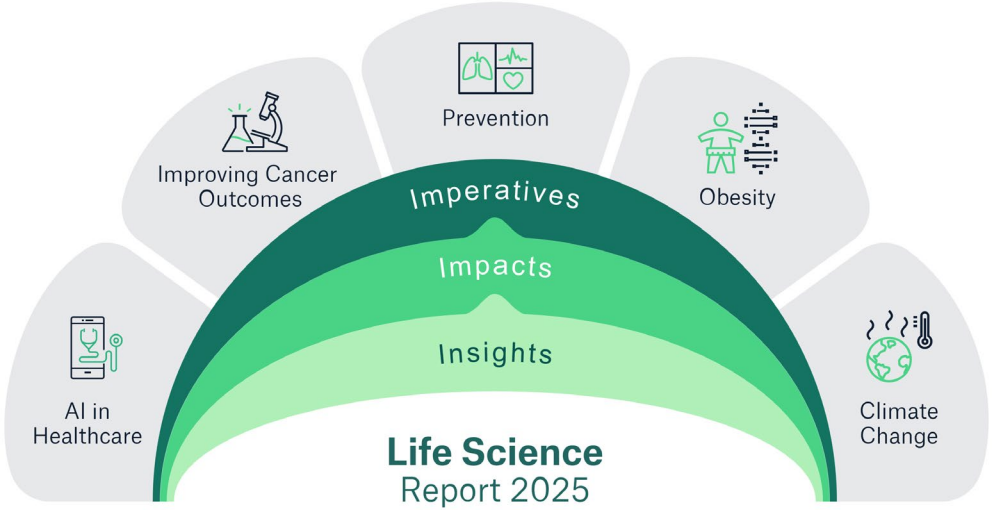
Climate Change

Recent and radical climate events raise urgent questions about the future impact of climate change on human health – and, by extension, on life and health insurance.

The **Climate Change** chapter explores climate-related hazards that could worsen mortality and morbidity and introduces a new modelling approach to assess potential impacts on underwriting, portfolio management and claims.

Life Science Report
Editorial

Throughout the report, Munich Re's global medical team offers in-depth insights into the medical, technological, and environmental factors that will influence underlying biometric risks and insurance operations, through three distinct sections in each chapter.



Imperatives

A list of the imperatives life and health insurers should consider in order to capitalize on the opportunities that biomedical advances will bring, and to prepare for scenarios that may pose a threat to operations and products.

Impacts

A description of the impacts of these changes on specific risk factors and product lines.

Insights

A review of the biomedical advances and risks, which provides succinct insights into their relevance for life and health insurance.

To make the Life Science Report an actionable business guide, we supplement each of the five chapters with an overview of Munich Re's regionally tailored services and solutions, which we invite you to explore further.

The Life Science Report 2025 will help you to turn **medical evidence into business excellence.**

Improving Cancer Outcomes

Image: [M] Munich Re [1] shapecharge / Getty Images

Improving Cancer Outcomes

Key Takeaways

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In recent years there has been an explosion of exciting advances in cancer research that will change the way that cancers are defined, prevented, diagnosed, and treated. These advances are expected to drive significant cancer mortality improvements, even beyond what we have seen in the past few decades.

Prevention efforts will leverage the power of AI to integrate and analyze vast amounts of biometric, genetic, and imaging data and improve cancer risk prediction. This will warrant monitoring by insurers to anticipate potential antiselective behavior.

Diagnostic advances will also be fueled by the power of AI and the acceleration of earlier cancer detection by molecular/genetic analysis of bodily fluids (liquid biopsy). Potential changes in how cancers are classified will require the modification of product definitions.

Therapies will continue to progress into more and more personalized treatment, further enhanced by tumor genetic analysis with targeted drug development and immunotherapies, such as personalized cancer vaccines. Much of this, however, will come at a high (financial) price, which could have significant impacts on health insurance costs and limit access in some markets.

Improving Cancer Outcomes

Executive Summary

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Although for most insurers worldwide, cancer is the leading cause of death among policyholders, considerable progress against cancer mortality has been made in the past 2 to 3 decades.

This has been mainly due to a reduction in cancer risk factors such as tobacco use, as well as from advances in cancer diagnosis and treatment.

Despite some concerns of increased cancer incidence in young people and interruptions in screening and treatment early in the COVID-19 pandemic, these mortality improvement trends are expected to not only continue, but to accelerate over the next ten years, as major advances in our understanding of cancer genetics and in harnessing one's own immune system to combat cancer are combined with the rapidly expanding world of artificial intelligence (AI).

