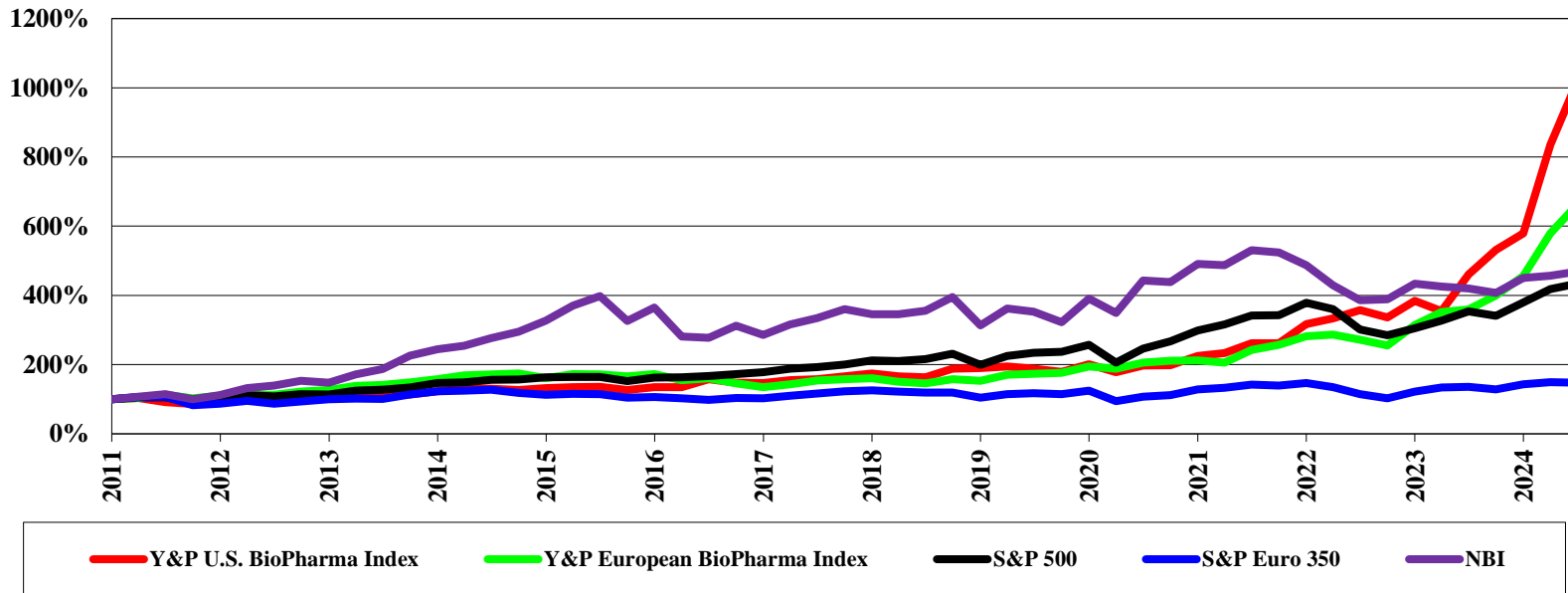


Stock Market Trends

Long-Term Performance of Y&P BioPharma Indices

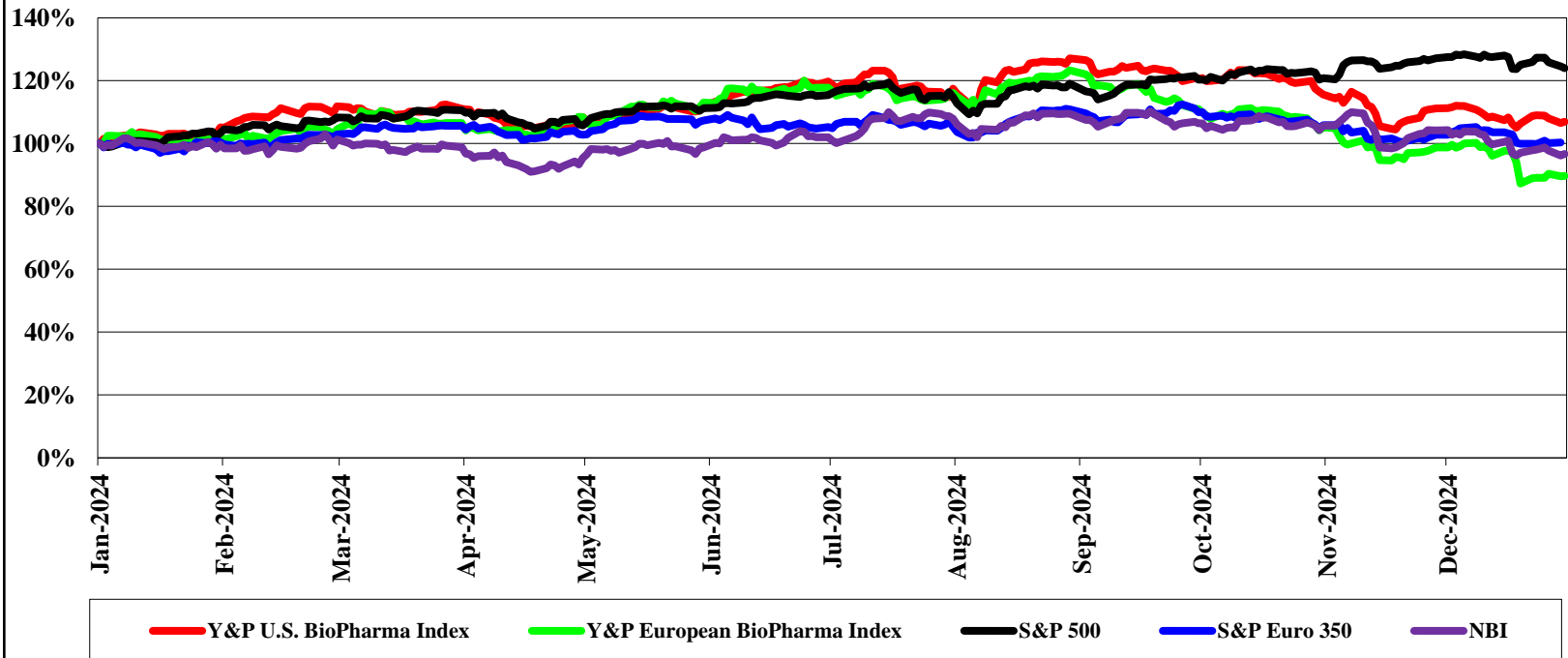
- Long-term, the Y&P U.S. and European BioPharma indices have done well and both outperformed the S&P 500 and the S&P Euro 350, except in the 2020-2021 