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Strategic Access Models for Multinational Pharmaceutical Companies to Expand Access to Innovative Medicine in Emerging Markets: An Equity-Based Approach

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Abstract:
Multinational pharmaceutical companies in emerging markets often face strategic failures due to rigid global governance and pricing models that force them into either premium pricing or cost leadership, with no viable middle-ground strategy. These challenges are worsened by delayed product launches and over-reliance on government tenders for patient access. In Indonesia, JKN policies prioritizing cost containment over clinical innovation further intensify these difficulties. This research aims to analyze the strategic challenges faced by pharmaceutical MNCs in emerging markets, formulate adaptable business-level strategies, and assess the feasibility of innovative financing solutions, particularly equity-based pricing, to promote equitable access to medicines. Using a qualitative exploratory design guided by Design Thinking, the research employed strategic management frameworks including Porter's Five Forces, Resource-Based View (RBV), and Strategic Entrepreneurship. Data were collected through semi-structured interviews with industry stakeholders and triangulated with secondary sources. Thematic analysis was conducted using NVivo software. Strategic ideation explored innovative access models such as equity-based pricing. Prototypes were evaluated through scenario modeling and stakeholder feedback, demonstrating strong feasibility as a scalable solution. Findings emphasize that success in emerging markets requires MNCs to abandon strategic arrogance and rigid global playbooks in favor of localized, collaborative, and adaptable strategies.

Keywords: *strategic failures; strategic management; equity-based pricing; emerging markets; innovative financing.*

INTRODUCTION

Multinational pharmaceutical companies initially viewed emerging markets as havens for growth and a means of escaping the uncertain marketplace conditions in Europe and the United States. These markets offered rapidly growing economies to fuel healthcare coverage expansion and large populations of new consumers who could now spend significant amounts out-of-pocket on prescription medications. However, early optimism quickly gave way to a more sobering reality as many companies encountered unforeseen challenges (Agarwal, Dreszer, & Mina, 2017).

Some emerging markets experienced downward trends or lower-than-expected growth due to declining commodity prices, while others saw healthcare systems unable to keep pace with growing populations (Arnabal, 2021; Claxton & Palmer, 2017; Drummond & Towse, 2019; Hitt, Ireland, & Hoskisson, 2011; Javadinasab, Masoudi Asl, Vosoogh-Moghaddam, & Najafi, 2020). Competition from local pharmaceutical companies intensified significantly. Additionally, multinational pharmaceutical companies faced substantial challenges in scaling their operations, including attracting and retaining talent, complying with complex regulations, and establishing effective operational structures (Agarwal et al., 2017).

Previous research has extensively documented the strategic challenges facing multinational corporations in emerging markets. Khanna and Palepu (2010) in their seminal work on institutional voids highlighted how the lack of specialized intermediaries, regulatory

systems, and contract-enforcing mechanisms in emerging markets creates unique challenges for multinationals accustomed to operating in developed economies. They argued that success in emerging markets requires companies to adapt their strategies to fill these institutional voids rather than simply transplanting successful models from home markets. Similarly, London and Hart (2004) emphasized that multinational corporations often fail in emerging markets because they persist with top-down, globally standardized approaches rather than developing bottom-up strategies that leverage local capabilities and relationships.

In the pharmaceutical sector specifically, several studies have examined the challenges of market access and pricing strategies. Iunes et al. (2019) investigated the impact of confidentiality agreements on pharmaceutical pricing in emerging markets, finding that while confidential pricing helps maintain global price integrity, it also creates transparency challenges for health systems. (Antonanzas, Juárez-Castelló, Lorente, & Rodríguez-Ibeas, 2019) conducted a comprehensive review of risk-sharing contracts in healthcare, concluding that while these mechanisms show promise for improving access to innovative therapies, their implementation remains complex and context-dependent. (Chandra & Garthwaite, 2017) explored the economics of indication-based pricing, demonstrating how value-based approaches could potentially align drug prices more closely with clinical benefits while maintaining innovation incentives.

Research by (Singh, Tracey, Dembek, & Leslie, 2025) identified several cognitive biases that undermine multinational performance in emerging markets, including "temporal optimism traps" where companies assume similar timelines to developed markets, and "strategic arrogance" where global success formulas are assumed replicable without significant adaptation. They documented how pharmaceutical companies often fall into these traps, leading to delayed product launches, misaligned pricing strategies, and strained relationships with local stakeholders.

Pharmaceutical multinational companies may take advantage of developing market opportunities but often fail to articulate a coherent long-term strategic position. Some companies approach emerging markets with overly optimistic expectations, underestimating structural and cultural complexities (Garrison & Towse, 2017; McGuire, 2018; OECD, 2018; Robinson, 2019; Vogler, 2020). One of the most common challenges is the temporal optimism trap — assuming that a company's strategy and timeline for developing markets should mirror those in developed markets (Singh et al., 2025).

Strategic arrogance in multinational pharmaceutical companies refers to the overconfidence that global success formulas can be replicated in emerging markets without significant adaptation (Iunes et al., 2019). This mindset assumes that having the best product and a strong global brand is sufficient to guarantee market penetration and growth. The truth is that succeeding in emerging markets requires much more than having the best product and a great global brand. To succeed in emerging markets, companies must develop a customized strategy that takes into account the unique regulatory environment, the cost of their product, and the importance of building long-term relationships, rather than relying solely on product quality and a standardized global playbook (Berndt, 2018; Glassman, 2022; Lomas, 2021).

Binary pricing approach — "go high" with premium pricing or "go low" to chase volume — is a strategy whose inflexibility overlooks many aspects of the dynamic nature of

affordability and competition in emerging markets. To illustrate, the Indonesian healthcare system and payers have traditionally de-emphasized new product introductions, as they have been price-sensitive; therefore, companies are typically required to pursue a low-cost strategy in order to be included in formularies. Pharmaceutical MNCs that require global reference pricing or premium pricing strategies will likely step out of this game and choose not to enter the market. On the other hand, implementing an aggressive low-price strategy may be accepted if the volume is considered "massive," even though it may undermine brand equity and profit margins without guaranteeing the establishment of sufficient scale.

