

Nasdaq: CANC

# Tema Oncology ETF

Investing behind the prevention and cure of cancer

Q4 2023



### Disclosure



Carefully consider the Fund's investment objectives, risk factors, charges and expenses before investing. This and additional information can be found in the Fund's prospectus or summary prospectus, which may be obtained by visiting <a href="https://www.temaetfs.com">www.temaetfs.com</a>.

Read the prospectus carefully before investing

#### **Risk Information**

Investing involves risk including possible loss of principal. There is no guarantee the adviser's investment strategy will be successful.

Sector Focus Risk: Oncology companies are highly dependent on the development, procurement and marketing of drugs and the protection and exploitation of intellectual property rights. A company's valuation can also be greatly affected if one of its products is proven or alleged to be unsafe, ineffective or unprofitable. The stock prices of oncology companies have been and will likely continue to be very volatile. The costs associated with developing new drugs can be significant, and the results are unpredictable. Newly developed drugs may be susceptible to product obsolescence due to intense competition from new products and less costly generic products. Moreover, the process for obtaining regulatory approval by the U.S. Food and Drug Administration or other governmental regulatory authorities is long and costly and there can be no assurance that the necessary approvals will be obtained or maintained.

Tema Global Limited serves as the investment adviser to Tema Oncology ETF (the "Fund"), and NEOS Investments, LLC serves as a sub adviser to the Fund. The Fund is distributed by Foreside Fund Services LLC, which is not affiliated with Tema Global Limited nor NEOS Investments, LLC. Check the background of Foreside on FINRA's BrokerCheck.

**Distributor**: Foreside Fund Service LLC

For inquiries: info@temaetfs.com

## Tema: thematic ETFs managed differently



## Our name is our mission

Tema (noun) Latin for Theme

**Our mission** is to democratize access to institutionally-focused<sup>1</sup> thematic investing through risk-focused, actively managed ETF strategies.

### Backed by top-tier<sup>2</sup> investors & led with expertise<sup>3</sup>

























### Management team



Maurits Pot
Founder and CEO



**Yuri Khodjamirian, CFA** 



David K. Song MD, PhD, CFA Oncology PM

### Tema ETFs product sample



Luxury



American Reshoring



Monopolies and Oligopolies

<sup>&</sup>lt;sup>1</sup>Tema's products are created with the aim to be suitable for financial institutions, e.g., pension funds or endowment funds. These institutions often have strict investment requirements based on factors such as risk management and precision of exposure. <sup>2</sup>Index Ventures and Accel ranked among the top 10 VCs globally according to 2022 Global Venture Capital Investor Prominence Ranking report issued by dealroom.co. Criteria for evaluation are based on a comprehensive and quantitative list, including investors' success in backing unicorns (privately held startup company with a value of over \$1 billion) and future unicorns, as well as their level of deal activity in the last 12 months. <sup>3</sup>Company logos in this slide (excluding Index Ventures and Accel) showcase the past experiences of Tema's management team.

## **Executive summary**



- Cancer is the second deadliest killer but could be on the brink of a revolution in both diagnosis and treatment
- Innovation, from CAR T-cell therapy to liquid biopsies, is driving a new generation of oncology drug approvals
- Biotech is enduring the worst downcycle in decades and nearly 25% of listed small-cap biotech companies trade below net cash value
- CANC is managed by a portfolio manager with healthcare domain expertise and 19 years of investment experience employing a tried and tested biopharma stock selection process
- Tema is an active ETF manager supported by large operational and funding partners

## Cancer is the second deadliest killer<sup>1</sup> but could be on the brink of a revolution

Tema

1 in 2 people



will be diagnosed with cancer in their lifetime



\$25.2 Trillion

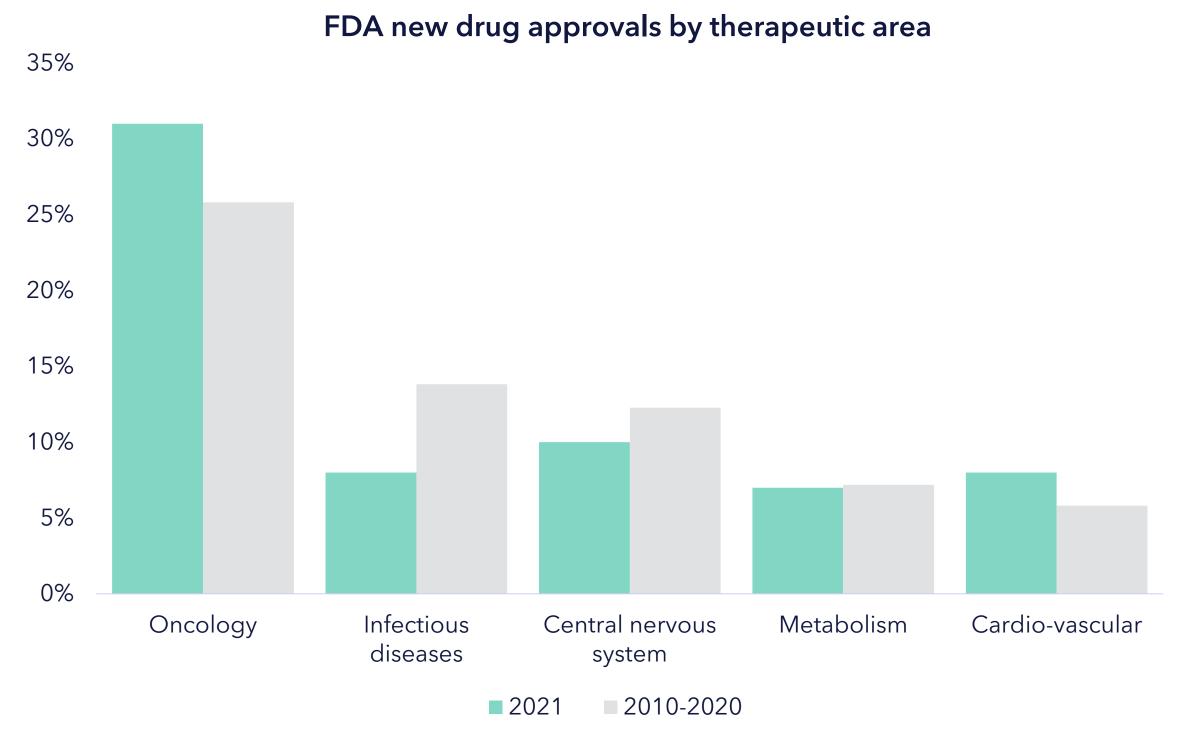


Estimated global cost of cancer from 2020-2050<sup>2</sup>

A revolution in biology is driving significant advances in diagnosing and treating cancer

