

Pharma R&D Annual Review 2022

Navigating the Landscape

Citeline
Pharma Intelligence

For our 30th edition, embark on a journey that circumnavigates the pharma world and discover the industry's trajectory as it resets its compass following a turbulent couple of years.

Checked in and Ready for Take-Off

Total Pipeline Size Exceeds 20k



- 20,109** drugs in active development
- 8.22%** growth rate
- 1,527** new drugs added in 2021



It seems that pharma is sailing along at some speed, buoyed by the prevailing winds resulting from the COVID-19 crisis.

Arrival

The 2022 Pipeline by Phase



- Preclinical 11.0% increase**, a considerable uptick from last year's rate of 6.0%
- Phase I 10.1% increase**, overtaking the 6.4% seen last year
- Phase II 6.4% increase** a much more rewarding acceleration than last year's 2.0%
- Phase III 8.7% increase**, burning rubber past the paltry 0.9% seen last year

For Phase III in particular, this represents something of a recovery after pharma suffered a bit of a breakdown in recent years, or at the very least was crawling along in the slow lane.

Meet Your Fellow Travellers: Top Companies

POSITION 2022 (2021)	COMPANY	NO. OF DRUGS IN PIPELINE 2022 (2021)	NO. OF ORIGINATED DRUGS 2022
1 (1)	Novartis	213 (232)	129
2 (2)	Roche	200 (227)	120
3 (3)	Takeda	184 (199)	68
4 (4)	Bristol Myers Squibb	168 (177)	98
5 (5)	Pfizer	168 (170)	101
6 (6)	AstraZeneca	161 (157)	89
7 (7)	Merck & Co	158 (176)	77
8 (8)	Johnson & Johnson	157 (162)	86
9 (9)	Sanofi	151 (141)	87
10 (10)	Eli Lilly	142 (126)	76
11 (11)	GlaxoSmithKline	131 (113)	67
12 (12)	AbbVie	121 (160)	44
13 (13)	Boehringer Ingelheim	108 (97)	79
14 (14)	Bayer	105 (108)	76
15 (15)	Otsuka Holdings	93 (95)	46

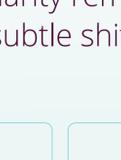
Source: Pharmaprojects® January 2022

There are no unfamiliar faces in the top 15 at all, which comprises exactly the same 15 companies as last year, with very little jostling for new positions either.

It's a sixth year with the largest R&D empire for Novartis, although the company's pipeline did contract slightly from 232 to 213 drugs.

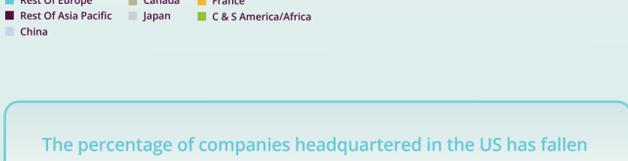
It's still looking over its shoulder at its compatriot Roche, which is runner-up again, but has posted a bigger fall in its pipeline size, putting more road between the two.

The remainder of the top five – Takeda, Bristol Myers Squibb, and Pfizer – each reported that their pipeline world was shrinking slightly too.



Favorite Destinations: Distribution of R&D Companies by HQ Country/Region

Order of popularity remains the same, but with some subtle shifts beneath that



The percentage of companies headquartered in the US has fallen by **2%**, while those in the Rest of Europe category fell by **1%**. The region responsible for this 3% shift – China. Its share of pharma companies leaps from **9%** to **12%**, a very significant expansion for a single year, and reflecting the fact that the number of companies based in that country has shot up by an astounding **43.3%**. There is truly a boom in R&D going on there.



Taking in the Varied Scenery: Top Therapies

Spectacular views of the mountains of anticancers



Therapeutically, cancer continues to top the league, with **7,772** drugs in its pipeline this year, an inflation-busting increase of **14.0%**. Third-placed anti-infectives posted a more modest **4.7%** expansion this year, indicating that the COVID-induced **22.4%** growth seen last year was something of a one-off, but also that this expanded pipeline has been sustained, rather than falling back. Incredibly, every single therapeutic area grew last year.

Nonetheless, at the start of 2022, the pharma industry looks to be firmly in control at the wheel. There may be many forks and bumps in the road ahead, it may even hit the occasional roadblock, but thankfully it looks certain to leave the COVID pandemic for dust.