

Trends in the global medicines market and the UK market landscape

Pharmaceutical market growth
Insights from the medicines pipeline
Deep Dive on Obesity and Oncology

Brian Smith
Chief Pharmacist, IQVIA Healthcare Consulting, UK+1

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IQVIA Market Access & Patient Activation, helping you get your product from discovery to patient

From market access to patient activation, we specialise in empowering you to get your products to the patients who need them

Our access to powerful longitudinal datasets, aligned to our expert team ensures IQVIA are uniquely capable of supporting pharma client aims

- Integrated teams that uniquely understand coding processes and code data
- Institutional knowledge of healthcare across disease and therapy areas
- Innovative approach to business case generation that seeks to establish a true "case for change"
- Expertise that supports market access practice from strategy through to delivery

Our Value & Access Healthcare Consulting Team are uniquely capable and experienced teams that make sense of the market to ensure highly accurate strategic decisions, focused in-field engagement and a positive prescribing environment through optimal pathway design

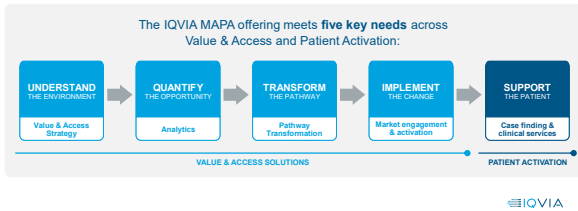
Highly-Resilient non-promotional teams that facilitate patient identification and treatment optimisation by directly supporting patients at the front line of care

Strategic Market Access | Field Market Access | Patient Identification | Patient Support
Pathway Analytics | Pathway Transformation | Patient Optimisation Programmes

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What We Do

The IQVIA MAPA team delivers **evidence-led, end-to-end services** to ensure patients in the UK get **efficient** access to pharmaceutical therapeutics and diagnostics.



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Brian Smith

Chief Pharmacist, Healthcare Consulting, UK & Ireland

Current Responsibility

- Supports the NHS and pharma clients to launch and grow effective medicines across the health economy
- Interprets and reports on IQVIA Data and healthcare performance metrics to the NHS and supports the Real World Evidence team in strategic projects
- Advices on Market Access to the NHS and Pharma Clients ensuring timely access to medicines for UK patients.

Profile overview

- Over 25 years experience in NHS Hospital Pharmacy, Trust Chief Pharmacist 2 NHS Trusts and founding Chair of the GMMMS Joint Formulary Committee
- Led, developed and redesigned pharmacy services at several NHS trusts
- Led on Secondary Care medicines data collection, analysis and reporting
- Advisor on UK Market Access for high-profile, branded, generic, biosimilar and orphan medicines

Education

- BSc (Hons) in Pharmacy (1990)
- Member of the Royal Pharmaceutical Society (1991 – Present)
- Registered as a pharmacist with General Pharmaceutical Council (to present)
- Post Graduate Cert in Clinical Pharmacy (1994)
- Post Graduate Diploma in Pharmaceutical Technology and Quality Assurance (2000)

Areas of expertise

- Medicines Management, Antimicrobial Stewardship, Formulary Development and joint working between commissioners, providers and the Life Sciences industry
- Market Access to the UK, NICE liaison.
- Uptake of new medicines
 - Value Propositions, Advanced Budgetary Notifications, HCP segmentation and liaison
 - Loss of Exclusivity

Relevant experience

- Varied input to Market Access projects
- Wide experience of NHS governance and medicines optimisation
- Experience with local and national commissioning, including high cost drugs, cancer treatments, contracting and special budgetary notification
- Member of the Guild of Healthcare Pharmacists
- Member of British Oncology Pharmacist Association

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Agenda

- Medicines use – growth in demand and environmental analysis to 2028
 - The R+D Pipeline
- NHS Priorities
- The UK picture
 - Market Growth and the share of the market
- Pipeline Highlights / Deep Dive
 - Obesity
 - Oncology

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Global Use of Medicines

IQVIA

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Key highlights from the Global Use of Medicines 2024 report published by IQVIA

Covid Pandemic Headlines
With the World Health Organization's declaration on May 5, 2023, of the end of the COVID-19 public health emergency, attention has shifted to the prevention and treatment of other communicable diseases as well as non-communicable diseases, and the critical contributions of medicines globally.

