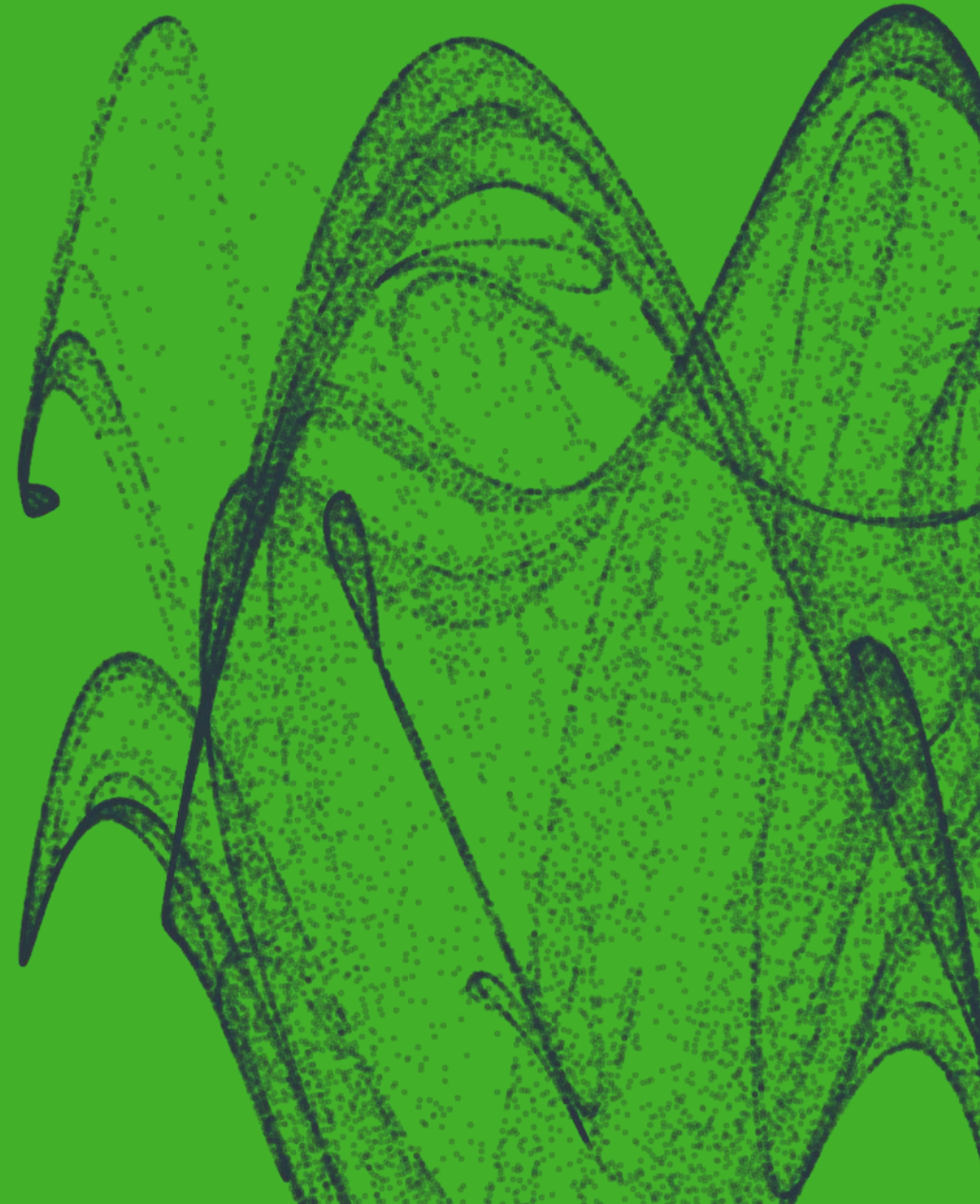




# **IQVIA Life Sciences Innovation Forum**

**Set-up slides: Re-thinking the Life Sciences  
Business Model**

**September 16, 2022**

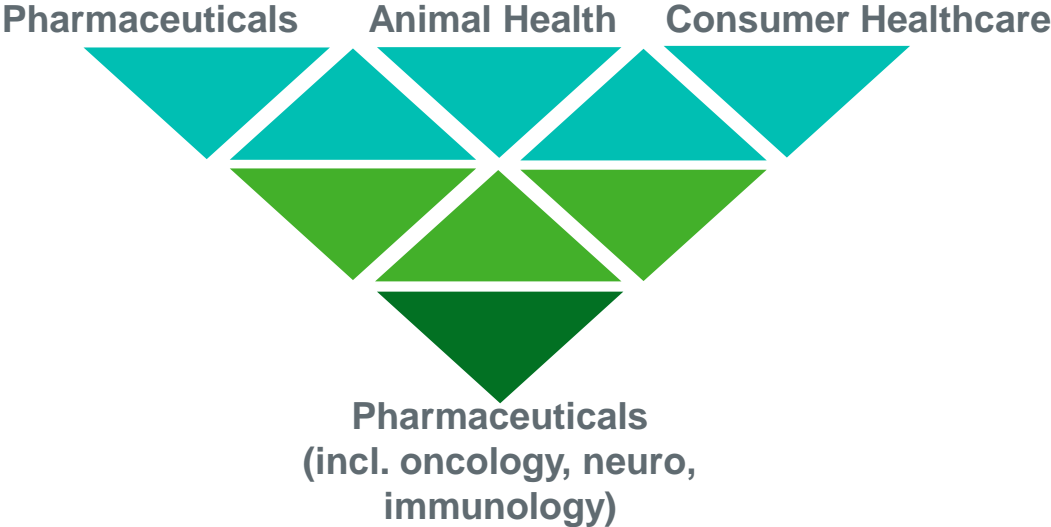


# Pharmaceutical companies have changed where and how they operate over the last few decades

Changing Share of Global Drug Spend			
↑ 10% - Asia Pacific	↓ 8% - Japan		
↑ 2% - Latin America	↓ 6% - Europe		

