

# Driving toward the elimination of cancer

Cancer breakthroughs take time – that's why we work  
at such a furious pace



# Three decades of innovation in oncology

- One of the top 5 and fastest growing leading oncology companies globally<sup>1</sup>
- 14 new medicines approved since 2011<sup>2-15</sup>
- A robust and diverse portfolio and pipeline of novel therapies
- A relentless commitment to improve patients' lives by advancing oncology science

*“The patients are waiting.”*

– Dr. Paul Janssen

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# Our commitment to patients

At Johnson & Johnson, we have a singular focus – the elimination of cancer. While we are inspired by emerging new science and tremendous progress, we are driven by enormous global unmet medical needs that continue to persist in disease treatment. Cancer remains a leading cause of death globally.<sup>16</sup> In 2020 alone, more than 19 million people were diagnosed with cancer worldwide and almost 10 million died of the disease.<sup>17</sup>

At Johnson & Johnson, we are dedicated to advancing science and delivering innovative therapies to treat, prevent, intercept, and cure cancer.

Our unwavering commitment to patients spans more than 30 years, and we are proud of our track record in progressing science and medicine, from drug discovery through development and ultimately to global commercialization. We bring together global resources, expertise, research capabilities, and alliances with a focus on hematologic malignancies, prostate cancer, bladder cancer, and other solid tumors, such as lung cancer.

No single company can solve the challenges of cancer, so we seek to collaborate with experts from across academia and industry to bring transformational therapies to people facing a cancer diagnosis.

Through this overview, we hope to share with you how we honor the legacy of our company's founder, Dr. Paul Janssen, by working with urgency and dedication to help the millions of people with cancer who are waiting and hoping for new treatments and cures.



**Yusri Elsayed, M.D.,  
M.H.Sc., Ph.D.**  
Global Therapeutic  
Area Head, Oncology

# Pursuing the best science

With unrelenting drive, Johnson & Johnson is advancing and applying the most compelling science to bring forward transformational therapies to prevent, intercept, treat, and cure cancer.

## Our cutting-edge research platforms

### Small molecules

Targeted therapies such as those that inhibit specific processes necessary for tumor proliferation or migration.<sup>18</sup>

### T-cell redirection

Recombinant proteins bridge T cells and tumor cells, redirecting T cells to target tumors more effectively.<sup>19-21</sup>

### Antibodies

Monoclonal antibodies are identical immunoglobulins generated from a single B-cell clone.<sup>22-24</sup> These antibodies recognize binding sites on a single antigen, such as CD38, a surface protein that is highly expressed across multiple myeloma cells.<sup>25-28</sup> Bispecific antibodies target antigens and T cells; bi-, tri-, and multi-specifics target multiple antigens through multiple pathways to increase efficacy and overcome resistance.<sup>29,30</sup>

### Chimeric antigen receptor T-cell (CAR-T) therapy

T cells from patients or healthy donors are genetically engineered to include these receptors, which specifically direct the T cells to recognize and kill cancer cells.<sup>31,32</sup>

### Oncolytic viruses

Oncolytic viruses enable the simultaneous delivery of multiple immune-modulating agents.<sup>33,34</sup>

### Vaccines

Vaccines trigger T-cell responses against cancer cells.<sup>35,36</sup>

### Novel drug-delivery technologies

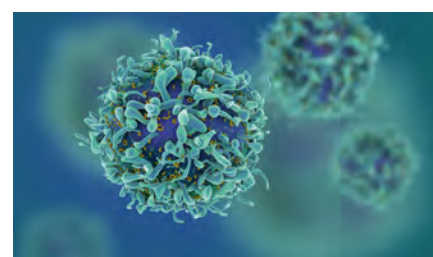
Innovative technologies including drug/device combinations to locally deliver medication.

### Data science tools

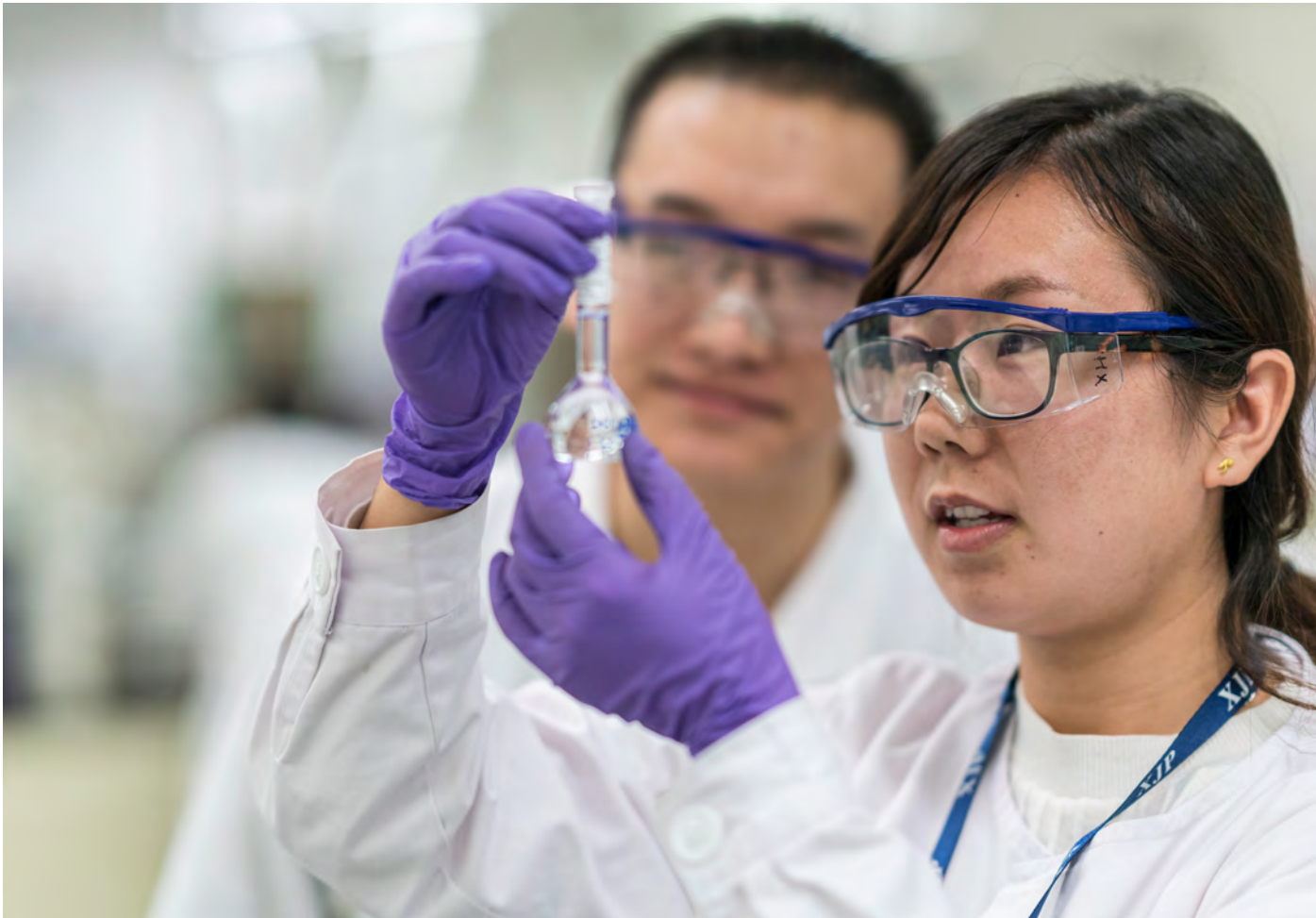
Artificial intelligence and machine learning are applied to discover and develop medicines better and faster.<sup>37</sup>

## Leading cancer interception

One of the innovative ways we seek to eliminate cancer is through cancer interception. Our researchers are going beyond early detection to determine why some healthy cells turn cancerous in order to develop treatments that interrupt that process. Johnson & Johnson has earned worldwide recognition for its innovation and leadership in this area. The theory behind interception is that by finding pre-malignant cells we can target them before they become more aggressive and resistant to treatment.<sup>38-40</sup>



We are currently exploring biological precursors that allow us to measure abnormalities before a person has clinical symptoms of cancer. For example, we are pursuing and pioneering research in smoldering myeloma and colorectal cancer, while looking to identify other diseases for interception strategies.



