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Life Sciences & Diagnostic Tools

# When will Biopharma demand rebound for Life Science Tools?

Industry Overview

25 January 2024

Equity
United States
Life Sciences & Diagnostic Tools

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## How does Biopharma impact Tools growth in FY24?

Pharma & Biotech is largest end-market for most Life Sciences Tools (LST) companies (Exhibit 1). As discussed in our 12/12/23 Year Ahead report (see here), sales to biopharma customers accelerated in FY19-FY22 due to robust biotech funding, COVID related demand, and instrument replacement cycles. However, in FY23, sales to biopharma plunged as some customers delayed purchases, reprioritized pipelines, and cut costs post-COVID. We remain bullish on biopharma over the long-term, but when demand rebounds is a key question. Here we take a closer look at this end-market.

## No 4Q23 budget flush, but most guided conservatively

LST vendors often benefit from a year end biopharma "budget flush", which for some companies was higher than usual across 2020-22 (Exhibit 2). However, for 4Q23, most LSTs guided conservatively as they did not expect to see typical seasonality given cautious spending trends. Company comments at recent conferences suggest that 4Q23 finished largely as expected, with no significant end-of-year spending increase.

## Biopharma not expected to slash R&D

We evaluated the overall R&D spend of the Top 30 Biopharma companies (by Market Cap) covered by BofA Analysts (Exhibit 3). At the peak of the pandemic in 2020-21, Biopharma companies' R&D spending was above historic levels. In contrast, SG&A was muted in 2020 due to pandemic lockdowns, but then rebounded in 2021-22 (Exhibit 4). BofA forecasts show that both R&D and SG&A are still expected to increase, but the yoy growth rates will return to pre-pandemic levels. In the near-term, while Biopharma companies get more clarity on the impact of IRA, spending could remain constrained for Tools and clinical trial services. Although these data suggest that while some drug sponsors (e.g., PFE) will cut costs, biopharma customers are unlikely to uniformly slash spending.

IRA: Inflation reduction act

## Biotech funding: Waiting for capital market rebound

Funding levels for small Emerging Biopharmas (EBPs) have been closely watched since mid-FY21 given their reliance on near-frozen capital markets (Exhibit 5 and Exhibit 6). Weak EBP customer spending was one of the early headwinds in 2023, hitting the sector harder than expected despite lower R&D spending vs. more mature companies (Exhibit 7). Recent LST management comments have noted stabilization in this customer group, and capital markets have begun to thaw. In 2024, we expect a gradual improvement in biotech funding, but do not see this being a significant tailwind for LSTs.

A: Agilent

AVTR: Avantor, Inc.

BRKR: Bruker Corp.