Impact of Covid-19 on the use of medicines
Breakthrough therapies launched over the past decade for multiple diseases are reshaping patient care in many areas and the outlook for medicines use – and the related spending – through 2028 is higher than prior forecasts as more novel drugs become available and despite a significant downward revision of the outlook for COVID-19 vaccines and therapeutics.

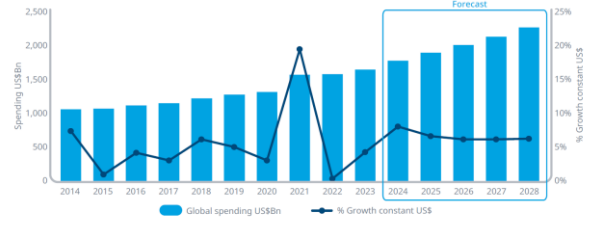
Outlook and Historical Drivers
The largest driver of medicine spending growth through the next five years is still expected to be the availability and use in developed markets of innovative therapeutics and offset by losses of exclusivity and the lower costs of generics and biosimilars.

Per Capita Use of Medicines Varies
Per capita use of medicines varies by GDP with use in higher income countries typically higher than in lower income countries. The global use of medicine is expected to reach nearly 3.8 trillion defined daily doses in 2028, up 400 million from the 2023 level bringing global spending on medicines at list prices to \$2.3Tn.

Source: IQVIA Institute for Human Data Science. Global Use of Medicines: Outlook to 2028, January 2024. Available from www.iqvia.com

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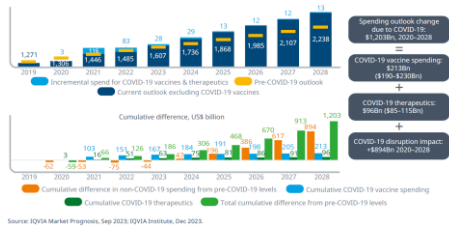
The global medicine market — using invoice price levels — is expected to grow at 5–8% CAGR through 2028 to about \$2.3Tn



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Global spending, including COVID-19 vaccines and therapeutics, is forecast to exceed pre-pandemic outlook by \$1.2Tn to 2028

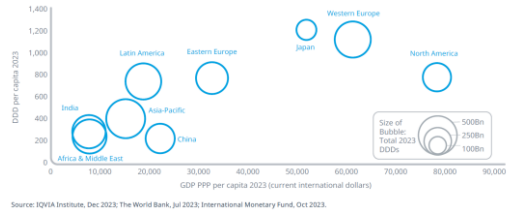
Changes in the historical and projected global medicine spending model due to COVID-19, 2019–2028, US\$Bn



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Per capita use of medicines varies by GDP with use in higher income countries typically higher than lower-income

Japan and Western Europe have more than double the use of most other regions



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Medicine use has been growing across therapy areas since 2019, with highest growth in immunology, endocrinology, and oncology

Defined daily doses (DDD) in 2023 across select therapy areas indexed to 2018 values (2018 value = 100)

Immunology
The dramatic growth in patient access to novel medicines is driving higher use of medicines in immunology, endocrinology and oncology. Immunology has seen expanded access to a variety of biologic and small molecule therapies, but as specialty therapies, access is often constrained in lower-income countries.

Endocrinology
As a group of hormonal regulating therapies, including diabetes, has also grown at double the global average rate of increase in days of therapy.

Oncology
Oncology, the largest therapy area by spending, increased 21% over the past five years by volume, an average of 3.9% per year, outpacing population growth and indicative of growing rates and durations of cancer treatment.

Source: IQVIA MIDAS, Jan 2022; IQVIA Institute, Dec 2023.

