



## ORG Research Thought Piece

### Life Science GMP: An In-Depth Analysis

Stephen Stuckwisch, CFA, CAIA | Principal  
Kevin Stone | Consultant  
Lucas Tiberi | Investment Analyst

### Introduction

The life science industry has seen unprecedented growth in the last few years. Record levels of venture capital funding and the increase of focus on public health has led to rapid growth in the pharmaceutical industry. As a result, tenant demand from life science companies has increased quickly. Commercial real estate investors have recognized this shift and have allocated record amounts of capital to providing space for these tenants. However, as discussed in ORG's previous Thought Piece published on November 8, 2021, *Life Science Real Estate - Where Money is Moving Fast*, many investors have failed to distinguish the two main types of life science real estate: Research and Development ("R&D") facilities and Good Manufacturing Practice ("GMP") facilities. In this article, we will take a deeper dive into life science GMP real estate and the role it can play in a real estate portfolio.

### What is GMP?

GMP stands for Good Manufacturing Practice and is a set of rules and measures that the FDA uses to ensure products in medical, pharmaceutical and food industries are being produced to a regulated standard<sup>1</sup>. GMP facilities are used for the commercialization of a product or for clinical trials and the facility must be GMP compliant to do so. Many life science companies use the term cGMP, which stands for Current Good Manufacturing Practice. This shows that the products they are producing comply with the current GMP standards. To achieve cGMP compliance, manufacturers must continuously improve their equipment and productions to comply with the current standards<sup>2</sup>.

GMP real estate are the facilities in which life science companies manufacture their goods. On the outside, these facilities look like typical industrial properties. However, GMP facilities require very intense buildouts and specifications to properly manufacture goods within the GMP standards. Typically, a GMP facility includes a large manufacturing component that represents about half of the building's floor space. The remaining space is used for offices, lab areas, loading docks, mechanical areas and additional warehousing space in order to support essential manufacturing functions.



*A manufacturing area in a GMP facility*

Every GMP facility requires careful planning from the tenant and building owner to properly design the building and meet the needs of the manufacturing process. Tenants typically have a detailed blueprint for their processes that need to be met in the design of the manufacturing space. There are many characteristics that are universally required in a GMP facility including complex HVAC systems, high floor loads of at least 125 to 150 pounds per square foot and a redundancy of power and utilities to the building<sup>3</sup>.

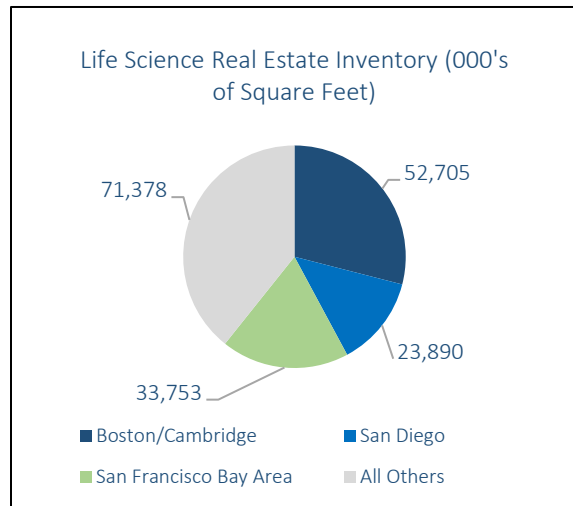
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<sup>1</sup> June 1, 2021, "What is GMP?" Madge Tech, <https://www.madgetech.com/posts/blogs/what-is-gmp/>.

<sup>2</sup> August 30, 2022 "cGMP: What every Life Science Researcher Should Know About Current Good Manufacturing Practice," Sartorius, <https://www.sartorius.com/en/knowledge/science-snippets/cgmp-what-every-life-science-researcher-should-know-about-current-good-manufacturing-practice-1045524>

<sup>3</sup> Daniel Ismail et al., September 30, 2021, "The Science of Office-to-Lab Conversions," Green Street

### Where are GMP Facilities?



*The top three life science markets made up over 60% of the total square footage of life science real estate in the U.S. (Source: CBRE)*

The life science industry continues to cluster around locations with highly educated talent pools that come from the country's top research universities and have the best access to venture funding. The top three markets of Boston-Cambridge, San Francisco and San Diego have attracted the most life science companies for these reasons. The top three markets secured 70% of the life science venture capital funding in the record breaking pharmaceutical year 2021<sup>4</sup>, and made up over 60% of U.S. life science real estate inventory as of year-end 2022. While there are secondary markets emerging across the country, these top three markets continue to receive the most demand from both tenants and investors. Typically, life science companies will strategically locate their GMP manufacturing facilities in the same area as their R&D locations in order to keep

operations in close proximity. Therefore, there is a correlation in demand in a market for R&D facilities and GMP facilities.