Big deals only: securing large government contracts or entering public reimbursement schemes is often perceived as the primary key to success in emerging markets. Many large multinational drug manufacturers view winning large government contracts as the ultimate way to succeed in developing countries. While government contracts can provide a large customer base for a company and may lend it credibility, it should be noted that contracts do not guarantee long-term revenue in developing countries. These are also very fragmented markets, and many patients have to pay privately for their care through hospitals, clinics, or out-of-pocket payments. Companies that focus solely on government contracts will miss many other factors important to the successful sale of their product. Additionally, government contracts can take years to award; they are unpredictable and can change due to political factors. Therefore, no company can rely solely on government contracts to achieve true success in developing countries.

Temporal misalignment occurs when headquarters forces a set timeline and/or production schedule on the region or country, and as a result the region cannot keep up with the demands of headquarters' plans, ultimately causing strain in the partnership and a mismatch in supply and demand.[2] The speed fallacy is a misguided belief held by many executives that entering a new market quickly and aggressively scaling operations will guarantee success.[2] Temporal myopia is a tendency for companies to underestimate the time and effort needed to build the relationships required for sustained growth. When companies prioritize short-term results, they are less likely to invest the time and resources necessary to build the relationships required for sustained growth.[2]

Despite the substantial body of research on multinational corporations in emerging markets and pharmaceutical access strategies, several important gaps remain. First, most studies have examined either strategic challenges or innovative financing mechanisms in isolation, without integrating these perspectives into a comprehensive framework. Second, limited research has specifically focused on how pharmaceutical MNCs can balance the dual imperatives of maintaining global pricing integrity while achieving local affordability. Third, there is a lack of empirical research examining stakeholder preferences for innovative financing models in specific emerging market contexts such as Indonesia, where JKN policies create unique dynamics by prioritizing cost containment over clinical innovation.

This research aims to address these gaps by analyzing the strategic challenges faced by pharmaceutical MNCs in emerging markets, formulating adaptable business-level strategies, and assessing the feasibility of implementing innovative financing solutions, particularly equity-based pricing, to promote equitable access to innovative medicines. The research integrates strategic management theory with empirical stakeholder analysis to develop

actionable insights for pharmaceutical companies seeking sustainable competitive advantage while contributing to health equity goals in emerging markets.

METHOD

The purpose of this study was to use a strategic management lens to help resolve the issues facing multinational pharmaceutical companies operating in emerging markets. The research methodology was based upon the three major questions identified from the previous section and followed the Design Thinking methodology.

The initial phase focused on developing an understanding of both internal company and external environmental factors that create strategic dilemmas. Qualitative methods of data analysis were used throughout this phase and included the application of the Input Approach of Strategic Management — utilizing stakeholder interviews and secondary literature — to identify the internal and external factors that create these dilemmas. The process began with empathy (identifying the internal company environment and external environmental factors), and then defined the specific strategic dilemmas that exist within the company.

The second phase explored international corporate and business-level strategies that multinational pharmaceutical companies may utilize to obtain above-average returns in dynamic and highly competitive international environments. During this phase, the researcher utilized strategic management formulation tools — the TOWS Matrix, Business-Level Strategy Frameworks, Strategy Group Mapping, and the SPACE Matrix — to generate new and innovative business-level strategies. After generating the proposed business-level strategies, the researcher transformed them into prototypes to assess the potential impact and scalability of each prototype.

The third phase examined the feasibility of utilizing the innovative financing solutions developed during the previous phase, one of which was equity-based pricing. To accomplish this goal, the researcher conducted a Stakeholder Preference Analysis and Scenario Modeling to ensure strategic fit between the innovative financing solutions and the needs of the multinational pharmaceutical company. The prototypes developed during the previous two phases were examined across several dimensions — legal, ethical, and regulatory — and the researcher conducted scenario comparisons to determine how stakeholders responded to equity-based pricing and other innovative financing solutions developed. Throughout all phases, the researcher employed a qualitative exploratory research design, integrated the five stages of the Design Thinking method (Empathize, Define, Ideate, Prototype, and Test), and applied strategic management frameworks to ground the analysis in theory.