DHR: Danaher

MTD: Mettler-Toledo

QGEN: Qiagen

RVTY: Revvity

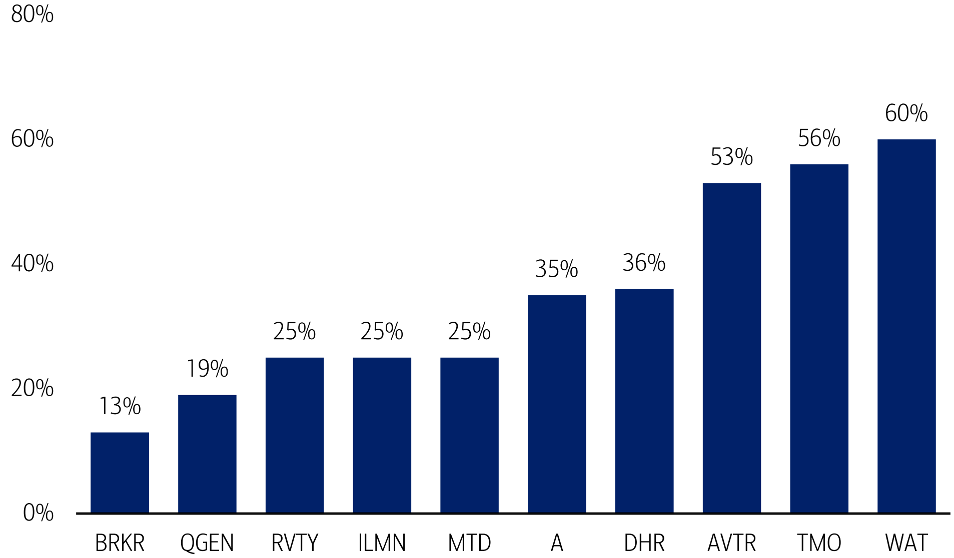
TMO: Thermo Fisher

WAT: Waters

## Still choppy near-term, but long-term drivers intact

R&D investment is the lifeblood of innovation for Biopharma, and LST vendors supply cutting-edge technologies and services that enable scientific advancements. For 2024, most LSTs expect Biopharma to return to growth, but see a slow recovery through the course of the year. We mostly agree with this view, but still see consumables and bioprocessing rebounding faster than instruments. Beyond 2024, we expect this end-market to return to mid-to-high single digit growth as secular growth remain intact.

**Exhibit 1: Biopharma Sales Exposure for Tools Vendors**
In 2022 Biopharma represented 13-60% of sales for Tools Vendors




**Source:** BofA Global Research, Company Filings

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We evaluated the sequential 3Q to 4Q growth for our companies, given the end-of-year seasonality and budget flush from 2016-2023E (Exhibit 2). Of note, the sequential growth for LSTs in 2020 is exaggerated due to the reopening of labs after the lockdown and the benefit from COVID-19 testing. WAT's 4Q/2023 guide assumes some year-end budget flush, whereas its peers remain more conservative.

**Exhibit 2: 3Q to 4Q Sequential Growth for LST vendors**
Most LSTs guiding for a flat 3Q to 4Q as Biopharma spend normalizes

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023E |
|---|---|---|---|---|---|---|---|---|
| A | 6% | 7% | 8% | 7% | 18% | 5% | 8% | 1% |
| AVTR | | 4% | -1% | 1% | 12% | 4% | -3% | -0.8% |
| BRKR | 19% | 22% | 19% | 15% | 23% | 12% | 11% | 6.4% |
| DHR | 14% | 14% | 12% | 13% | 16% | 14% | 11% | 5.6% |
| MTD | 9% | 11% | 11% | 12% | 16% | 9% | 7% | 3.1% |
| QGEN | 8% | 9% | 7% | 8% | 18% | 9% | 0% | 5.0% |
| RVTY | 10% | 16% | 12% | 14% | 41% | 17% | 5% | -0.1% |
| TMO | 10% | 18% | 10% | 9% | 24% | 15% | 7% | 1.5% |
| WAT | 19% | 22% | 24% | 24% | 32% | 27% | 21% | 13.1% |

**Source:** BofA Global Research, Company Filings
* Represents Fiscal Year
† Ex-Environmental and Applied Solutions (EAS)

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Tools vendors benefit from Biopharma R&D spend, so we assessed the Top 30 Biopharma companies (by Market Cap) covered by BofA Analysts (Exhibit 4). Overall, Biopharma companies spent $130bn in 2020 (+14.3% yoy) and $143bn in 2021(+10.5% yoy) on R&D. While R&D spend is expected to continue to increase from 2023E-2025E, growth rates will normalize to pre-pandemic levels.