## Oncology is leading the way amidst a sustained boom of new drug approvals



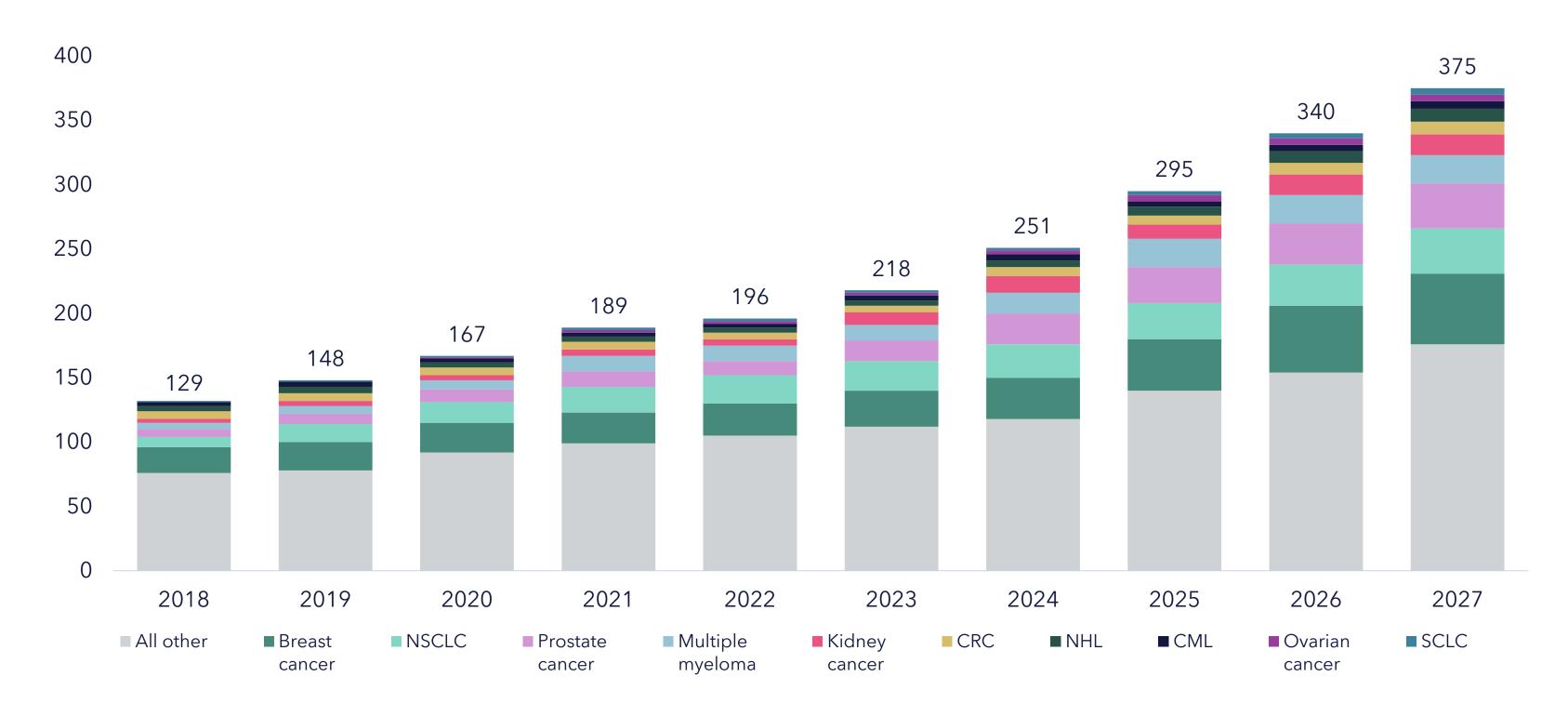


>100% increase

in number of new drugs approved

from 2010 to 2021

## Oncology spending is forecast to grow materially across all types of cancers iema

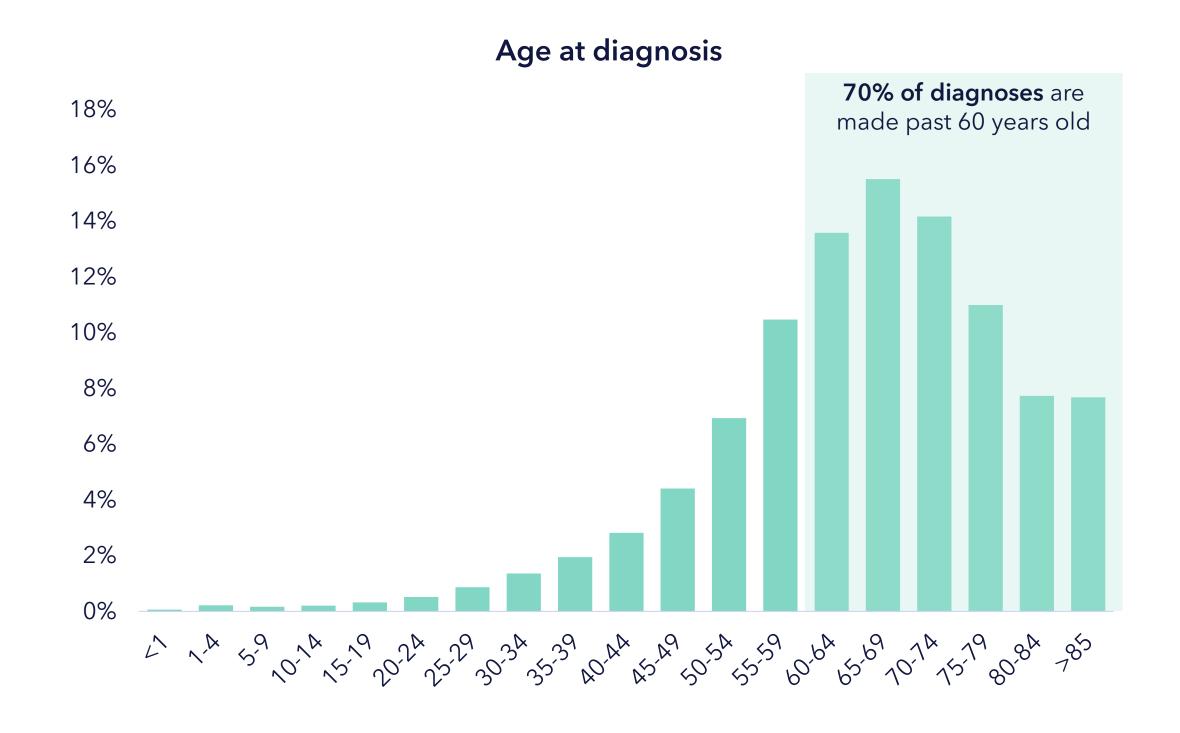


## Cancer incidence is primarily driven by an aging global population



The population of individuals >60 years old is forecast by the UN to 2.5x by 2050 to 2.5 billion people

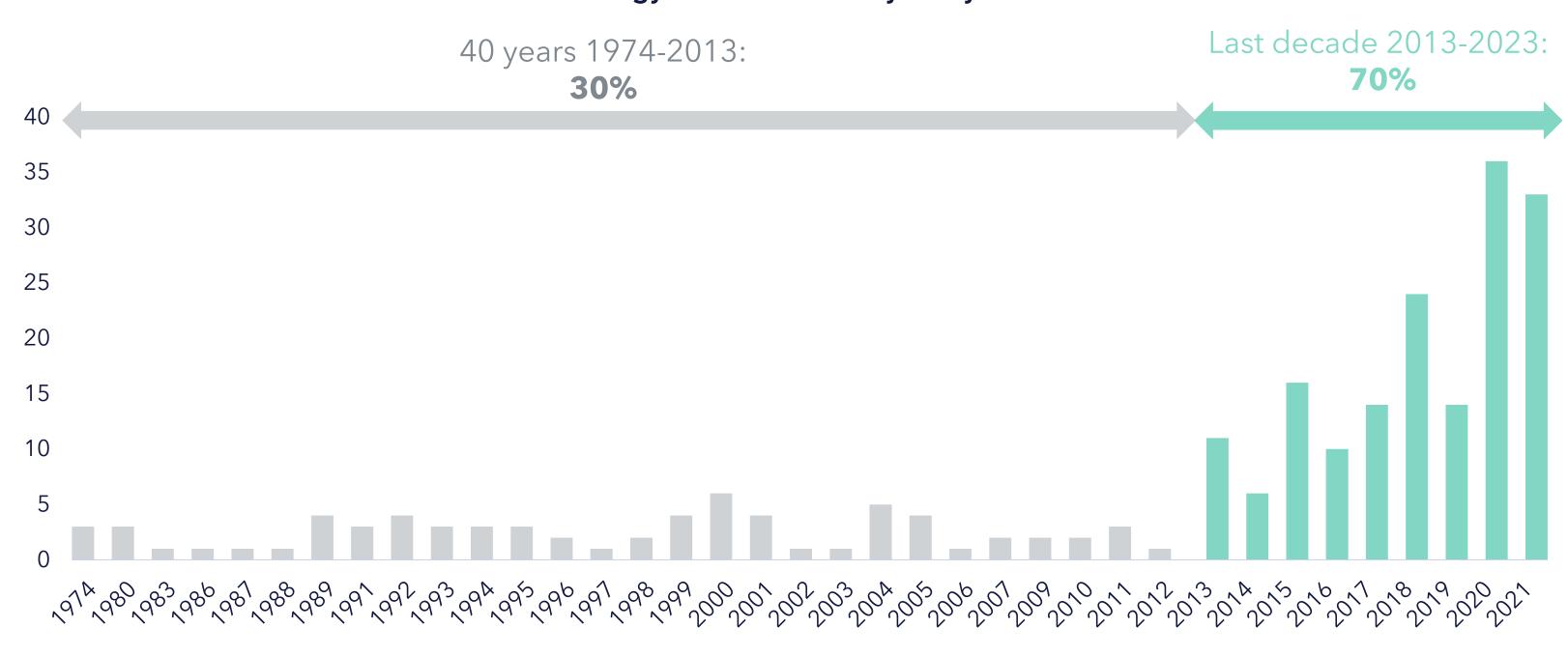




## A significant increase in the number of newly listed oncology companies has greatly expanded the investment opportunity set