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Spending in Europe is expected to increase by \$70Bn through 2028, driven by new brands

Spending and growth drivers in France, Germany, Italy, Spain, and UK 2018–2028 (const US\$Bn)

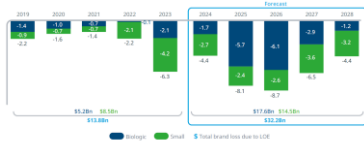
Medicine spending in the top five European markets is expected to increase by \$70Bn over the next five years, up from \$65Bn in the past five years but with large shifts in the drivers of growth. New brands are the largest driver of growth from 2018 to 2023 and are expected to continue in the next five years but will be hampered by lingering effects of the pandemic on marketing operations early in the period and reimbursement decisions later as budget pressures increase. Generics, including biosimilars, are expected to add \$18Bn in growth over the next five years, about the same as in the past five years, despite a larger impact of LCEs as volume gains will be offset by price deflation. Payer actions will be shaped by the pace of economic and COVID-19 recovery, including broader inflation concerns and the impact on fuel commodity costs in the region related to the Ukraine conflict. Innovation is expected to be significantly strong in the next five years despite expected greater scrutiny of the value of new medicines in the form of health technology assessments.

Source: IQVIA Market Prognosis, Sep 2023; IQVIA Institute, Nov 2023.

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The impact of exclusivity losses will reach \$32Bn over 5 years, with more than half due to the availability of biosimilars

EU4+UK impact of brand losses of exclusivity 2019–2028, (US\$Bn)



The impact of LOEs in the five largest European markets (Germany, France, Italy, Spain, and the UK), are expected to more than triple over the next five years and more than half of the impact is expected to be biologics with \$17.6bn of the \$32.2bn total impact.

The major impact is seen in 2023, 2025 and 2026 with patent expiry of ranibizumab (Lucentis) in 2022, and ustekinumab (Stelara) in 2025, and aflibercept (Eylea) in 2026.

Europe's biosimilar market is the largest in the world, with the first biosimilar launched in 2008 following the approval of biosimilars based on a solid and robust legal pathway introduced in 2004; since then, the process has led to the highest number of biosimilar approvals in the world.

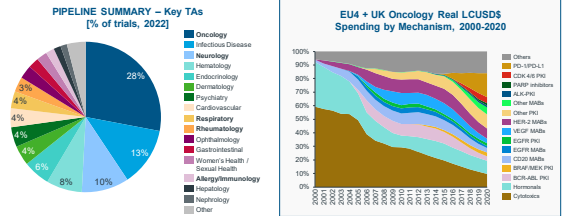
Small molecule LOE is expected to double in terms of impact on brands in the next five years even as they have been a smaller share of overall impact.



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Oncology continues to dominate the clinical pipeline

In recent years, the number of major mechanisms of action have increased from 3 to 15



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Other Key Therapy Areas

Global biotech spending is set to exceed \$890Bn by 2028, with growth slowing to 9.5–12.5% due to the impact of biosimilars

Specialty medicines will represent 43% of global spending in 2028 and more than 55% of total spending in leading developed markets.

The two leading global therapy areas — oncology and immunology — are forecast to grow 14–17% and 2–5% CAGR, respectively, through 2028.

Oncology is projected to add 100 new treatments over five years, contributing to an increase in spending of \$224Bn to a total of more than \$440Bn in 2028 and facing limiting new losses of exclusivity.

Treatments for autoimmune disorders are forecast to reach \$192Bn globally by 2028, driven by steadily increasing numbers of treated patients and new products, and **offset after 2023 due to biosimilars**.

Diabetes spending growth is slowing to low single digits in most developed markets and declining in some, especially net of rebates.

Global obesity spending has accelerated in the past two years from novel drugs with upside if more widely reimbursed.

New therapies in Alzheimer's and anxiety / depression are expected to drive spending growth in neurology.

The outlook for next-generation biotherapeutics includes significantly uncertain clinical and commercial prospects for cell, gene and RNA therapies, which will grow to \$33Bn in spending by 2028.



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NHS Priorities

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The NHS has several short / medium term priorities to address in addition to achieving the long-term plan

Finance
Activity demand of 30% increased throughput
3% uplift in funding

Staffing
Staff leaving the NHS for other jobs / retirement
110,000 vacancies
c.80,000 sickness absence (at peak)

Backlog
7m+ people waiting for treatment
Delays in discharge
Social care in backlog

Precision medicine
Genomic testing
High-cost drugs / commissioning
How to make the unaffordable affordable

Carbon net zero
NHS first global health system to announce net zero targets in 2020
Targets are challenging
Focus on DPI to MDI switch