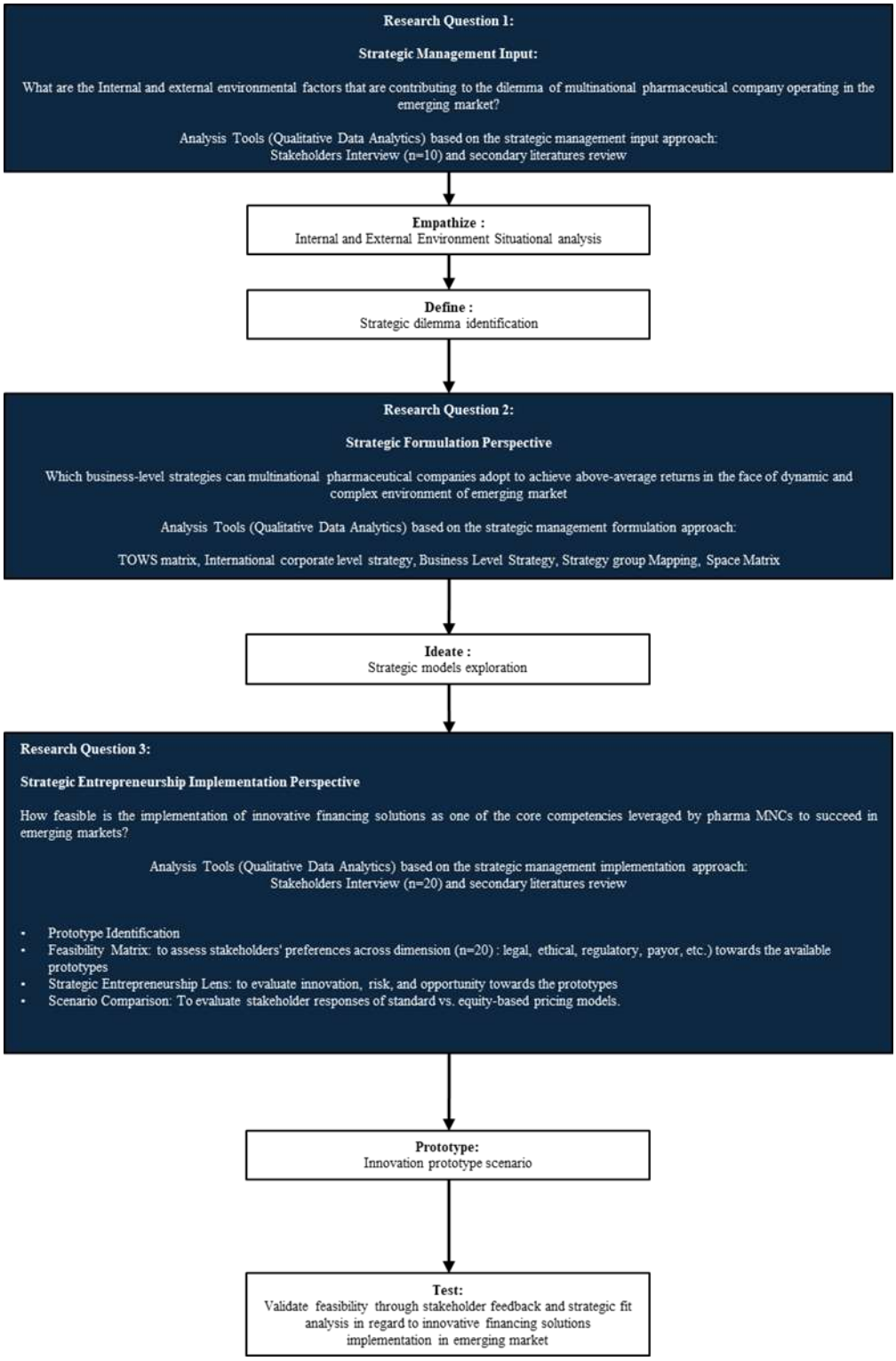

Figure 1. The research design of five iterative stages to answer 3 research questions
Source: Developed by researcher based on Design Thinking methodology, 2025

The data collected in this research were limited to the Indonesian market and focused on several therapeutic areas, such as oncology. The research did not address other segments of the pharmaceutical industry and/or broad healthcare reform. In addition, the research was

confined to multinational pharmaceutical corporations (MNCs) and excluded both local manufacturers and generic producers.

This study relied upon both primary data gathered through interviews with stakeholder groups and secondary data sources, in addition to various strategic frameworks. Proprietary pricing data of pharmaceutical companies, as well as internal strategic documents, may have been restricted by confidentiality agreements or other limitations on access. Secondary data were selected to provide additional strategic insight.

While the study was based on well-established strategic management theories, assumptions made in the application of these models to the Indonesian market may have reduced their generalizability to other emerging markets.

The study was carried out over a short period of time and represented market conditions, the regulatory framework, and stakeholders' views as of 2025. Future changes in healthcare policies, healthcare funding reform, or global pharmaceutical pricing strategies could impact the applicability of the results.

RESULTS AND DISCUSSION

Research question 1: "What are the Internal and external environmental factors that are contributing to the dilemma of multinational pharmaceutical company operating in the emerging market?"

Pharmaceutical MNCs in emerging market such as Indonesia continue to face significant challenges in achieving strategic balance across the two market segments. The public sector, governed by rigid pricing ceilings and complex HTA processes, often limits the inclusion of high-cost innovative therapies. This forces MNCs to prioritize private sector launches, resulting in delayed or restricted access for lower-income populations reliant on JKN. Meanwhile, the private sector offers more flexibility but caters to a smaller, more affluent segment, creating an equity gap in access.

Internally, while MNCs possess strong capabilities in access strategy design and financial innovation, gaps remain in regulatory navigation, infrastructure alignment, and portfolio optimization. The underutilization of local clinical trial infrastructure and limited tailoring of global pipelines to Indonesia's healthcare capacity further exacerbate the disconnect. Externally, fragmented hospital systems, uneven digital readiness, and geographic disparities continue to hinder the scalability of access models.

The most common mistake is called "strategic arrogance"—the implicit assumption that a model, product, or strategy that worked in the US or Europe can be simply transplanted into a new market with minimal adaptation.

Table 1. Mapping of Porter's Five Forces from Multinational Pharmaceutical Company operating in Emerging Market

Types of Medicines	Company	Example of Drugs	Competitive Rivalry	Supplier Power	Buyer Power	Threat of New Entrants	Threat of Substitutes	Strategic Implementation
Innovative	Multinational Pharmace	Keytruda (Pembroliz umab),	High – due to high	Moderate – suppliers	High – governm ent and	Low – high entry	High – biosimi lars and	Strengthen value-based pricing,

Medicine	utical Company	Enhertu (Trastuzumab Deruxtecan)	R&D investment, brand loyalty, and regulatory exclusivity. However, rivalry intensifies post-LOE.	of biologic APIs and advanced technologies have leverage, but MNCs often vertically integrate or have global sourcing.	payers demand cost-effectiveness; HTA and EML inclusion influence access. Patients organization also able to influence the drug price.	barriers due to IP, regulatory complexity, and capital intensity.	generics post-LOE pose substitution threats.	expand access programs, and prepare for biosimilar competition.
Biosimilars	Indonesia Local Industry	Rituximab biosimilar, Trastuzumab biosimilar	High – increasing competition among local players, but limited differentiation.	High – reliance on imported biologic APIs and manufacturing tech increases supplier power.	Moderate – hospitals and BPJS demand affordability; biosimilars offer cost savings.	Moderate – regulatory pathways are improving, but technical barriers remain.	Low – substitution with originator biologics is limited due to cost; generics not equivalent.	Invest in local manufacturing, improve regulatory alignment, and promote biosimilar adoption.
Generics	Indonesia Local Industry	Amoxicillin, Metformin	High – many players, low differentiation, price competition.	Low – APIs are commoditized, multiple suppliers available.	High – buyers (BPJS, hospitals) exert strong price pressure.	Low – easy entry, low capital requirement, but scale matters.	Moderate – substitution with branded generics or alternative therapies.	Focus on operational efficiency, quality assurance, and formulary inclusion.
Branded Generics	Indonesia Local Industry	Cefixime (Omedix), Amlodipine (Norvasc)	Moderate – brand recognition offers some differentiation, but price remains key.	Moderate – branded APIs may be sourced from select suppliers.	Moderate – patients may prefer brands, but payers push for cost savings.	Low – similar to generics, but marketing investment needed.	Moderate – substitution with generics or other brands.	Build brand equity, engage prescribers, and align with payer incentives.