This combination will expedite the development of cancer tests and therapies and lead to a reclassification of cancers based more on their underlying genetic causes than on their tissue of origin, allowing for a more personalized approach to each unique cancer.

The utilization of genetic markers and AI is expected to lead to better cancer prevention and more effective screening for early-stage cancers.

Insurers will need to keep abreast of how cancers are evaluated and classified and to understand how these trends can affect their underwriting needs and their mortality and morbidity expectations.

There will however be significant healthcare costs in connection with these advances, and where previously terminal cancers become instead chronic diseases, there may be implications for living benefits products.

Improving Cancer Outcomes

Introduction

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In much of the world, cancer is the leading cause of death among those with life insurance. However, mortality rates for most common cancer types have been declining over the last three to four decades in most regions.[1,2]

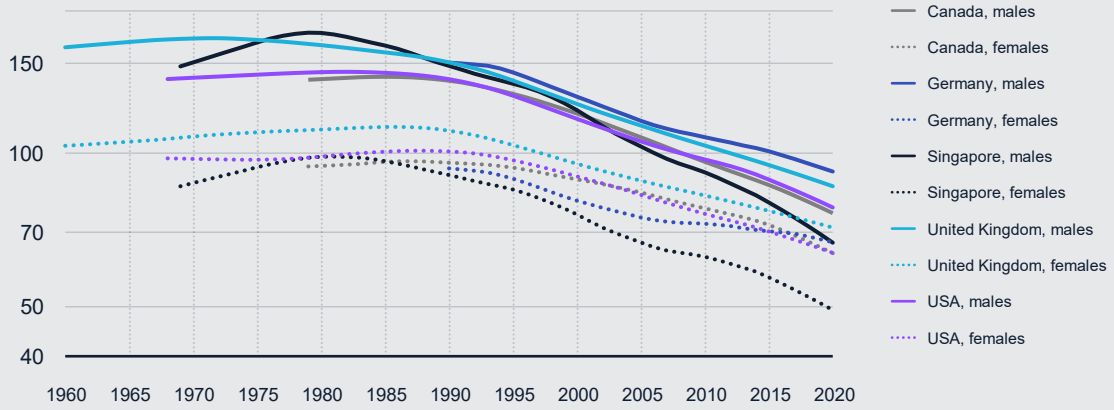
In the US, age-adjusted cancer mortality declined by on average 1.6% annually from 2012 to 2022.

Can we expect those trends to continue? And with numerous medical advances in recent years and on the horizon, how can we best predict what cancer mortality expectations will be like going forward?

Age-standardized rate (World) per 100,000, mortality, males and females, age [0–79]

All sites excl. non-melanoma skin cancer

Canada | Germany | Singapore | United Kingdom | USA



Despite these improvements up through 2020, there were many indications that cancer diagnoses, and at times treatments, were delayed following the onset of the SARS-CoV2 pandemic.[3,4] US data indicates that cancer mortality improvements may have plateaued during the past three years.[5] In addition, a worrisome increase in colorectal and endometrial cancer incidence and mortality in younger individuals has been seen over the past decade in many countries, including Germany, Canada, Australia, the UK, the Netherlands and the US.[6,7] Still, medical advances in the prevention, diagnosis and treatment of cancer have mushroomed in recent years. These advances are expected to influence cancer mortality outcomes and may also alter cancer incidence rates and the number of people living with a cancer diagnosis. We analyzed these changes in order to estimate how they will affect overall cancer survival and how they might also impact morbidity lines of business.

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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Prevention

Much of the cancer mortality improvement seen in these past three decades has been due to preventative measures – understandably, the best option is to prevent cancer from occurring in the first place. Although significant progress has been made, particularly in regard to smoking cessation, both the American Cancer Society and the Global Burden of Diseases, Injuries, and Risk Factors Study estimate that over 40% of cancers could potentially be avoided.[8,9]

Continued improvement could be achieved through further reductions in tobacco use as well as measures to reduce alcohol consumption, excess weight and inactivity and improve diets. To help achieve this, it will be increasingly useful to incorporate artificial intelligence (AI) to better identify one's individual risk and devise targeted efforts to support the necessary preventative measures.