**~60%** Share of market for Top 20 pharma over last 20 years

## Large Pharma restructuring to focus on core business



**34% → 65%**

Shift in EBP share of R&D pipeline over last 20 years

# The surge of biomedical innovation activity since 2019 reflects a robust pipeline

Change from 2019 - 21

## U.S. Venture Funding in Life Sciences

**+105%**

\$22.9 -> \$47.0 Bn



## Planned Clinical Trial Starts

**+885**

4,693 -> 5,578



## Total Pipeline

**+17%**

5,221 -> 6,085



## Next Generation Biotherapies in Pipeline

**+33%**

605 -> 804



## Total Subjects (excl COVID-19 or Ebola trials)

**+28%**

757 -> 966k



## Novel Active Substances Launched

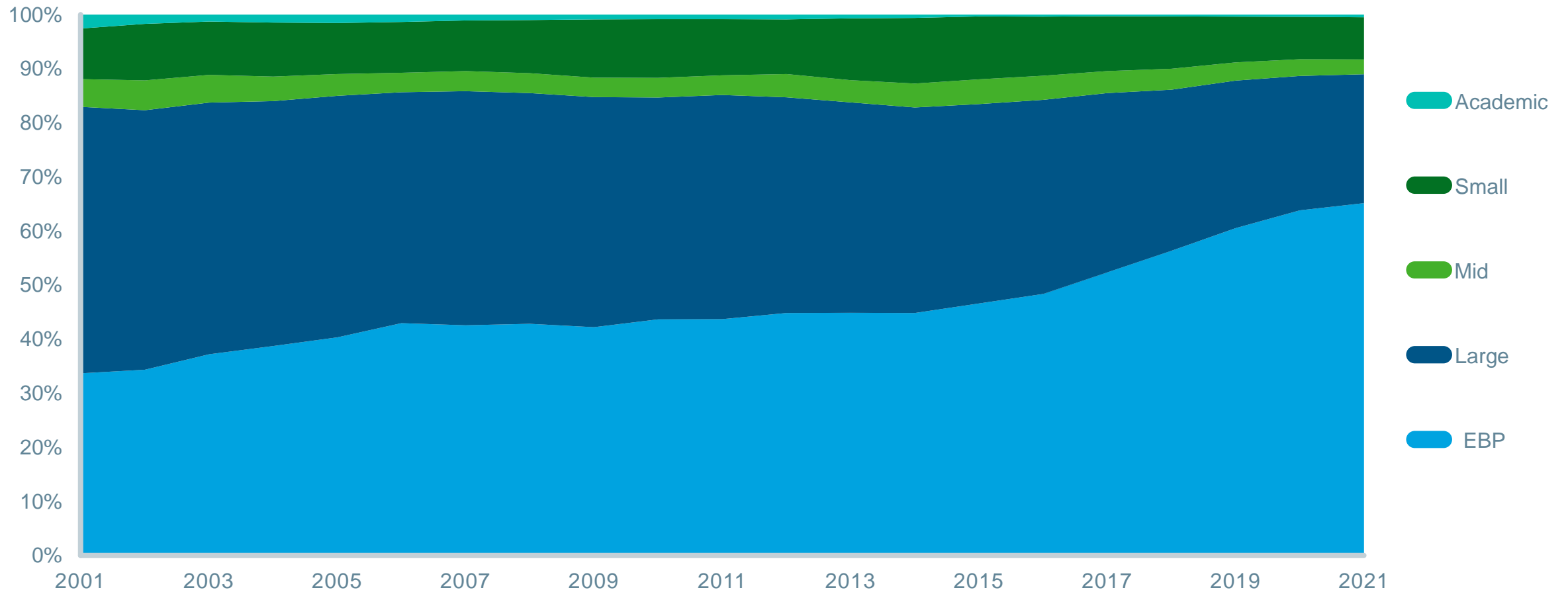
**+26**

58 - 84



# Emerging biopharma companies are responsible for most of the R&D pipeline, with their share continuing to grow

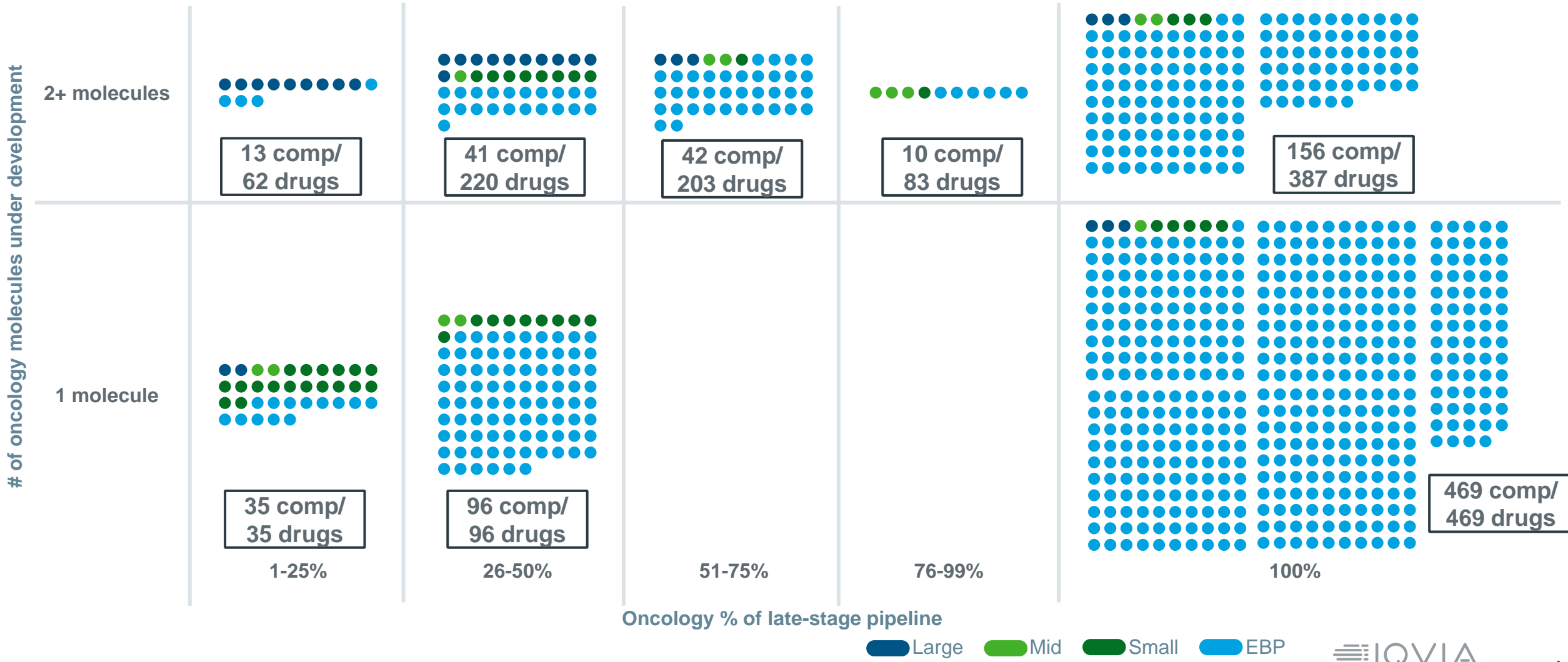
*Share of Phase I to regulatory submission pipeline by company segment, 2001-2021*