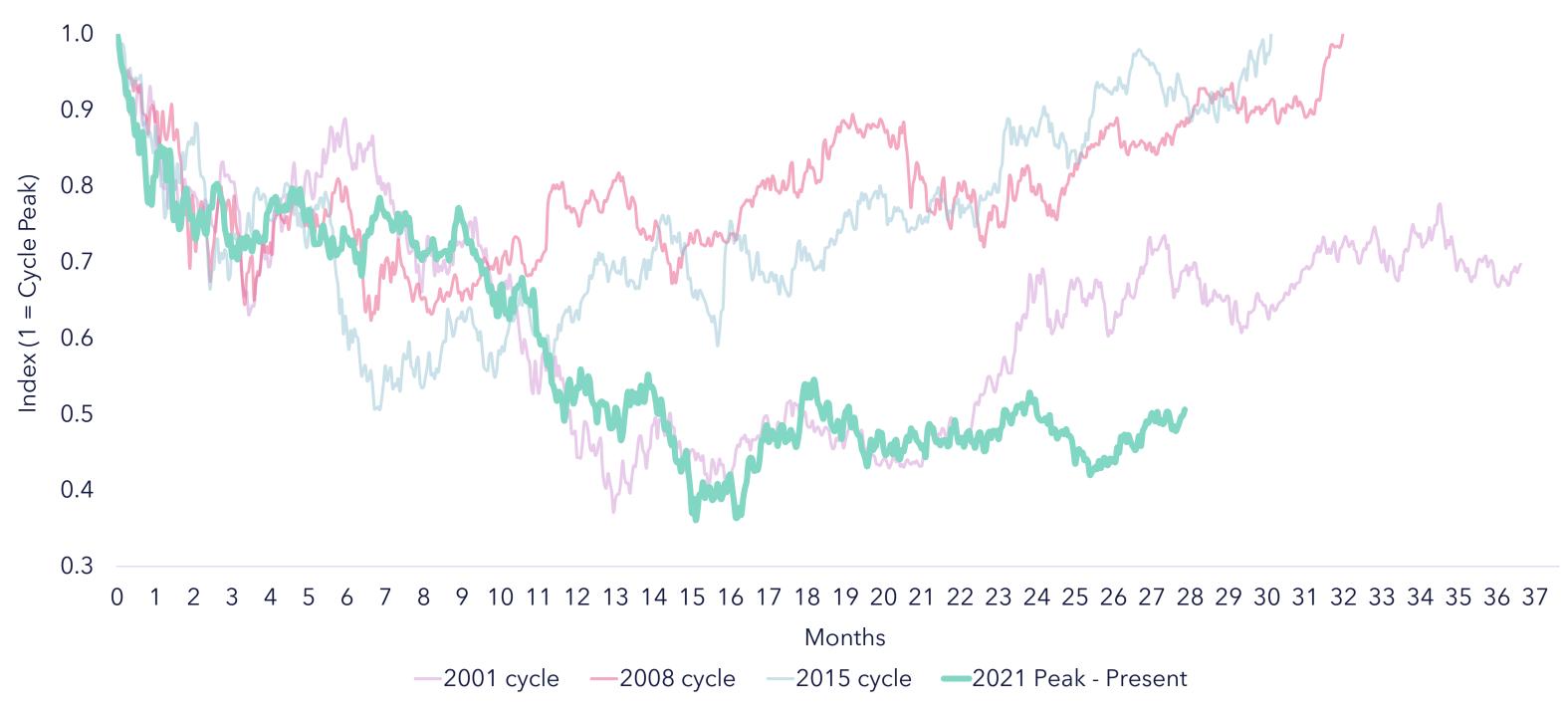
### Tema

### Oncology listed universe by IPO year



## Why now? Worst biotech downcycle in decades, nearly 25% of small biotech trade below net cash value



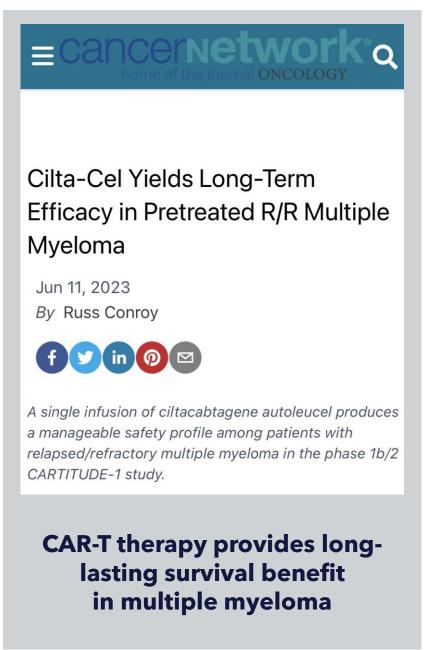


Source: Bloomberg. S&P Biotechnology Select Industry Index used for 2008, 2015, 2021 cycles. Cycles start dates are defined by index price peaks for each year. Nasdaq Biotech Index used for 2001 cycle. Past performance is not indicative of future results. The referenced index is shown for informational purposes only and is not meant to represent the Fund. You cannot invest directly in an index. The measures are representative of the indexes underlying holdings and are not indicative of future performance.

### Why now? R&D innovation boom has the potential to discover new cures



## Cell therapy: harnessing immune cells to fight cancer



## Liquid biopsy: early cancer screening

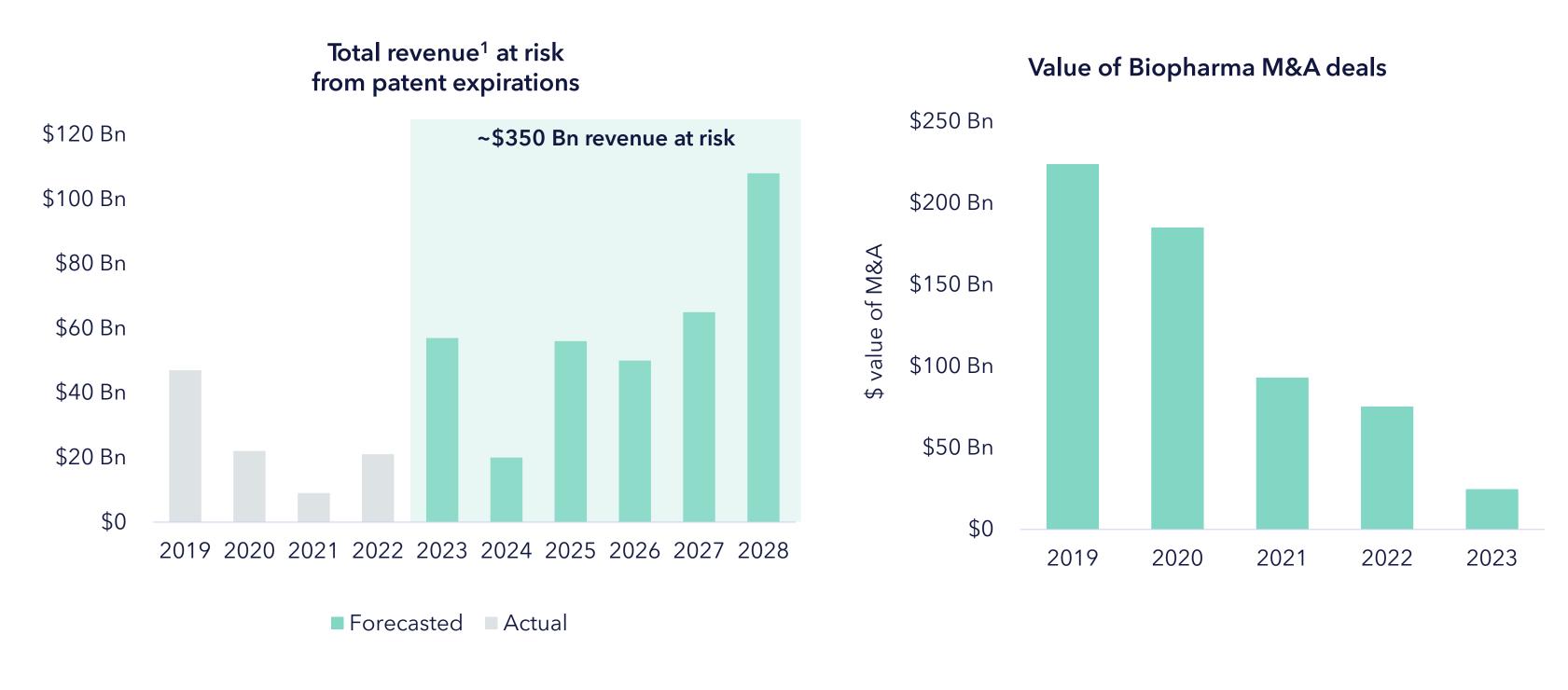


## Precision oncology: safer and more effective treatment



## Patent expiries are set to intensify yet M&A activity has not picked up





Source: Bioworld June 2023, Evaluate Pharma Aug 2022. Encompasses entire pharmaceutical industry, not just oncology. <sup>1</sup>Timelines are estimates based on key patent expirations or patent settlement agreements, and the life of a brand can be lengthened or shortened unexpectedly due to various factors. Forecasts are inherently limited and should not be relied upon when making investment decisions. There is no guarantee projected growth will occur. In addition, there is no guarantee it will translate to positive fund performance. M&A: merger and acquisitions. See Glossary in appendix for full definition.