Traditional and Herbal Medicines	Indonesia Local Industry	Jamu, Curcuma extract	Low – fragmented market, cultural preference drives use.	Low – local sourcing, low-tech inputs.	Low – buyers are individual consumers; low price sensitivity.	High – low regulatory barriers, many small entrants.	Moderate – substitution with modern medicines for efficacy.	Promote standardization, evidence-based claims, and integration into formal healthcare.
Biologic Copies	Indonesia Local Industry	Erythropoietin copy, Filgrastim copy	Moderate – increasing adoption, but quality concerns persist.	High – dependence on imported biologic materials and tech.	Moderate – hospitals may adopt for cost reasons, but clinicians cautious.	Moderate – regulatory clarity improving, but technical barriers remain.	Moderate – substitution with originator biologics or biosimilars.	Strengthen regulatory compliance, invest in pharmacovigilance, and educate stakeholders.

Source: Primary data processed based on stakeholder interviews and secondary data analysis, 2025

This manifests in many ways for multinational pharmaceutical industry to operate and innovate in emerging market. Such as:

1. Underestimating the strength and agility of local competitors.
2. Failing to develop a genuinely affordable pricing strategy for a market with emerging middle-income populations
3. Ignoring the need for local clinical data until it's too late
4. creating a commercial model that talks at doctors instead of engaging with a new generation of digitally empowered patients.

In conclusion, MNCs in Indonesia should make a strategic move in navigating Integrated approach in dual market system strides but still struggle to fully harmonize their operations across the dual market system. Bridging this gap requires deeper localization, regulatory reform, and infrastructure investment to ensure that innovative therapies are not only available but equitably accessible across all segments of the population.

Research question 2: "Which business-level strategies can multinational pharmaceutical companies adopt to achieve above-average returns in the face of dynamic and complex environment in emerging markets?"

Pharmaceutical MNCs in emerging market such as Indonesia continue to face significant challenges in achieving strategic balance across the two market segments. The public sector, governed by rigid pricing ceilings and complex HTA processes, often limits the inclusion of high-cost innovative therapies. This forces MNCs to prioritize private sector launches, resulting in delayed or restricted access for lower-income populations reliant on JKN. Meanwhile, the private sector offers more flexibility but caters to a smaller, more affluent segment, creating an equity gap in access.

Identified Core Competencies of Multinational Pharmaceutical Company Operating in Emerging Market

Internal Analysis identified four key competences for Pharmaceutical Multinationals competing in Emerging Markets through which they can obtain a Sustainable Competitive Advantage.

Affordable Drug Pricing Program Designs – The company's ability to design Patient Assistance Programs and drug pricing plans designed to increase the availability of High-Cost Therapies in Price Sensitive Markets. The Competence of Affordable Pricing Plans were referenced 13 times with 69% of all feedback being Positive. These references highlight Affordable Pricing Plans as a Strategic Competence enabling Equity-Based Pricing and Innovative Financing Models.

Adaptive Organization Execution – A new emphasis on a competence of the organization's ability to create formal structure and process to enable rapid adaptation to Regulatory Changes and to enable Pilot Programs to test New Access Strategies. The Competence of Adaptive Organization Execution was referenced 15 times with 80% of all references having Positive Sentiment. Therefore, it is important for Pharmaceutical Multinational Companies competing in Emerging Markets to have the Competence of Adaptive Organization Execution to be able to navigate Volatile Policy Environments and Scale their Innovative Access Strategies.

Pipeline Optimization – The Competence of Pipeline Optimization was referenced 13 times (38% Positive) and enables the Alignment of Global Research & Development Priorities with Local Market Realities to enable timely Product Launches and Portfolio Relevance.

Clinical Trial Infrastructure – The Competence of Clinical Trials was referenced 5 times (40% Positive) and enables the Company to Conduct Local Clinical Trials and Generate Real World Evidence necessary for Health Technology Assessments and Policy Advocacy.