Source: IQVIA Pipeline Intelligence, Dec 2021; IQVIA Institute, Jan 2022.

# There are a significant number of companies focused in oncology R&D, often with only a single molecule in development

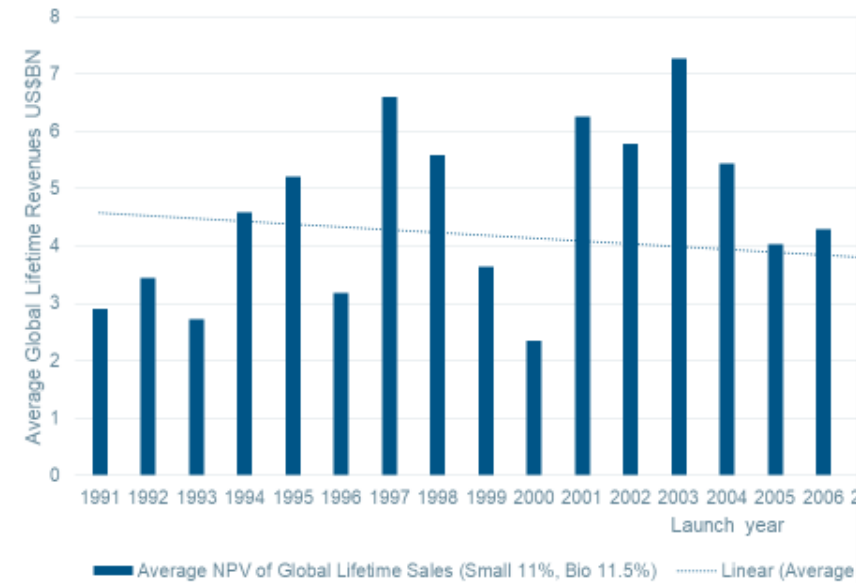
Oncology late-stage pipeline by company and company type, 2021



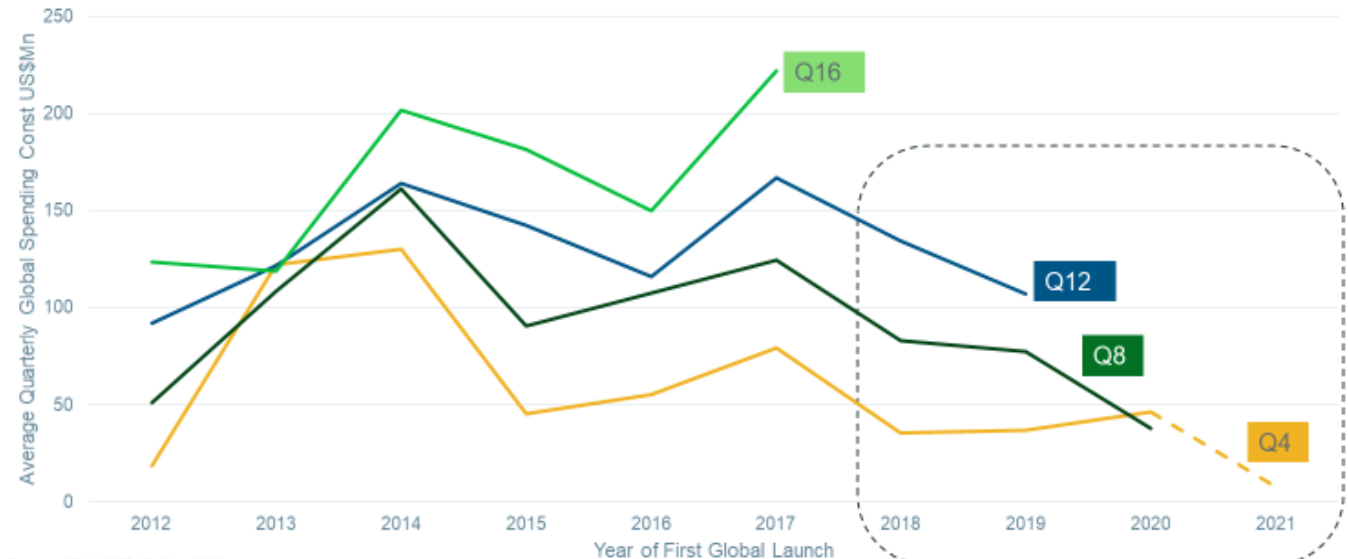
Source: IQVIA Pipeline Intelligence, Dec 2021; IQVIA Institute, Apr 2022.

