
INTERNSHIP

At

IIHMR University, Jaipur

Submitted to



The IIHMR University, Jaipur

for the partial fulfillment for the award of the degree

of Master of Business Administration (MBA)

in

Hospital and Health Management/Pharmaceutical

Management/Development Management/ Healthcare Analytics

by

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Under the Supervision and Guidance of

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1. Introduction

This internship report documents the research work undertaken during the MBA internship programme at IIHMR University, Jaipur, from February 25 to June 09, 2026. The internship project focused on the application of artificial intelligence and data analytics techniques to analyse the Indian Pharmaceutical Market (IPM) using IMS (IQVIA) Moving Annual Total (MAT) data. The Indian pharmaceutical sector is one of the fastest-growing in the world, with a market valuation exceeding INR 2,40,000 Crores as of 2025, making it a strategically significant area for analytical research.

The project was undertaken as a dissertation study titled "AI-Driven Indian Pharmaceutical Market Analysis and Competitive Benchmarking Using IMS Data," submitted in partial fulfilment of the MBA degree requirements. The research leveraged Python-based analytical tools — including Pandas, NumPy, Matplotlib, Seaborn, and Scikit-learn — to process approximately 1.1 lakh brand-level records covering the period from September 2021 to September 2025. The work demanded a synthesis of pharmaceutical domain knowledge, market intelligence, and data science competencies.

2. Objectives

The internship project was guided by the following core objectives:

- To conduct a comprehensive competitive intelligence analysis of the Indian Pharmaceutical Market (IPM) using IMS MAT data spanning September 2021 to September 2025.
 - To identify market leaders and evaluate their sales growth trends, CAGR performance, and competitive positioning across the study period.
 - To assess competitive intensity and market concentration among the top pharmaceutical companies operating in India.
 - To analyse the acute-to-chronic therapy segment transition and evaluate portfolio diversity among key players.
 - To benchmark ALKEM Laboratories' performance against industry peers in terms of growth consistency, market share, and therapy-wise presence.
 - To explore emerging molecule and brand opportunities and map them against high-growth therapeutic categories.
 - To develop structured analytical frameworks using AI and data science tools that can be applied for ongoing market intelligence within the pharmaceutical sector.
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3. Organisational Profile – IIHMR University, Jaipur

3.1 About IIHMR University

The Indian Institute of Health Management Research (IIHMR) University, Jaipur, is a premier institution dedicated to health management education, research, and capacity building in the healthcare sector. Established in 1984, IIHMR has consistently been ranked among the top health management institutes in India. The university is recognised by the University Grants Commission (UGC) and offers postgraduate management programmes across healthcare, hospital administration, pharmaceutical management, development management, and healthcare analytics.

IIHMR University occupies a unique niche in India's higher education landscape by combining rigorous management education with a deep focus on the healthcare domain. Its flagship MBA programmes are designed to produce professionals capable of leading healthcare organisations, designing health policy, managing pharmaceutical supply chains, and applying data-driven approaches to health system challenges.

3.2 Vision and Mission

- Vision: To be a globally recognised institution for excellence in health management education and research that contributes to equitable and effective healthcare.
- Mission: To develop competent health managers, researchers, and leaders through quality education, applied research, and community engagement.

3.3 Academic Programmes

IIHMR University offers the following MBA specialisations relevant to this internship:

- MBA – Hospital and Health Management
- MBA – Pharmaceutical Management
- MBA – Development Management
- MBA – Healthcare Analytics

The dissertation-based internship is a mandatory academic requirement across all specialisations, designed to bridge theoretical learning with applied industry research.

4. Services Provided by the Organisation

IIHMR University provides a wide spectrum of academic and research services, relevant to health management and pharmaceutical management professionals:

4.1 Academic and Training Services

- Postgraduate MBA education with domain specialisations in hospital management, pharmaceutical management, and healthcare analytics.
- Executive development programmes and short-term training courses for working professionals in healthcare and pharma sectors.
- Certificate programmes in health data analytics, healthcare quality management, and pharmaceutical marketing.

4.2 Research and Consulting

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- Applied research projects in collaboration with national and international health organisations, including WHO, UNICEF, the Gates Foundation, and the Government of India.
 - Health systems research, pharmaceutical market studies, health economics evaluations, and public health programme assessments.
 - Consulting engagements with state governments, hospitals, and pharmaceutical companies for strategy, operations, and market research.

