THE GCC PLAYBOOK

FOR THE PHARMACEUTICAL INDUSTRY: A CXO-LEVEL PERSPECTIVE

1. EXECUTIVE INSIGHT

Pharma is at a structural crossroads: margin pressure, patent cliffs, regulatory scrutiny, and AI-driven disruption are converging. The question for Boards is no longer whether to build global capabilities, but how to do so in a way that creates strategic advantage without amplifying risk.

> Global Capability Centers are no longer cost arbitrage vehicles. They are emerging as AI-enabled innovation hubs that influence R&D velocity, regulatory excellence, commercial analytics, and enterprise resilience

The Board mandate is clear:
Move from transactional offshoring to intelligent, governed, AI-orchestrated global capability design.

2. INDUSTRY INFLECTION POINT

Pharma faces five structural forces reshaping the operating model

R&D Cost Inflation

Drug development costs continue to rise while the probability of success declines. AI-driven discovery and data science are becoming non-optional.

Patent Expiry and Revenue Compression

Blockbuster cliffs require portfolio acceleration and faster time-to-market.

Regulatory Intensification

Global data residency, pharmacovigilance, and compliance standards are tightening.

Talent Scarcity in Core Markets

Computational biology, bioinformatics, AI/ML, and regulatory experts are scarce in the US and EU markets.

AI as Competitive Separator

AI is reshaping drug discovery, safety surveillance, medical writing, and commercial engagement

The GCC market for Pharma reflects this shift. The segment is projected to grow from approximately **USD 26.96B in 2024 to USD 92.38B by 2032** at **14.88% CAGR**

$26.96B	$92.38B	14.88%
2024 Market size	2032 Projection	CAGR Growth

3. EVOLUTION OF GCCs IN PHARMA

Phase 1: Cost Arbitrage

Finance, HR, transactional processing.

Phase 2: Functional Excellence

Clinical data management, pharmacovigilance, and regulatory documentation.

Phase 3: Innovation Hubs

Computational drug discovery, AI modeling, digital health, and advanced analytics.

Leading pharma GCCs now:

- Run molecular simulations overnight across time zones
- Support AI-driven compound screening
- Generate regulatory documentation using GenAI
- Manage global digital transformation programs

India's Pharma GCC Ecosystem

India hosts 40–60 pharma/life sciences GCCs, primarily in Hyderabad, and anchors a USD 64B broader GCC ecosystem

$64B

GCC Ecosystem

The shift is clear: GCCs are becoming embedded into enterprise value chains.

4. COMPETITIVE PATTERNS: WHAT LEADERS ARE DOING

Leading companies such as **Eli Lilly, AstraZeneca, BMS, Novartis, Roche, Sanofi** and **Johnson & Johnson** are:

Eli Lilly – Digital Innovation & AI-Driven GCC

Eli Lilly's Bengaluru GCC is a mature innovation hub supporting cloud, AI/ML, analytics, and cybersecurity at scale. It plays a key role in improving clinical trials and enabling digital capabilities for global drug launches. The center contributed to Lilly's **~32% revenue growth in 2024** by supporting the successful launch of tirzepatide.

AstraZeneca – Integrated R&D and Commercial GCC

AstraZeneca's India GCC supports clinical operations, data management, and computational oncology, aligning with its goal of reaching **$80B revenue by 2030**. It strengthens oncology leadership and enables AI-driven drug safety and real-world evidence generation. The GCC acts as a critical engine for both R&D and commercial strategy.

Bristol-Myers Squibb (BMS) – Clinical & Regulatory Excellence Hub

BMS's Hyderabad GCC focuses on clinical research, biostatistics, and regulatory affairs across key therapeutic areas. It plays a vital role in accelerating regulatory submissions and managing complex clinical data. This capability supports BMS's strategy to **launch 10+ new medicines** and expand indications.

Sanofi – AI-Powered Biopharma GCC at Scale

Sanofi's India GCC supports its vision of becoming a tech-powered biopharma company through AI-driven clinical development, pharmacovigilance, and analytics. It underpins a **pipeline of 86 projects** and supports blockbuster drugs like Dupixent. The GCC is central to scaling AI and sustaining global growth.

Novartis – Data Science & Pipeline Enablement GCC

Novartis's India GCC provides data science, regulatory, and commercial support for its specialty drug pipeline. It plays a key role in driving growth across therapeutic areas and improving operational efficiency. These efficiencies have enabled strategic investments like **$23B in global infrastructure**.

Roche – High-Control Captive GCC for R&D and Digital Health

Roche's India GCC operates as a captive model, ensuring high control over R&D, data security, and compliance. It collaborates closely with Swiss teams, combining strategy with execution. This model has **reduced clinical testing cycles by ~32%** while maintaining strong IP protection.

Johnson & Johnson – Diversified Enterprise GCC Supporting Pharma & MedTech

J&J's GCC supports both pharmaceutical and MedTech businesses across finance, IT, analytics, and clinical operations. It enables scaling of blockbuster drugs like Darzalex and supports a **$94B revenue base**. The GCC serves as a diversified, enterprise-wide backbone.

Up to 40% operational cost savings	Faster clinical data processing cycles	Reduced regulatory errors via automation	Reallocation of capital to late-stage pipeline assets

The pattern: Leaders treat GCCs as strategic assets, not support units.

5. ARCHITECTURE CHOICES

Boards must understand structural trade-offs. Drawing from contemporary GCC architecture research and setup models:

A. Process Owner Model

GCC owns delivery end-to-end.

Pros:

- High control
- Strong alignment to CFO
- Clear accountability

Cons:

- Slower to scale
- Requires mature governance

B. Landlord Model

GCC provides infrastructure; functions own delivery.