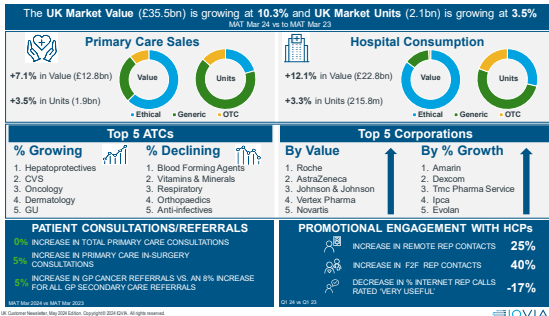
Antimicrobial resistance
10m deaths per annum by 2050 if no action is taken



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The UK Picture

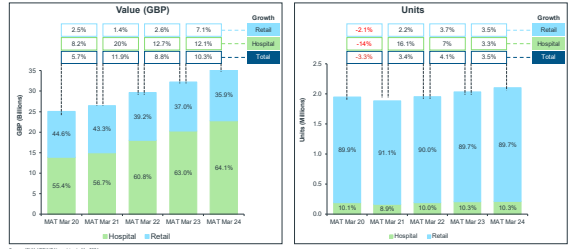
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UK Market - Retail & Hospital - Value & Volume

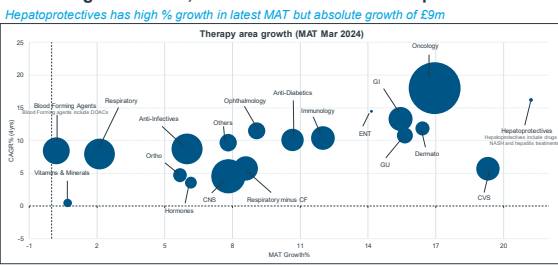
Retail market growth (MAT) +7.1% in value (+3.5% in volume) vPY, Hospital volume +3.3% despite a value growth at list price of 12.1%
 Both sectors have seen growth, with the exception of disruption caused by the pandemic



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UK Market - Retail & Hospital - Value

Oncology is the fastest growing therapy area in the UK with an absolute growth of £1,329m in the MAT Mar 24 vs previous MAT

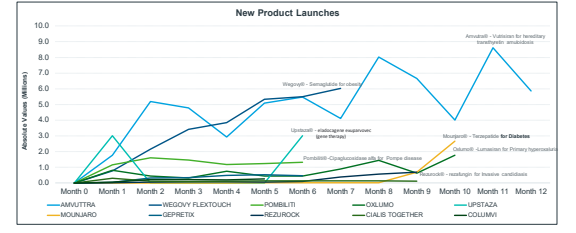


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UK Market - Retail & Hospital - Value

Mounjaro (£2656K) has largest growth of 291.8% vs. previous month, Oxlumo (£1764K) has a growth of 183.1% vs. previous month

Upstaza, Amvuttra, Cialis Together and Geprupt have seen a negative growth compared to the previous month. Note Wegovy and Mounjaro

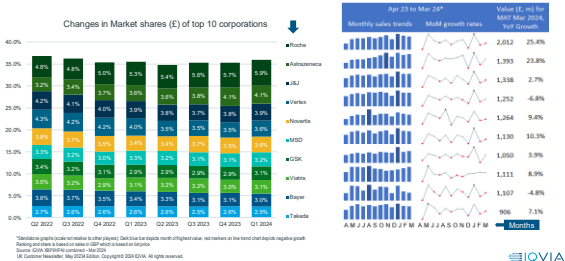


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UK Market - Retail & Hospital - Value

Roche has highest share of UK market (5.9%) in latest quarter with biggest share gain (0.6%) compared to same quarter PY

Vertex share has biggest share decline (0.4%) followed by Bayer (0.4%) during the same period

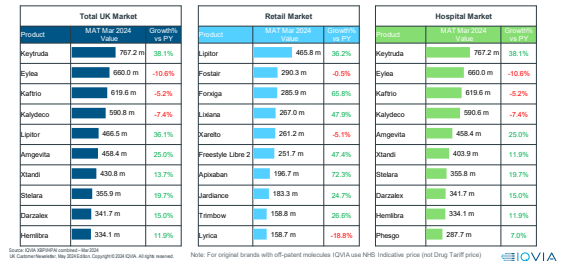


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UK Market - Retail & Hospital - Value