## Immune therapy

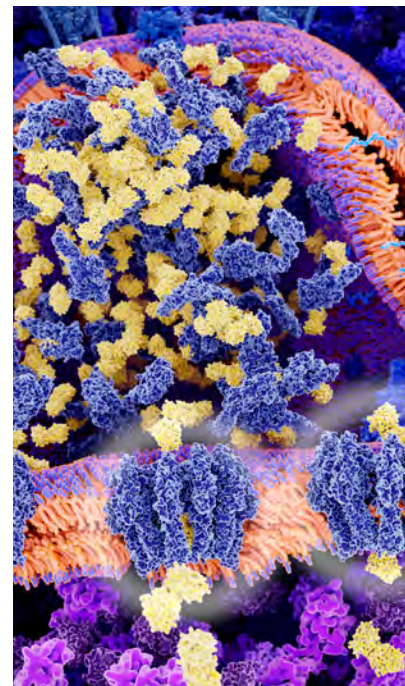
One of the most significant advancements in treating cancer has been the advent of immuno-oncology (I-O), harnessing the body's immune system to fight cancer.<sup>41, 42</sup> Identifying how to leverage a patient's immune system by addressing immune exhaustion, evasion, and resistance is a key capability and part of our focus on patients with advanced cancer and on cancer interception. This focus has led Johnson & Johnson to form a dedicated, multi-functional team entirely focused on immune therapy research to evaluate new ways for harnessing the immune system against cancer. This approach includes chimeric antigen receptor T-cell (CAR-T) therapy, T-cell redirection, vaccines, induced pluripotent stem cell-derived cell-based immunotherapies, and more.

## A novel oncolytic virus platform

Johnson & Johnson has a potentially best-in-class technology called T-Stealth™ Oncolytic Virus Platform that tailors oncolytic viruses to avoid destruction by the body's immune system.<sup>43, 44</sup> Typically, viruses stimulate the immune system, which eliminates them as foreign bodies.<sup>45</sup> By avoiding this process, the new technology platform allows the therapeutic virus to spread further and persist longer in tumors, thus inducing an improved anti-tumor immune response.<sup>43, 44</sup>

The platform also enables the simultaneous delivery of multiple immune-modulating agents. These engineered viruses are intended to infect and directly destroy cancer cells, mobilize the immune system to hunt down and destroy solid

tumor cells throughout the body, and enhance the effectiveness of other immunotherapies.<sup>46</sup>





## Novel drug-delivery technologies

Johnson & Johnson is developing a novel platform to deliver transformational, multimodality regimens, which include localized delivery, targeted therapy, and systemic immunotherapy.<sup>47-49</sup> Initially, the focus will be on the combination of the TARIS targeted releasing system with two therapeutics to treat localized bladder cancer.

Other areas where we aim to leverage novel drug delivery technologies include lung cancer, where our vision is to diagnose and deliver drug therapeutics in one procedure working closely with Johnson & Johnson's MedTech scientists and engineers.

## Data science

Data Science approaches play a broad role in accelerating drug research and development by applying novel analytic methods to high-dimensional data sets. Advanced learning methods paired with emerging platforms, such as

single-cell sequencing and high-throughput proteomics, are being used to characterize tumors and enable segmentation of patient populations and identification of novel targets. Initial efforts to build novel therapeutic strategies focus on identifying novel biomarkers and combination opportunities where current I-O therapies are less effective.<sup>50, 51</sup> These efforts may unlock the therapeutic potential of new cell therapies and build effective neoantigen-targeting vaccines. In addition, using clinical data from the real world, Data Science is accelerating clinical trial enrollment and providing evidence to support the registration of new therapies.<sup>52</sup> Real-world data are also being used to identify areas of high unmet medical need that can be the focus of future clinical trials.<sup>53</sup>

## Precision medicine

We see enormous potential in the use of companion diagnostics to help identify patients who are most likely to respond to a therapy or to achieve the best outcomes with one of our therapies. As part of this effort, we are developing predictive biomarkers to guide targeted, personalized treatment options for different cancers.

There is also strong scientific support that the earlier cancer is diagnosed and potentially treated, the more favorable the potential outcome.<sup>54</sup> We are advancing digital tools to measure signs and symptoms of disease so that cancer can be diagnosed and intercepted at the earliest phases of malignancy to improve chances of a more favorable outcome.



# Our areas of focus

Johnson & Johnson's research, development, and collaborative efforts are focused in areas where our deep expertise, understanding of disease biology, and scientific innovation can be concentrated on specific tumor types with the greatest need for new treatment innovations.

## Hematologic malignancies

**There has been significant progress in the treatment of people diagnosed with blood cancers over the past 40 years.<sup>55</sup> Our leadership has advanced transformative therapies for patients with hematologic malignancies across the disease continuum, ranging from highly refractory, to frontline, to pre-cancerous disease.<sup>56, 57</sup> We are committed to advancing our industry-leading pipeline with novel opportunities for next-generation treatments to develop the right regimens for a broad spectrum of patients.**

To that end, our strategy involves a multimodal, multi-targeted approach to drive toward curative regimens. We are developing comprehensive regimens in B-cell malignancies, myeloid malignancies, and plasma cell malignancies, including multiple myeloma and amyloid light-chain (AL) amyloidosis, advancing a wide range of therapies, including B-cell maturation antigen (BCMA) bispecific antibodies, to work in different ways to overwhelm tumors. We also are working on ways to enhance the ability of the immune system to target and kill cancer cells.

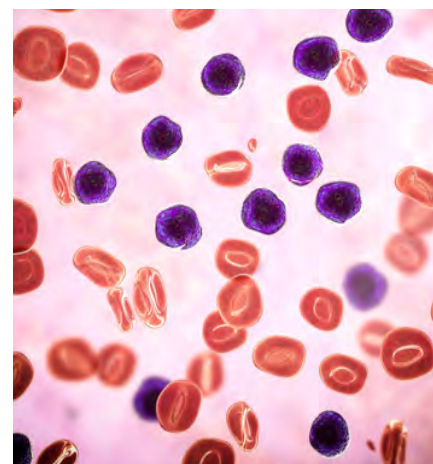
### Plasma cell malignancies: multiple myeloma

With advances in treatment over the past 15–20 years, survival outcomes in multiple myeloma have significantly improved, but patient outcomes still vary, and cure has remained elusive.<sup>58</sup> While Johnson & Johnson is already having a measurable impact on transforming patients' lives with 11 approved treatments, our goal is to develop curative treatments and our urgency is influenced by the unmet needs that patients still face today.