By analyzing, through AI, a broad array of an individual's personal information, such as their health data, family history, genetic and epigenetic profiles, microbiome, living environment, and exposure history, (dubbed by some as a "statistical biopsy"), a more complete picture of risk for a wide variety of cancers can be obtained.

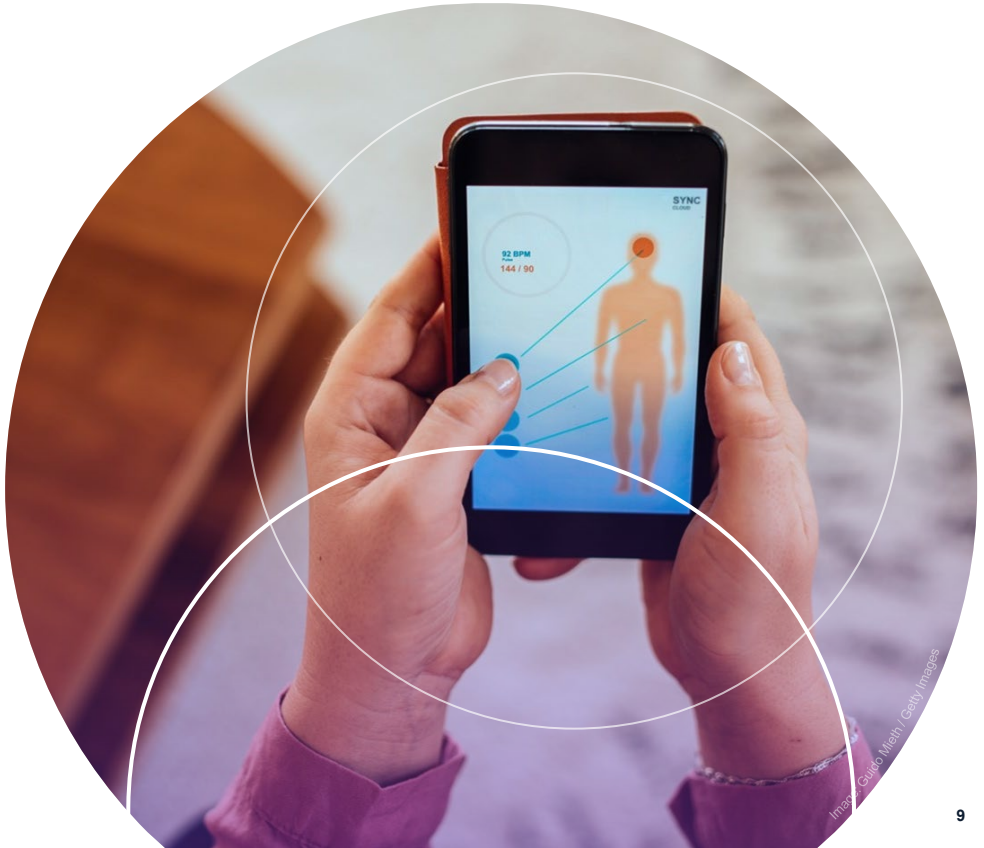

Image: Guido Mieth | Getty Images

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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Prevention

Providing more complete and accurate information on an individual's cancer risk could allow for a personalized approach to identifying and quantifying cancer risks and behaviors and even determining which strategies may be most effective in reducing these risks.

An example of this potential was shown in a study of lifelong non-smoking women from Taiwan. Their long-term risk of lung adenocarcinoma was estimated using polygenic risk scores, derived from an analysis of their genetic profiles, in combination with exposure to environmental tobacco smoke at home and/or at work.

Risk approximately doubled for those with tobacco smoke exposure at both home and work compared to those with neither type and was roughly 5-fold higher for those in the highest decile of polygenic risk score compared to the lowest, leading to a nearly 11% absolute risk for those at the highest risk of each vs a 1% risk for the lowest.[10]

Furthermore, with an estimated 13% of cancers worldwide attributable to infectious agents, enhancing efforts to increase vaccination for Human Papilloma Virus and Hepatitis B virus can lead to decreased cancer rates. In addition, vaccines are also now being studied to prevent non-virally mediated malignancies.[11-16]

Image: FatCamera / Getty Images

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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Diagnostics

Beyond preventing cancer from occurring, advances in diagnosing cancers more accurately and at earlier stages, when they are often more responsive to treatments, are expected to have an impact on cancer mortality. These advances, too, are being driven by cancer genomics – cancer is after all a genetic disease (or, perhaps more accurately, hundreds of diseases) – in combination with AI.