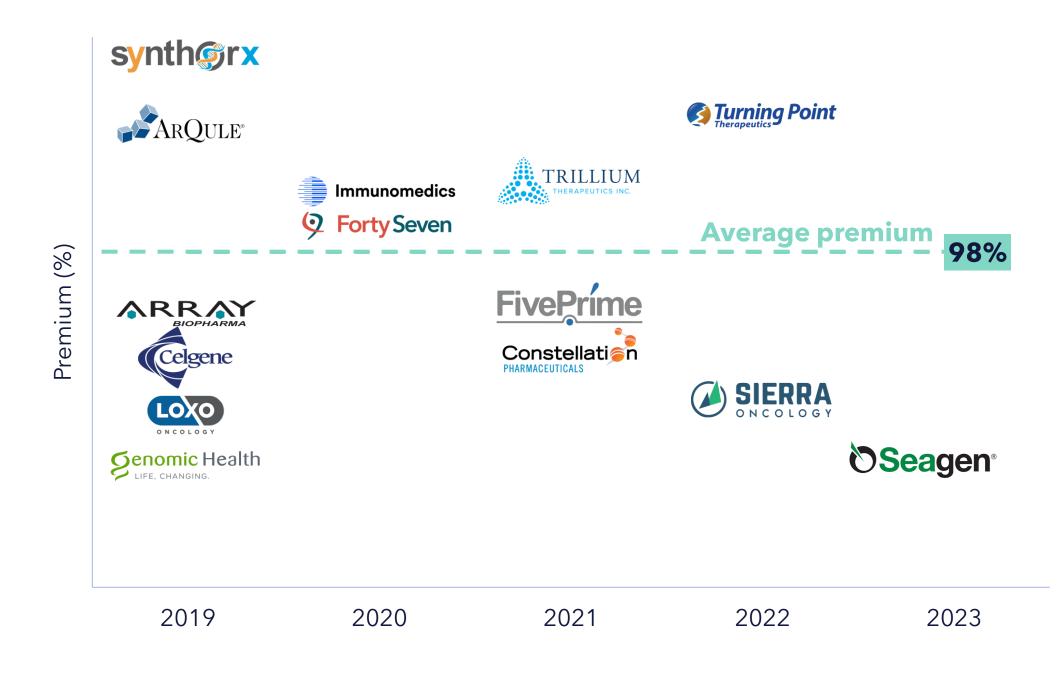
## Large cap pharma companies have ample dry powder and tend to pay high premiums for oncology deals



Recent oncology acquisitions have on average been done at nearly 98% premiums

\$838bn of Big Pharma dry powder<sup>1</sup>

74% of entire S&P Biotechnology Select Industry Index market cap



## Oncology exhibits high-quality characteristics as a sub-segment of biopharma

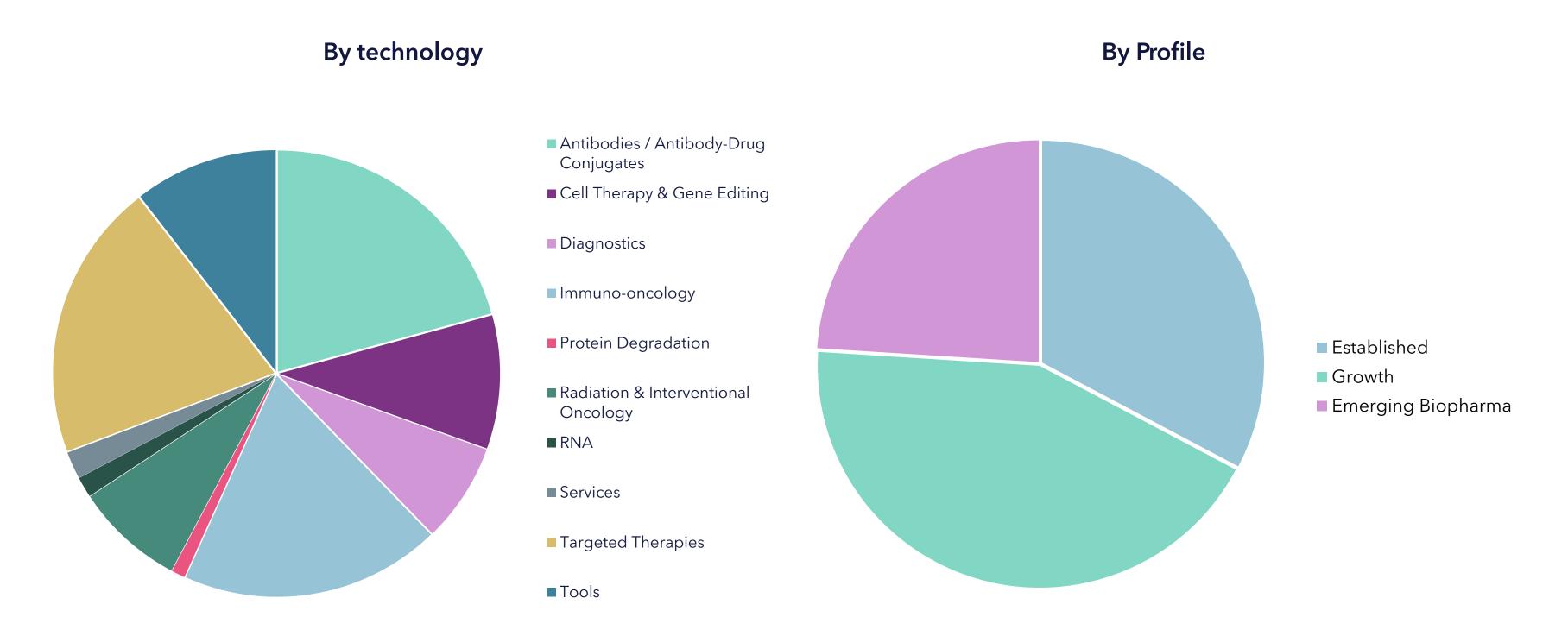


	Tema CANC ETF	Nasdaq Biotechnology Index	S&P Biotechnology Index
Innovation exposure		30% exposure to slower growth <sup>1</sup> bellwethers Missing key new technologies (e.g., Radiopharma)	
Pre-revenue biotech risk <sup>2</sup>	Measured	Low	High
Non-therapeutic exposure <sup>3</sup>			
Experienced healthcare stock selection			
Regulation & pricing	Biden's "Cancer Moonshot" <sup>4</sup>	Large pharma/biotech exposure means higher regulatory risk from more exposure to non-innovative medicines	Higher exposure to regulatory hot spots (e.g., rare diseases)

Source: Tema analysis as of 06/27/2023. <sup>1</sup>Defined as having a revenue growth rate <10% in the past three years. <sup>2</sup>Exposure to cash-burning Biotech companies, defined as total 2020, 2021, 2022 free cash flow as % of market cap being <20%. <sup>3</sup>Exposure to non-therapeutic areas such as medical imaging and innovative diagnostics. The referenced index is shown for informational purposes only and is not meant to represent the Fund. You cannot invest directly in an index. <sup>4</sup>President Biden reignited the Cancer Moonshot and set new national goals to cut the death rate from cancer by at least 50% over the next 25 years and improve the experience of people and their families living with and surviving cancer. See Glossary in appendix for full definition.

## Balanced portfolio across key oncology areas and risk profiles

### **Tema**



Source: Tema CANC ETF Portfolio as of 07/31/2023, subject to change. Tema classification based on main business and company drivers. Risk profile is subjective categorization by Tema. Established refers to maturing growth businesses with a long-term history of profitable operations. Growth businesses refer to recently commercialized companies or companies in early stages of rapid growth from a material product cycle, with not yet at scale profit margins. Emerging Biopharma refer to pre-revenue companies. For a full list of fund holdings <u>click here.</u>

## Managed by a veteran stock picker





David K. Song, MD, PhD, CFA
Fund manager

Over 25 years of combined investment and life sciences industry experience.

David holds a medical degree from the University of Pennsylvania and a PhD in health economics from Wharton.

19 years of investment experience

Lead healthcare investment teams at Rockefeller, Millenium and Balyasny

Vast domain experience in healthcare

Managed Rockefeller Capital's Healthcare Fund Strategy for a decade

Academic publications in both biochemistry and health economics fields

Advised CEOs of private and public companies

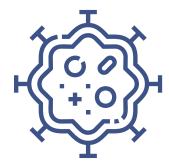
## Why Tema?





**Process** 

Bottom-up research led by a team of experienced professionals



**Product** 

Own businesses that deliver breakthrough solutions to oncology, at reasonable valuations