Keytruda (38.1%) in Total UK Market, Apixaban (72.3%) in Retail and Keytruda (38.1%) in Hospital have highest value growth

Despite a negative growth, Eylea is second highest value (list price) product in Hospital sector



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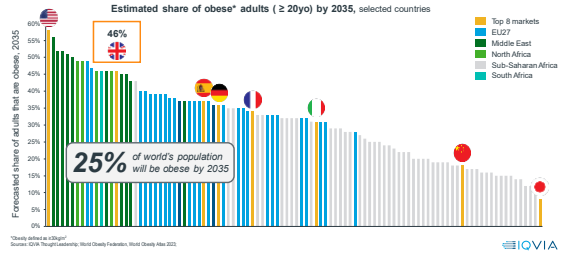
Pipeline Highlights 1
Obesity



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Obesity is a major global health crisis, which is estimated to affect 2 Billion people by 2035

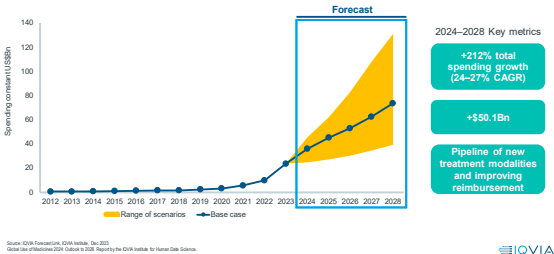
The UK is forecasted to be the fifteenth most impacted country



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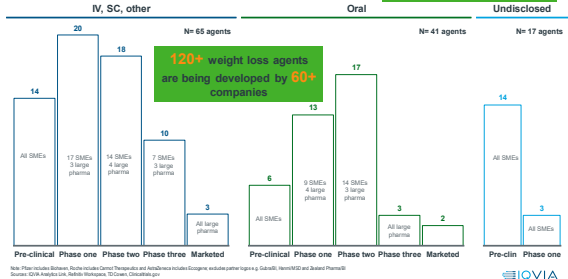
There is a wide range of global financial impacts

Many uncertainties and challenges remain



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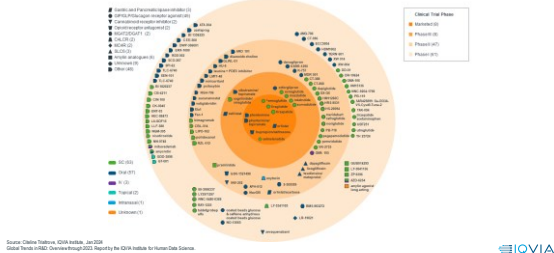
Anti-obesity therapy horizon scan



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Majority of therapies are injectable combinations

Obesity pipeline by phase, target and route of administration



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Publicly funded markets will be more restrictive – understanding consumer behaviour is key

UK example: Currently, over 95% of Wegovy Rx are out of pocket – can evidence change this?

NICE
National Institute for Health and Care Excellence
Recommends Wegovy for people living with obesity; but access restrictions are high:

- Patients with at least **one weight-related comorbidity** and a **BMI ≥35.0 kg/m²**
- Exceptionally, a BMI of 30.0 kg/m² to 34.9 kg/m², if aligned with guidelines criteria
- Reimbursement for **maximum of two years**
- **Specialist prescribing** with multidisciplinary input

'The limitation of two years' treatment is, of course, completely illogical since obesity is a chronic disease and is not cured by this treatment. In common with other diseases, such as hypertension and diabetes, withdrawal of a drug that is working means the benefits are likely to be lost'

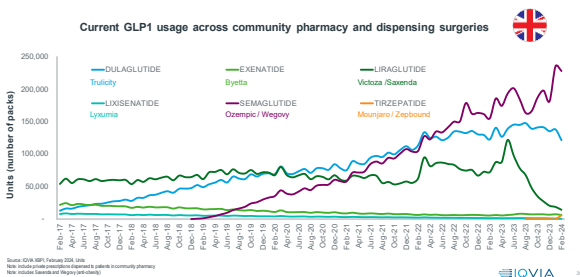
Prof Nick Finer, currently expert medical consultant in obesity medicine and endocrinology

Scottish Medicines Consortium **Less restrictive than NICE, but still impose conditions**
Patients with at least one weight-related comorbidity and a **BMI ≥30 kg/m²**. Treated in a specialist weight management service