period. The NBI has outperformed as well historically.



Stock Market Trends

Y&P BioPharma Indices – 2024

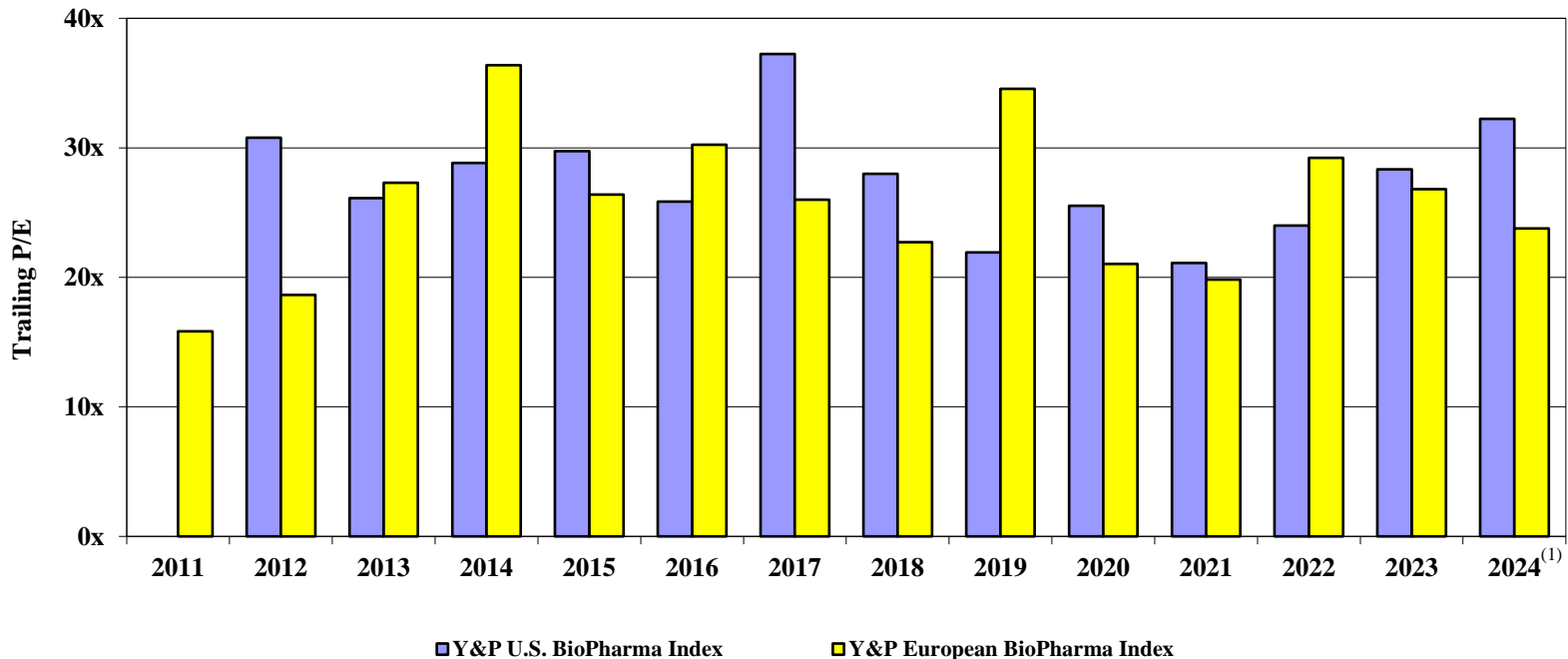
- In 2024, the Y&P U.S. and Y&P European BioPharma Indices underperformed the S&P 500 and the S&P Euro 350, respectively. The NBI lagged both market indices.