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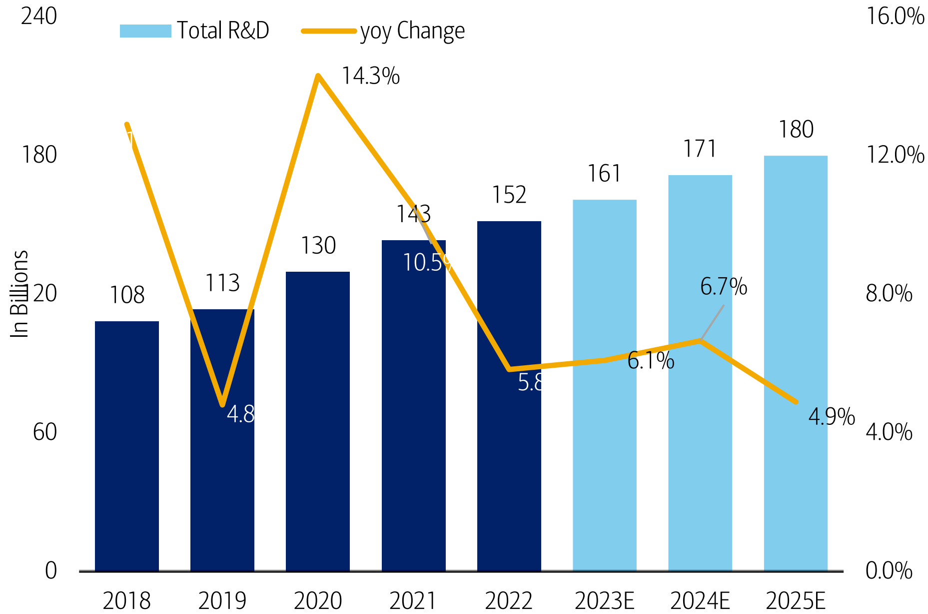
**Exhibit 3: R&D spend of Top 30 Biopharma Companies covered by BofA (2018-2025E)**

R&D spend to normalize to pre-pandemic levels




**Source:** BofA Global Research estimates, Bloomberg, Company Filings

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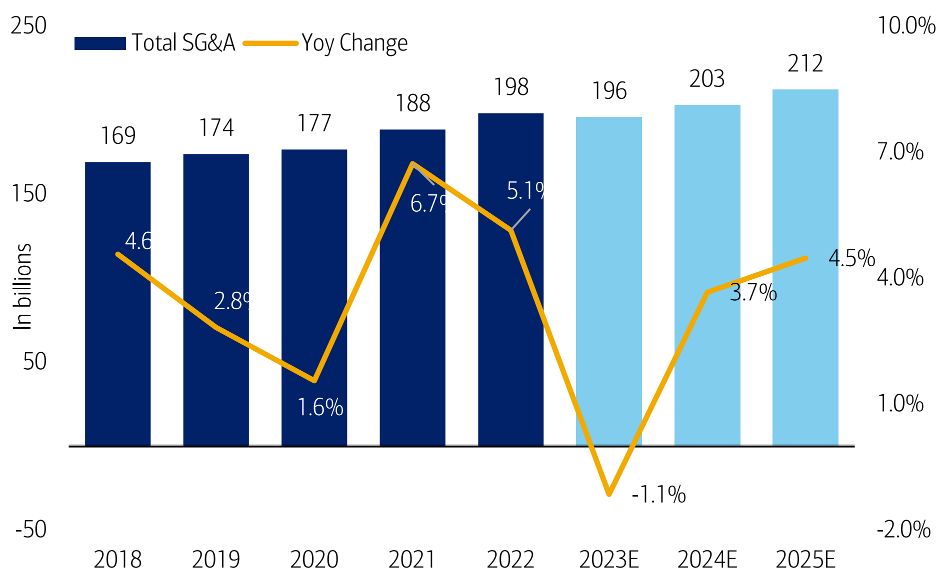
We also assessed the SG&A spend of the Top 30 Biopharma companies (by Market cap) covered by BofA Analysts. Post the COVID-19 lockdowns, growth in SG&A spend remained elevated for the Biopharma companies. BofA Analysts forecast an overall decline in 2023E as the companies curtail their discretionary spend. As we look forward to 2024-2025, growth in SG&A spend is expected to be lower than pre-pandemic levels.