We are committed to changing the course of multiple myeloma and envision a world where this disease is redefined as curable. Our comprehensive portfolio explores treatments that employ a range of mechanisms of action and hit different cellular targets so that patients have options based on their unique disease characteristics. Our aim is to maximize available options by developing complementary approaches to treating multiple

myeloma using bispecific T-cell engagers, CAR-T therapies, and the current standard of care therapy in accordance with a patient's condition and preferences. We are deepening our commitment to lead the advancement of science and innovation across disease states and lines of treatment to help unlock transformational outcomes for patients.

Our ambition is to get in front of cancer, and we are driving towards that goal every day on behalf of patients and healthcare professionals.





## AL amyloidosis

AL amyloidosis is a rare and serious disease in which amyloid protein builds up in tissues or organs and can eventually lead to organ failure.<sup>59</sup> Our work focuses on earlier disease detection and treatment before organ damage occurs, and leveraging science from our deep knowledge in multiple myeloma to better develop new treatment options, including the approval of a subcutaneous version of an existing therapy which is benefiting patients.

## B-cell malignancies

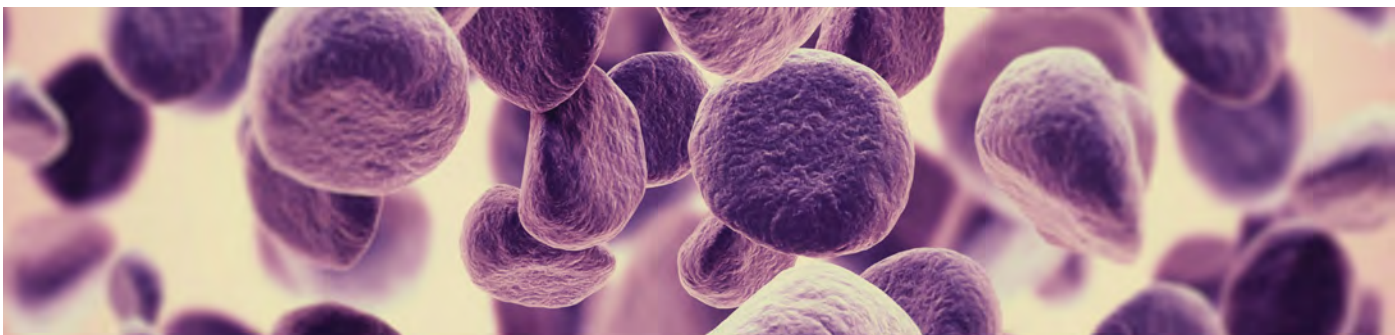
We collaborated to pioneer the development of a globally approved, first-in-class treatment for certain B-cell malignancies,<sup>60</sup> including chronic lymphocytic leukemia, previously treated mantle cell lymphoma, Waldenström's macroglobulinemia, and previously treated marginal zone lymphoma. Using our full array of strategic research approaches, we are continuing to innovate to advance care and provide new treatment options for these malignancies, including non-Hodgkin lymphoma, large B-cell lymphoma, and follicular lymphoma. We are advancing the next wave of transformative medicines with novel combination regimens, antigens, and costimulation.

## Myeloid malignancies

Acute myeloid leukemia (AML) is a disease of the bone marrow that can quickly spread to the blood.<sup>61</sup> Our focus is to better understand existing standard treatment and to research new ways to overcome resistance.

Myelodysplastic syndromes (MDS) are disorders in which the bone marrow does not produce enough healthy blood cells, leading to anemia and the need for blood transfusions.<sup>62</sup>

We are committed to bringing forth new treatment options for patients with AML and MDS and have advanced a comprehensive development program that includes novel bispecific approaches as well as other novel targets with transformational potential.

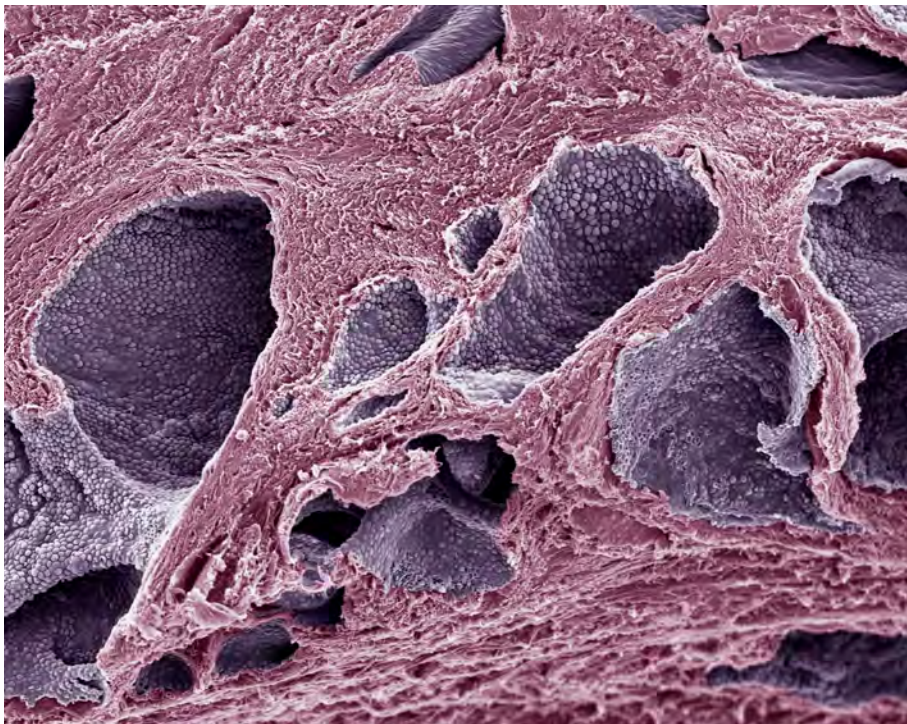


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# Prostate cancer

Johnson & Johnson has built a **legacy of innovation** in the treatment of prostate cancer. Our strategy includes a **patient-centric, comprehensive development program** spanning the entire disease continuum from early, localized disease to late stage, metastatic prostate cancer, and includes multiple therapeutic modalities and combination approaches.

We are advancing an industry-leading pipeline and portfolio, beginning with the development of a novel agent for patients with non-metastatic castration-resistant prostate cancer (nmCRPC) and metastatic castration-sensitive prostate cancer (mCSPC), and the execution of two first-in-class registration programs in high-risk localized prostate cancer combining hormonal therapy with radiation and radical prostatectomy. Leveraging the strength of precision medicine, we are also working on therapeutics for patients with prostate cancer who have **DNA repair defects**, where we are using biomarkers to help select patients most likely to respond to therapy.



We continue to innovate by leveraging novel endpoints to bring new transformational therapies to patients. Our approach includes evaluating the benefits of combining therapies in our portfolio, as well as bringing novel compounds and treatment approaches into clinical development, including highly selective targets and multiple platforms and modalities addressing heterogeneity and resistance.

