

SECTOR OVERVIEW

1. **Pharmaceuticals markets in India and the People's Republic of China.** Global pharmaceutical industry growth has shifted dramatically toward the emerging markets since 2000, with Asia now accounting for about 30% of all global pharmaceutical spending.¹ With rapidly growing consumer markets and increasing disease burdens, domestic pharmaceutical markets experienced a compound annual growth rate (CAGR) of 9.5% in India and 6.3% in the People's Republic of China (PRC) during 2016–2019 (footnote 1). As a result of this fast growth, the PRC was the second-largest pharmaceutical market worldwide, with a total value of \$209 billion in 2020 (footnote 1). India's domestic pharmaceutical market reached \$42.0 billion in 2021.² Continued growth is expected to be driven by improving affordability and accessibility and the introduction of more innovative products. These two countries continue to present compelling growth opportunities for pharmaceutical companies, which is why OrbiMed Asia Partners V, L.P. (OAP V) is expected to invest actively in high-growth pharmaceutical and biopharmaceutical opportunities in India and the PRC.
2. The coronavirus disease (COVID-19) pandemic has accelerated policy support for the PRC's biotech and biopharma industry. The environment for drug development in the PRC has become more supportive driven by an improving regulatory environment, a stronger ecosystem for research and development (R&D)-based companies, a continuous inflow of talent with relevant overseas experience, and an increasingly attractive drug development pipeline in the country. OAP V targets creating proprietary biotech deal flow and helping source, analyze, and create value within these innovative PRC biopharma companies.
3. Chronic therapies have led pharmaceutical market growth in India, with the metabolic, cardiovascular, respiratory, and dermatology segments registering a CAGR of 9.5% during 2017–2021. Pharmaceutical companies are increasing their depth of coverage in nonmetropolitan and rural areas where pharmaceutical penetration remains modest. Increasing affluence, improving patent protection laws, and favorable pricing regimes for patented drugs will continue to create opportunities for the introduction of novel and innovative products. Chronic therapies with a specialty focus are expected to also help sustain future market growth.
4. Furthermore, India is among the world leaders in the production of generic drugs and vaccines and is the largest exporter of generic medicines globally, accounting for about 20% of the global generics market by volume.³ The industry has captured a leading share in developed economies such as the United States (40% of generic medicine) and the United Kingdom (25%) and exported about \$16 billion of pharmaceuticals in fiscal year (FY) 2020 (footnote 3).
5. Indian pharmaceutical companies are moving beyond basic generics and focusing on newer growth opportunities including specialty drugs, complex injectables, and biosimilars. Many companies are also investing in novel drug R&D, which could lead to interesting opportunities in this sector. There is a large opportunity pool of \$82 billion in branded sales in complex generics and biosimilars losing exclusivity during 2020–2024. Indian generic companies are projected to increase R&D spending from 7%–9% of sales in 2017–2021 to 9%–12% of sales in 2022–2026 to capture this opportunity.⁴ Spurring innovation in these product categories will help catalyze the next phase of growth for the Indian pharmaceutical industry.

¹ OrbiMed. 2021 OrbiMed Private Placement Memorandum.

² India Brand Equity Foundation. 2022. [Indian Pharmaceutical Industry](#).

³ India Brand Equity Foundation. 2021. [Pharmaceuticals](#).

⁴ N. Chandra. 2022. [Indian Pharma Firms Look to Ramp Up Investments in R&D, Innovation](#). *Business Today*. 22 February.

6. **Contract development and manufacturing.** Pharmaceutical and biotech companies have a long history of leveraging Asia's lower cost structures to outsource significant components of their product life cycle. In contrast to the traditional Big Pharma approach of internally developing a product from preclinical research through sales and marketing, a more efficient model has emerged that embraces outsourcing of key R&D and manufacturing functions. During 2010–2019, outsourcing to India and the PRC by pharmaceutical companies expanded to include drug discovery research. Pharmaceutical companies use drug discovery outsourcing as part of a comprehensive and integrated outsourcing strategy to access unique capabilities and cost-effective resources in emerging markets.

7. Contract development and manufacturing organizations (CDMOs) offer a viable solution to the pharmaceutical industry to reduce time to market and move from a fixed cost model to a variable cost model, allowing pharmaceutical companies to focus on core functions of clinical development, marketing, and sales. Furthermore, CDMOs play crucial roles in providing additional capacity to mitigate the risk of supply shortages by offering additional sites for pharmaceutical companies with multisite supply strategies and backup capacities. Externalizing manufacturing may also be highly desirable to reduce time to market where internal expertise or capacities are limited.