Stock Market Trends

BioPharma Drug Comparative LTM P/E Ratios

- At the end of the third quarter, the average P/E ratios of the companies in the Y&P U.S. BioPharma Index increased and the Y&P European Pharma Index decreased compared to yearend 2023.

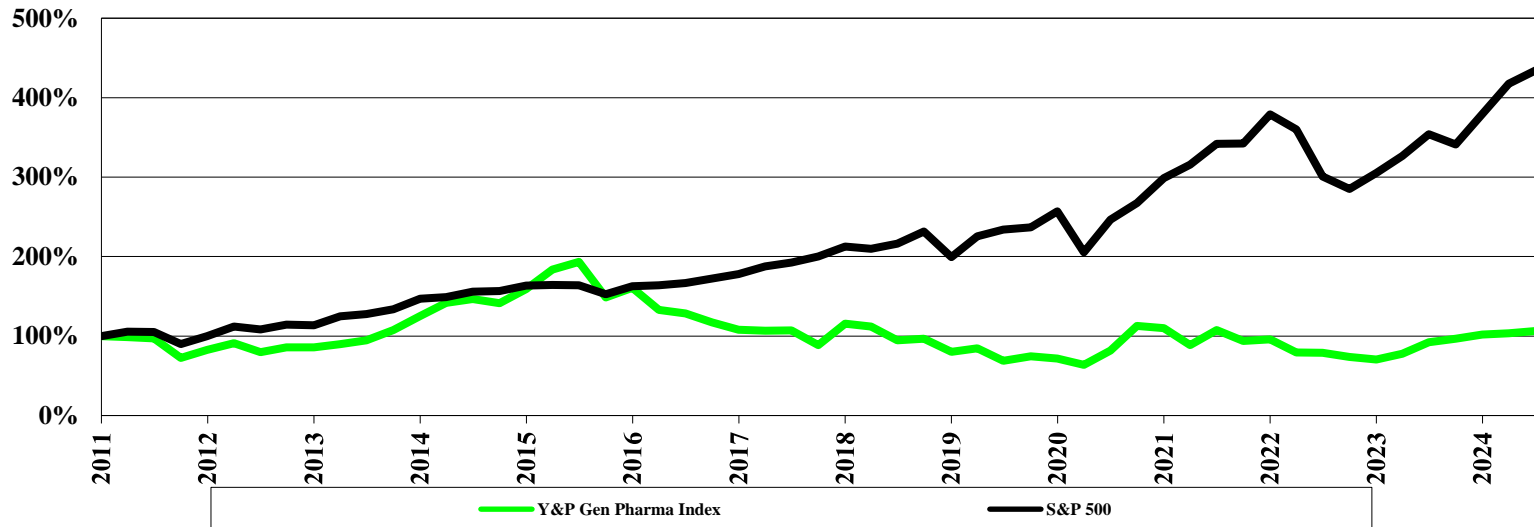


(1) As of December 31, 2024

Stock Market Trends

Long-Term Performance of Y&P Generic Pharma Index