4.3 Dissertation and Internship Support

- Structured internship placement facilitation with hospitals, pharmaceutical companies, NGOs, and healthcare consulting firms.
- Faculty-guided dissertation mentorship enabling students to conduct primary and secondary research on live industry problems.
- Access to academic databases, IMS/IQVIA data resources, and domain-specific research repositories for evidence-based project work.

5. Key Activities Undertaken During the Internship

The following key activities were performed over the course of the internship period:

5.1 Data Acquisition and Preparation

- Sourced and structured IMS (IQVIA) MAT sales data covering September 2021 to September 2025, comprising approximately 1.1 lakh brand-level records across 20+ therapeutic categories.
- Performed data cleaning operations in Python using Pandas — including column whitespace stripping, null handling, and standardisation of company and molecule nomenclature.

5.2 Market Analysis and Modelling

- Conducted Top 15 company-level and brand-level MAT sales analyses for 2022–2025 using Python visualisation libraries (Matplotlib, Seaborn).
- Executed nine structured analytical frameworks: market share movement, growth consistency analysis, CAGR computation, price-versus-volume contribution, acute-to-chronic transition analysis, portfolio diversity scoring, competitive intensity mapping, molecule opportunity identification, and emerging brand analysis.
- Constructed company positioning matrices (Growth vs Market Size) to classify firms as Stars, Challengers, Steady Players, or Laggards.

5.3 Competitive Benchmarking

- Benchmarked ALKEM Laboratories against major Indian and MNC peers — SUN Pharma, Abbott, Cipla, Mankind, Lupin, Torrent, Zydus, and others — across multiple financial and market parameters.
- Identified ALKEM as the only top-5 Indian private company to record consistently positive growth across all four study years (2022–2025).

5.4 Documentation and Reporting

- Prepared a comprehensive 150+ page dissertation with six structured chapters — Introduction, Literature Review, Methodology, Results & Analysis, Discussion, and Conclusion.

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- Developed 20 detailed company profile tables covering MAT sales, growth rates, CAGR, market share, and therapy-area breakdown for each of the top 20 companies.
 - Generated 25+ data visualisation charts and figures to support analytical findings.
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6. Key Learnings

6.1 Technical Competencies Developed

- Gained hands-on proficiency in Python for pharmaceutical data analytics — data wrangling with Pandas, statistical analysis with NumPy, and visualisation with Matplotlib and Seaborn.
- Developed practical skills in applying AI and machine learning concepts (clustering, competitive mapping) to real-world market intelligence problems.
- Learnt to process large datasets (1.1 lakh+ records) efficiently, including managing column inconsistencies, rolling period data (MAT), and multi-year comparative structures.

6.2 Domain and Industry Insights

- Developed a thorough understanding of IMS/IQVIA MAT data structure, its significance as an industry standard for pharmaceutical market tracking, and how it is used in competitive intelligence.
- Gained insight into the strategic dynamics of the Indian Pharmaceutical Market — including the shift from acute to chronic therapies, the growth of Indian companies vis-à-vis MNCs, and therapy-level concentration patterns.
- Understood the role of molecule lifecycle management, portfolio diversity, and brand strategy in sustaining long-term competitive advantage in pharma.

6.3 Research and Analytical Skills

- Enhanced ability to design and execute multi-framework analytical studies — from hypothesis formulation through data analysis to structured findings presentation.
- Learnt to synthesise large volumes of secondary data into actionable insights and executive-level strategic recommendations.
- Developed skills in academic writing, Vancouver-style referencing, and professional dissertation documentation aligned with institutional standards.

6.4 Professional Development

- Developed time management and project planning skills through the discipline of managing a six-month research project independently under faculty supervision.
- Improved communication and presentation skills through the iterative process of drafting, revising, and refining research findings for academic and professional audiences.
- Built a strong foundation for a career in pharmaceutical market intelligence, healthcare analytics, or strategic consulting within the life sciences sector.

This internship experience has been an invaluable opportunity to apply classroom learning to a real-world analytical challenge of significant industry relevance. The project has not only

strengthened technical and domain competencies but has also reaffirmed the growing importance of data-driven decision-making in the Indian pharmaceutical industry.

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MBA – Healthcare Analytics / Pharmaceutical Management

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