nature reviews drug discovery

https://doi.org/10.1038/d41573-026-00069-7

Supplementary information

Shifts in pharma's therapeutic area focus

In the format provided by the authors and unedited

Data sources and methodology

The composition of top launches. We analysed four groups of product launches to determine the relative differences in their composition: historic launches from 5-year time windows (2010 to 2014, 2015 to 2019 and 2020 to 2024) and a "forward-looking" sample of actual and expected launches from 2025 to 2029. For each batch, the launches were sorted by either reported (historic years) or consensus analyst forecast (future) revenue for each product, combining revenues reported by all companies involved in the sales of an asset. The annual revenue was assessed 5 years from the period's end (2019 for the first batch, 2024 for the second, or forecasted 2029 and 2032, respectively, for the last two batches) to identify the top 100 launches for each time window, and the total value of these launches in this year are shown in Fig. 1b. In the last batch, 2032 forecasted data was used instead of 2034 to ensure that the consensus forecast values are based on a robust number of underlying analysts' inputs. The analysis included products classified as "New Molecular Entity" (NME), "NDA" and "New Derivative", although the top 100 launches across all time windows were almost exclusively NME-grade. We then mapped the top launches from each batch to the following categories informed by EvaluatePharma categorizations:

- Rare disease – products whose 50% or more of their lifetime sales are expected to come from orphan indications
- Specialty – prescription drugs promoted to healthcare professionals based in a hospital
- Primary (including DTC) – prescription drugs promoted to a general physician (GP), a nurse or directly to the patient (DTC)
- Mix – prescription drugs promoted either to a GP/nurse or to healthcare professionals based in an outpatient clinic or a hospital.

The number of products in each class and their cumulative revenues 5 years out were compared for each of the batches of top 100 launches to investigate potential notable shifts in composition of the highest valued launches over time.

Late-stage trial trends. We analysed all phase III (including phase III and phase II/III) investigational industry-sponsored clinical trials reported in the ClinicalTrials.gov registry. We included all trials with a start date from 1 January 2005 to 31 December 2024 except for the studies that were withdrawn, withheld and suspended. The sample was not restricted to trials conducted in any specific region (all trials were included regardless of their location); however, due to the scope of the underlying database it could be less complete when it comes to trials conducted outside of the USA that are not linked to the development of drug candidates intended for the US market.

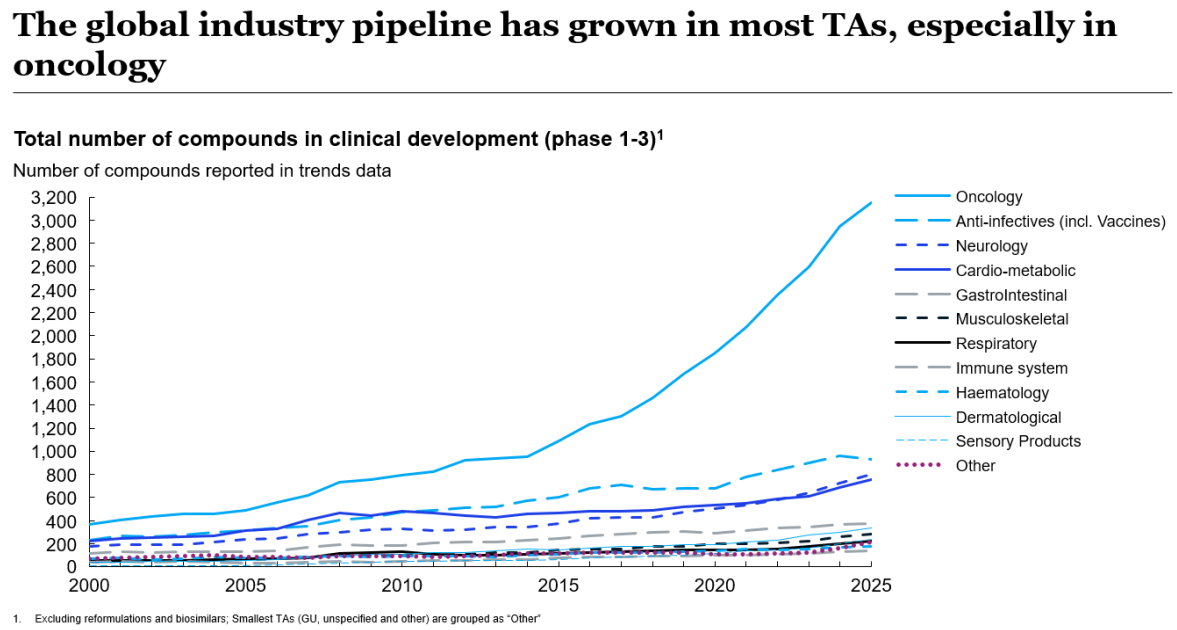
Trials were classified into therapeutic areas (and defined as rare-disease-related) based on the MeSH (Medical Subject Headings) classification within the ClinicalTrials.gov registry. This categorisation has some limitations especially when it comes to trials that can be classified to several different therapeutic areas – this is often the case, for example, for immunology given the anatomically driven alignment (for example, dermatology for atopic dermatitis) might not reflect the immunological root causes of the disease. Similarly, if a trial includes both orphan and non-orphan diseases, in this view we are unable to split these patient populations and an entire study would be considered as "rare disease".

To assess potential trends in clinical trial size, we used total (reported or planned) enrolment for each trial. Trials were then plotted on a time scale based on their start date, so that each study is only counted once and trial duration is not taken into account.