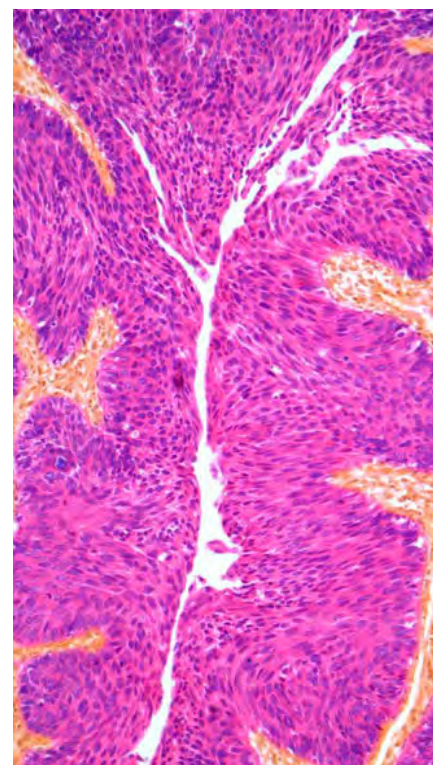
# Bladder cancer



Despite available therapies, there is a high unmet need based on the prevalence of poor outcomes for patients.<sup>63</sup> While new treatment options have offered some promise, we recognize the urgency to advance science and develop innovative, bladder-sparing treatment options to redefine what a bladder cancer diagnosis means for patients.

**We are committed to addressing these specific challenges with disruptive solutions. Within bladder cancer, we are exploring how a personalized and targeted approach to care could transform patient outcomes long-term.**

Building upon our approval of the first fibroblast growth factor receptor (FGFR) inhibitor for the treatment of patients with metastatic urothelial carcinoma,<sup>64, 65</sup> our differentiated program is evaluating potential treatments across all stages of the disease, including both combination and monotherapies using various drug delivery approaches, from oral dosing to an innovative targeted releasing system. This system provides a potentially best-in-class platform to create comprehensive and transformative early bladder cancer regimens against a broad range of targets.



# Solid tumors

## Lung cancer

Johnson & Johnson is committed to transforming the trajectory of lung cancer, advancing important innovations and accelerating the development of new applications in the fight against this deadly disease.

**Our strategy involves targeting the complex nature of the disease by interfering with multiple disease mechanisms. This includes distinct therapeutic approaches to lung cancer such as targeted therapy with small and large molecules, multi-specifics designed to affect multiple targets, and vaccine-based therapy.**

The approval of our first lung cancer therapy, a bispecific antibody, is a landmark achievement that provides renewed hope for patients with a rare and serious type of genetically defined non-small cell lung cancer who previously had no approved treatment options.<sup>66-68</sup> Driven by the promise of this therapeutic, our rapidly expanding development program in lung cancer includes both monotherapy and combination strategies,<sup>66</sup> with the potential to build standard-of-care treatment regimens. In addition, Johnson & Johnson is focused on building external collaborations to further advance the science of lung cancer, recently collaborating with the LUNGeVity Foundation.<sup>69</sup>

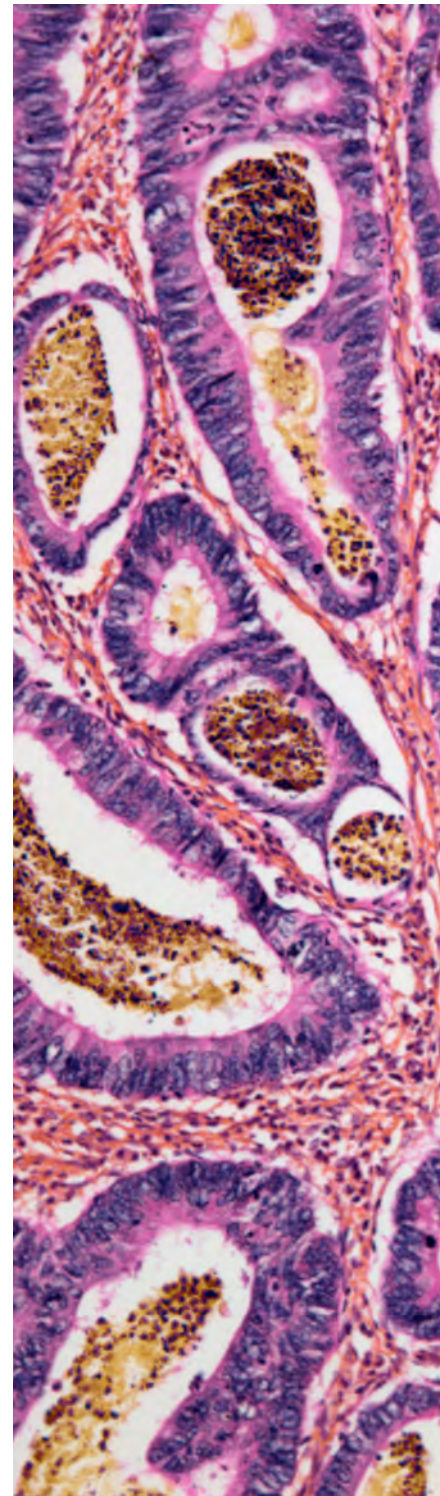
Our focus includes research and development efforts on non-small cell lung cancer (squamous and adenocarcinoma) as well as small cell lung cancer.

## Colorectal cancer

**In colorectal cancer, patients are often diagnosed after the cancer has progressed too far to be effectively treated.<sup>70, 71</sup> New techniques for early detection will allow us to intercept cancers before they develop.<sup>72</sup>**

Identifying biomarkers and developing targeted therapeutics to treat colorectal cancer before it starts are major efforts currently underway at Johnson & Johnson. Our clinical trials in colorectal cancer interception are investigating how we can discover and disrupt biological processes that enable the growth of tissue that eventually becomes cancerous. We are exploring stem cell properties, including how they self-renew, and the related hypothesis that tumors are proliferated by a type of cancer stem cell.

We are also pursuing ways to prevent and arrest the development of malignancies of the colon and rectum by diagnosing and treating precursor lesions. Our vision for eliminating colorectal cancer involves identifying and treating people who may develop the disease so early that the colonoscopy becomes a tool to confirm the absence of malignancies rather than to catch those malignancies early.



# Unmet medical needs

We focus our efforts where the need is great, the science is compelling and actionable, and there is the greatest opportunity to help people live longer, healthier lives.