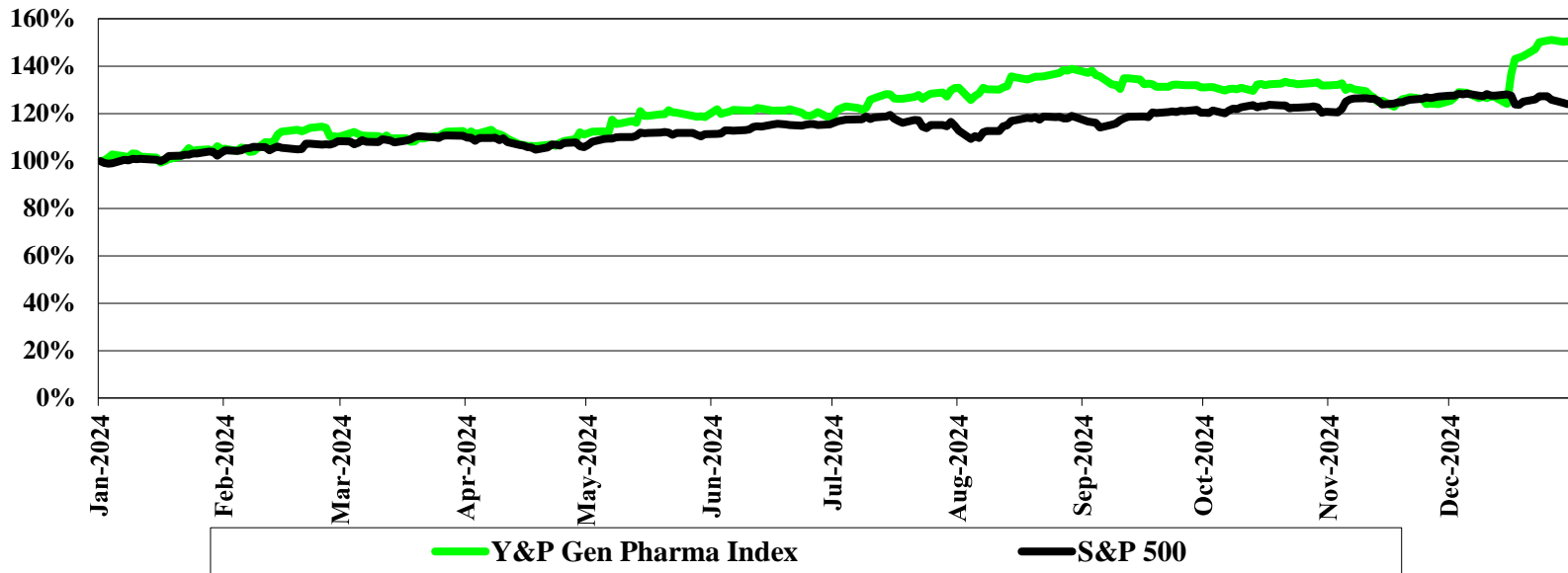
- Since 2016, the Y&P Generic Pharma index has continued to seriously underperformed the S&P 500 as generics companies suffered lower earnings and growth.



Stock Market Trends

Y&P Generic Pharma Index – 2024

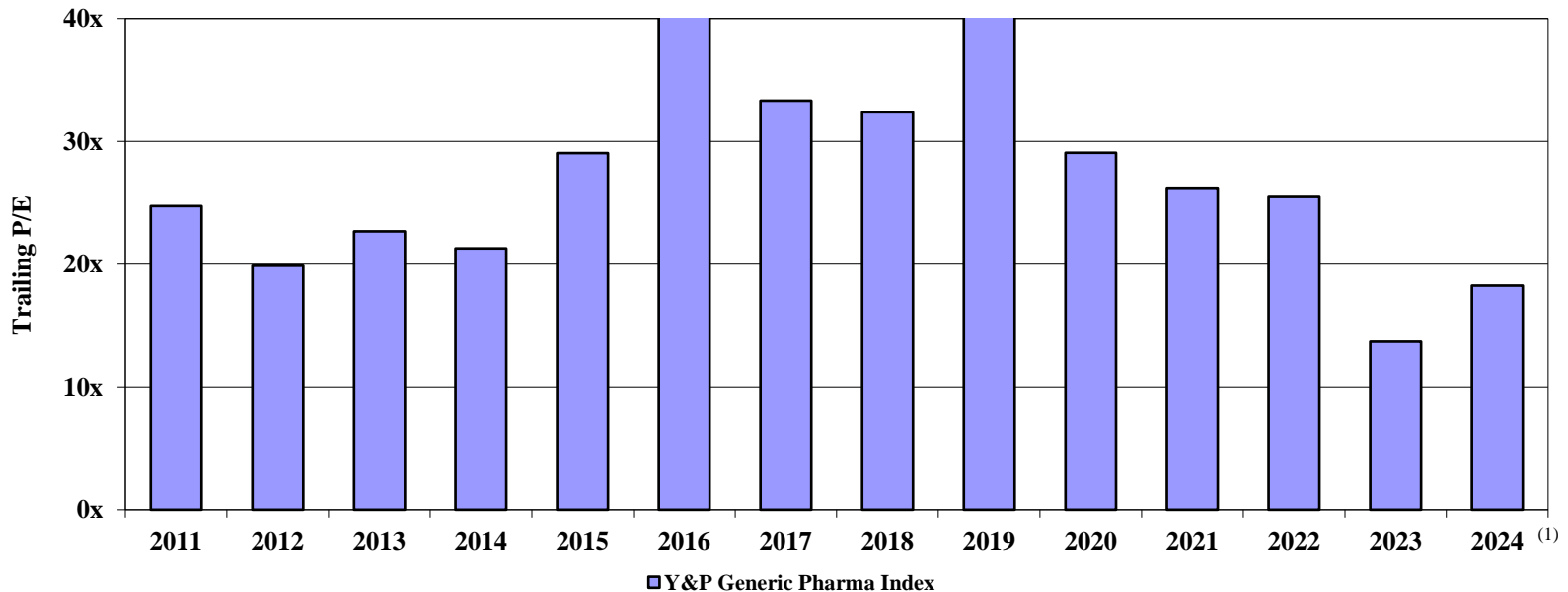
- The Y&P Generic index partially recovered in 2024 and outperformed the S&P 500.