8. India and the PRC offer the pharmaceutical industry compelling cost advantages compared with developed countries. India is stronger at manufacturing, while the PRC is more dominant in outsourcing of discovery chemistry and biology. India and the PRC have increased their combined global market share in this segment from 10% in 2010 to 15% in 2018.⁵ CDMO markets across India and the PRC are developing rapidly, along with progress in talent cultivation, pharmaceutical technology research, infrastructure, raw material supply, and significant operating cost advantages. Such companies will be targets for investments by OAP V.

9. **Hospitals.** The hospital market in the PRC was valued at \$672 billion in 2019 and grew at a CAGR of 9% during 2015–2019. The PRC's private hospitals (more than 15,000) outnumbered public hospitals for the first time in 2015, and by 2019 they had increased to 1.9 times the number of public hospitals (footnote 1). The private hospital sector in India was valued at \$133 billion in 2021 and is expected to grow to \$339 billion at a CAGR of 21% by 2027.⁶ The private hospital sectors in both countries should continue to grow rapidly fueled by increasing demand for quality health care services, greater specialization, and inadequate public health infrastructure.

10. Health care infrastructure in India remains highly underpenetrated with an overall hospital bed density of 5 per 10,000 population (compared with the world average of 29).⁷ In addition, health care services in rural areas remain underpenetrated relative to urban areas. With the introduction of the National Health Protection Scheme, affordability, access, and consumption of health care services is expected to increase in smaller cities and rural areas. Private health care service providers are expanding in tier II and III cities to cater to high unmet medical needs in these areas.

11. Significant opportunities exist to invest in companies that seek to improve the standard of health care delivery to consumers. OAP V is expected to target companies that have established leadership in the region or have achieved a meaningful commercial scale in tier II and III markets,

⁵ ReportsNReports.com. 2018. [China CDMO Industry Research Report, 2018–2021](#).

⁶ Prnewsire.com. 2022. [India Private Hospital Market Report 2021](#).

⁷ World Bank. [Hospital beds \(per 1,000 people\)](#) (accessed 26 April 2022).

where there is a vast gap between supply and demand for quality health care services. Furthermore, the expansion of private hospitals is expected to generate growth opportunities in adjacent market segments, such as senior care, disease management, medical devices, mobile health, and other health care information technology. OAP V will also look to invest in specialty hospital chains, a rapidly growing segment in India and the PRC, which can provide high-quality care with significant in-house expertise and resources.

12. **Diagnostics.** Growth in the diagnostic sector in India and the PRC is being driven by favorable demographics, an increasing preference for evidence-based treatment, and a market shift toward organized players. In the PRC, the independent clinical laboratory (ICL) industry is still nascent with a penetration rate of about 5% in 2018.⁸ The ICL market was \$3.1 billion in 2019, with a CAGR of 23% during 2015–2019. With a growing aging population, the higher incidence of chronic diseases, and favorable government policies, the penetration rate and scale of the PRC's ICL industry is expected to increase significantly during 2022–2032 (footnote 1).

13. India's diagnostic services industry was valued at \$12.3 billion in FY2021 and expected to grow by a CAGR of 12% until FY2027 driven by an aging population, rising affordability and access, rising chronic disease burdens, and a greater consumer awareness of preventive testing.⁹ In addition, increased insurance and National Health Protection Scheme coverage and rising health care demand and awareness should boost diagnostics growth in smaller cities and rural areas.

14. The diagnostics market in India is highly fragmented with more than 100,000 labs and large organized chains accounting for a market share of only 15%. Organized chains have meaningful structural advantages over standalone centers and hospital-based labs because of their ability to build strong brand equity, provide consistent test quality and customer experience, and cultivate a wide network, which in turn drives higher testing volumes and related economies of scale and operational efficiency. This has led to organized chains gaining market shares across India through organic and inorganic growth. Therefore, OrbiMed Advisors LLC (OrbiMed) is evaluating investment opportunities in scalable and profitable diagnostic chains.