**Exhibit 4: SG&A spend of Top 30 Biopharma Companies covered by BofA (2018-2025E)**

A significant drop in SG&A spend is expected in 2023 which should normalize back to pre-pandemic levels




**Source:** BofA Global Research estimates, Bloomberg, Company Filings

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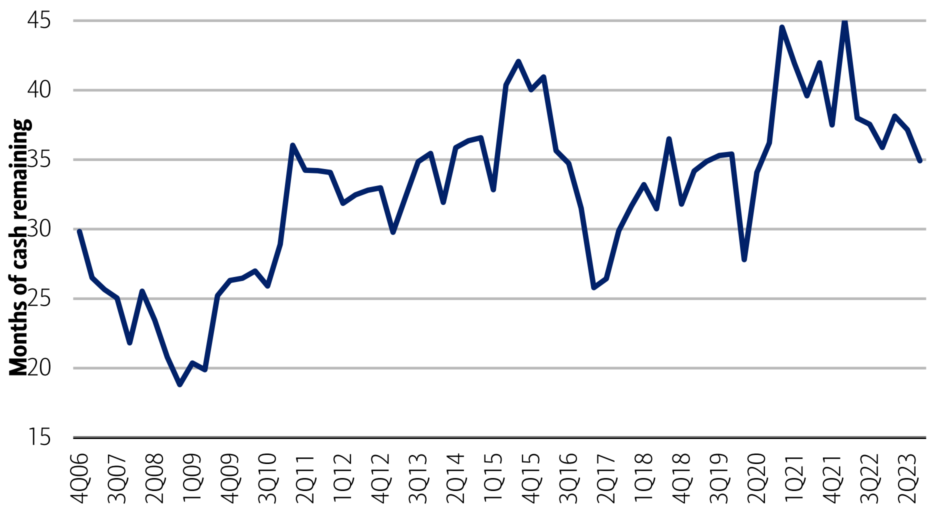
While access to capital from both public and private market for "at-risk" biotech's has been more limited recently, many of these companies raised substantial amounts of funding prior to the current macro backdrop and appear to be sufficiently capitalized into the near term. In our [Biotech funding note (see here)]() we have developed a 'cash burn metric' for at risk small biotech companies (members of the NBI Index with under $50mn in annual revenues) by dividing their cash reserves by the average trailing twelve-month (TTM) R&D expense. As shown in Exhibit 5, despite recent moderation, the average "at-risk" biotech is positioned to fund just shy of 3 years of R&D spend from their current cash position.

**Exhibit 5: Down from high in FY21, "at risk" biotechs can support less than 3-yrs of R&D**
Estimated months of cash-burn remaining for emerging biotech firms in the NBI




**Source: :** BofA Global Research, Company Filings, Bloomberg
Note: Data from companies within the NBI (Nasdaq Biotechnology Index) with under $50mn in annual revenues

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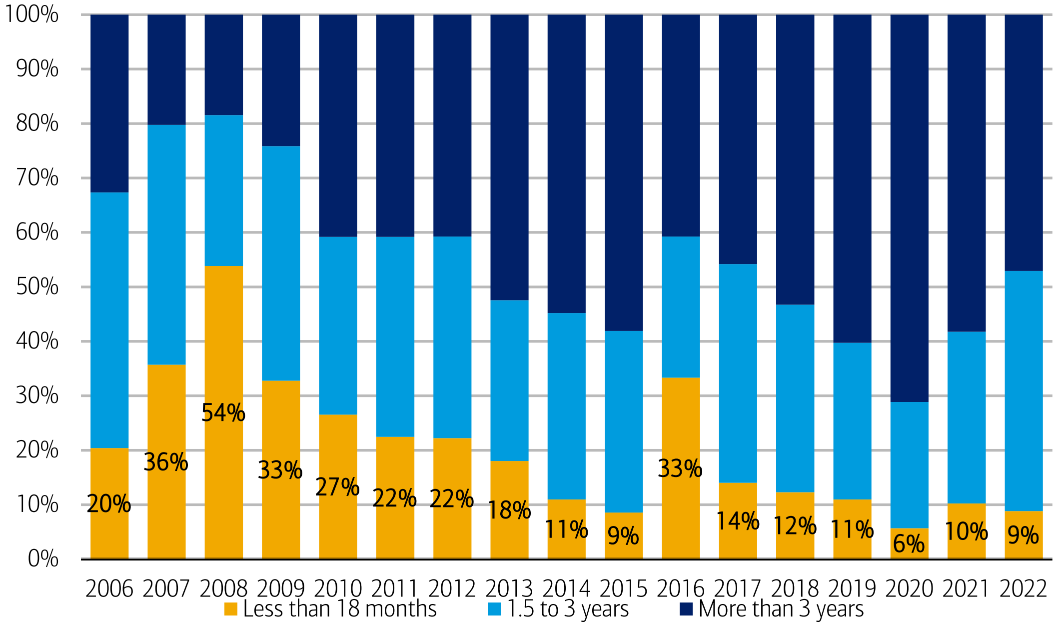
We also assessed the health of "at-risk" NBI constituents at the company specific balance sheet level (Exhibit 6). We see only ~9% of "at risk" companies having less than 18 months of R&D runway based on their current cash position (compared to over 50% in 2008).