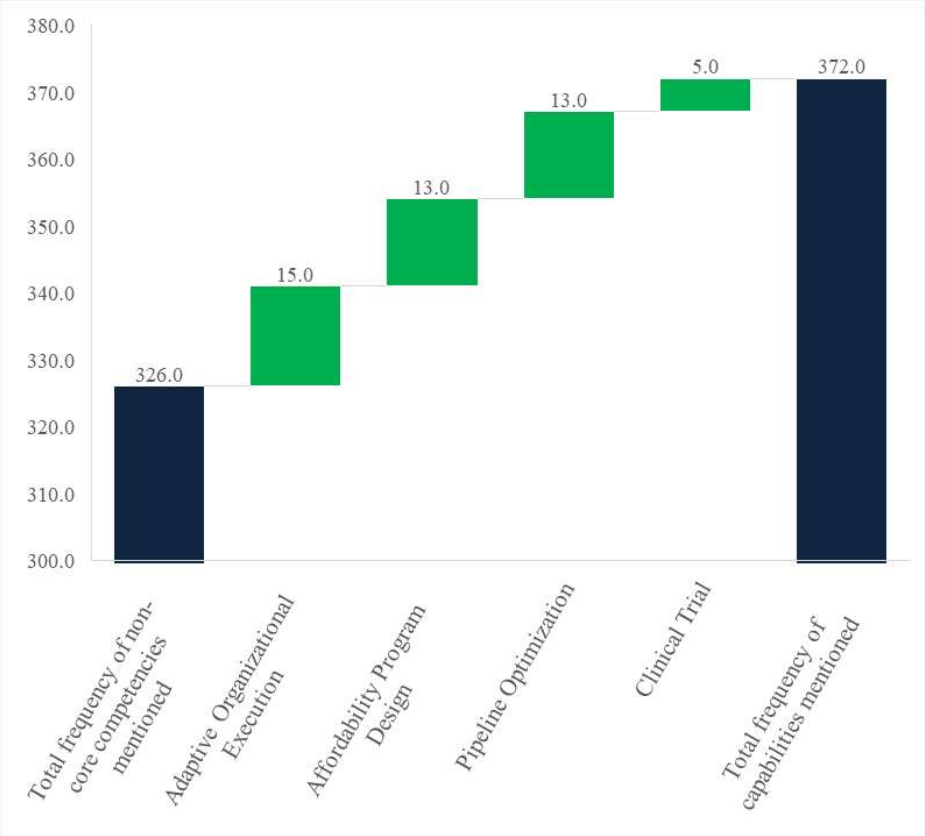

Figure 2. The frequency of capabilities vs. core competencies mentioned in the stakeholders' interviews (n=10)

Source: Primary data processed based on stakeholder interviews (n=10), 2025

However, the Waterfall Graph illustrates a strategic imbalance; Non-Core Capabilities appear to be more dominant (No. mentions: 326) than Core Competencies (No, of Mentions: 46) during the stakeholder's interview (n=10) , it is apparent that Pharmaceutical MNC's recognize Core Competencies as the source of Sustainable Competitive Advantage yet seem to underestimate them in practice. **Organizational focus appears to be heavily skewed towards maintaining parity capabilities** (e.g., Collaborative Access Expansion, Market Access Navigation, Stakeholder Management, Effective Commercial Initiatives/Campaign, etc.) **rather than scaling core competencies that will create long term competitive advantages and above-average financial returns.** The disparity between investment in non-core and core competency areas may lead Pharmaceutical MNC's to dilute their strategic differentiation through over-investment in non-core areas at the expense of building out scaleable competitive advantages. For Pharmaceutical MNC's to achieve sustained success in Emerging Markets, they must redirect investments toward building/leveraging their core competencies so that Affordability Innovation, Organizational Agility, and Pipeline Alignment become key components of their Strategic Execution.

When multinational pharmaceutical companies (MNCs) enter emerging markets, such as Indonesia, **they have three business strategic options,** all with unique feasibility and implications for the company.

Option 1: is Cost Leadership at High Volumes, or to be competitive on price to gain entry into public reimbursement channels. While this model may be able to work during the LOE (loss of exclusivity) period of innovative products transitioning to generic competition, this is not an attractive strategic option for MNCs. Maintaining extremely low margins creates conflict with MNCs' need to maintain global profit benchmarks to support R&D and sustain innovation pipelines. Therefore, pure cost leadership is better suited for local generic manufacturers rather than global innovators.

Option 2: is Mid-Tier Differentiation; MNCs want to enter into public reimbursement channels while still protecting their profit margins by using value-based arguments. However, MNCs are facing many obstacles in Indonesia as the HTA (Health Technology Assessment) system is designed to favor cost effectiveness over clinical innovation. The rigid pricing caps in place from JKN and the inability to negotiate for outcome-based contracts limits MNCs ability to charge premiums for products in the public sector (Chidavaenzi, Salie, & Grobbelaar, 2025). Although differentiation is a major component of MNCs' competitive strengths in the marketplace worldwide, MNCs will find this very challenging in Indonesia's public reimbursement environment.

Option 3: is an Integrated Strategy, which uses elements of cost leadership and differentiation to provide affordable, yet innovative, health care products. An integrated strategy is also the best option since MNCs can develop tiered pricing systems and use different types of equity and hybrid access programs to serve different socio economic level patients' in developing countries. By utilizing their core competencies related to affordability program design, adapting their organization to execute programs locally, and optimizing their product pipeline, MNCs can develop scalable health care solutions that meet local affordability constraints and protect their global pricing standards. However, implementing an integrated strategy successfully will require MNCs to have an agile operating structure, engage with stakeholders effectively, and invest in digital platforms for affordability scoring and compliance**. Using an integrated strategy will position MNCs as innovation leaders in developing countries committed to delivering equitable health care and will allow them to achieve long term sustainable competitive advantage in emerging markets.**

Strategic Group Mapping is a visual and analytical tool used to classify and compare firms within an industry based on key strategic dimensions. In the context of Indonesia's pharmaceutical sector, this mapping helps benchmark the positioning of multinational pharmaceutical companies (MNCs) relative to local players—such as generic manufacturers, biosimilar producers, and traditional medicine providers—based on their strategic choices, capabilities, and market behavior.