# Lifetime sales per molecule are trending down

## Median Real Net NPV Lifetime Sales by Launch year (2009\$Bn)



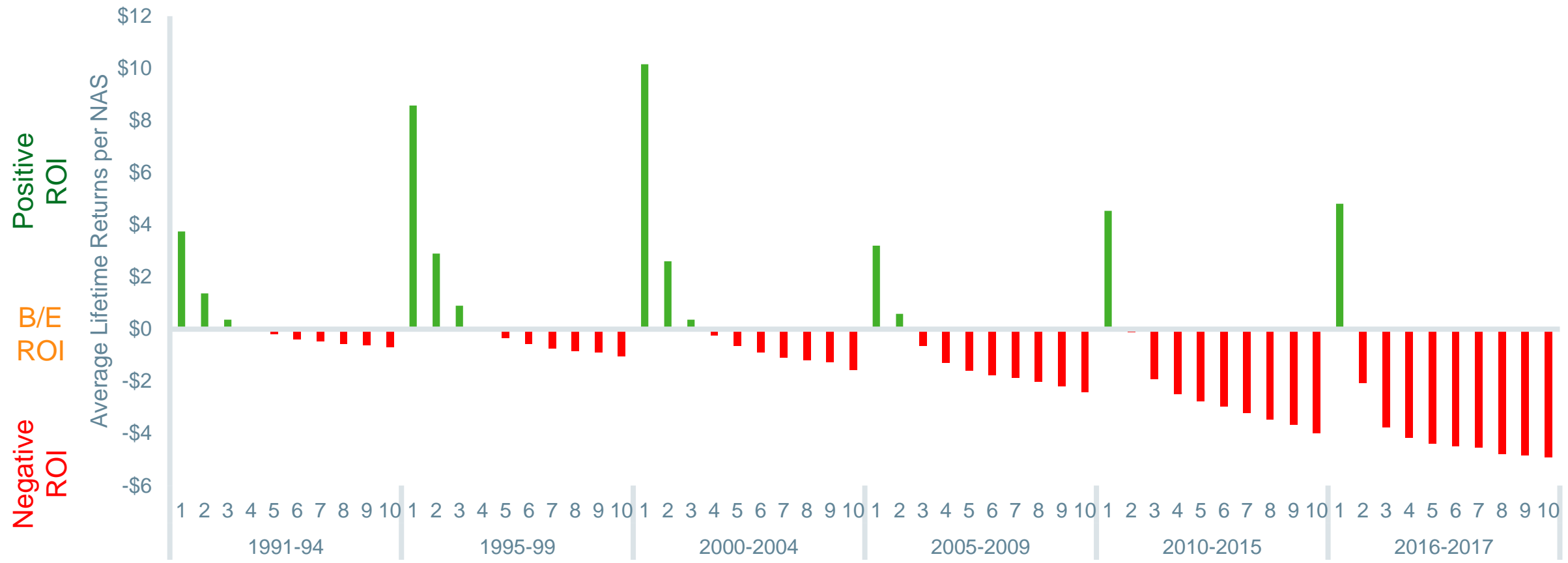
## Average Quarterly NAS Global Sales by Year of First Global Launch 2012-21 Constant US\$Mn



Source: IQVIA MIDAS Mar 2022  
 Note: Excludes COVID-19 vaccines; only Q1 and Q2 2021 Launches have 4 quarters of post-launch history and the sales may be understated relative to when the complete year of launch information is available

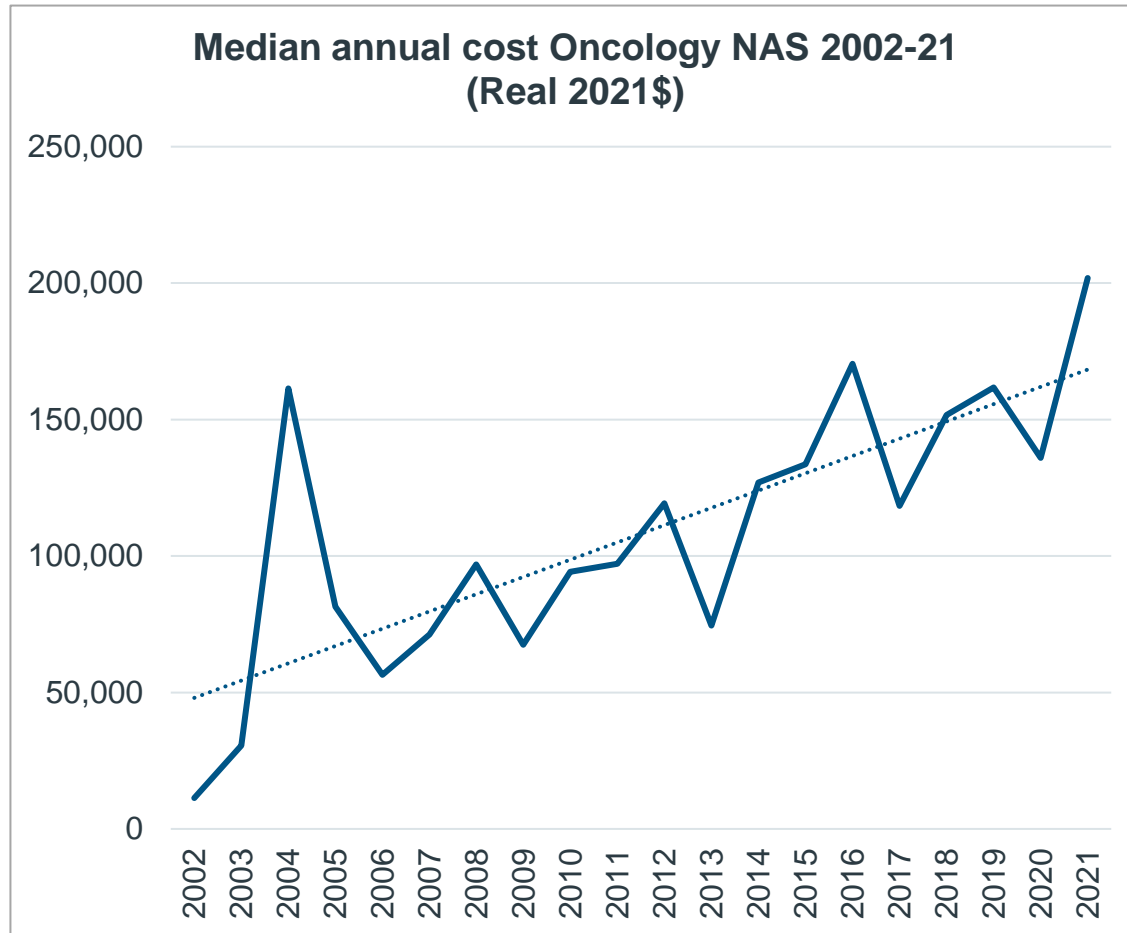
# Positive ROI have been reduced to 1 in 10 products, putting greater pressure on blockbusters to perform

Average Lifetime Returns by Launch Cohort and Decile Real 2009 US\$ NPV to Launch and Offset by Costs (SG&A, COGS, TAX, R&D)



Source: IQVIA Institute, Sep 2018

# Record-setting levels of new drug pricing meeting questions and resistance



Growing use of ICER assessments will continue to send stronger price signals to manufacturers that **cancer drugs with low value for money will be viewed less favourably by private insurers.**

Cherla A, Renwick M, Jha A, Mossialos E. Cost-effectiveness of cancer drugs: Comparative analysis of the United States and England. *EClinicalMedicine*. 2020 Nov 5;29-30:100625. doi: 10.1016/j.eclinm.2020.100625. PMID: 33437948; PMCID: PMC7788430.