We are now witnessing a paradigm shift in how cancer is envisioned, from a mostly tissue-based diagnostic approach to one based on the tumor's unique genetic signature, in conjunction with additional available data. Although tissue biopsy is currently considered the gold standard for cancer diagnosis, it is invasive, can be costly and a risk for complications, and may yield an incomplete representation of the full tumor makeup.

AI has already led to refinements in identifying signs of malignancy in imaging studies and in blood, urine, and tissue samples. In addition, AI can be employed to fully interrogate the complex interplay between the tumor's genetic pattern, other associated biomarkers, and one's own risk profile, immune status, and pharmacogenetic pattern, which then allow for more accurate stratification of both the prognosis and the best management approach. These developments will also impact how cancer is defined from a clinical perspective and in turn will affect insurance products which use clinical definitions as claims triggers.

Image: sanjeri / Getty Images

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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Diagnostics

Diagnostic advances will also come from the application of AI to enhance both the efficiency and the accuracy of cancer diagnosis tools, including imaging studies, pathologic specimen interpretation, and photograph analysis.

AI-assisted “machine eyes” can often recognize patterns that are not apparent to the human observer.

For example, AI-assisted mammography was shown to improve sensitivity for breast cancer (i.e., identify more cases) without leading to higher false-positive rates and can even be used to improve the prediction of subsequent breast cancer development.[17-19]

Similar enhancements have been observed for lung cancer diagnosis by CT scan.[20-21]

Image: kokouu / Getty Images

Multiple studies have found that AI-assisted interpretations of pathology slides have improved the accuracy and consistency of cancer diagnosis. For example, there is a significant degree of subjectivity in the interpretation of prostate biopsies and an AI-assisted program already in use was found to be better than general pathologists, and on par with uropathology specialists, at discriminating between biopsy cores with cancer vs benign tissue, and between Gleason scores, with a very high degree of accuracy.[22]

Likewise, AI prediction of skin cancer based on skin photographs has been available commercially for several years now, with one recent version able to identify over 99% of melanomas and other forms of skin cancer, as well as 90% of premalignant lesions.[23-24]

In a broader scope of applicability, a neural network mining health data from the Prostate-Lung-Colorectal-Ovarian cancer and UK Biobank datasets was fitted to predict cancer incidence within 5 years for 17 different cancer types, achieving high levels of accuracy for most cancers. Over time, such models should also be able to provide information on what tests would offer the best screening approach, along with the best timing and intervals for such tests.[25]

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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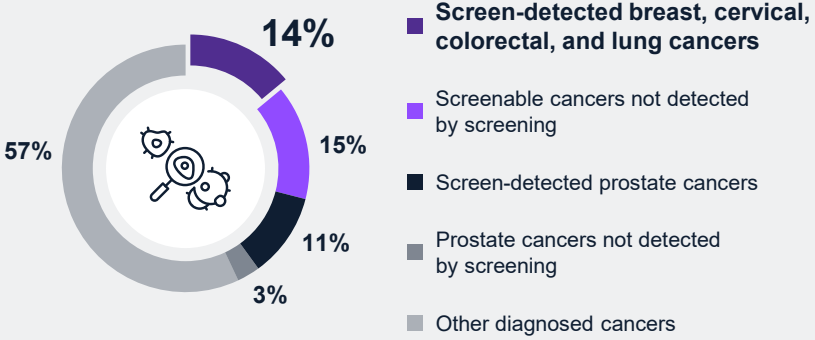
Diagnostics

Furthering the goal of earlier cancer diagnosis will require more than just improvements in diagnostics and screening methods. Currently, most cancers lack effective screening approaches, sometimes even for high-risk individuals.[26]

Percent of diagnosed Cancers Detected by Screening



An important technology that may be able to fill that gap is commonly referred to as “liquid biopsy” – the analysis of fluids (usually blood) to look for markers indicating the presence of a cancer, such as circulating tumor DNA.

This technology is already used to detect residual cancer or recurrence after treatment. It can also guide therapy by providing a more complete picture of tumor genetic alterations than can be obtained by a single tissue biopsy.[27]

The larger challenge though is to identify evidence of cancer, without the presence of a known malignancy, through what is known as a “tissue uninformed” liquid biopsy.