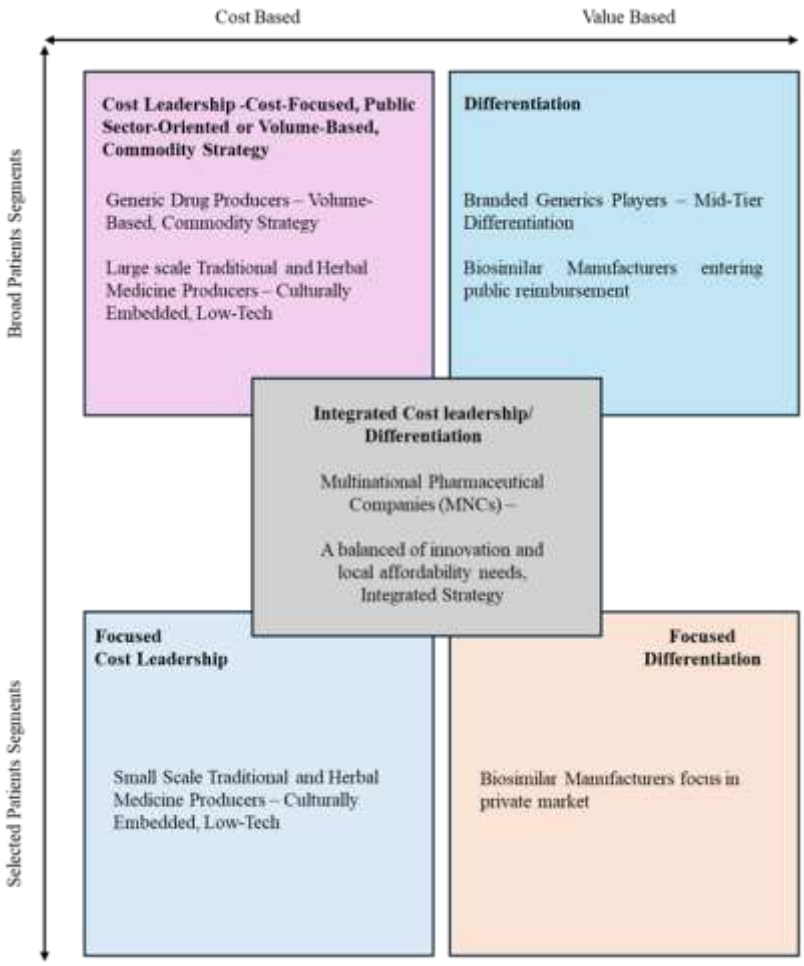

Figure 3. Five Identified Strategic Groups Mapping of Pharmaceutical Company in Emerging Market

Source: Primary data processed based on stakeholder interviews and secondary data analysis, 2025

A transnational strategy is the recommended international corporate strategy for achieving global efficiency through a combination of local responsiveness and global integration. A transnational strategy allows the organization to adapt to different regulatory environments, cultural expectations, and affordability constraints across markets. It also allows organizations to share best practices, clinical data, and other forms of knowledge globally across markets. This strategy is particularly important for pharmaceutical MNCs that operate in both slow cycle and fast cycle markets (patented drugs and post-LOE generics). The transnational strategy allows organizations to compete effectively while managing the risks associated with regulatory complexity and price referencing. Implementing a transnational strategy **is achieved through a combination of an appropriate organizational structure (a hybrid of product and geographic divisions)** and integrated strategic and financial controls to manage global efficiency and local market performance.

The Strategic Position and Action Evaluation (SPACE) Matrix is a strategic management tool used to determine the appropriate strategic posture a company should adopt—whether Aggressive, Conservative, Defensive, or Competitive. It evaluates four dimensions:

1. Financial Strength (FS)
2. Competitive Advantage (CA)
3. Industry Attractiveness (IA)
4. Environmental Stability (ES)

SPACE Matrix Scores Used

Financial Strength (FS): +4

Competitive Advantage (CA): –3

Industry Attractiveness (IA): +5

Environmental Stability (ES): –4

Calculation:

X-Axis (FS + CA) = 4 + (-3) = +1

Y-Axis (IA + ES) = 5 + (-4) = +1

Strategic Posture: The resulting coordinates (+1, +1) place Pharma MNCs in the **Aggressive quadrant.**

The Aggressive quadrant where the pharma MNCs fall in stands for bold, innovation-driven action — combining affordability, operational agility, and collaborative relationships with stakeholders — to obtain long-term competitive advantage and above average return in emerging markets.

Research question 3: "How feasible is the implementation of innovative financing solutions as one of the core competencies leveraged by pharma MNCs to succeed in emerging markets?"

The Available Prototype of Innovative Financing Solutions for Pharmaceutical Multinational Company Operating in Emerging Market

Risk Sharing [3,4,5]

The risk-sharing agreement is a contract arrangement made by one or more healthcare payers such as government agencies or private insurance companies with one or more service providers or drug companies. The primary goal for RSAs is to share the financial and clinical risks of adopting new health technologies; particularly expensive medications based upon their performance in actual use. In addition, they can provide above-average returns in emerging markets.[26]

Types of Risk-Sharing Models in pharmaceutical industry:

- **Financial-Based Agreements**

Price and volume agreements and other financial risk-sharing arrangements were implemented to address the budget impact of expensive drugs. Financial based risk sharing agreements are structured around limits to volumes (caps) and financial ceilings (thresholds). The terms of these agreements are defined by use metrics and not by clinical outcome. A classic example is an agreement between a manufacturer and the payor (insurance or government) (Vlaanderen et al., 2019), whereby if a threshold of prescriptions is exceeded then the manufacturer will have to provide either additional supply at no charge, or rebates, etc. There are also a range of other mechanisms available including discounts for advance purchase,

repayments or "two for one" offers. Compared to other forms of collaboration, these models are relatively easy to negotiate and implement and are therefore generally used in situations where the main focus is on limiting spending rather than addressing the lack of certainty about what treatment options are most effective. They are helpful in situations where the Government has agreed to a single "floor price" for public funding of a drug, because they enable cost control without impacting patient access to the drug.

- **Performance-Based Agreements (Pay-for-Performance)**

In Performance Based Agreements (PBA), the payment amount to the manufacturer is based on the specific clinical results of the drug in real world practice settings. PBAs also provide for a "pay-for-performance" mechanism; where the payer can expect some form of refund from the manufacturer, either partial or full depending on how well the drug performed against agreed upon clinical endpoints; such as tumor shrinkage, improved survival rate, etc.; or other biomarkers. **Treatment Cycle Based Agreements**

The Treatment Cycle-Based Agreement is a type of Outcome-Linked Access Strategy that is most frequently utilized within the field of Oncology. The Pricing & Reimbursement of a Drug is based on the number of treatments cycles a Patient has completed. In many cases with High-Cost Cancer Therapies, Clinical Response will be assessed after a few Initial Cycles of Treatment.

This is a Strategic Advantage to the Treatment Cycle-Based Agreement. First, the Published Price of the Drug is preserved, which is critical to maintain Global Pricing Integrity, while preventing downward pressure in Reference Pricing Markets. The Cost Reduction is Masked Through the Provision of Free Cycles, which do not appear as Price Cuts in Official Pricing Databases. Second, the Treatment Cycle-Based Agreement creates an Incentive for Adherence to Treatment, as both Patients and Providers are Motivated to Complete the Initial Cycles of Treatment in order to Unlock the Benefit.