Between 2017 and 2019, Medicare Parts B and D cumulatively spent at least \$569 million on the 10 cancer **drug indications with a confirmed lack of OS benefit after AA**. Approximately \$224 million of this spending was for **indications that were either voluntarily withdrawn by the manufacturers or recommended by the ODAC for withdrawal.**

....spending on cancer drugs that lack OS benefit constitutes **waste and risks harming health**

Shahzad M, Naci H, Wagner AK. Estimated Medicare Spending on Cancer Drug Indications With a Confirmed Lack of Clinical Benefit After US Food and Drug Administration Accelerated Approval. *JAMA Intern Med*. 2021;181(12):1673–1675. doi:10.1001/jamainternmed.2021.5989



# Public scrutiny and threats have been intensifying and led to lines being crossed



Biden signs Inflation Reduction Act, Aug 16, 2022



The work of antitrust enforcers can help ensure that companies are facing the right incentives to continue innovating, and to make the fruits of these scientific feats widely available at affordable prices. – Lina Khan, June 14, 2022



**Draft Ministerial Decision on the TRIPS Agreement** authorizing the use of the subject matter of a patent<sup>2</sup> required for the production and supply of COVID-19 vaccines **without the consent of the right holder to the extent necessary** to address the COVID-19 pandemic

*June 17, 2022*

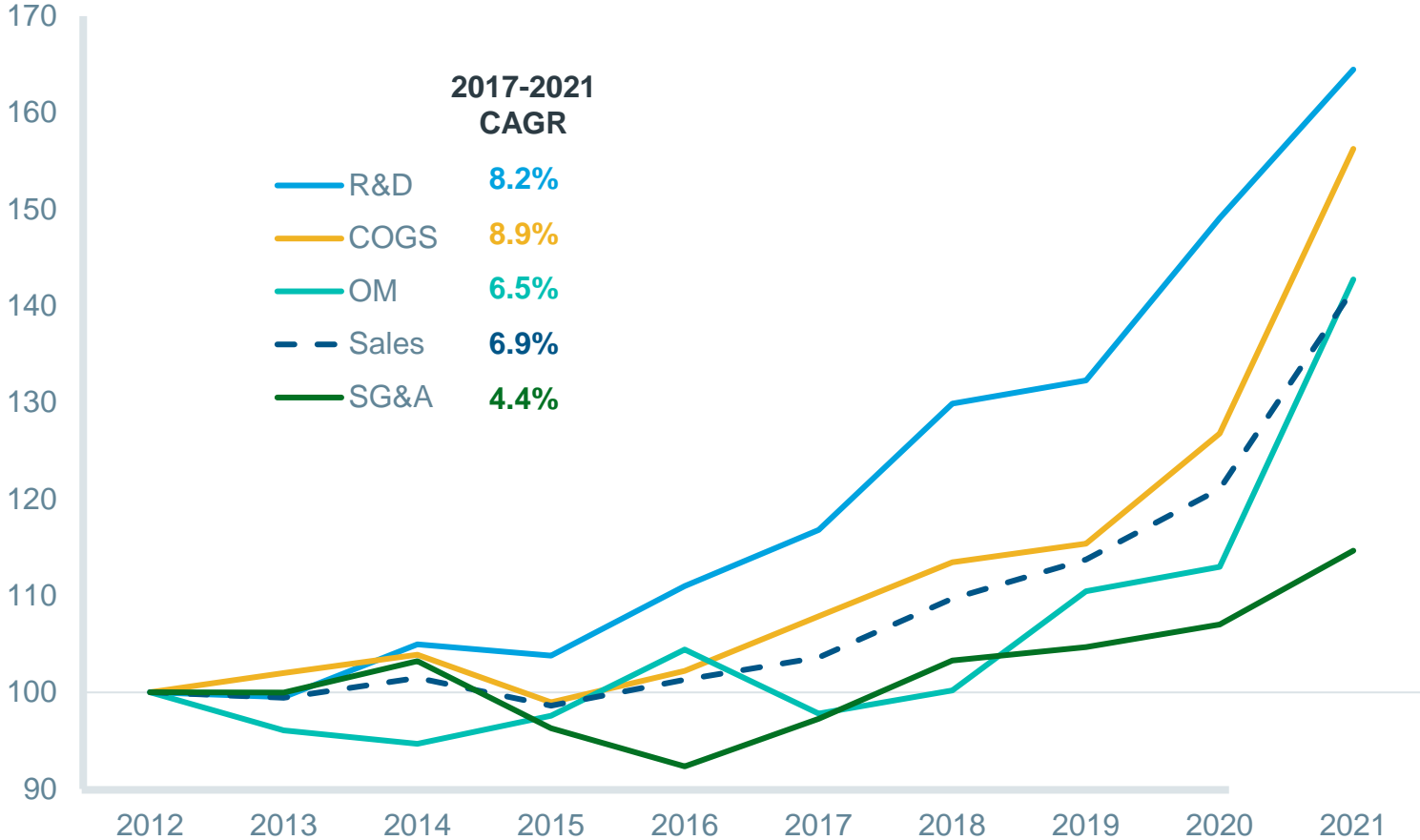


**EU HTA Regulation** has cleared the final hurdle in the legislative negotiations ... EFPIA still regrets that the original ambition set forth by the European Commission in its original proposal has been diluted and that **we continue to see the risk of an unpredictable system...**

*Dec 14, 2022*

# Growth in costs and R&D spend are outpacing sales, decreasing returns for pharma companies

*Sales and Cost Growth for Large Pharma Companies Indexed to 2012 Values, 2012-2021*