Such tests are in use as a screen for specific cancer sites, such as the Guardant Shield and Epi proColon tests for colorectal cancer, and many more are in development.[28-32]

However, the greater benefit will likely be realized with liquid biopsy tests that can screen for multiple cancers in asymptomatic individuals.

Many such tests are now being studied, and a handful have made it to market, including the Galleri, CancerSEEK, and PanSeer tests.

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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Diagnostics

The Galleri test is best studied at this point and has been shown to potentially identify over 50 different cancer subtypes with a sensitivity for all stage I to III cancers of around 40% (higher for more aggressive cancers, and lower for more indolent tumors) at a specificity set at 99.5%.[33] Even with this high specificity there will be many false negative results when utilized in a low-cancer-prevalence population, yet the overall positive predictive value of the test still compares favorably to most other cancer screening tests.

Making an early diagnosis does raise concerns about over-diagnosis and surveillance bias, as some identified cancers may be indolent and never become a significant mortality risk. Fortunately, liquid biopsies tend to detect aggressive cancers more accurately, will continue to improve with machine learning and large datasets, and combining screening tests will increase the predictive value. Liquid biopsies offer advantages over tissue biopsies as well, including lower costs, ease of repetition, and recognition of tumor heterogeneity. Overall, liquid biopsy has the potential to become the diagnostic standard for many cancers, improving early detection and treatment outcomes.

As noted, genetic profiling of tumors is increasingly used for diagnosis and treatment selection and allows for better prediction of prognosis and treatment response than traditional pathologic diagnosis. Cancers are increasingly being reclassified based more on their “genetic signature” than on their site of origin, potentially leading to thousands of cancer subtypes.

Image: Andrew Brookes / Getty Images

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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Therapeutics

Recent advances in cancer therapies, particularly immunotherapies, have transformed oncology. Genomic analysis of tumor cells and associated immune cells, coupled with AI, have enabled the development of targeted treatments that exploit specific genetic patterns, offering more precise and safer alternatives to traditional chemotherapy.

Four key categories of cancer therapies have emerged:

- Targeted monoclonal antibodies, which disrupt cancer cell activity and trigger an immune response
- Immune checkpoint inhibitors, which allow the immune system to recognize and attack cancer cells
- Cancer vaccines, such as mRNA vaccines, which use tumor DNA to stimulate a tumor-specific immune response
- Adoptive cell immunotherapy, including CAR T-cell therapy and tumor infiltrating lymphocyte therapy, which involve modifying and re-administering cancer-fighting T-cells to target tumors

Image: sanjeri / Getty Images

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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Therapeutics

These advances have improved treatment outcomes and offer new hope for cancer patients, with many agents already available (such as Herceptin, rituximab, pembrolizumab and atezolizumab).

Since the introduction of some of these newer therapies, many individuals diagnosed with cancer who would once have succumbed to a given cancer in a brief time, are now living longer with the cancer or having long-term remissions.

For example, an analysis of the significant reduction in US breast cancer mortality between 1975 and 2019 attributed 29% of that improvement solely to improved treatment for metastatic disease.[34]

Image: Cavan Images / Getty Images

Improving Cancer Outcomes

Insights – Impacts – Imperatives

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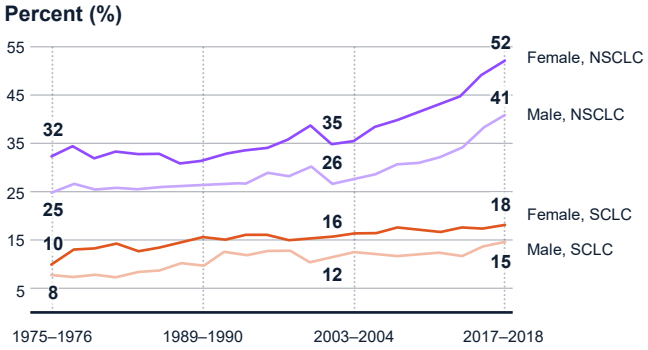
Therapeutics

Similarly, though improvements in lung cancer incidence in the past 30 years were due mostly to declines in smoking, recent declines in mortality are believed to be driven largely by targeted treatments based on tumor genotyping. The rate of lung cancer survival improvement in the US doubled from 2% annually in 2005–2013 to 4% in 2013–2018, as shown by these two-year survival rates for both non-small cell lung cancer (NSCLC) and small-cell lung cancer (SCLC).[35]