Indication based pricing [6]

Indication-based pricing (IBP) is an innovative pharmaceutical pricing strategy that allows the price of a pharmaceutical to be changed as a function of the particular indication (disease state) for which it has been prescribed. Since the same product can provide a different level of clinical benefit as a result of differences between diseases, stages of disease, and patients' populations, this new approach recognizes that the value delivered by a product to patients is dependent upon the specific indication for which it is being prescribed. For instance, a cancer treatment could potentially add several months to a patient's life expectancy when used in a certain type of cancer, while adding less than a month to a patient's life expectancy when used in another type of cancer. Traditionally, under uniform pricing, all patients have paid the same price for the same medication regardless of how well it works in treating their specific disease. IBP advocates for charging higher prices for high-value indications and lower prices for low-value indications; high-value indications are those where the drug delivers the greatest amount of clinical benefit and low-value indications are those where the clinical benefit delivered by the drug is limited.

The cancer drug cetuximab (Erbitux) provides a good example of how this can work in practice. Cetuximab was shown to provide a median survival benefit of 0.23 years for patients

diagnosed with recurrent head and neck cancer and a median survival benefit of 1.64 years for patients diagnosed with locally advanced disease. If a uniform price were charged for cetuximab (i.e., $10,000/month) for both of these groups, then it would seem that the price paid by each group is unrelated to the actual clinical benefit they received from taking the drug.

Equity based pricing using means testing approaches

Equity Based Pricing through Means-Testing is a pricing strategy that is designed to help make sure every individual has equal access to medical care; specifically by pricing services according to an individual's ability to pay for them as opposed to treating each person equally with regards to their income level. As opposed to using a uniform price structure that applies to all individuals regardless of how much money they have, Equity-Based Pricing utilizes a 3rd party means testing algorithm to separate people into different price groups. The separation of people into these different pricing groups is done via verifiable measures to assess each person's purchase power prior to receiving the price determination. This provides discounted pricing to those that are in need, while maintaining sustainable and equitable pricing for both the health service provider/healthcare entity and the pharmaceutical company.

A good example of the Equity-Based Pricing model is the Indonesian Affordability Program (IAP), implemented by one of the world leading multinational pharmaceutical companies in Indonesia for its new and innovative therapy. IAP established a four tiered discount system (a%, b%, c%, d%), determined through a comprehensive means testing procedure. In order to participate in the IAP, patients register and submit financial information and will then receive a custom discount voucher for use at approved hospitals. This allows low income or under served communities to afford life saving treatment at a lower cost, while wealthier communities are able to contribute to paying for the higher costs.

As well as being used globally, there is evidence of this strategy from research. For example, Asante et al. (2016) reported that in many low and middle income countries (LMICs), [28] the majority of the funding of health financing systems go towards the wealthy more so than the poor; even though the financing mechanism is supposed to be "progressive." Asante et al. (2016) suggest that benefit and financing incidence analyses should be conducted to demonstrate whether health subsidies are fairly distributed and if payment levels correlate with the ability to pay. Also, Berg and Kim (2018) found that the practice of price discrimination in public health services -- such as different prices for services based on the quality of the provider, or characteristics of the patient -- can increase social welfare while encouraging providers to deliver high quality health services. [28, 29]

Ibrahim et al., (2020), therefore, are careful about the need for fairness and equity when using big data in health care and make clear that decision-making algorithms used in health care, like those used in "means testing", should be transparent and address biases so they do not exacerbate existing disparities. [30]

Equity-based pricing through the use of means testing has potential as a model to improve access to innovative medicine in low- and middle-income countries (LMICs). Equity-based pricing through means testing is aligned with international best practice in equitable health care financing and represents an accessible, transparent, and patient-centered alternative to existing price-setting models.

Figure. Operational Model Prototype of Equity Based Pricing (EBP)