## Hematologic malignancies

### Plasma cell malignancies: multiple myeloma

- Second most common blood cancer<sup>73</sup>
- Nearly 176,000 new cases diagnosed worldwide every year<sup>73</sup>

### AL amyloidosis

- An estimated 4,000 new cases annually in the US<sup>74</sup>
- Actual incidence may be higher due to underdiagnosis<sup>74</sup>
- Can lead to life-threatening organ failure<sup>74</sup>

### B-cell malignancies

- Chronic lymphocytic leukemia – one of the most common forms of leukemia in the US<sup>75</sup>
- Mantle cell lymphoma – a rare, aggressive lymphoma with an average survival rate of 5–7 years<sup>76</sup>

- Waldenström’s macroglobulinemia – a rare, slow-growing type of non-Hodgkin lymphoma (NHL) that occurs in less than 2% of patients with NHL<sup>77</sup>

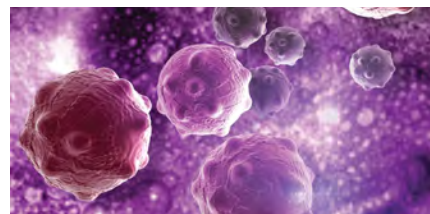
- Marginal zone lymphoma – slow-growing lymphoma that accounts for 8% of NHL patients<sup>78</sup>

- Diffuse large B-cell lymphoma – a fast-growing type of NHL, accounting for 22% of all NHL cases in the US<sup>79</sup>

- Follicular lymphoma – a slow-growing form of NHL, accounting for 11% of all cases in the US<sup>79</sup>

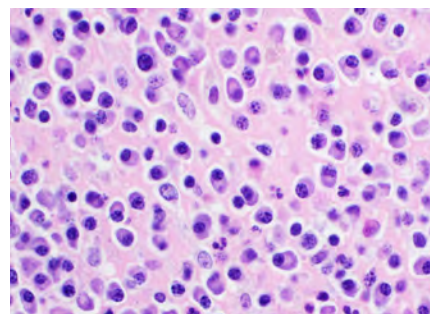
### Acute myeloid leukemia (AML)

- Resistant to several standard therapies; patients often relapse with poor prognosis
- 5-year relative survival rate of approximately 33%<sup>80</sup>



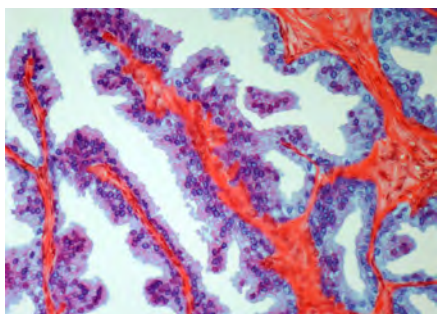
### Myelodysplastic syndromes (MDS)

- High-risk MDS is very similar to AML
- Approximately 60–80% of patients experience symptomatic anemia, significantly reducing quality of life<sup>81</sup>
- Often requires repeated blood transfusions<sup>81</sup>



# Prostate cancer

- Second most common cancer in men worldwide<sup>82</sup>



## Localized prostate cancer (LPC)

- 70% of prostate cancers are discovered at localized stage when cancer is only inside the prostate gland<sup>82</sup>
- High unmet need in LPC, as some men with high-risk disease experience early metastasis even after aggressive local treatments<sup>83</sup>
- 5-year high-risk LPC PSA relapse-free survival rates range from 55–71%, indicating potential for metastatic relapse<sup>84</sup>

## Metastatic castration-sensitive prostate cancer

- Also known as metastatic hormone-sensitive prostate cancer<sup>85</sup>
- Typically responds to testosterone suppression therapy and chemotherapy<sup>86</sup>
- Patients with newly identified metastatic disease, either at first diagnosis or following prior local therapy, have a poorer prognosis<sup>87</sup>

## Non-metastatic castration-resistant prostate cancer

- No longer responds to hormone treatment and is only found in the prostate<sup>85</sup>
- 90% will develop bone metastases, which can lead to pain, fractures, and spinal cord compression<sup>88</sup>
- Median overall survival is less than 5 years<sup>89</sup>

## Metastatic castration-resistant prostate cancer

- Has spread to other parts of the body<sup>85</sup>
- No longer responds to a medical or surgical treatment that lowers testosterone<sup>85</sup>
- Median overall survival is less than 3 years in chemotherapy-naïve men<sup>90</sup>

# Bladder cancer

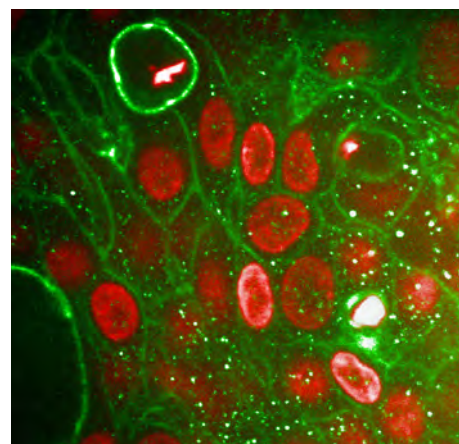
- Tenth most common cancer worldwide<sup>91</sup>
- More than 570,000 new cases diagnosed in 2020<sup>91</sup>
- Sixth most commonly occurring cancer in men<sup>91</sup>

# Lung cancer

- Leading cause of cancer deaths worldwide<sup>82</sup>
- Most common cancer in men, and second most common cancer in women<sup>82</sup>
- Claims more lives than colon and breast cancers combined<sup>82</sup>
- More than 2 million people worldwide diagnosed with lung cancer in 2022<sup>82</sup>; about 87% of lung cancers are non-small cell lung cancer (NSCLC)<sup>92</sup>
- The 5-year survival rate for NSCLC is 32%, compared with 9% for small cell lung cancer<sup>93</sup>
- Lung cancer makes up almost 20% of all cancer deaths<sup>82</sup>
- 1.8 million deaths in 2022 globally<sup>82</sup>

# Colorectal cancer

- Second leading cause of cancer death worldwide<sup>85</sup>
- More than 1.9 million cases in 2020<sup>85</sup>



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# Seeking the best collaborations to advance cures

We seek medical breakthroughs wherever they occur. Our goal is to leverage our internal expertise and embrace external science to bring forth truly transformational therapies.

Based on the belief that collaboration is essential to drive change and innovation, we are dedicated to collaborating with strategic partners across the globe who share our vision to make cancer a preventable and curable disease by providing transformational therapeutic and diagnostic products and resources.

Johnson & Johnson is committed to ensuring the success of our collaborations. Our Johnson & Johnson Innovation and Business Development teams bring scientific, funding, and commercialization

expertise to engage at all levels of research and development and the product lifecycle process. Our flexible structure enables us to be agile and work effectively with a variety of partners to create the best business model for each collaboration. We work globally and regionally to foster promising early-stage opportunities and establish collaborations in which each partner brings unique strengths and experiences to the table so that together we can achieve more than either could alone.

## The resources and expertise to deliver new advances in cancer

We have decades of experience in successfully bringing transformational cancer medicines to market, from research in the lab to our state-of-the-art development and commercialization capabilities. As part of Johnson & Johnson, our team of world-class experts in oncology research and development has access to tremendous global resources. Our end-to-end capabilities are integrated and strategically aligned to effectively manage the complexities of the global drug discovery and development process. These include the ability to work with partners to rapidly advance ideas, to take local market and regulatory realities into consideration, and to help reduce the cycle time from laboratory to patient. We have teams intensely focused on specific cancers with fully dedicated groups for each compound. Complementing them are global centers of excellence in biomarkers, companion diagnostics, biologics, precision medicine, data science, and global marketing. These are further enhanced by local expertise in regulatory and medical affairs.



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Johnson & Johnson Innovation brings together business development, venture investment, incubation and research, and development resources from across the company to advance science and technology at all stages of innovation.

This innovation network identifies the right partnerships and deal structures, and allows innovators to leverage the many resources of Johnson & Johnson.

We believe that the right kind of support for new ideas is critical to driving innovation and achieving our goals to transform human health around the world.



#### **JLABS and JPODS**

Help companies get up and running by providing a number of company incubation options.