Stock Market Trends

Generic Pharma Comparative LTM P/E Ratios

- The average of the P/E ratios of the companies in the Y&P Generic Pharma index has been declining, with a significant uptick in 2024 with the surge in stock price values.

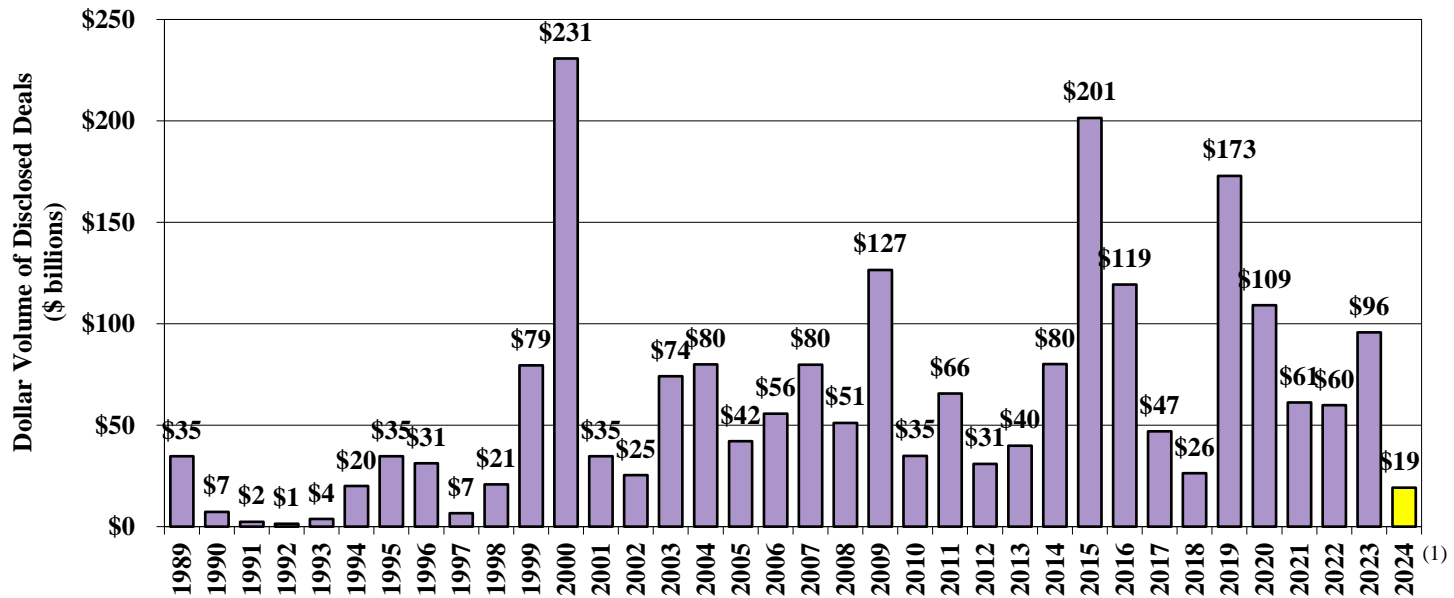


(1) As of December 31, 2024

Merger and Acquisition Trends

Dollar Value of Global Pharma Acquisitions – 2024

- Global M&A dollar volume has been strong in recent years. However, the dollar volume declined dramatically in 2024. This is the lowest value since 1997.