More specifically, recent studies have found that, among NSCLC patients with advanced disease and a particular cancer genomic pattern, the use of an adjuvant therapy that targeted that pattern significantly improved disease-free survival (DFS) compared with conventional chemotherapy with a DFS at 2 years of 93.8% vs 63.0%. And for a similar population treated with another new agent, the 5-year progression-free survival (PFS) was 60% vs 8% for those treated with an older version of a targeted treatment.[36-37]

Additional studies of advanced but resectable NSCLC have also found 35–60% reductions in cancer progression, recurrence or death with the use of various forms of immunotherapy.[38-41]

Similar improvements in outcomes utilizing immunotherapy instead of, or in addition to, conventional chemotherapeutic agents have been seen for advanced stage melanoma and renal-cell carcinoma, MMR-deficient colon cancer, early-stage HER2-negative breast cancer, and multiple hematologic malignancies.[42-46]

Though quite promising, early results with mRNA vaccines and adoptive T-cell therapies have been mixed. CAR-T therapy has been successful for some forms of relapsed leukemia, lymphoma, and myeloma, and the combination of an mRNA vaccine with checkpoint inhibitor yielded a 44% reduction in death or relapse in advanced melanoma, yet responses for many solid tumors have been more varied thus far. Significant optimism remains however that the current obstacles will be overcome and that combinations of immunotherapies could hold even greater potential.[47-49]

Improving Cancer Outcomes

Insights – **Impacts** – Imperatives

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Given the acceleration of these advances in cancer prevention, diagnosis, and treatment, but also concerns regarding the rising incidence of some cancers in younger individuals and the pandemic's potential impact on cancer diagnosis and treatment, predicting future trends is a challenge. We believe that the pandemic's impact will be limited and that advances in cancer risk stratification and prevention measures will offset the lifestyle and exposure risks associated with cancer, at least in a typical insured population. It is reasonable to anticipate that, in the short term, cancer mortality improvement will begin to get on track again with the levels seen pre-pandemic, in most markets.

Thus far, the improvements have been confined to specific subgroups of primarily advanced stage cancers, such that the overall short-term mortality impact will be limited. Based on studies to date such as those noted previously, we estimate that there have been substantial recent survival gains in 10–20% of all cancer subtypes, often in the range of 30–60% improvement in short-term disease-free survival. Though this alone will not lead to an immediate leap in cancer mortality improvement, it is projected that the higher pre-pandemic rate of improvement will continue to carry forward in the near future.[2]

Beyond the short term, we believe there will follow far more substantial gains as similar treatment advances ultimately extend to most forms and stages of cancer, given the potential of newer targeted immunotherapies, the introduction of combination targeted therapies, and the promise of recent technologies (see also AI in healthcare – therapeutics).[50]

In addition, advances in cancer risk stratification and diagnosis, including changes in how certain cancers are defined based on molecular profiles, will further bolster these gains.

Advances in cancer diagnosis are also expected to have a significant impact on overall cancer survival. Though still in a relatively early development phase, liquid biopsy cancer screening holds immense potential. An analysis of one such test estimated a potential 21% reduction in 5-year cancer mortality for those ages 50–79 who are tested.[51] Although the modeling used required many assumptions, and these tests are too new to demonstrate absolute mortality improvements, it is believed that enhanced test accuracy through AI, improvements in risk stratification for testing selection, and cost reduction from tech advances and competition, will lead to tangible benefits and eventually the acceptance and wide application of such tests.

Image: Jonathan Pow / Getty Images

Improving Cancer Outcomes

Insights – **Impacts** – Imperatives

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Image: sanjeri / Getty Images

The impact of these projected cancer mortality improvements should be favorable for life insurance business – and unfavorable for longevity business. It is anticipated that longevity gains will be realized most by the 50–70-year-old age group, where cancer incidence is high, yet competing causes of death remain fairly low. In a few years' time, we expect cancer mortality improvement for this age range to potentially double compared to the already favorable recent rates.

The cost of these advances will be substantial however and will adversely impact health insurance products. For income protection, long-term care, and critical illness, the consequences are less clear. For critical illness, the advances in diagnosis and changes in diagnostic criteria are expected to increase cancer incidence rates, at least in the short term, but could ultimately decrease rates if major advances in cancer prevention prevail.

Similarly, if treatment advances lead to a cure for many types of cancer, then DI and LTC products could be favorably impacted, whereas extended life from new therapies, without complete cancer resolution, can be expected to increase DI and LTC claims as people live longer with a chronic illness. We currently expect living benefits to see a small negative impact in the short term but not the long term, as treatment and early diagnosis improve further. The developments described above will come at a cost, in particular on the treatment side.