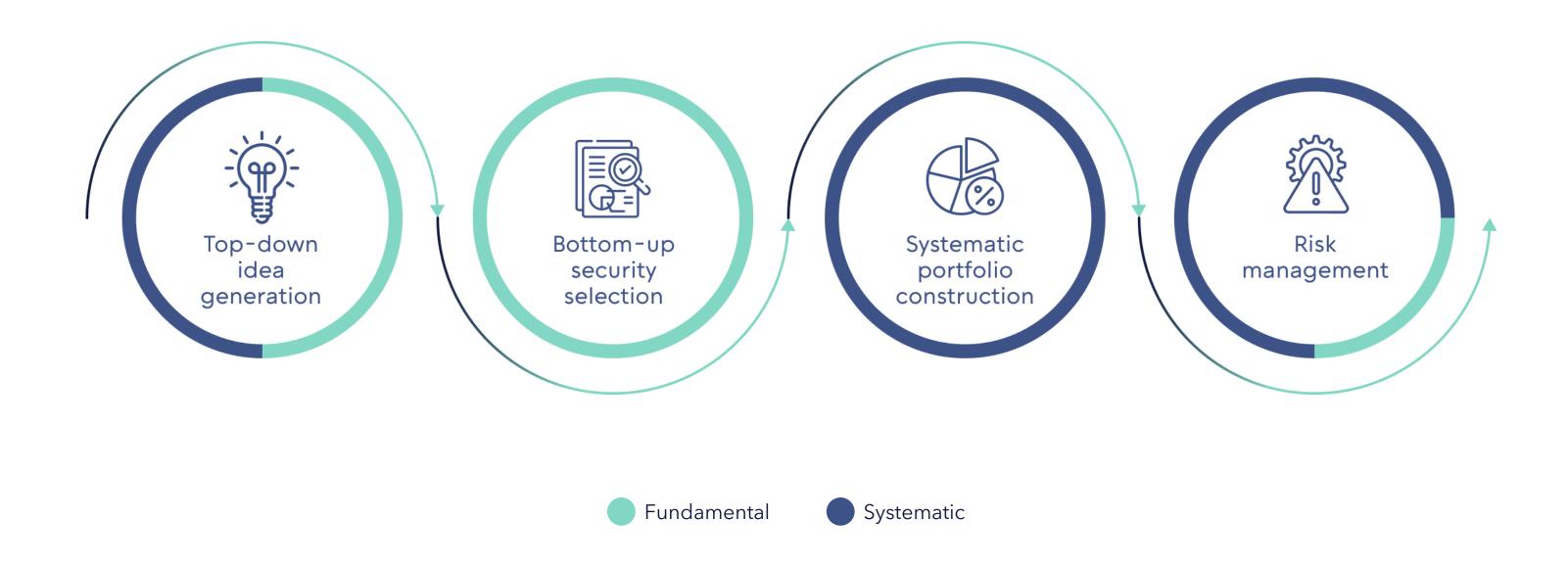


Firm

Supported by large operational and funding partners

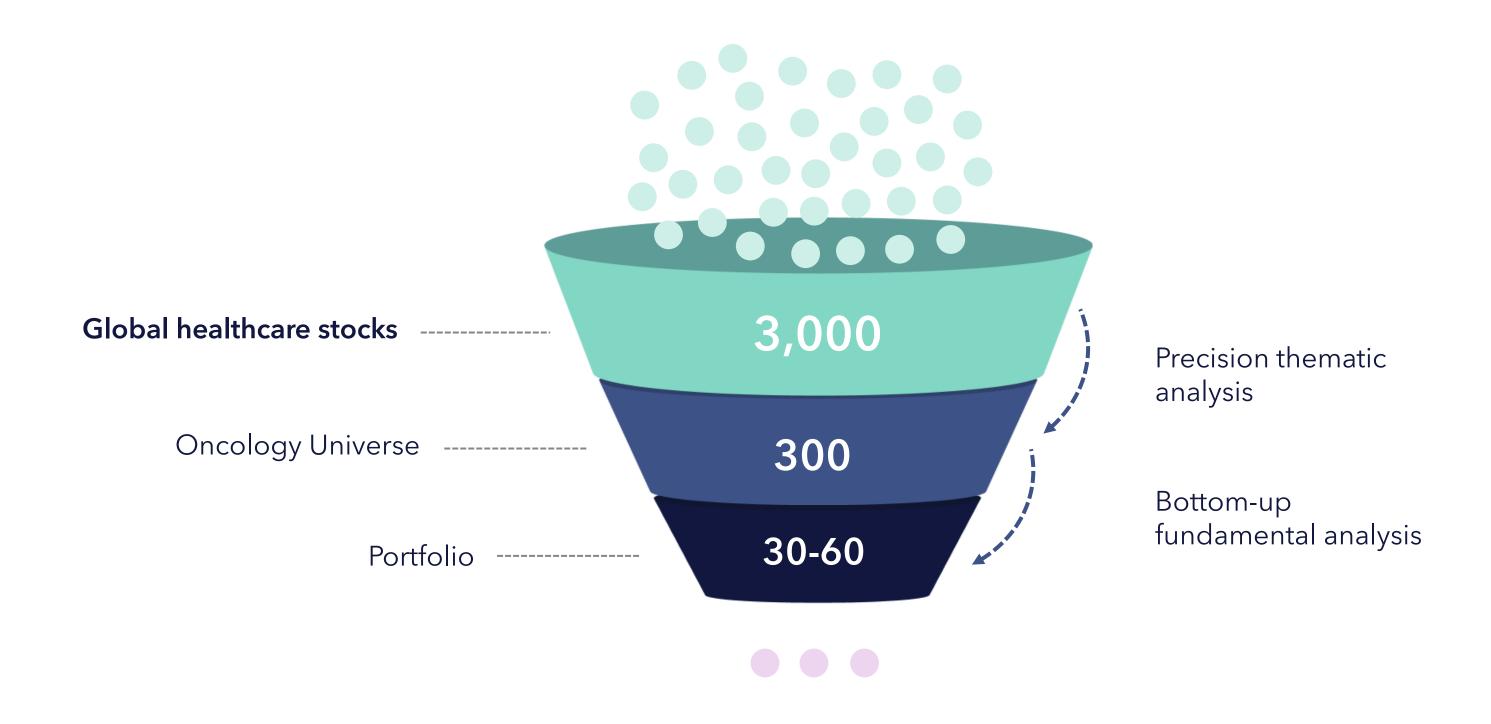
## Investment process: top-down idea generation, bottom-up fundamental security selection and systematic portfolio construction





## Idea generation: using expert led insights and quantitative tools to narrow down research set





## Security analysis: our fundamental research assesses stocks based on four key pillars



1

### Operating base

Solid R&D leadership or platform

Competitive advantage

Predictable cash flows

2

## Balance sheet and cash flow

Strong balance sheet

Strong cash generation

Access to non-dilutive capital

3

#### **Valuation**

Compelling asymmetric upside

Inexpensive vs. peers, history, or fundamentals

4

### Tema's edge

Deep understanding of clinical product profile and fundamental R&D drivers

See Glossary in appendix for full definition

Strictly for distribution outside the EU/UK

## Portfolio construction: active systematic principles have the potential to drive considerable benefits to investors



### Three tiers of positions size

Conviction based sizing

Active systematic guidelines and rebalancing

Risk managed approach

Highest conviction position

Higher conviction position

Foundation position

#### **Benefits**



Risk managed conviction portfolios



Focus on stock-picking alpha



Limited trading activity, long-term focus



Mitigates human biases

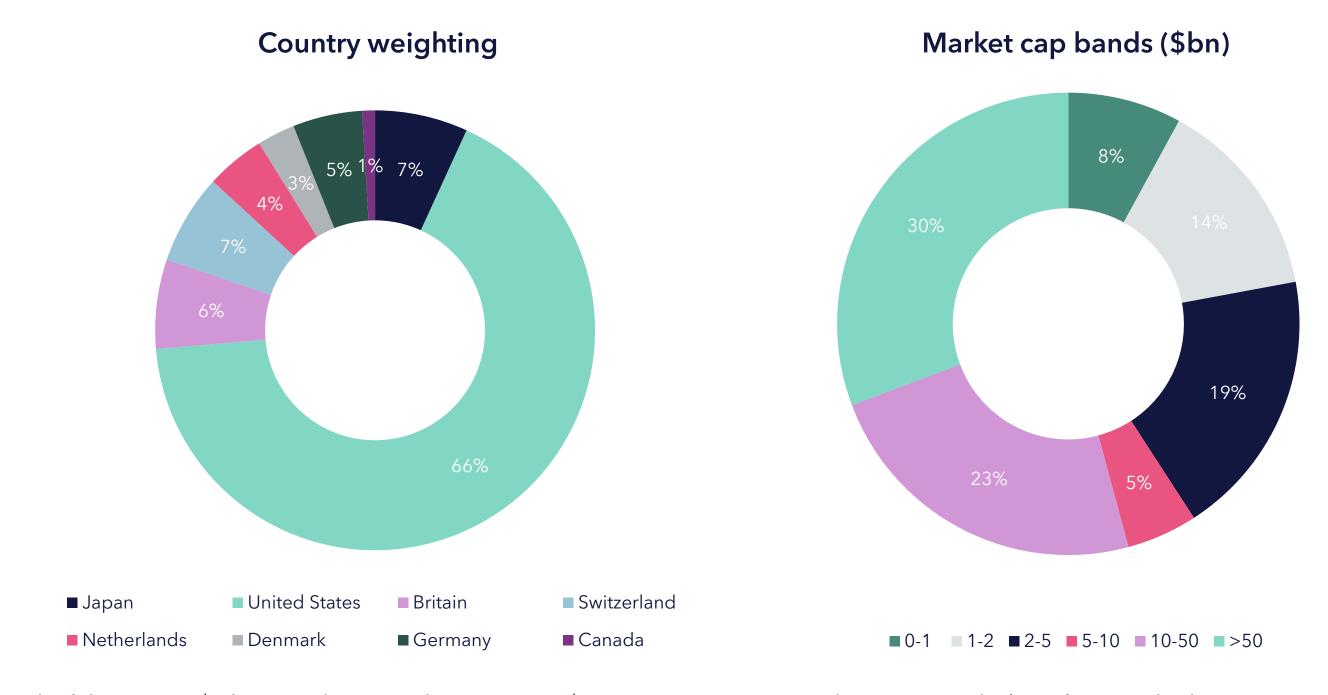
## Risk oversight: we monitor risk from multiple viewpoints



Risk factor	Risk assessment	Mitigations
Drug Pricing	Monitor developments in healthcare policy through policy expert contacts, conferences, and trade journals	Recent pricing provisions provide long-term clarity for industry. Invest in breakthrough drugs, as well as areas (e.g., diagnostics) somewhat insulated from policy risks
Product risk - Science and Commercial	Medical publications, scientific conferences, calls with key opinion leaders, and third-party commercial product data sources	Avoid unfavorable risk-reward events, expert led analysis of clinical data, and models of patient populations and market sizes using third-party commercial data sources
Funding Risk	Company financial reports and calls with management teams and peers	Portfolio construction and balance sheet analysis