Declining average global pharmaceutical revenues since 1990



Average launch has a negative return



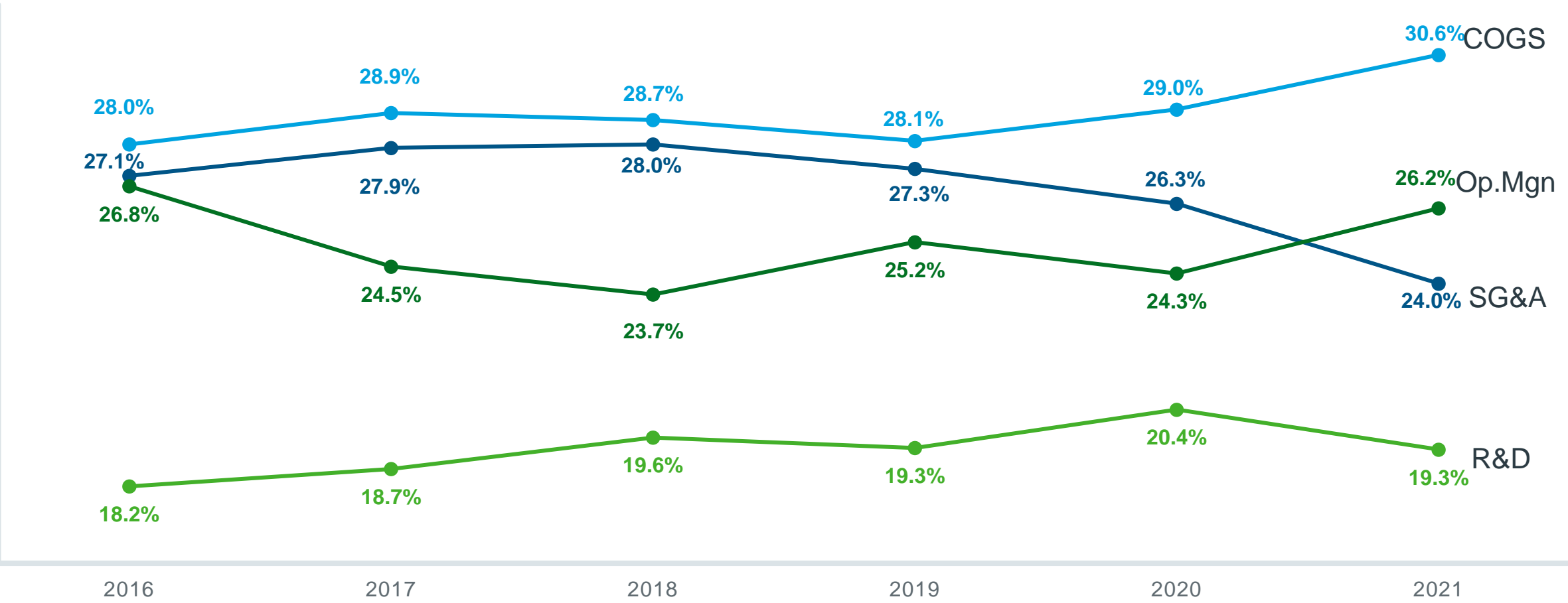
Only 1 in 10 products expected to have positive ROI

Source: Company Financial Reports

Notes: Based on total corporate performance (not limited to pharmaceutical division) for 15 largest companies based on MIDAS-reported pharma sales.