Targeted therapies, immunotherapies and vaccines require highly sophisticated biotechnology, and pharmaceutical companies will likely see this as a new opportunity for high revenues. Some offset in costs might however be possible by applying AI in target identification and drug development, and in the conducting of clinical trials.

These medical advances have many implications for underwriting. AI-based diagnosis will likely be more accurate and more predictive, with fewer false positive and false negative results, helping us assess the risk more precisely. And the use of liquid biopsy and AI-assisted imaging and pathology interpretation in monitoring post-cancer treatment will allow more accurate assessment of recurrence risk. An additional impact to keep in mind is that the increasingly seen introduction of tests direct to consumer for cancer prediction, screening, and even diagnosis could present a potential for anti-selection.

Improving Cancer Outcomes

Insights – Impacts – **Imperatives**

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These dramatic and rapid changes in how cancer is identified, classified, and treated will impact many aspects of life and living benefit insurance products,

Pricing

making it more important than ever to engage with the necessary medical and actuarial expertise in order to stay attuned to the transforming landscape.

1

In many populations, improvements in cancer mortality have been a driving factor in overall mortality improvements. And yet, as we have learned in recent years, projecting future improvements based on historical trends can be problematic.

2

At a portfolio level, bearing in mind the potential impact of the changes is necessary to properly estimate future cancer mortality improvements, the extent of which will depend on multiple demographic factors such as age, socioeconomic status, health care system, type of cancer, and risk factor prevalences.

3

These factors will influence the degree that the preventative, diagnostic, and treatment measures are available and adopted. Similarly, these factors will influence the degree to which longevity portfolios are negatively impacted.

4

Given the costs of new treatments, health insurance will likely face another wave of higher treatment costs, in particular as treatments become increasingly individualized. Some offset might be seen through the AI-based efficiency gains in the performance of clinical trials (see AI in healthcare).

Improving Cancer Outcomes

Insights – Impacts – **Imperatives**

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Underwriting

1

It is currently estimated that approximately 5.4% of the US population are living with a cancer diagnosis, of whom nearly 70% were diagnosed more than 5 years ago, and roughly one-third of whom are younger than 65.[52]

2

Many of these individuals will remain in the market for insurance products, and underwriting guidelines will need to adapt.

3

With prolonged survivals (depending on cancer type), improvements in the accuracy of imaging and pathology specimen interpretation, and enhancements in the detection of residual cancer and recurrence, it is likely that individuals with certain cancers will be insurable with eliminated or reduced postponement periods and/or lower temporary flat extra charges.

4

Newer screening tests are beginning to be seen in medical records, and underwriter education is needed to help with understanding the implications of both positive and negative results – that though the test will often be more accurate than current biomarkers, a positive result doesn't equate to a definite cancer diagnosis, just as a negative result does not entirely rule it out.

5

The possibility of anti-selection due to the availability of some risk assessment and diagnostic tests direct-to-consumer could warrant a review of policy application questions, pricing adjustments, and/or a search for new protective underwriting requirements.

6

Finally, as more cancer subtypes shift from being a terminal condition to a chronic disease, the extension in life can correspond with an increased possibility of disability or long-term care claims. This will need to be reflected in guidelines and exclusion language.

Improving Cancer Outcomes

Insights – Impacts – **Imperatives**

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Claims

1

Cancers will increasingly be classified by their molecular profile rather than organ of origin.

2

It will be crucial to stay abreast of these changes and to make necessary changes to policy language, application questions, claims adjudication guidelines, and the tracking of claims results.

Image: MoMo Productions / Getty Images

Improving Cancer Outcomes

Conclusion

Rapid medical and artificial intelligence advances are transforming the field of oncology – some in ways already realized, others predictably just around the corner, and in other ways only imagined at this time yet soon to yield a surprise return.

Understanding and closely monitoring these changes is increasingly necessary, blending medical, technological, and data analytics expertise to be best prepared for what lies ahead.