#### **Innovation Centers**

Teams located in the life sciences hot spots of Shanghai, Boston, California, and London identify opportunities from academics and early-stage companies who want to accelerate novel programs through collaborations. Each center houses science and technology experts and has broad deal-making capabilities.

#### **JJDC, Inc. (JJDC)**

Invests in emerging life sciences companies developing healthcare solutions in areas of strategic interest to Johnson & Johnson. Investments range from seed funding and Series A investments in the earliest-stage startups to Series B investments and beyond in more mature companies, each deal customized to fit the opportunity.

#### **Johnson & Johnson Business Development**

A decentralized approach combines an entrepreneurial drive for growth and proximity to customers with the resources, know-how, and investment capital of a well-respected Fortune 500 company. This approach creates a strong sense of ownership and accountability with the goal of bringing the full strengths of Johnson & Johnson to bear to create long and valuable relationships.

# Our team – leading the fight against cancer

*“I am grateful to be part of the Johnson & Johnson team that works with such intentional focus and relentless effort to discover and develop the next generation of paradigm-changing treatments; therapies that will not only change the way oncologists practice, but will hopefully one day lead to cures.”*



**Jeff Infante, M.D.**  
Global Head,  
Early Clinical Development  
and Translational Research

**At Johnson & Johnson, we share a deep passion for scientific innovation and for bringing together the best expertise worldwide to make promising treatments available to patients who are waiting for them.**

Our global research and development program is driven by world-class experts in oncology, with diverse experience in clinical medicine, academia, and drug discovery and development. Every member of our team is deeply committed to changing the trajectory of health for people with cancer.

The Johnson & Johnson team is breaking new ground and charting unexplored territory every day, developing innovative approaches to intercept cancer and move toward cures. Our unique teamwork-driven approach to discovery and innovation is leading to transformational breakthroughs in the fight against cancer.

We cherish unique perspectives because enormous problem-solving potential is unleashed when all minds work together. Consequently, cross-functional teamwork plays a vital role in oncology research.

Our Credo guides our decision making and challenges us to put the needs and well-being of people first. At Johnson & Johnson, we lead with integrity to think critically and take innovative approaches to combating cancer.

**If you want to make groundbreaking contributions to cancer research, treatment, and prevention, see how you can join us in the fight against cancer at [jobs.jnj.com](https://jobs.jnj.com).**



## About Johnson & Johnson

**At Johnson & Johnson, we believe health is everything. Our strength in healthcare innovation empowers us to build a world where complex diseases are prevented, treated, and cured, where treatments are smarter and less invasive, and solutions are personal. Through our expertise in Innovative Medicine and MedTech, we are uniquely positioned to innovate across the full spectrum of healthcare solutions today to deliver the breakthroughs of tomorrow, and profoundly impact health for humanity.**

Learn more at [www.jnj.com/](https://www.jnj.com/) or at [www.janssen.com/johnson-johnson-innovative-medicine](https://www.janssen.com/johnson-johnson-innovative-medicine).

Follow us at [@JanssenUS](https://twitter.com/JanssenUS) and [@JNJInnovMed](https://twitter.com/JNJInnovMed).

Janssen Research & Development, LLC, and Janssen Biotech, Inc., are both Johnson & Johnson companies.

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# Our work to improve healthcare for everyone

Changing the trajectory of health for humanity is the core purpose of our business, and it has never been more critical. At Johnson & Johnson, we are uniquely positioned to enhance clinical trials, access, and quality of care.

Our initiatives to help drive health equity among patients include:

## Generating evidence on health disparities

- Conducting research, publishing clinical and real-world evidence studies, and monitoring impact of policy changes on under-served communities

## Driving awareness and policy change

- Partnering with advocates, targeting education to healthcare professionals, and incorporating health disparities into medical education

## Reaching out to patients

- Delivering patient education through trusted channels, launching culturally responsive campaigns, and deploying additional nurse educators proficient in other languages

## Improving representation

- Gathering data on recruitment issues, activating clinical trial sites with more representative populations

It is important to have representative participants in clinical trials in which life-changing medicines and therapies are studied for safety and efficacy. To advance healthcare moving forward, prioritizing a representative clinical trial landscape will be critical to improving the overall health system.

## People-first culture

Cultivating a workforce that inspires innovative healthcare solutions around the world.

## Healthier communities

Help close the racial mortality gap by investing in culturally competent community care models that create health outcomes for people of color.

## Enduring alliances

Lead and leverage Johnson & Johnson's powerful partnership network to combat health determinants.

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# Contact us

## Early-stage Johnson & Johnson innovation

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# References

- 1 Fierce Pharma. The top 20 pharma companies by 2023 revenue. Accessed August 2025. <https://www.fiercepharma.com/pharma/top-20-pharma-companies-2023-revenue>.
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- 8 Data on File
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- 10 Data on File
- 11 Data on File.
- 12 Data on File
- 13 Data on File
- 14 Johnson & Johnson. European Commission approves subcutaneous RYBREVANT® (amivantamab) for the treatment of patients with advanced EGFR-mutated non-small cell lung cancer. Accessed August 2025. <https://www.jnj.com/media-center/press-releases/european-commission-approves-subcutaneous-rybrevant-amivantamab-for-the-treatment-of-patients-with-advanced-egfr-mutated-non-small-cell-lung-cancer>.
- 15 Data on File
- 16 World Health Organization. 2022 Cancer Fact Sheet. Accessed August 2025. <https://www.who.int/news-room/fact-sheets/detail/cancer>.
- 17 American Cancer Society. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. Accessed August 2025. <https://acsjournals.onlinelibrary.wiley.com/doi/10.3322/caac.21660>.
- 18 National Cancer Institute. Targeted Therapy to Treat Cancer. Accessed August 2025. <https://www.cancer.gov/about-cancer/treatment/types/targeted-therapies>.
- 19 National Cancer Institute. Bispecific T-cell engager. Accessed August 2025. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/bispecific-t-cell-engager>.
- 20 Singh A, et al. Overcoming the challenges associated with CD3+ T-cell redirection in cancer. *Br J Cancer*. 2021;124(6):1037–1048.
- 21 Qin X, et al. Stepping forward: T-cell redirecting bispecific antibodies in cancer therapy. *Acta Pharm Sin B*. 2024;14(6):2361–2377.
- 22 National Cancer Institute. Monoclonal Antibodies. Accessed August 2025. <https://www.cancer.gov/about-cancer/treatment/types/immunotherapy/monoclonal-antibodies>.
- 23 National Cancer Institute. Antibody. Accessed August 2025. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/antibody>.