## Current portfolio positioning





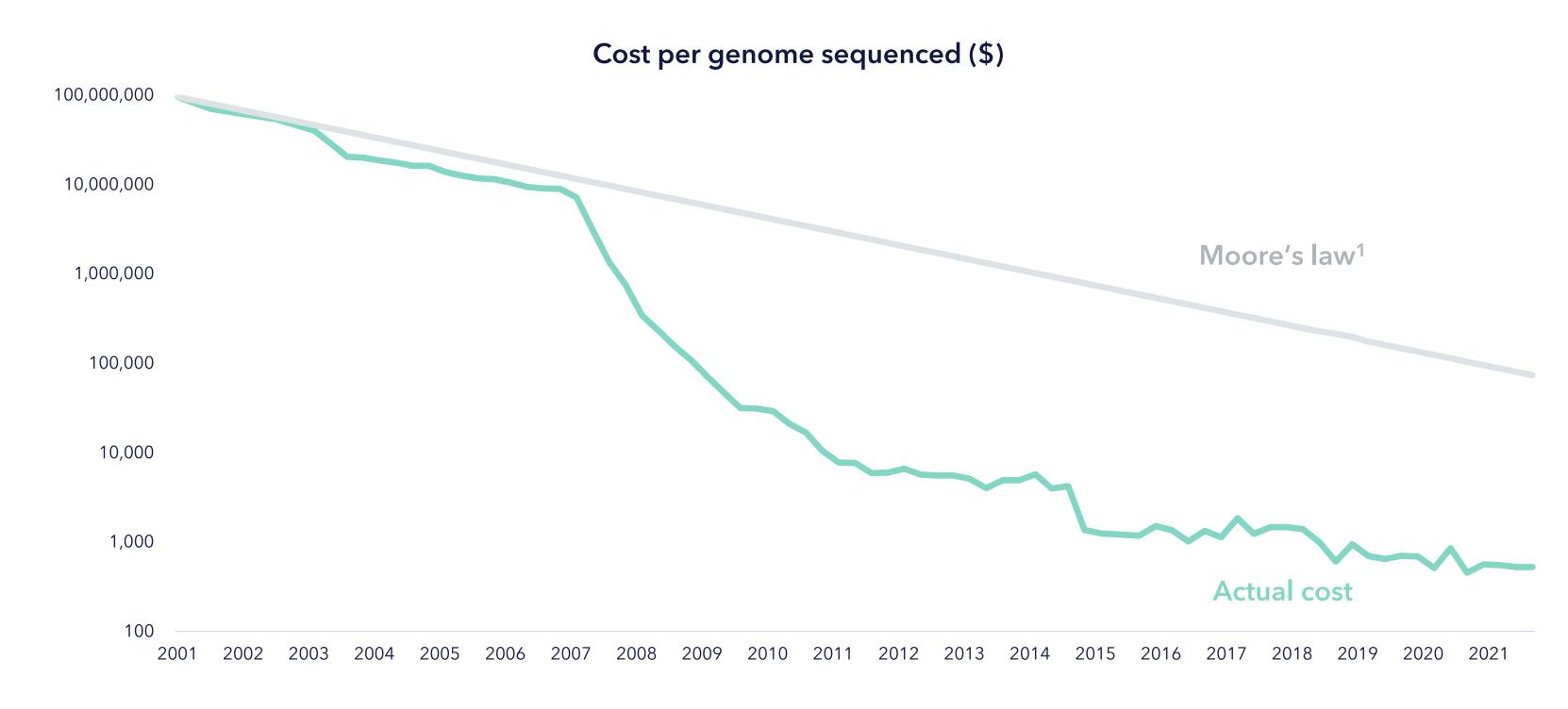
45 holdings • c\$4bn median market cap • c\$100M mean 6-month average daily value traded (ADVT) per holding

## Tema

## Appendix

## A revolution in genomic sequencing has dramatically increased R&D productivity





## Case study: Schrodinger is poised to drive significant value from validation of its internal drug pipeline and collaborator-led programs





- Attractive and growing software business for life sciences clients
- Undervalued drug discovery segment
- Clinical validation on oncology candidates on the horizon

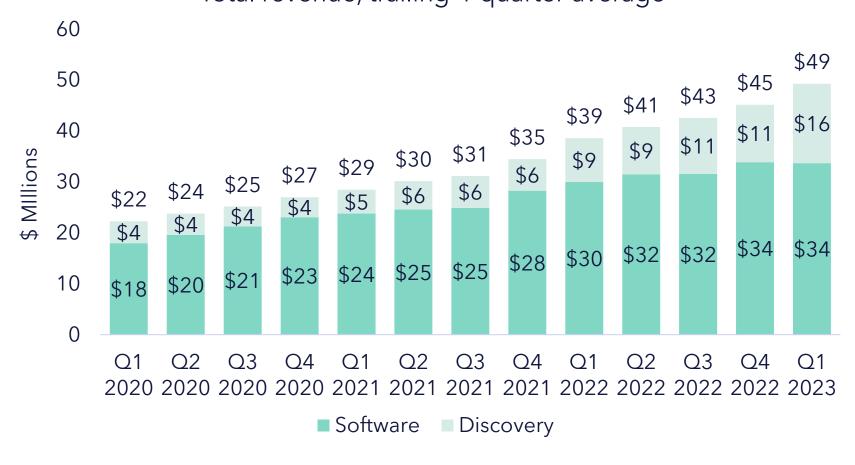




### Security Analysis

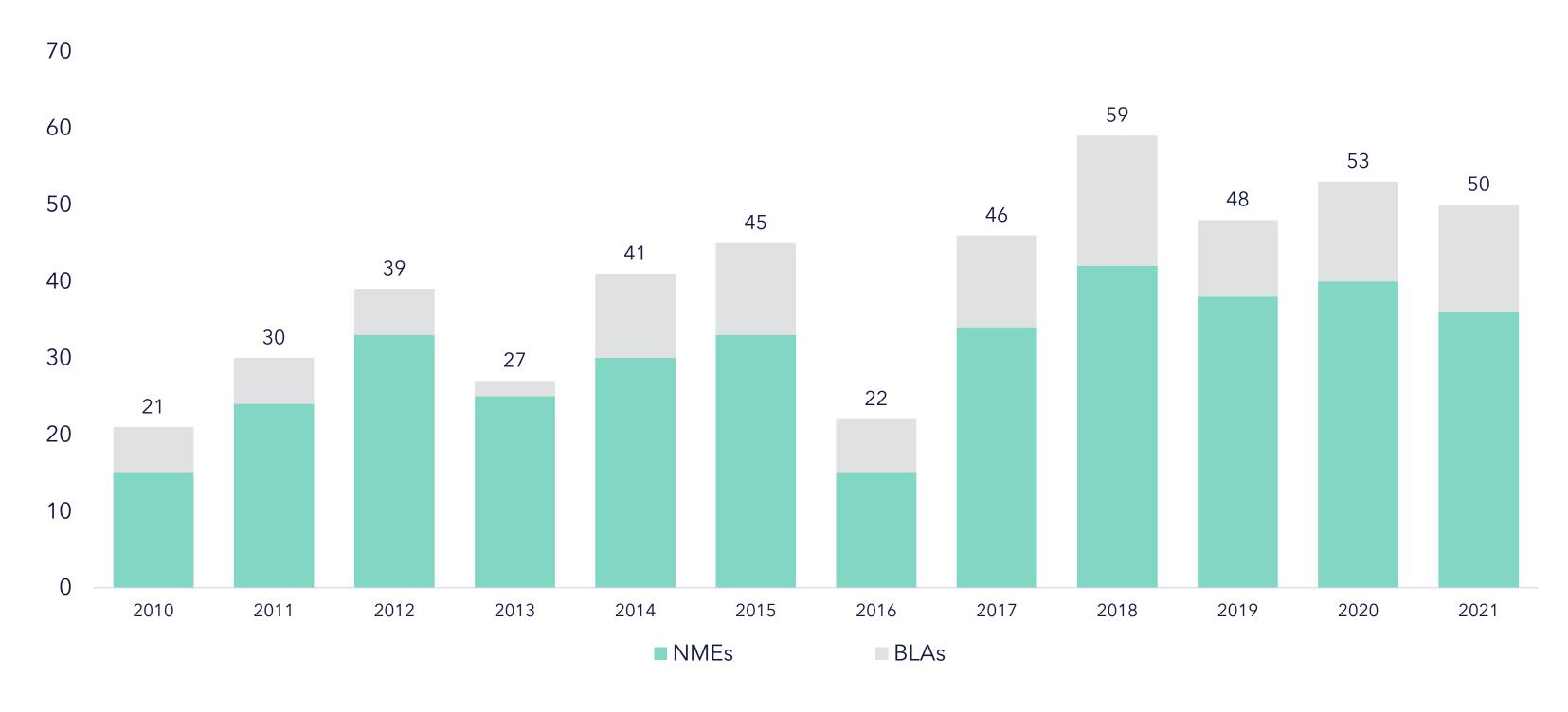
- Operating Base: Rapidly growing and recurring revenue base; competitive advantage in protein structure and drug design from physics insights; burgeoning pipeline and collaborations
- Balance Sheet/Cash Flow: \$400M in net cash, as well as collaborations, provide ample runway to advance internal pipeline
- Valuation: Software business plus net cash worth \$2bn+, implying significant optionality for the drug business stub
- What is our edge? Recurring software revenue and collaborations provide more favorable funding than development stage peers; strategic options for the software business