*Former: History Clinical Professor at UCL, and former Senior Principal Clinical Scientist, Clinical Medical Affairs Management, at Novartis. Source: NICE website. ¹ May consider a real BMI threshold in primary care. Source: Scottish Medicines Consortium. ² IQVIA

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Despite recent supply issues GLP-1 demand continues to grow particularly with dulaglutide and semaglutide



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Wegovy® Uptake Feb 2024

Based on NHSE Data and IQVIA Proprietary Supply Chain Manager (SCM) Data

Region	Packs supplied
Northern Ireland	1240
Wales	5840
Scotland	12642
North of England	38796
Midlands and East	23143
London	15781
South of England	11417
NHSE Prescriptions (by items)	287
NHS Hospitals (HPA)	620
IQVIA Community Pharmacy Panel	52724

SCM data shows Wholesaler sell out and includes private providers and on-line pharmacies. Total UK activity is 108859 packs, with England totaling 89137 packs. NHS activity is low on both measures (NHSE and HPA) – a total of 907 packs (est).

This shows massive (>99%) uptake in the private market

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Pipeline Highlights 2
Oncology



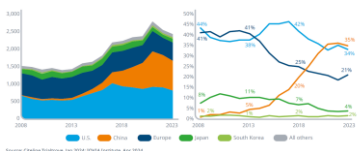
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Key highlights from the Global Use of Medicines 2024 report published by IQVIA

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Oncology trials from China-headquartered companies have risen to 35% of total starts, up from only 5% a decade ago

Number of oncology trials over time and country share of trials Phase I to Phase III based on company headquarters location, 2008–2023



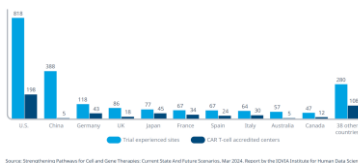
As oncology research and development activity has increased, the geographic footprint of companies involved in this activity has expanded outside the U.S. and Europe. Europe's share declined to 21% in 2023, down from 25% five years ago, while the absolute number of trials started by European companies decreased 8% over the same period. Trials run by China headquartered companies have seen significant growth in the last decade, highlighting the important role that companies headquartered there will play in the development of new products globally.

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There are 522 hospitals accredited with international standards for the administration of CAR-T therapies globally

Number of research sites or treatment centres with CAR-T capabilities by country, Q3 2023



Administering CAR-T cell therapy is relatively complex, such that only a subset of cancer centres are trial experienced or accredited to deliver these treatments. These centres must be equipped to handle any adverse events that may arise, typically limiting the Centres to larger hospital systems where additional capacity may be available. The availability of currently accredited treatment centres varies significantly by country and is concentrated in high-income countries where these therapies are more widely used. There were 2,009 trial experienced sites globally in 2023, an increase of 50% from the 1,297 in 2020, which includes 388 trial experienced sites in China, where a large amount of CAR T research is taking place.

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Spending on oncology medicines

Cancer medicine spending rose to \$223Bn globally in 2023 and is expected to reach \$409Bn by 2028.

Growth in oncology spending was driven by protected brand volume and new products launched over the last five years and offset by losses of exclusivity across both small molecules and biologics.

Oncology biosimilar uptake has been greater than 50% across major markets, and biosimilars saved \$7.1Bn in 2023 and \$19Bn since 2017.

Six of the top 10 tumours had double-digit spending growth over the last five years, all areas of significant numbers of breakthrough new medicines and expanded patient access to care.

PD-1/PD-L1 inhibitors are used across most solid tumours reaching \$52Bn in spending globally in 2023 and expected to grow to over \$90Bn in 2028.

The outlook for next-generation biotherapeutics in oncology includes significantly uncertain clinical and commercial success, with the potential to grow from the current \$4Bn in global spending to \$23Bn by 2028.

The outlook for oncology medicine spending includes an incremental 83% increase in spending over five years driven by innovation as more patients around the world get access to better medicines.



Thank you!

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The slide features a dark grey background with the IQVIA logo in the top right corner. Below the logo, there are four horizontal bars of varying lengths, each with a blue-to-white gradient. The text "Thank you!" is centered in the upper half, and the email address "brian.smith1@iqvia.com" is centered in the lower half.