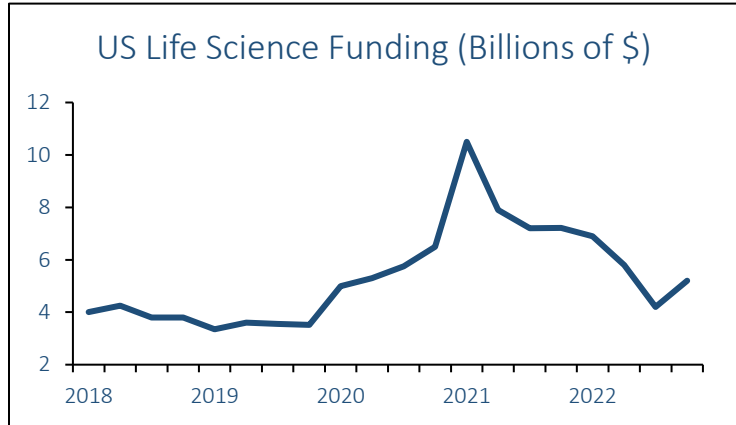
### GMP Real Estate Analysis

GMP facilities are much different from R&D facilities and it is crucial for investors to understand the differences. While both facilities require capital intense buildouts and specifications, they are not utilized in the same way. R&D facilities tend to have a standard buildout and are reusable amongst different life science tenants. GMP facilities are quite different. The capital intense buildout of the manufacturing floor and the design of the building are specialized to each tenants' processes and needs. This means GMP facilities are not nearly as reusable for different life science tenants as R&D facilities and owners of GMP facilities will incur high buildout costs if a new tenant enters the building. However, some successful life science companies who have been profitable for many years are able to provide a portion of funding for buildout costs. While the initial all-in cost basis for a GMP facility is relatively similar to an R&D facility (\$400-\$600 per square foot), the high turnover costs must be considered when underwriting an investment. R&D facilities are commonly multi-tenanted which reduces tenant risk for the investment. GMP facilities typically only have one tenant which increases tenant risk.

Due to the specialized buildouts and high turnover costs, tenant selection for a GMP facility is crucial. The thesis for many investments in an R&D facility is to capture rent growth through the improvement of the building and/or the turnover of in-place tenants. An investment in a GMP facility should include a credit tenant that is signed to a long-term lease to capture attractive cash yields. The tenant must have significant cash on hand to withstand years of negative cash flow and the investor must have high conviction in the tenant enduring its long-term lease obligations. A failure of a tenant in a GMP facility could be detrimental to investor returns.

<sup>4</sup> November 2021, "U.S. Life Sciences Trends," CBRE, <https://www.cbre.com/insights/figures/us-life-sciences-trends-2021>

While there have been multiple tailwinds for the life science industry in recent years including an abundance of venture capital funding, the future is more uncertain. Due to increased investment into the pharmaceutical industry from the COVID-19 pandemic, calendar year 2021 set a record for venture funding with over \$33 billion allocated to life science<sup>5</sup>. However, rising interest rates and increasing concerns over an economic downturn dramatically slowed funding down by the end of 2022. Venture capital funding for U.S. life sciences was \$21.7 billion in 2022 which was a 34.4% decrease from 2021<sup>6</sup>. The abundance of venture capital has fueled startup companies and has provided significant capital to support a company's negative cash flow for many years. Life science real estate owners have benefited from companies having significant capital to pay rapidly increasing rents in the top markets. Expectations are that funding will moderate and have a trickle-down effect on rents and tenant demand in life science markets.



*Although moderating from its peak, venture funding for life science remains elevated above pre-pandemic levels. (Source: CBRE)*

## Conclusion

While GMP facilities and R&D facilities both serve the life science industry, they are vastly different real estate investments. Investors searching for life science real estate investments must be aware of the differences in the two and how they both fit into a portfolio of alternative real estate investments. GMP facilities with a credit tenant signed to a long-term lease can serve as a core investment seeking high income yield. However, the risks of high buildout costs and low reusability of purpose-built space must be considered. While venture capital funding is slowing due to rising interest rates, there will still be very profitable, credit life science companies seeking GMP facilities that can serve as great diversification in a portfolio of alternative real estate investments.

<sup>5</sup> January 25, 2023, "Despite Economic Headwinds, Life Sciences Market Finishes 2022 with Solid Fundamentals," CBRE, <https://www.cbre.com/insights/figures/q4-2022-us-life-sciences-figures>

<sup>6</sup> January 25, 2023, "Despite Economic Headwinds, Life Sciences Market Finishes 2022 with Solid Fundamentals," CBRE, <https://www.cbre.com/insights/figures/q4-2022-us-life-sciences-figures>