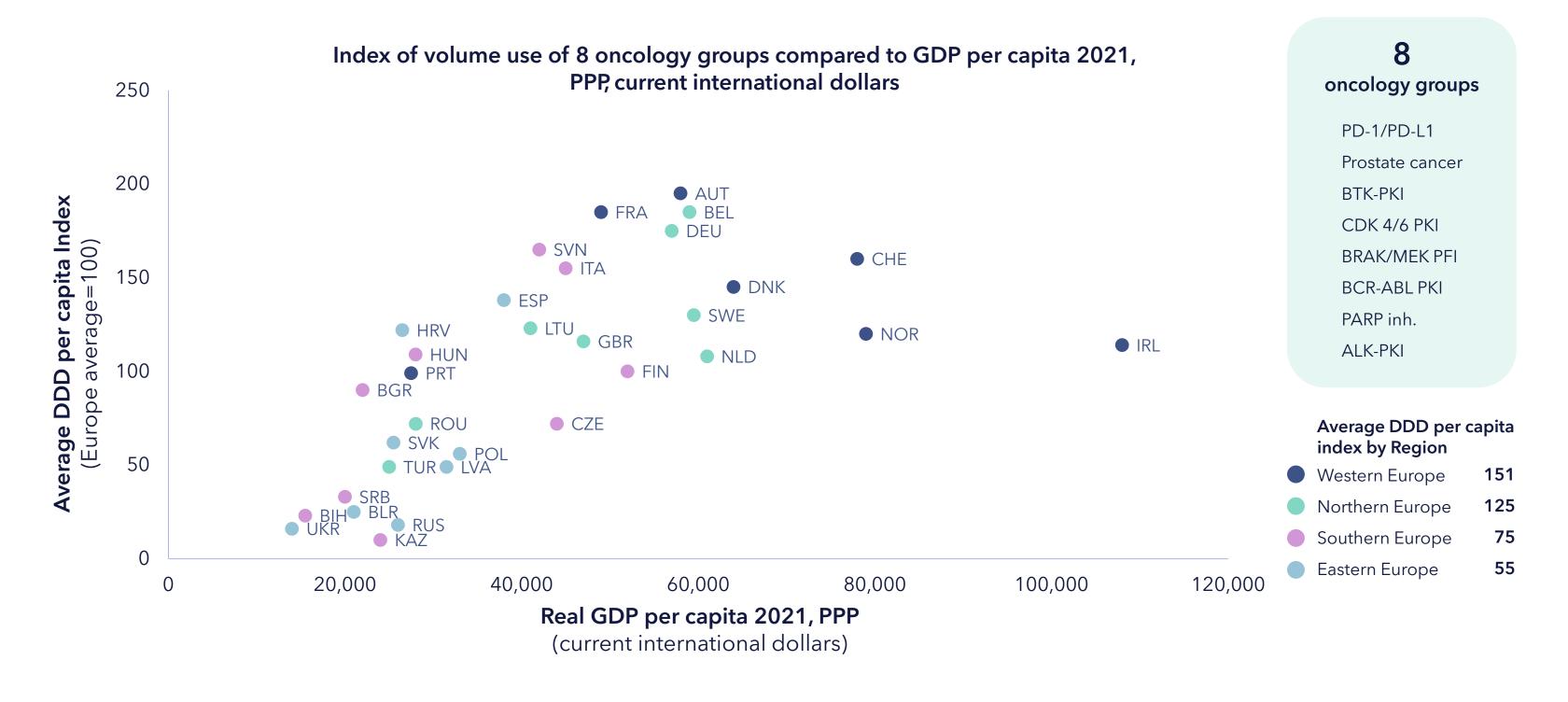
## Number of new drug approvals has doubled in the last decade





## New markets are a source of future demand as oncology drug spending is correlated with GDP per capita

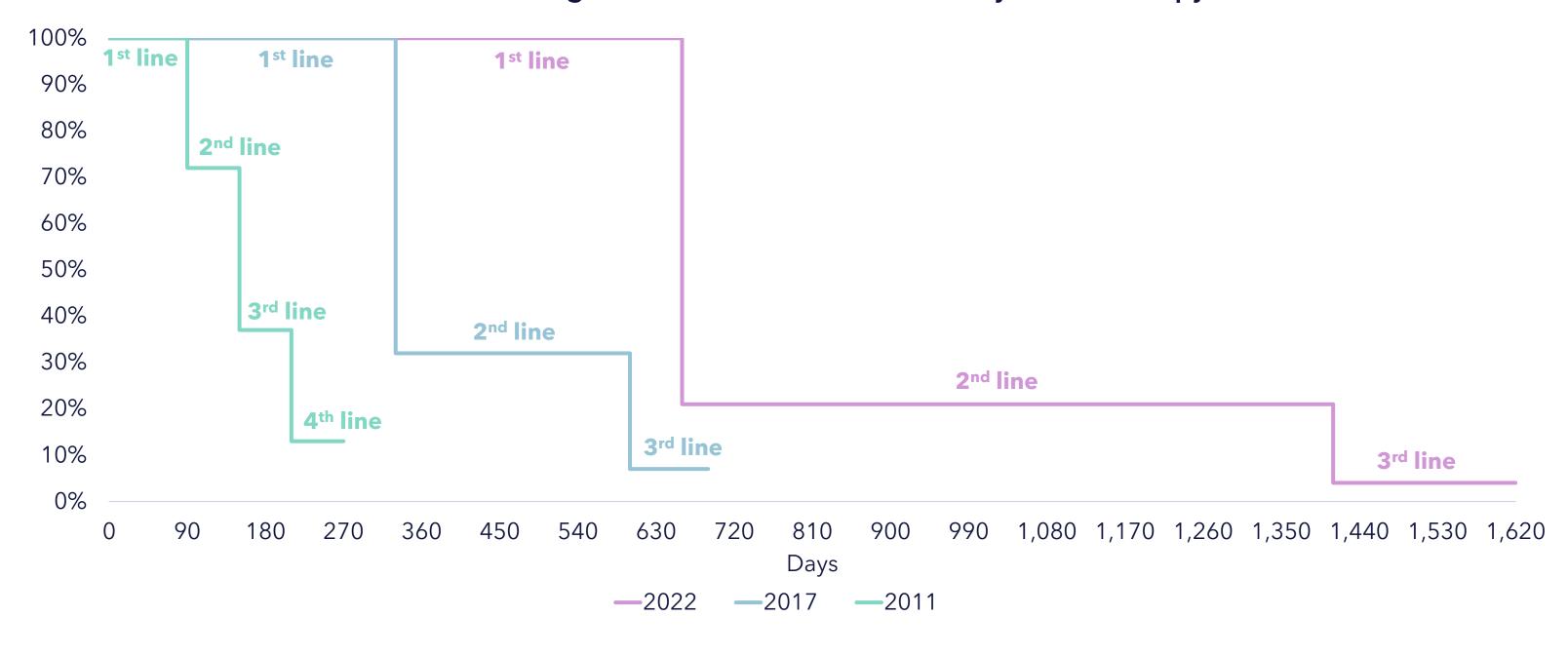
### **Tema**



## Advances in treatment have the potential to significantly extend duration of first line therapy, improving outcomes and revenues

