

Study Shows 2021 Global Pharmaceutical R&D Investment Reached \$276B

The US Leads the Global R&D Investment Effort.

The US is the world's hub for biopharmaceutical R&D, with 48% of global biopharmaceutical R&D companies headquartered in the US, accounting for 55% of worldwide R&D investments. As measured in this study, pharmaceutical R&D investment was significantly larger than commonly reported, totaling \$276B across 4,191 global companies in 2021.¹

US Reinvests Greater Share of Revenue Back into Research.

US-based firms disproportionately reinvest into research compared to firms in regions with lower sales. The R&D intensity, as share of revenues, was as high as 34% in the US. At the same time, US firms also allocate a relatively smaller portion to operational expenses and marketing.¹

Policymakers Must Protect the US Innovation Ecosystem.

The US private pharmaceutical ecosystem drives unparalleled advancements that are critical in addressing unmet patient needs. Innovation and health policies should support the interconnected private ecosystem that delivers investment into life-saving medicines for tomorrow.

\$276 Billion

Amount the world's private pharmaceutical sector contributed to R&D investment in 2021.¹

50%

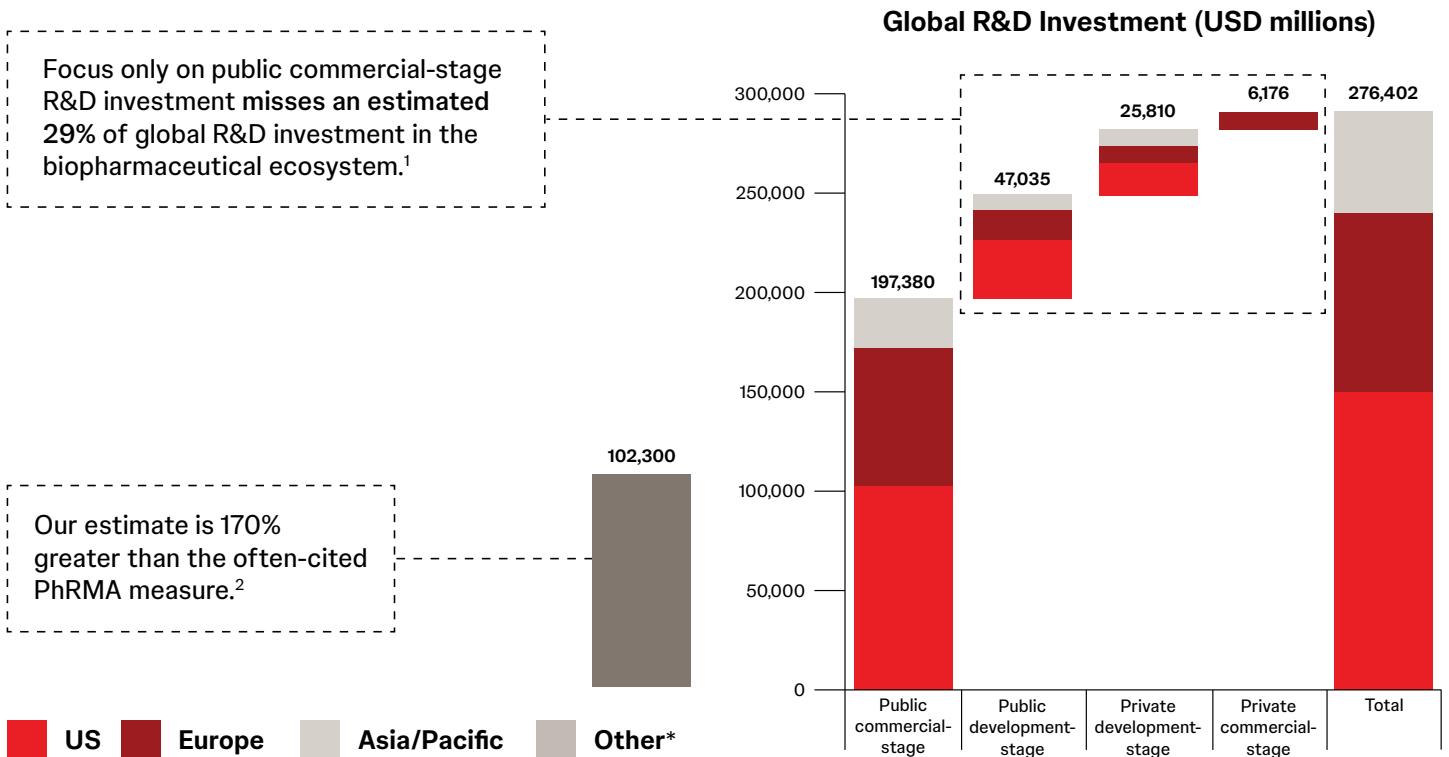
Top 20 companies by revenue contribute half of R&D investment.¹

186%

Global R&D investments were 186% greater than all industry sales & marketing costs.¹

A Complete and Replicable Measurement of R&D Investment

This new study by J&J introduces a transparent and replicable approach to estimate all innovative pharmaceutical R&D across the private-sector ecosystem. The private-sector ecosystem was categorized into publicly listed and privately owned companies who were either in the commercial stage (with approved products) or development-stage.¹



*Other includes Africa, the Middle East, Latin America, the Caribbean, and Canada, which combined account for 1% (\$2.7B) of global R&D investment.

¹ Chandra et al., 2024. Comprehensive measurement of biopharmaceutical R&D investment. *Nature Reviews Drug Discovery*, 23(9), 652–653. <https://doi.org/10.1038/d41573-024-00131-2>

² PhRMA. "2022 PhRMA Annual Membership Survey." July 2022. https://phrma.org/-/media/Project/PhRMA/PhRMA-Org/PhRMA-Refresh/Report-PDFs/P-R/PhRMA_membership-survey_2022_final.pdf