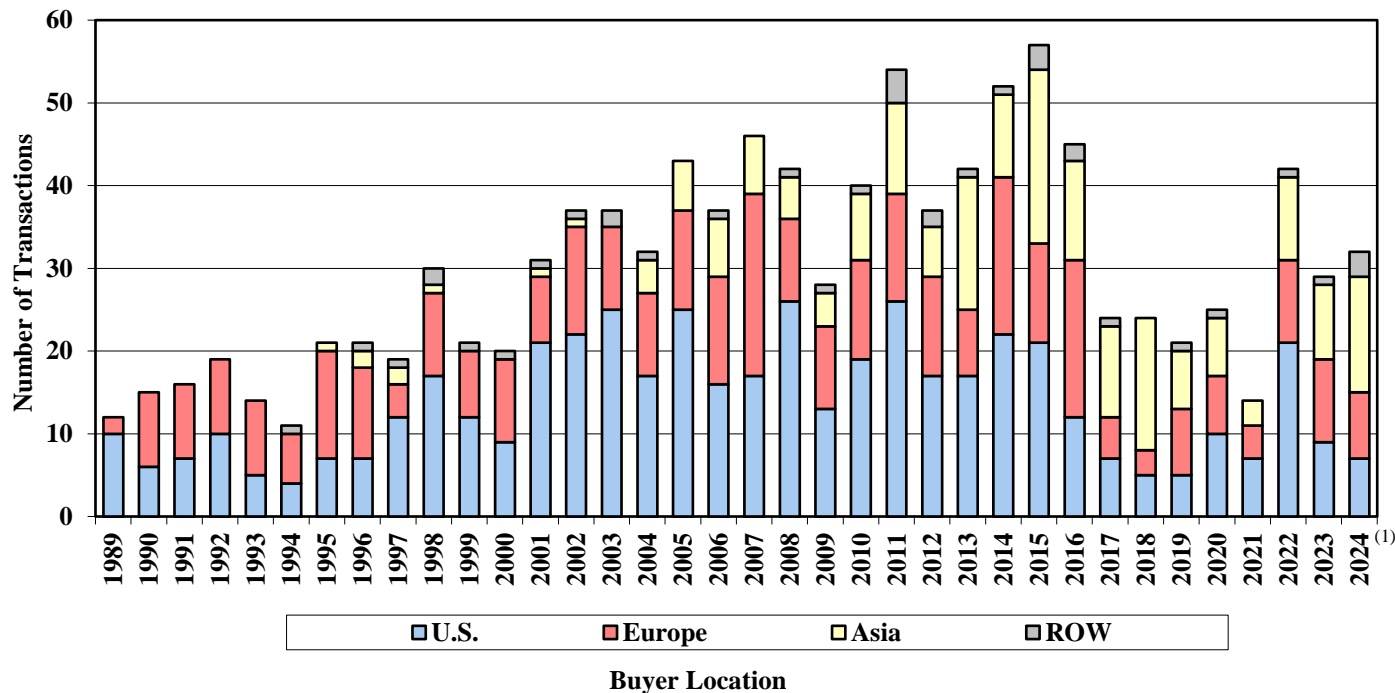
(1) As of December 31, 2024

Only Deals > \$25 million

Merger and Acquisition Trends

Number of Worldwide Pharma Acquisitions - Buyer Location

- The number of deals in 2024, however, was at a higher pace compared to 2023.



(1) As of December 31, 2024

Only Deals > \$25 million

Merger and Acquisition Trends

Top 10 Deals in 2024 by Equity Value

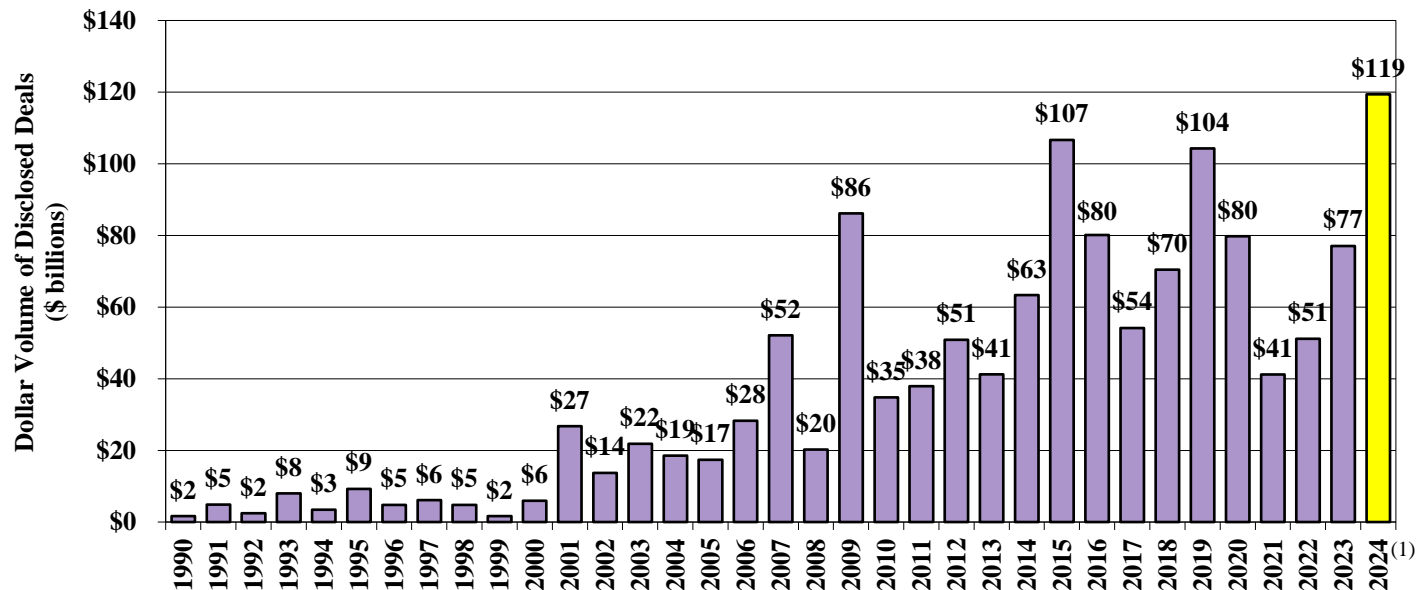
- There were no major deals completed in 2024.