Therapeutic area growth trends and sentiment analysis

Clinical pipeline composition. Our analysis of the composition of global clinical pipeline points to oncology as the fastest-growing therapeutic area (TA) over the past two decades. Other TAs have also increased in size, but their growth has not been as consistent and often show spikes that can be linked to specific scientific breakthroughs or global events (for example, a pandemic-driven peak for anti-infectives) and many have plateaus or even temporary declines. Continuous growth — albeit from a much smaller base — has also been visible for immunology (this TA is still structurally underestimated, given many assets are primarily classified based on the primary organ they act upon and hence can be grouped within musculoskeletal, GI or dermatology). More recently, pipeline size increases are also observed in the neurology and cardiometabolic TAs.

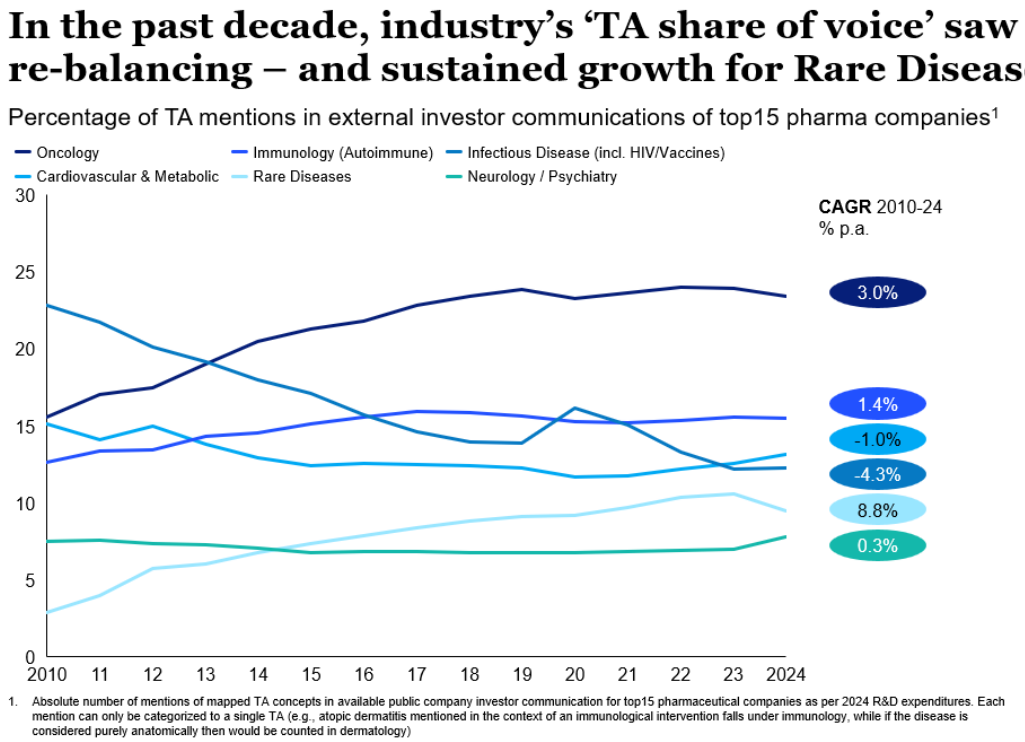
This analysis was conducted based on annual snapshots of the global industry pipeline from Pharmaprojects (data as of December 2025). Each asset is only counted once per year and in a single TA (dependent on its lead indication and primary therapeutic description). Reformulated assets and biosimilars are excluded from this view to focus on novel products. Only assets that were in phase I, II or III based on global status (defined by lead indication) in a given year (snapshots are taken mid-year except for 2025 datapoint which corresponds to October status) are included on the chart —indication and regional expansion are not considered.



Supplementary Figure 1 | **Global clinical pipeline by therapeutic area**. Source: Pharmaprojects as of December 2025.

Investor's sentiment analysis. We analysed available public investor communications (quarterly and annual press releases plus other relevant company releases) from 2010–2024 for the top 15 pharmaceutical companies by 2024 R&D expenditure. Using McKinsey Value Intelligence (including its GenAI-enabled agent), we identified mentions of mapped therapeutic area (TA) concepts within each document, assigned each mention to a single TA based on context (for example, "atopic dermatitis" discussed in an immunological intervention was coded to immunology rather than dermatology), and aggregated results by company and year. We then calculated annual "share of voice" for each TA (TA mentions as a proportion of total mentions that year) and assessed trend dynamics over the full period, including CAGR over 2010–2024.

This analysis shows that oncology consistently commands the largest share of voice (~23%), reinforcing its role as the industry's primary strategic anchor despite a recent plateau (3% CAGR, 2010–2024); immunology exhibits durable, incremental growth consistent with platform-led lifecycle expansion (1.4% CAGR); cardiovascular & metabolic shows a recent uptick but not a structurally renewed long-term outlook (−1% CAGR); infectious diseases displays episodic prioritization with a COVID-era peak followed by reversion to below the prior baseline (−4.3% CAGR); and rare diseases shows steady expansion despite a slight dip in 2024 (8.8% CAGR). The visualization focuses on the largest TAs: oncology, immunology, cardiovascular & metabolic, infectious diseases, and rare diseases. The remaining TAs (respiratory/pulmonary, musculoskeletal, dermatology, sensory/ophthalmology, gastrointestinal, and women's health) were also assessed but not shown; collectively, these remaining TAs account for ~18% share of voice (down from ~23% in 2010), with respiratory being the largest among them (~6.5%).



Supplementary Figure 2 | **Industry public communications 'share of voice' by therapeutic area**. Source: Company investor presentations and major press releases as accessed through McKinsey Value Intelligence as of December 2025.