# Operating margins for the Top 15 pharmacos rose in 2021 as rising COGS were offset by reductions in SG&A and R&D

Operating Margin Components as Percent of Sales 2016-21

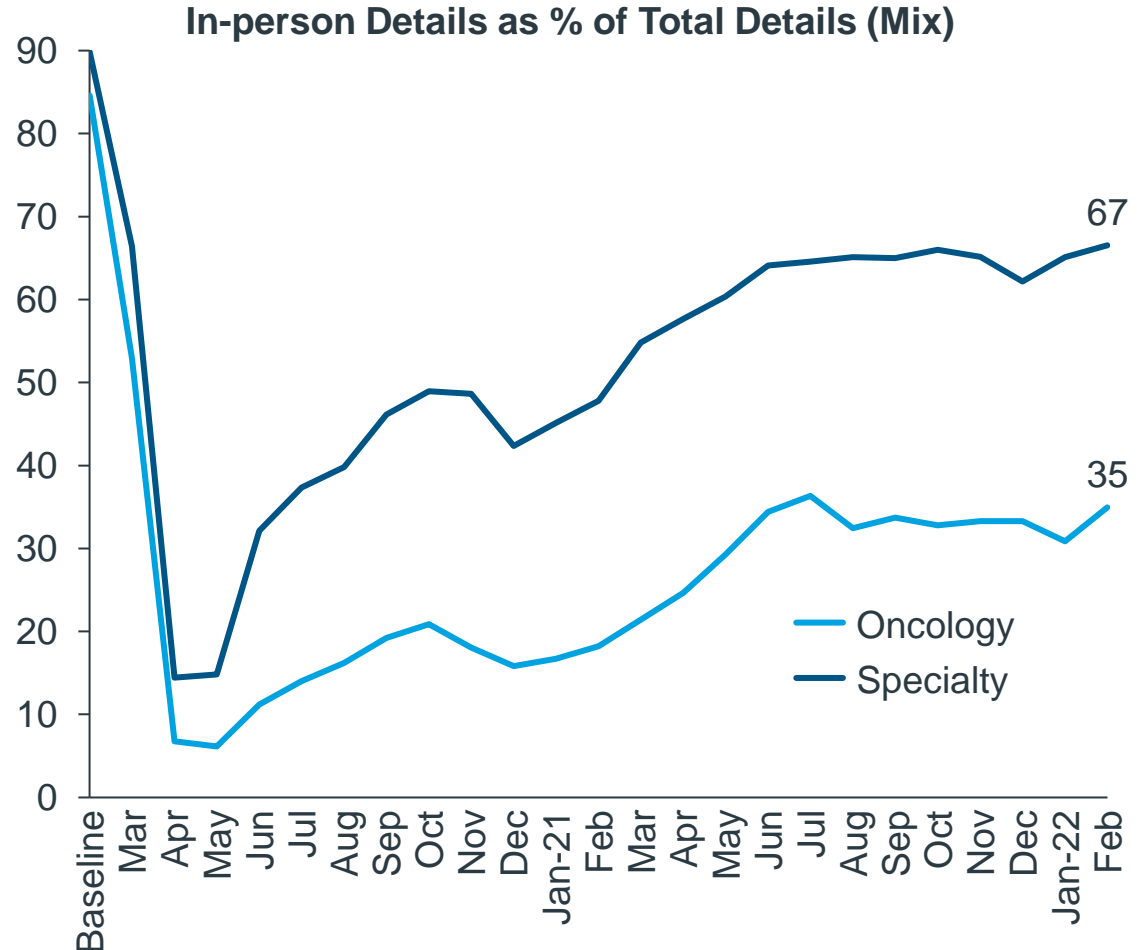
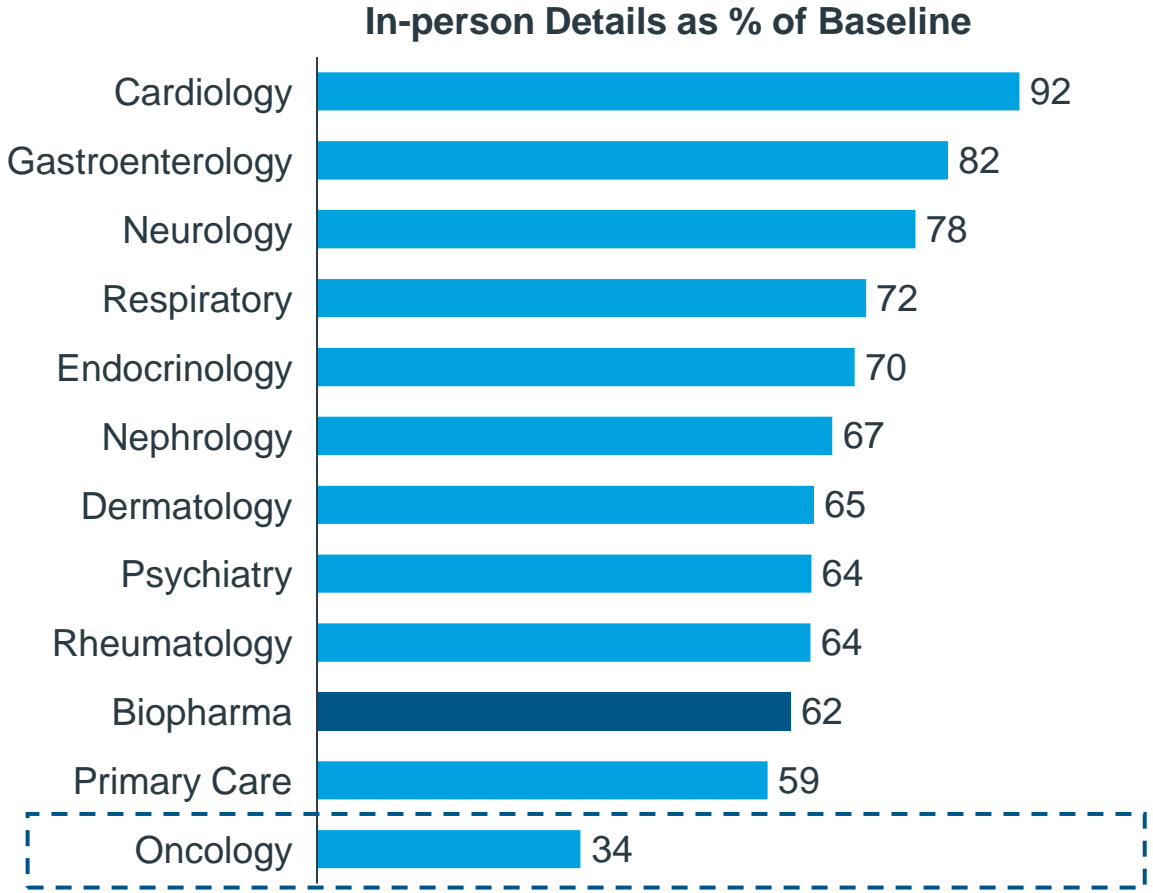


Source: Company financial reports  
 Notes: Based on total corporate performance (not limited to pharmaceutical division) for 15 largest companies based on MIDAS-reported pharma sales; Operating Margin defined as Net product sales less Cost of Goods Sold, Selling General & Administration costs, and Research & Development



# Recent shift to remote detailing requires companies to focus on omnichannel engagement with variation across therapy areas

*In-person Details as Percent of Baseline and Total Details*



Source: IQVIA BrandImpact, Feb 2022

Baseline is the monthly average of Jan and Feb 2020 consisting of stable detail, patient visit and treatment volumes. BrandImpact HCP Network = ~3600 unique HCPs including: Oncology, Specialty and Primary Care; Specialty includes, but not limited to: Allergy, Cardiology, Dermatology, Gastroenterology, Endocrinology, Neurology, Pulmonology, Psychiatry and Rheumatology; Treatments/Tx = treatment decisions (Rx's and Samples) by BrandImpact's HCPs at the point-of-care

# Amongst the shifting marketing dynamics, we see a new paradigm is emerging based on core commercial principles

## Advanced analytic decision-making

*Using predictive analytics and AI/ML to assess engagement strategies, promotional mix, resource allocation and execution*

## Hyper-personalized experience

*Developing tailored HCP engagement strategies at an individual level across channel, content and cadence*

## Adaptive allocation

*Monitoring local market and territory needs for flexible resource allocation across personal and non-personal channels*