Pros:

- Faster scaling
- Easier multi-function integration

Cons:

- Diffused accountability
- Requires strong coordination

C. Blended Model

Hybrid ownership based on function maturity. Often optimal for Pharma, where:

- R&D may require tighter control
- Commercial analytics can scale hybrid

Engagement Models

01

BOT (Build-Operate-Transfer)

Lower entry risk, phased control transition.

02

Assisted Build

Advisory-led setup with enterprise ownership from day one.

03

Joint Venture

Longer-term strategic alignment.

Board Decision Lens

• Speed vs control • CapEx vs OpEx • IP sensitivity • Regulatory exposure • Leadership bandwidth

6. RISK LANDSCAPE

Despite 300+ GCCs being established annually, **65% of Global 2000 enterprises still do not operate a GCC model**. When you consider mid-market pharmaceutical companies, the opportunity is even bigger. Look to the software industry to see how even startups leverage a GCC model to speed up product development and time-to-market.
Primary Barriers

Primary Barriers	For Pharma specifically, risks amplify
• Limited GCC operating experience • Regulatory and legal complexity • Lack of executive mandate • Work package complexity • Fear of execution failure	• Data privacy non-compliance • IP leakage • Regulatory inspection failures • Vendor concentration • Attrition in critical talent clusters

Risk must be governed dynamically, not annually.

Leading indicators Boards should monitor:

- Vendor SLA deviation trends
- Regulatory change alerts by jurisdiction
- Attrition heatmaps in critical skill pools
- Budget drift vs milestone value
- Cyber and data localization compliance signals

Risk governance must function as a real-time radar system, not a compliance checklist.

7. FINANCIAL BLUEPRINT

Cost savings alone do not justify a GCC.
Boards must evaluate:

A Total Cost of Ownership

- Salaries and benefits
- Infrastructure and real estate
- Tax structure and transfer pricing
- Vendor ecosystem costs
- Risk mitigation buffers

B ROI Drivers

- Reduced time-to-market
- Increased R&D productivity
- AI automation savings
- Regulatory cycle acceleration
- Commercial analytics uplift

C Capital Reallocation Effect

Savings must be redeployed into:

Late-stage trials | AI capabilities | Digital therapeutics | Real-world evidence platforms

Financial discipline must link spending to milestone value and forecast dynamically, not annually.

8. PHARMA-SPECIFIC GCC PLAYBOOK

A For Companies Without a GCC

- Define strategic intent beyond cost
- Select 2–3 high-value functions for pilot
- Use assisted build or BOT to reduce entry risk
- Embed AI capability from day one
- Establish cross-functional governance

B For Scaling Enterprises

- Move from single-city to multi-center resilience
- Diversify talent pools
- Build domain CoEs in drug discovery, AI, regulatory, safety
- Integrate digital commercial and R&D analytics
- Implement real-time governance dashboards

Avoid “lift-and-shift.”
Design for capability and resilience.

9. 2027–2030 OUTLOOK

Competitive separation will emerge along three axes:

Axis 1
AI-Embedded GCCs vs Labor-Centric GCCs

Axis 2
Multi-Center Resilient Networks vs Single-City Risk Exposure

Axis 3
Integrated Governance vs Fragmented Execution

By 2027 — Projected Scale

- GCC headcount projected to grow to **~4.0M FTEs** globally
- Spend projected to reach **~US$155B**

Pharma Leaders Will:

- Run continuous AI-enabled discovery cycles
- Use predictive regulatory monitoring
- Dynamically rebalance global workloads

Lagging players will struggle with compliance shocks and talent bottlenecks.

10. THE AOKAH DIFFERENTIATOR

Aokah's **AI + Human Orchestration Platform** integrates four intelligence layers to overcome a client's limited GCC operating experience, regulatory and legal complexity, support buy in, reduce work package complexity and overcome fear of execution failure via:

Geo Wisdom
Data-driven city selection, TCO modeling, ESG overlays, risk alerts

Talent Wisdom
Executive mapping, skill heatmaps, attrition prediction

Ecosystem Wisdom
Vendor intelligence, risk monitoring, mitigation orchestration

Program Wisdom
Real-time execution governance, OKR alignment, risk-to-recovery routing

Together, this forms a **Service-as-Software orchestration layer** aligned with AI-enabled governance principles.

→ THE SHIFT

From **static site selection and manual PMO** to **continuously learning, AI-powered execution governance**.

11. BOARD-LEVEL ACTION FRAMEWORK

Five Questions Every Pharma Board Should Ask Now:

01

GCC Strategy

Is our GCC strategy primarily designed for innovation acceleration, or is its focus limited to cost efficiency?

02

Risk Transparency

Do we possess real-time risk transparency across all our geographies, vendors, and talent pools associated with GCC operations?

03

AI Integration

Are AI capabilities intrinsically embedded into our GCC architecture from the very inception of its design and operational processes?

04

Financial Governance

Does our financial governance framework explicitly link GCC spend to measurable pipeline acceleration and strategic outcomes?

05

Resilience Planning

Should regulatory shifts, geopolitical events, or significant talent shocks occur tomorrow, can our GCC operations rebalance and adapt within 90 days?

Closing Thought

The pharmaceutical industry is now entering a transformative decade where the very architecture of capability development will be synonymous with competitive advantage. Global Capability Centres have evolved far beyond their initial role as peripheral infrastructure; they are now indispensable strategic levers, driving accelerated innovation, instilling rigorous cost discipline, and significantly enhancing organisational resilience.

Boards that acknowledge and actively cultivate GCCs as such will inevitably widen their competitive gap in the market. Conversely, those that fail to recognise this fundamental shift will find themselves consistently reacting to a market that has already progressed, facing increasing difficulties in adapting to new demands and challenges.