- 24 National Cancer Institute. Monoclonal antibody. Accessed August 2025. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/monoclonal-antibody>.
- 25 Horenstein AL, et al. Monoclonal anti-CD38 therapy in human myeloma: retrospects and prospects. *Front Immunol*. 2025;16:1519300.
- 26 Laubach JP, et al. CD38-targeted immunochemotherapy in refractory multiple myeloma: A new horizon. *Clin Cancer Res*. 2015;21(12):2660–2662.
- 27 Leleu X, et al. Anti-CD38 antibody therapy for patients with relapsed/refractory multiple myeloma: differential mechanisms of action and recent clinical trial outcomes. *Ann Hematol*. 2022;101(10):2123–2137.
- 28 Kitadate A. CD38-targeted therapy for multiple myeloma: Mechanisms of action and clinical development. *Annals of Oncology*. 2022;33(S6):S431.
- 29 Zhu Y, et al. Multifunctional receptor-targeting antibodies for cancer therapy. *Lancet Oncol*. 2015;16(15):e543–e554.
- 30 Amoozgar B, et al. From molecular precision to clinical practice: A comprehensive review of bispecific and trispecific antibodies in hematologic malignancies. *Int J Mol Sci*. 2025;26(11):5319.
- 31 National Cancer Institute. T-cell transfer therapy. Accessed August 2025. <https://www.cancer.gov/about-cancer/treatment/types/immunotherapy/t-cell-transfer-therapy>.
- 32 National Cancer Institute. CAR T-cell therapy. Accessed August 2025. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/car-t-cell-therapy>.
- 33 National Cancer Institute. Oncolytic virus enables the immune system to attack tumors. Accessed August 2025. <https://www.cancer.gov/news-events/cancer-currents-blog/2023/oncolytic-virus-blocking-tgf-beta>.
- 34 Ma N, et al. Formulation-optimized oncolytic viruses: Advancing systemic delivery and immune amplification. *J Control Release*. 2025;383:113822.
- 35 National Cancer Institute. Vaccine. Accessed August 2025. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/vaccine>.
- 36 Zhou Y, et al. Cancer vaccines: current status and future directions. *J Hematol Oncol*. 2025;18(1):18.
- 37 Gupta R, et al. Artificial intelligence to deep learning: machine intelligence approach for drug discovery. *Mol Divers*. 2021;25(3):1315–1360.
- 38 Blackburn EH. Cancer-interception. *Cancer Prev Res (Phila)*. 2011;4(6):787–792.
- 39 Stanton SE, et al. Advances and challenges in cancer immunoprevention and immune interception. *J Immunother Cancer*. 2024;12(3):e007815.
- 40 Zhu B, et al. Spatial and multiomics analysis of human and mouse lung adenocarcinoma precursors reveals TIM-3 as a putative target for precancer interception. *Cancer Cell*. 2025;43(6):1125–1140.
- 41 Adedokun OK, et al. Immuno-oncology from a chemist’s lens: Small molecules modulating the tumor immune microenvironment. *J Int Res Med Pharm Sci*. 2025;20(2):50–65.
- 42 Bao R, et al. Ten challenges and opportunities in computational immuno-oncology. *J Immunother Cancer*. 2024;12(10):e009721.
- 43 Johnson & Johnson. Janssen to acquire BeneVir Biopharm to advance immunotherapy regimens 2018. Accessed August 2025. <https://www.jnj.com/media-center/press-releases/janssen-to-acquire-benevir-biopharm-to-advance-immunotherapy-regimens>.
- 44 Peters C, et al. Oncolytic Virus Immunotherapy 2017. Latest developments in oncolytic virus immunotherapy. Accessed August 2025. [https://www.immuno-oncologysummit.com/uploadedFiles/Immuno\\_Oncology\\_Summit/Agenda/17/Oncolytic-Virus-Immunotherapy-Meeting-Review.pdf](https://www.immuno-oncologysummit.com/uploadedFiles/Immuno_Oncology_Summit/Agenda/17/Oncolytic-Virus-Immunotherapy-Meeting-Review.pdf).

- 45 National Library of Medicine. National Center for Biotechnology Information. In brief: How does the immune system work? Accessed August 2025. <https://www.ncbi.nlm.nih.gov/books/NBK279364/>.
- 46 Omolekan TO, et al. Viral warfare: unleashing engineered oncolytic viruses to outsmart cancer's defenses. *Front Immunol*. 2025;16:1618751.
- 47 Nature.com. Janssen Oncology—leading the way in transformational innovation 2022. Accessed August 2025. <https://media.nature.com/original/magazine-assets/d43747-022-00066-w/d43747-022-00066-w.pdf>.
- 48 US Food and Drug Administration. FDA approves gemcitabine intravesical system for non-muscle invasive bladder cancer 2025. Accessed August 2025. <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-gemcitabine-intravesical-system-non-muscle-invasive-bladder-cancer>.
- 49 American Cancer Society. Intravesical therapy for bladder cancer. Accessed August 2025. <https://www.cancer.org/cancer/types/bladder-cancer/treating/intravesical-therapy.html>.
- 50 Petralia F, et al. Pan-cancer proteogenomics characterization of tumor immunity. *Cell*. 2024;187(5):1255–1277.e27.
- 51 Capobianco E. High-dimensional role of AI and machine learning in cancer research. *Br J Cancer*. 2022;126(4):523–532.
- 52 Hulstaert L, et al. Enhancing site selection strategies in clinical trial recruitment using real-world data modelling. *PLoS One*. 2024;19(3):e0300109.
- 53 Zhu R, et al. Clinical pharmacology applications of real-world data and real-world evidence in drug development and approval—an industry perspective. *Clin Pharmacol Ther*. 2023;114(4):751–767.
- 54 Hubbell E, et al. Potential for cure by stage across the cancer spectrum in the United States. *Cancer Epidemiol Biomarkers Prev*. 2024;33(2):206–214.
- 55 AACR.org. AACR cancer progress report 2025. Accessed August 2025. [cancerprogressreport.aacr.org/wp-content/uploads/sites/2/2025/09/AACR\\_CPR\\_2025.pdf](https://www.aacr.org/wp-content/uploads/sites/2/2025/09/AACR_CPR_2025.pdf).
- 56 Johnson & Johnson. Johnson & Johnson to showcase strength of its broad hematology portfolio and pipeline at the 2024 American Society of Hematology Annual Meeting. Accessed August 2025. <https://www.jnj.com/media-center/press-releases/johnson-johnson-to-showcase-strength-of-its-broad-hematology-portfolio-and-pipeline-at-the-2024-american-society-of-hematology-annual-meeting>.
- 57 Johnson & Johnson. Johnson & Johnson highlights its preeminent leadership in hematology through differentiated blood cancer portfolio and pipeline with new clinical and real-world data at ASH. Accessed October 2025. <https://www.jnj.com/johnson-johnson-highlights-its-preeminent-leadership-in-hematology-through-differentiated-blood-cancer-portfolio-and-pipeline-with-new-clinical-and-real-world-data-at-ash>.
- 58 Ortega-Vida E, et al. Evolution of survival in patients with multiple myeloma over two decades: A real-world experience from a medium-level hospital. *Cancers (Basel)*. 2025;17(5):793.
- 59 American Cancer Society. What is amyloidosis? Accessed August 2025. <https://www.cancer.org/cancer/types/multiple-myeloma/about/what-is-multiple-myeloma.html>.
- 60 Data on File
- 61 American Cancer Society. What is acute myeloid leukemia (AML)? Accessed August 2025. <https://www.cancer.org/cancer/types/acute-myeloid-leukemia/about/what-is-aml.html>.
- 62 American Cancer Society. If you have myelodysplastic syndrome (MDS). Accessed August 2025. <https://www.cancer.org/cancer/types/myelodysplastic-syndrome/if-you-have-myelodysplastic-syndrome.html>.
- 63 Filon M, Schmidt B. New treatment options for non-muscle-invasive bladder cancer. *Am Soc Clin Oncol Educ Book*. 2025;45(2):e471942.