### **Tema**

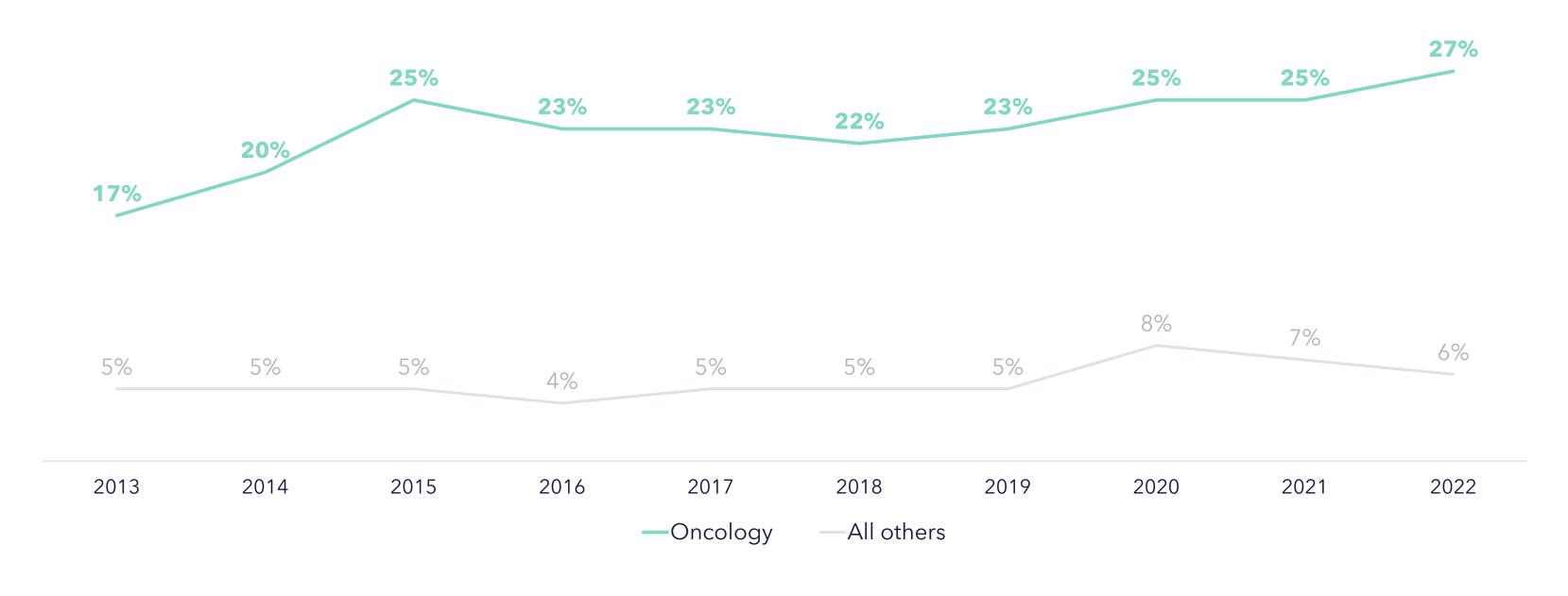
### Non-small cell lung cancer duration of treatment by line of therapy



## Oncology, more than the rest of biotech, increasingly involves novel trial design, improving returns but requiring more expertise to analyze

### **Tema**

### % of industry-sponsored trials with novel trial design by start year



## Glossary 1/2



#### CAR-T

CAR stands for chimeric antigen receptor. A type of treatment in which a patient's T cells (a type of immune system cell) are changed in the laboratory so they will attack cancer cells.

#### Downcycle

a time when there is less economic activity, or when prices or values of something are falling or low

#### MD

Medical doctor. MD is written after someone's name to indicate that they have been awarded a degree in medicine and are qualified to practice as a doctor.

#### PhD

degree awarded to people who have done advanced research into a particular subject. PhD is an abbreviation for 'Doctor of Philosophy'.

#### R&D

Research & development

#### Genome sequence

Laboratory procedure that determines the sequence of someone's unique 3 billion letters of DNA

#### R/R Multiple Myeloma

Relapsed/refractory MM (RRMM) is defined as a disease which becomes non-responsive or progressive on therapy or within 60 days of the last treatment in patients who had achieved a minimal response (MR) or better on prior therapy.

#### Enhertu

A drug used to treat adults with certain types of HER2-positive or HER2-low breast cancer

#### HER2

A protein involved in normal cell growth. HER2 may be made in larger than normal amounts by some types of cancer cells.

#### **FDA**

The Food and Drug Administration is a government agency that regulates certain food, drugs, cosmetics, and medical products.

#### **NSCLC**

Non-small cell lung cancer (NSCLC) occurs when abnormal cells form and multiply in your lung tissues.

#### CRC

Colorectal cancer is a disease in which cells in the colon or rectum grow out of control.

#### NHI

Non-Hodgkin's lymphoma is a type of cancer that begins in your lymphatic system, which is part of the body's germ-fighting immune system.

#### **CML**

Chronic myelogenous leukemia is a disease in which the bone marrow makes too many white blood cells.

#### **SCLC**

Small cell lung cancer is a disease in which malignant (cancer) cells form in the tissues of the lung.

#### **S&P Biotechnology Select Industry Index**

S&P Select Industry Indices are designed to measure the performance of narrow GICS sub-industries. The Index comprises stocks in the S&P Total Market Index that are classified in the GICS biotechnology sub-industry.

#### Nasdaq Biotech Index

The NASDAQ Biotechnology Index contains securities of NASDAQ-listed companies classified according to the Industry Classification Benchmark as either Biotechnology or Pharmaceuticals which also meet other eligibility criteria. The NASDAQ Biotechnology Index is calculated under a modified capitalization-weighted methodology.

#### Patent cliff

potential sharp decline in revenues upon patent expiry of one or more leading products of a firm

#### Biden's "Cancer Moonshot"

President Biden reignited the Cancer Moonshot and set new national goals to cut the death rate from cancer by at least 50% over the next 25 years and improve the experience of people and their families living with and surviving cancer.

#### RNA

Ribonucleic acid (abbreviated RNA) is a nucleic acid present in all living cells that has structural similarities to DNA.

#### NME

new molecular entity (NME): new drug whose active ingredient is a chemical substance that is marketed for the first time in the United States.

#### **BLA**

Biologics license application: a request for permission to introduce, or deliver for introduction, a biologic product into interstate commerce

#### **PPP**

Purchasing power parity: measurement of the price of specific goods in different countries and is used to compare the absolute purchasing power of the countries' currencies.

#### DDD

Defined Daily Dose (DDD): The assumed average maintenance dose per day for a drug used for its main indication in adults.

#### PD-1/PD-L1

A protein found on T cells (a type of immune cell) that helps keep the body's immune responses in check.

#### BTK-PKI

Bruton's tyrosine kinase (BTK) is a soluble tyrosine kinase with central roles in the development, maturation, and signaling of B cells.

#### CDK 4/6 PKI

cyclin-dependent kinase 4 and 6. These are enzymes that play a crucial role in cell division and are involved in regulating the cell cycle progression. Inhibition of CDK 4/6 can be a therapeutic strategy for certain types of cancers, particularly breast cancer.

## Glossary 2/2



#### **BRAK/MEK PFI**

BRAF/MEK refers to a combination therapy targeting both the BRAF protein and the MEK protein in the mitogen-activated protein kinase (MAPK) signaling pathway. shown to be an effective treatment strategy in specific cancers with BRAF mutations, such as advanced melanoma.

#### **BCR-ABL PKI**

BCR-ABL tyrosine kinase inhibitors. BCR-ABL tyrosine kinase inhibitors are targeted therapies that specifically inhibit the activity of the BCR-ABL protein, thereby interfering with the signals that drive the growth of cancer cells.

#### PARP inh.

poly(ADP-ribose) polymerase, an enzyme involved in DNA repair. They are used as targeted therapies for certain types of cancer, such as breast and ovarian cancer.

#### **ALK-PKI**

anaplastic lymphoma kinase (ALK) tyrosine kinase inhibitors. ALK-PKIs are targeted therapies designed to inhibit the activity of the ALK protein, thereby suppressing the growth and survival of cancer cells that depend on ALK signaling.

#### IQVIA

provider of biopharmaceutical development and commercial outsourcing services, focused primarily on Phase I-IV clinical trials and associated laboratory and analytical services, including consulting services.

#### **Lines of therapy**

term used to describe the order in which different therapies are given to people as their disease progresses.

#### ADT\

Average daily traded value - a measure of liquidity for individual stocks. Unless otherwise stated, this is calculated as the average daily volumes traded in the past 6 months x the most recent USD price.

#### Alpha

Alpha ( $\alpha$ ), used in finance as a measure of performance, is the excess return of an investment relative to the return of a benchmark index.

#### **AUM**

Assets Under Management

#### **CAGR**

Compounded annual growth rate between 2 points in time

#### EBITD

EBITDA stands for Earnings Before Interest, Taxes, Depreciation, and Amortization. It is a financial metric used to assess a company's operating performance by focusing on its core profitability, excluding the impact of financing decisions, tax structures, and non-cash expenses such as depreciation and amortization.

#### **EPS**

Earnings per share (EPS) is a company's net profit divided by the number of common shares it has outstanding

#### **ESG**

Environmental, Social & Governance

#### ETF

Exchange-Traded Fund

#### Free Cash Flow or FcF

Free Cash Flow - calculated as cashflow from operations less capital expenditure (CAPEX)

#### Free Cash Flow conversion

Free cash flow conversion is calculated by taking free cash flow (FcF) and dividing it by net income, in order to assess what percentage of earnings convert to cash.

#### **GDP**

**Gross Domestic Product** 

#### P.a.

Per Annum

#### P/E

Price/Earning Ratio

#### ROCE

Return on Capital Employed- calculated by dividing the company's earnings before interest and taxes (EBIT) by its total capital employed, which includes both equity and debt

#### ROIC

Return on Invested Capital - calculated as net operating profit after taxes (NOPAT) / Invested capital (IC)

#### **Sharpe Ratio**

The Sharpe ratio is a measure of risk-adjusted return that compares the excess return of an investment to its volatility or risk, using the standard deviation of returns. It calculates how much additional return an investment generates for each unit of risk taken, relative to a risk-free investment. A higher Sharpe ratio indicates a better risk-adjusted performance

#### S&P 500

The Standard and Poor's 500, or simply the S&P 500, is a stock market index tracking the stock performance of 500 large companies listed on stock exchanges in the United States.