## Connected, convenient customer data

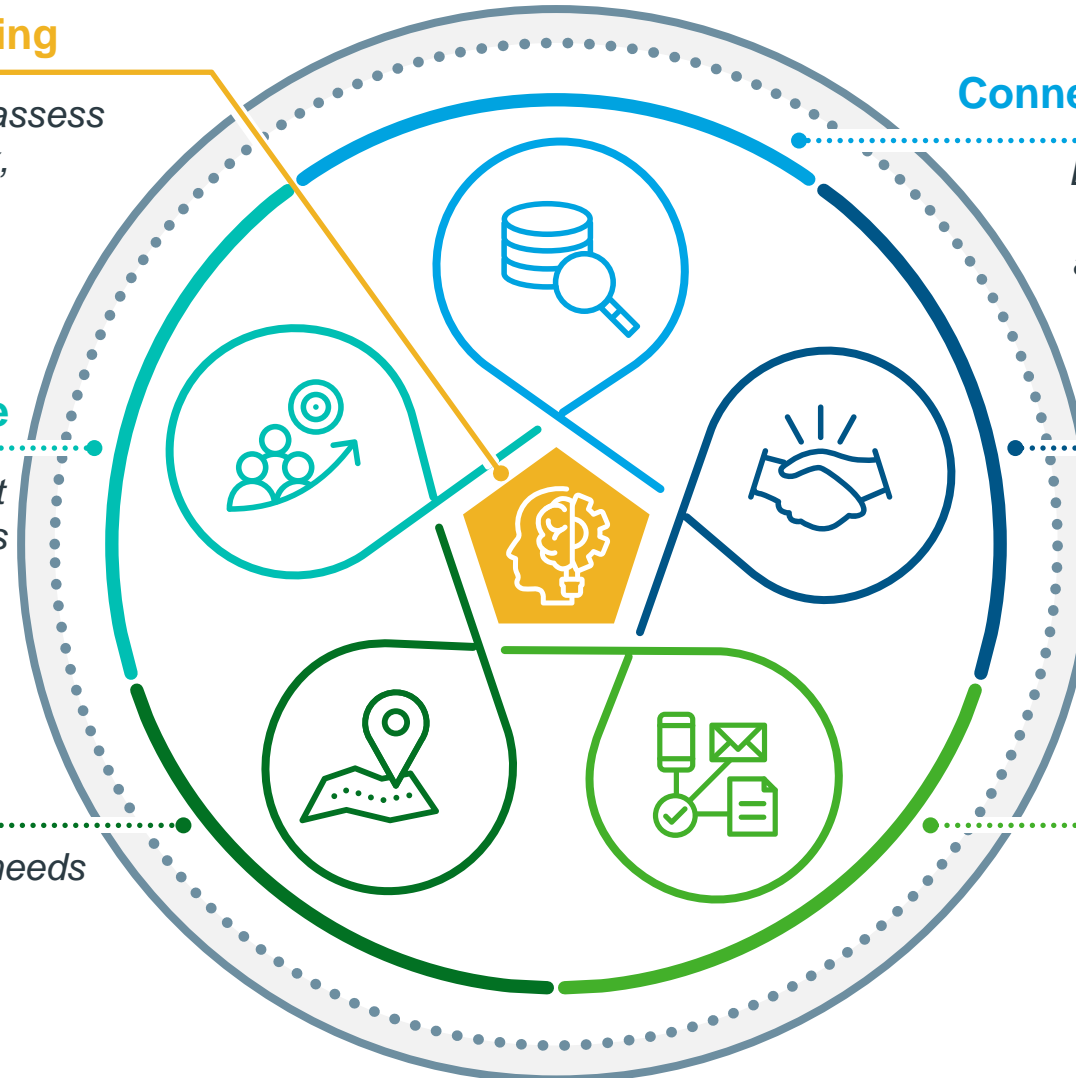
*Ensuring customer and commercial data is optimally captured and managed for an easily accessible 360° customer view*

## Diverse, differentiated field roles

*Developing a suite of customer-facing roles tailored to the specific portfolio and therapeutic dynamics*

## Omnichannel engagement

*Ensuring sales, marketing and medical channels interact seamlessly to drive enhanced engagement with customers*



# Day 5: Re-thinking the Life Sciences Business Model

*Areas for discussion*

## Balancing Risk and Reward

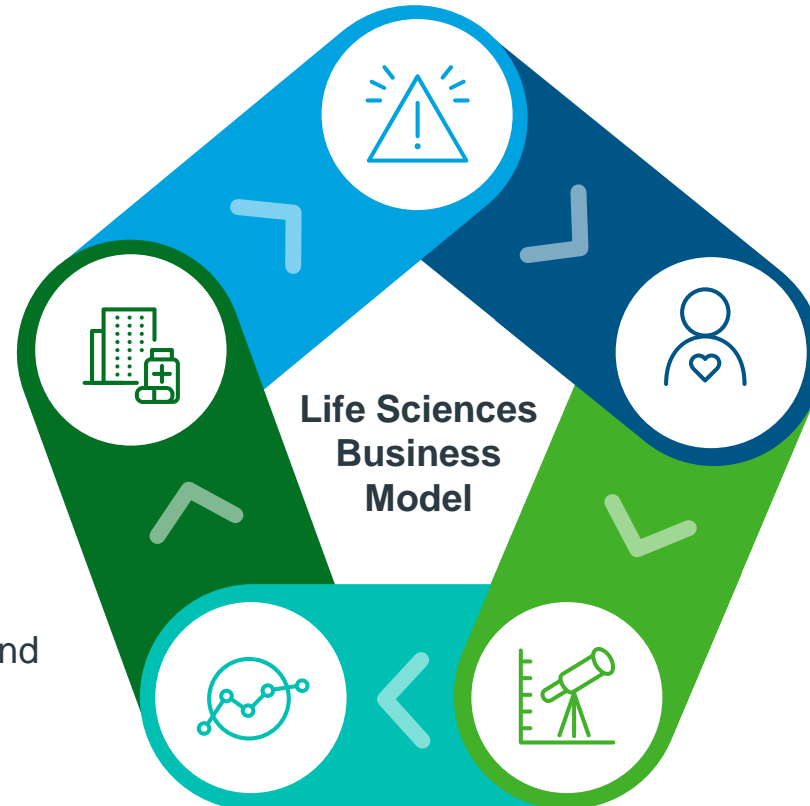
How is the balance of risk and reward evolving from a therapeutic and geographic basis?

## Disruptors

How can the life sciences business model prepare for and respond to disruptors looking to redefine the traditional value chain?

## Speed and agility

How can companies improve their speed and agility in decision-making in reducing R&D white space and commercialization effectiveness?



## Radical Patient Engagement

How can life sciences companies expand their role in patient engagement to deliver better outcomes?

## Future of Life Sciences Companies

How different can we expect the profile and performance of life sciences companies to be in five and ten years?