15. **Medical devices and life sciences tools.** Asia and the Pacific accounted for 26% of the global market for medical devices and life sciences tools (medical technology) in 2021 and is expected to become the second-largest regional market by 2025 (footnote 1). By 2030, the PRC is expected to become the second-largest medical device market, with more than 25% of the global market, while India is expected to rank fifth.¹⁰

16. Domestic PRC companies are gaining market share from multinational companies across segments including in-vitro diagnostics, imaging, neural and cardiovascular, nephrology, orthopedics, and hearing aids and wearables. The Government of the PRC has launched multiple initiatives and policies to accelerate domestic substitution and support long-term growth and innovation. OrbiMed expects future regulations to continue to favor innovative, differentiated products. The market is transitioning toward innovation, with large domestic companies, such as Mindray Medical International Co., Ltd. and AK Medical Holdings Limited, turning their attention to the world stage, with potential for expansion through mergers and acquisitions and licensing activities. OAP V will consider investments in a wide range of medical technology opportunities, including companies with leading technology and product offerings at attractive price points.

⁸ Research and Markets. 2019. [China's Independent Clinical Laboratory Market](#).

⁹ Globalnewswire. 2021. [India Diagnostic Labs Market](#).

¹⁰ KPMG. 2018. [Medical Devices 2030](#).

17. India's medical device market is fragmented, with about 800 medical device makers. The market share captured by larger, organized national players is only about 10% (footnote 1). This fragmentation makes the sector interesting for consolidation. India remains dependent on imported suppliers for a surprisingly high percentage (about 75%) of its medical device needs, with domestic suppliers focused on low-value products, such as needles, catheters, and blood collection tubes.¹¹ The medical devices sector is a key focus for the "Make in India" campaign, a government program to improve high value addition manufacturing in the country. OAP V will seek to invest in companies that have the products, management, and technology that could benefit from industry consolidation and opportunities to supplant imported product providers.

18. **Distribution of pharmaceutical and medical products.** The pharmaceutical distribution sector in India and the PRC is complex and inefficient. In India, it is highly fragmented and largely unorganized, with 65,000 distributors, compared with 30 in the United States and 12,000 in the PRC (footnote 1). Most distributors in India are small, family-owned entities lacking operational efficiencies or access to growth capital. Furthermore, these companies struggle with low visibility of market inventory and secondary sales and high product expiries and inventory leakage. Customers (retailers and hospitals) are forced to deal with many distributors to fill their needs, resulting in high inventory carrying costs, loss of sales, and high stockout rates.

19. Consolidation in the distribution industry in India has been further catalyzed by regulatory considerations, such as the goods and services tax (unified tax regime), demand for higher quality standards, and enforcement of good distribution practices and regulations. Consolidation should help distributors achieve revenue and cost synergies through expansion of their product portfolio, improvement of sourcing margins and information technology systems, and better maintenance of infrastructure.

20. The pharmaceutical distribution industry in the PRC has also witnessed intense consolidation, with larger players gaining market share. In 2017, the PRC's regulators enforced the "two-invoice" system to streamline pharmaceutical distribution channels.¹² The regulation has reshaped the PRC's drug distribution landscape, improved efficiency, and accelerated industry consolidation. Further consolidation is likely to present investment opportunities for OAP V.

21. **Digital health care.** India and the PRC are among the largest and fastest-growing markets for digital consumers. In 2020, there were 565 million internet subscribers in India and 980 million in the PRC.¹³ Health technology penetration remains low in both markets at 5% in the PRC and 2% in India and has great potential for growth. The online digital services market in the PRC was \$33 billion in 2019 and is estimated to grow at a CAGR of 38% to reach \$225 billion by 2025. The COVID-19 pandemic has triggered a seismic shift in consumer behavior causing the industry to grow in the PRC by 144% during 2020–2021. In India, the health technology market is expected to grow from \$2.0 billion in 2020 to \$7.2 billion by 2025 (footnote 1). Increasing awareness, prevalence of smartphones, government initiatives to promote telemedicine, and the creation of the digital health care backbone through the National Digital Health Mission are all tailwinds that OrbiMed believes will support exponential growth in the health technology sector.

¹¹ International Trade Administration. [India – Healthcare](#).

¹² The new system will allow no more than two invoices between a manufacturer and a hospital, eliminating multitiered distribution.

¹³ World Bank. [Individuals using the Internet \(% of population\)](#) (accessed 26 April 2022).