**Exhibit 6: Small, unprofitable companies within the NBI are well-capitalized, with only ~9% of names having less than 1.5yrs of cash-burn left**

Companies in with immediate funding needs remain a consistently small part of overall "at-risk" biotech group




**Source:** BofA Global Research, Company Filings, Bloomberg

Note: Data from companies within the NBI (Nasdaq Biotechnology Index) with under $50mn in annual revenues

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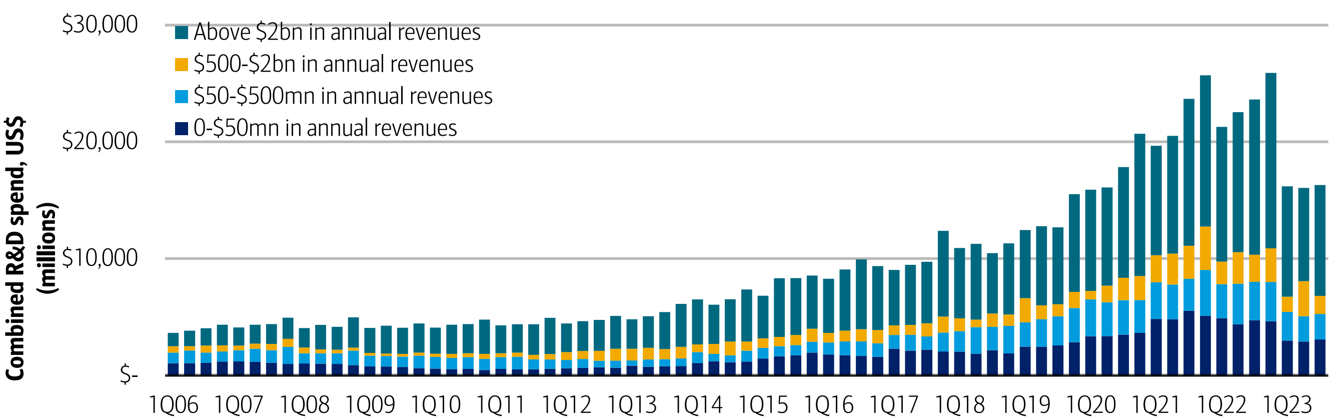
While investor concerns have understandably focused on the health of the "at-risk" capital market dependent biotechs, we highlight that these earlier stage businesses represent only 19% of the overall R&D spend addressable by CROs and Tools players. Indeed, the majority (~58%) of biotech R&D spending is generated by a concentrated group of large, established index members including Sanofi, Gilead, and AstraZeneca with multiple commercial products and stable cashflows whose R&D spending decisions are not impacted by the availability of external financing.

**Exhibit 7: Large companies not reliant on outside financing generate the majority of annual R&D**

19% of R&D expenses are attributable to companies with <$5mn in annual revenues




**Source:** BofA Global Research, Company Filings, Bloomberg

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