Image: Westend61 / Getty Images

Improving Cancer Outcomes

Munich Re’s services and solutions

Improving Cancer Outcomes

Overview of regionally tailored services and solutions

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United States of America

- Grail Early Cancer Detection
- Cancer Enhancements in the Digital Age

Canada and Caribbean

- Cancer Enhancements in the Digital Age

Europe and Latin America

- Cancer Advances Extending Insurability
- Right to be Forgotten

Asia-Pacific, Middle East and Africa

- Multi Cancer Early Detection (MCED) Screening CI Solution
- Experimental Drugs and Cell Therapy CI Features

Click on Service/Solution to go to Designated Slide

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United States

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Grail Early Cancer Detection

Solution

Cancer and its devastating impacts aren't slowing down. The Centers for Disease Control and Prevention (CDC) predict that the annual number of cancer cases in the U.S. will increase by 49% by 2050 as the number of adults entering the age groups at the greatest risk for being diagnosed increases. What if we could do something about it? By pooling the life insurance industry's resources to bring multi-cancer early detection (MCED) tests to policyholders, together we can attempt to alter the course of cancer mortality.

Benefits

Roughly 52% of the U.S. population have life insurance, creating an opportunity for the industry to positively impact cancer mortality by speeding up the acceptance of cutting-edge MCED tests. Working together as an industry, we can bend the cancer mortality curve.

Contact

Dr. Gina Guzman
gguzman@munichre.com

Learn more

United States, Canada and Caribbean

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Cancer Enhancements in the Digital Age

Insights

Technological advances in pharmacology, genetic engineering, genomics, and artificial intelligence are increasing the speed at which medical breakthroughs occur. Improving cancer care has long been a focus of the medical and insurance community, given the significant burden of cancer on both morbidity and mortality outcomes. Recent advances in cancer research have sparked excitement and renewed interest in cancer cures beyond the medical community.

Benefits

In the near future, AI and other new technologies promise a host of augmented cancer care solutions, as highlighted in this article. With cancer being the leading cause of death in the U.S. life-insured population, advancements that impact incidence, diagnosis, or outcomes are of keen importance to our industry and our clients and bring hope to the millions impacted by cancer.

Contacts

Dr. Bradley Heltemes
Munich Re Life US
bheltemes@munichre.com

Dr. Tim Meagher
Munich Re, Canada (Life)
tmeagher@munichre.ca

Learn more

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Europe and Latin America

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	Cancer Advances Extending Insurability	Right to be Forgotten
Insights	Recent years have seen significant medical advances in cancer treatment, prevention and screening, resulting in a steady decline in mortality rates. It is therefore of the utmost importance to monitor these developments and to reflect mortality improvements in our evidence-based underwriting manual.	EU legislation and its potential impact on life insurance: The “right to be forgotten” (RTBF) prohibits insurers from obtaining or using information from cancer survivors about their cancer diagnosis after a certain period of time.
Benefits	Our ambition is to extend insurability to as many customers as possible, while maintaining risk adequacy. Our medical research and development team has recently reviewed the 22 most common and relevant cancers from an insurance medicine perspective, covering more than 90% of annual cancer incidence, with a particular focus on improving long-term mortality after treatment.	Using figures from the German market, our experts have developed a calculation model to examine the impact of this legislation on the insurance industry.
Contacts	**Prof. Dr. Mathias Orban** morban@munichre.com Learn more	**Dr. Alban Senn** asenn@munichre.com Learn more

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Asia-Pacific, Middle East and Africa

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	Multi Cancer Early Detection (MCED) Screening CI Solution	Experimental Drugs and Cell Therapy CI Features
Solutions	Our Multi Cancer Early Detection Screening Test solution leverages the latest advances in cancer screening technology and enhances the value proposition of Critical Illness (CI) products.	Our Experimental Drugs and Cell Therapy features enhances current Critical Illness (CI) coverage for policyholders who have been diagnosed with cancer and enables better access to the latest cancer treatments.
Benefits	Through early detection of cancer biomarkers, insurers are able to identify policyholders at risk of having cancer. This provides an opportunity to intervene early and improve both survival and health outcomes related to cancer.	The additional coverage designed specifically to cover the latest cancer treatments enhances the value proposition of Critical Illness products and offers policyholder who have been diagnosed with cancer additional options in their journey to recovery.
Contacts	**Dr. Hao Liu** hliu4@munichre.com	**Dr. Hao Liu** hliu4@munichre.com

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Contributors

Dr. Bradley Heltemes

Vice President & Medical Director of R&D

Munich Re Life US

bheltemes@munichre.com

Dr. Andreas Armuss

Chief Medical Officer

Munich Re Life & Health Asia-Pacific, Middle East & Africa

aarmuss@munichre.com

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