Close Date	Acquiror	Target	Equity Value	Enterprise Value
01/23/2024	Bristol-Myers Squibb Co	Mirati Therapeutics Inc	\$4,066	\$3,090
04/09/2024	Otemon Co Ltd	TAISHO PHARMACEUTICAL HOLDINGS CO LTD	\$3,913	\$2,941
06/11/2024	Ono Pharmaceutical Co., Ltd.	Deciphera Pharmaceuticals, Inc.	\$2,214	\$2,261
11/29/2024	Recordati Industria Chimica E Farmaceutica SpA	Sanofi-Aventis US LLC- Enjaymo	\$1,075	\$1,075
10/11/2024	Asahi Kasei Corp	Calliditas Therapeutics AB	\$1,060	\$1,098
07/03/2024	GL Capital Group	SciClone Pharmaceuticals (Holdings) Ltd.	\$964	\$1,207
11/29/2024	CBC Group (Singapore) Pte. Ltd.; Mubadala Investment Co. (Private Equity); UCB SA /Mature Business/ /Private Group/	UCB SA /Mature Business/	\$680	\$680
09/03/2024	Collegium Pharmaceutical, Inc.	Ironshore Therapeutics, Inc.	\$550	\$550
01/24/2024	Kyowa Kirin Co Ltd	Orchard Therapeutics PLC	\$480	\$380
\$ value in millions 09/30/2024	Nestle Health Science SA	Seres Therapeutics Inc/Vowst Business/	\$435	\$435

Worldwide Debt Financing Trends

Worldwide Pharma Non-Bank Debt Financings

- Volume in 2024 was strong, primarily driven by a couple of Big Pharma financings of large biotech transactions.