- 64 US Food and Drug Administration. FDA approves erdafitinib for locally advanced or metastatic urothelial carcinoma. Accessed August 2025. <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-erdafitinib-locally-advanced-or-metastatic-urothelial-carcinoma>.
- 65 Johnson & Johnson. BALVERSA™ (erdafitinib) receives U.S. FDA approval for the treatment of patients with locally advanced or metastatic urothelial carcinoma with certain FGFR genetic alterations 2019. Accessed August 2025. <https://www.jnj.com/media-center/press-releases/balversa-erdafitinib-receives-u-s-fda-approval-for-the-treatment-of-patients-with-locally-advanced-or-metastatic-urothelial-carcinoma-with-certain-fgfr-genetic-alterations>.
- 66 US Food and Drug Administration. FDA approves lazertinib with amivantamab-vmjw for non-small lung cancer 2024. Accessed August 2025. <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-lazertinib-amivantamab-vmjw-non-small-lung-cancer>.
- 67 Johnson & Johnson. RYBREVANT™ (amivantamab-vmjw) receives FDA approval as the first targeted treatment for patients with non-small cell lung cancer with EGFR Exon 20 insertion mutations 2021. Accessed August 2025. <https://www.jnj.com/media-center/press-releases/rybrevanttm-amivantamab-vmjw-receives-fda-approval-as-the-first-targeted-treatment-for-patients-with-non-small-cell-lung-cancer-with-egfr-exon-20-insertion-mutations>.
- 68 US Food and Drug Administration. FDA approves amivantamab-vmjw for EGFR exon 20 insertion-mutated non-small cell lung cancer indications. Accessed October 2025. <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-amivantamab-vmjw-egfr-exon-20-insertion-mutated-non-small-cell-lung-cancer-indications>.
- 69 Johnson & Johnson. “Our goal is to prevent lung cancer from happening in the first place” 2021. Accessed August 2025. <https://www.jnj.com/innovation/preventing-lung-cancer-from-happening-in-the-first-place>.
- 70 Andrew AS, et al. Risk factors for diagnosis of colorectal cancer at a late stage: A population-based study. *J Gen Intern Med*. 2018;33(12):2100–2105.
- 71 Arhi CS, et al. Delays in referral from primary care worsen survival for patients with colorectal cancer: a retrospective cohort study. *Br J Gen Pract*. 2020;70(696):e463–e471.
- 72 Chacko N, Ankri R. Non-invasive early-stage cancer detection: current methods and future perspectives. *Clin Exp Med*. 2024;25(1):17.
- 73 Myeloma Revealed. What is multiple myeloma? Accessed August 2025. <https://www.myeloma.org/what-is-multiple-myeloma>.
- 74 National Organization for Rare Disorders. Rare disease database. Accessed August 2025. <https://rarediseases.org/rare-diseases/amyloidosis/>.
- 75 American Cancer Society. What Is chronic lymphocytic leukemia? Accessed August 2025. <https://www.cancer.org/cancer/chronic-lymphocytic-leukemia/about/what-is-cll.html>.
- 76 Leukemia & Lymphoma Society. Mantle cell lymphoma facts. Accessed August 2025. <https://llsorg.widen.net/s/62bqxnhvt6/mantlecelllymphoma>.
- 77 Lymphoma Research Foundation. Waldenström macroglobulinemia. Accessed August 2025. <https://lymphoma.org/aboutlymphoma/nhl/wm/>.
- 78 Lymphoma Research Foundation. Marginal zone lymphoma. Accessed August 2025. <https://lymphoma.org/aboutlymphoma/nhl/mzl/>.
- 79 Lymphoma Research Foundation. Non-Hodgkin lymphoma. Accessed September 2025. <https://lymphoma.org/understanding-lymphoma/aboutlymphoma/nhl/>.
- 80 NIH-NCI Surveillance, epidemiology, and end results program. Cancer stat facts: Leukemia - Acute myeloid leukemia. Accessed August 2025. <https://seer.cancer.gov/statfacts/html/aml.html>.

- 81 Shenoy N, et al. Impact of iron overload and potential benefit from chelation in low risk myelodysplastic syndrome. *Blood*. 2014;124:873–881.
- 82 Global Cancer Observatory. Cancer Today World Factsheet 2022. “Worldwide cancer data.” Accessed August 2025. <https://gco.iarc.who.int/media/globocan/factsheets/populations/900-world-factsheet.pdf>.
- 83 Sundi D, et al. Very-high-risk localized prostate cancer: definitions and outcomes. *Prostate Cancer Prostatic Dis*. 2014;17(1):57–63.
- 84 Chang AJ, et al. “High-risk” prostate cancer: classification and therapy. *Nat Rev Clin Oncol*. 2014;11(6): 308–323.
- 85 Urologyhealth.org. Advanced Prostate Cancer. What is advanced prostate cancer? Accessed August 2025. [https://www.urologyhealth.org/urology-a-z/a/\\_advanced-prostate-cancer](https://www.urologyhealth.org/urology-a-z/a/_advanced-prostate-cancer).
- 86 Urologyhealth.org. Metastatic Hormone-Sensitive Prostate Cancer (mHSPC). What you should know. Accessed August 2025. <https://www.urologyhealth.org/educational-resources/metastatic-hormone-sensitive-prostatecancer>.
- 87 American Cancer Society. Prostate cancer early detection, diagnosis, and staging. Accessed September 2025. <https://www.cancer.org/content/dam/CRC/PDF/Public/8795.00.pdf>.
- 88 SCUA.org. CUA-CUOG Guideline. 2022 Canadian Urological Association (CUA)-Canadian Uro Oncology Group (CUOG) guideline: Management of castration-resistant prostate cancer (CRPC) Accessed August 2025. [https://www.cua.org/system/files/Guideline-Files/8161\\_v14.pdf](https://www.cua.org/system/files/Guideline-Files/8161_v14.pdf).
- 89 Saad F, et al. Treatment of nonmetastatic castration-resistant prostate cancer: focus on second-generation androgen receptor inhibitors. *Prostate Cancer Prostatic Dis*. 2021;24(2):323–334.
- 90 Ryan CJ, et al. Abiraterone acetate plus prednisone versus placebo plus prednisone in chemotherapy-naïve men with metastatic castration-resistant prostate cancer (COU-AA-302): final overall survival analysis of a randomised, double-blind, placebo-controlled phase 3 study. *Lancet Oncol*. 2015;16(2):152–160.
- 91 GLOBOCAN 2020: Bladder cancer 10th most commonly diagnosed worldwide. Accessed August 2025. [https://worldbladdercancer.org/news\\_events/globocan-2020-bladder-cancer-10th-most-commonly-diagnosedworldwide/](https://worldbladdercancer.org/news_events/globocan-2020-bladder-cancer-10th-most-commonly-diagnosedworldwide/).
- 92 American Cancer Society. Key statistics for lung cancer. Accessed August 2025. <https://www.cancer.org/cancer/types/lung-cancer/about/key-statistics.html>.
- 93 American Cancer Society. Lung cancer early detection, diagnosis, and staging. Accessed August 2025. <https://www.cancer.org/cancer/types/lung-cancer/detection-diagnosis-staging/survival-rates.html>.

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