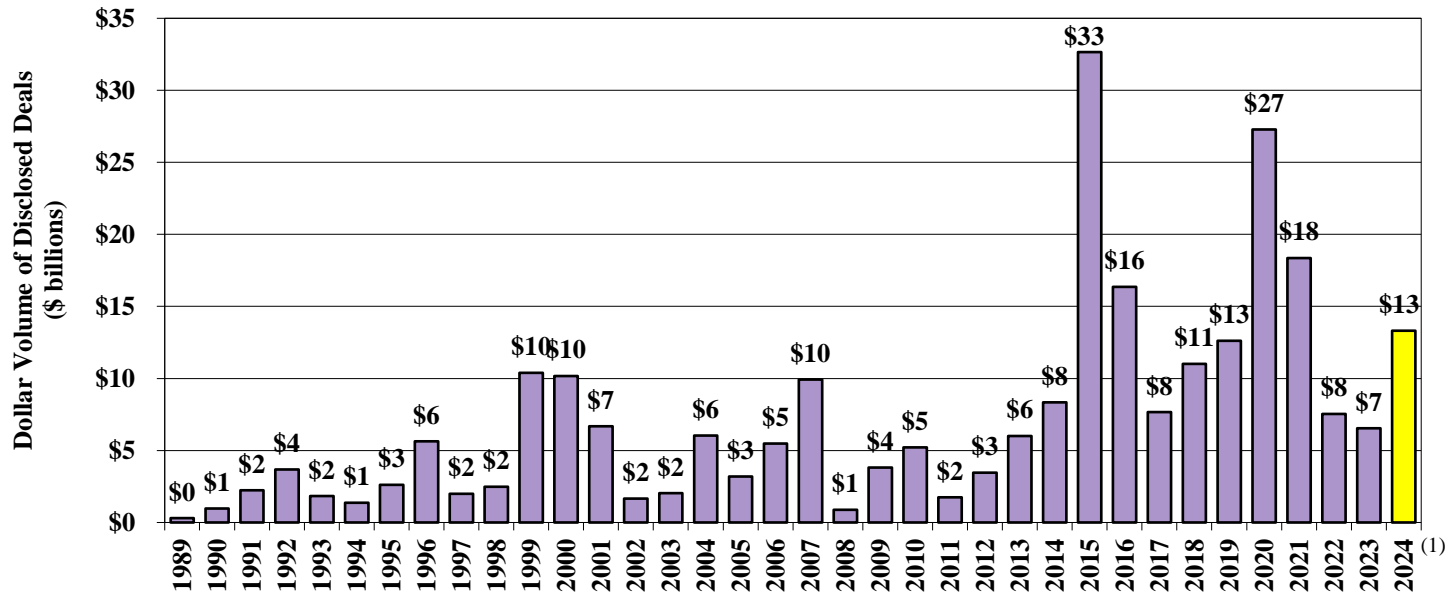
(1) As of December 31, 2024

Only Deals > \$25 million

Worldwide Equity Financing Trends

Dollar Value of Worldwide Pharma Equity Issued

- Historically, the dollar volume of equity financing has been modest due to the industry's limited equity needs. After a surge in 2020, volume declined until 2024.



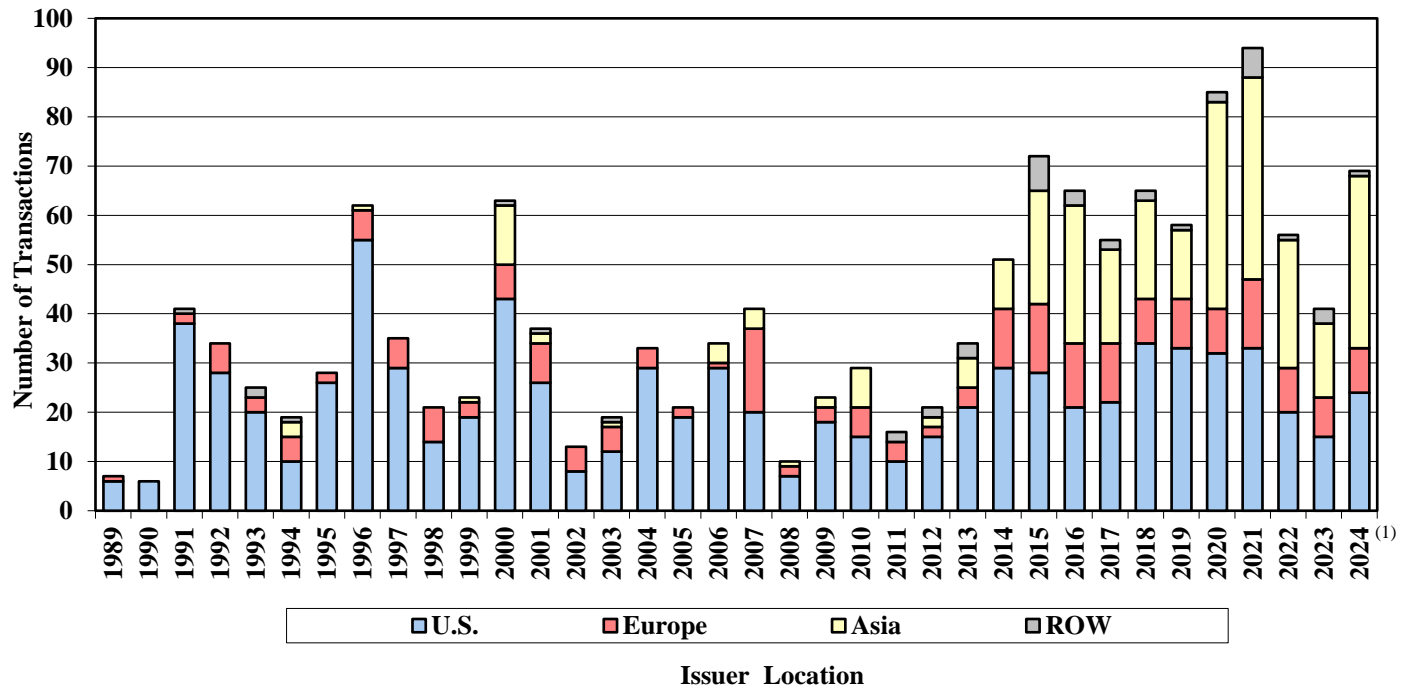
(1) As of December 31, 2024

Only Deals > \$25 million

Worldwide Equity Financing Trends

Number of Worldwide Pharma Equity Issues - Issuer Location

- The number of pharma equity offerings in 2024 increased significantly compared to recent years.



(1) As of December 31, 2024

Only Deals > \$25 million