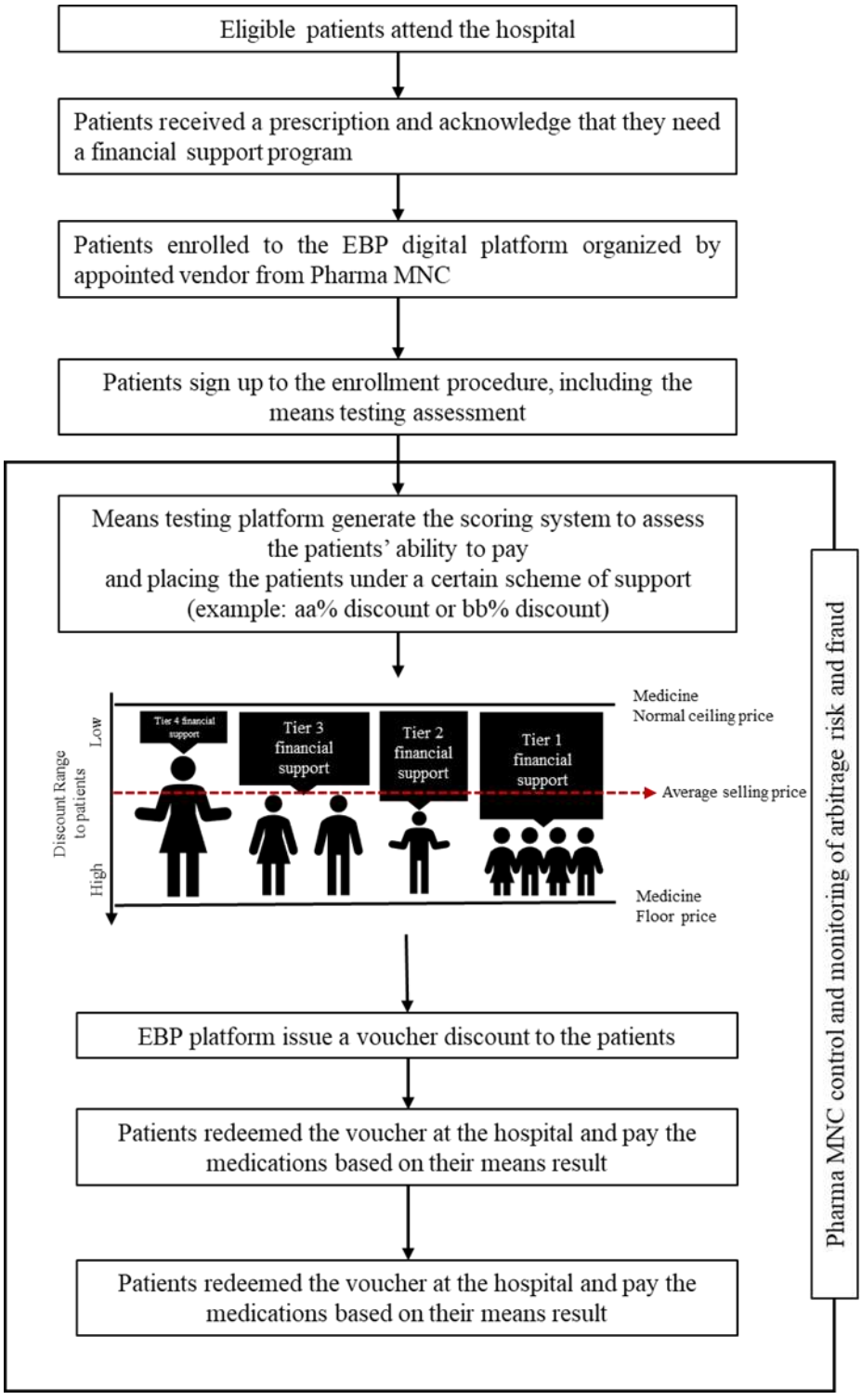

Figure 4. Operational Model Prototype of Equity Based Pricing (EBP)

Source: Developed by researcher based on stakeholder feedback and prototype testing, 2025

Confidentiality pricing

Confidential Pricing refers to a Pharmaceutical Pricing Strategy in which the ultimate price that is paid for a drug—following discounts, rebates or Managed Entry Agreements —is

confidentially maintained between the Manufacturer and Payer (which typically includes a Government or Insurance Provider). Confidential Pricing has become an increasingly popular pricing strategy among Multinational Pharmaceutical Companies (MNCs) when negotiating a single "floor" price for Public Reimbursement through Government Schemes while protecting the Price Integrity of drugs across Countries.

Illustrative Example:

The idea behind this would be for an MNC to negotiate a confidential discount with a country's government to reduce the cost of a chemotherapy drug from $10,000 per cycle to $6000 (a 60% reduction). The MNC would continue to list the drug as being available at the original price of $10,000; therefore, the public would have no knowledge of the negotiated discount amount.

The pharmaceutical company could use this pricing strategy internationally when negotiating prices with countries' governments by using "managed entry agreements" (MEAs), or "risk sharing agreements". These types of agreements allow manufacturers to provide discounts based on the volume of product sold, how well the product works, and/or the effectiveness of the treatment, but they do so without the need to disclose those details. If the details were made public, it may cause other countries which also utilize international reference pricing, to begin to pay lower amounts than the U.S. for the same product.

MNC's preference for confidential pricing will be especially important in those cases where they are seeking to establish a single floor price for public reimbursement by masking direct discounts through their use of confidential pricing while maintaining a consistent pricing strategy across all regions globally. In addition, this preference will be most significant in LMIC's which have international reference pricing systems and would experience downward price pressure if public disclosed lower prices for certain products.

In contrast, as has been discussed in several global forums and studies, there is increasing pressure for greater transparency in pharmaceutical pricing to promote equity among drug manufacturers. This increased pressure for transparency has resulted from an increase in recognition by many researchers and policy makers that LMIC's rely on published prices for decision making regarding drug procurement. [7]

Sin tax subsidy [8,9]

A Sin Tax Subsidy is a use of money generated from the sale of items considered to have a negative impact on the health of consumers (tobacco, alcohol, sugar-sweetened beverages, etc.) as well as gambling; and these monies are used to assist or subsidize public health programs and/or healthcare services. A Sin Tax Subsidy can help to fund public health programs and it provides a method to discourage unhealthy behaviors and create a sustainable source of funds to support healthcare delivery systems. A Sin Tax Subsidy has additional relevance when pharmaceutical multinational companies (PMMCs) charge one price for all medicines they cover under public reimbursement, because a portion of the monies generated through the Sin Tax may be able to be used to offset some of the cost of purchasing expensive medication.

Feasibility Matrix Assessment to Innovative Financing Solutions Prototype in Emerging Market Healthcare System

Table 2. Feasibility Scoring Matrix: Stakeholders rate their preference of Innovative Financing Solutions for Innovative Medicines in Indonesia based on interviews (n=20).

Innovative Financing Solutions in Healthcare Industry	Caregivers / Patients	BPJS Kesehatan (National Health Insurance/Reimbursement System)	Ministry of Health (MoH)	Public Hospitals	Private Hospitals	Pharma MNCs	Patient Advocacy Groups (e.g., YKI)	Financing Platforms	Local Regulatory and Legal Body	Average Stakeholders Acceptance Rate
n=	6	2	1	2	2	2	2	1	2	20
Risk Sharing (Outcome based approach)	1	2	2	2	4	1	2	1	4	2.1
Indication based pricing	1	4	4	1	1	1	1	2	2	1.9
Equity based pricing using means testing approaches	2.2	1	3	3	3	3	3	4	3	2.8
Confidentiality pricing	5	1	2	1	3	4	3	3	1	2.6
Sin tax subsidy	5	3	3	3	1	4	5	3	3	3.3

Notes: From the patients' perspective as end users, confidentiality pricing and sin tax subsidies are often preferred, as they are perceived to ensure full coverage of treatment costs through government or public funding mechanis

Source: Primary data processed based on stakeholder interviews (n=20), 2025

Adoption of new financial methods – specifically equity-based pricing (EBP) is both operationally practical and strategic for multinational drug companies (MNC) entering into emerging markets. Interviews with stakeholders, feasibility assessment, and prototype testing demonstrate that EBP has significant alignment with the principles of health equity, is more affordable, and increases patients' access to medications while maintaining pricing integrity on an international level.

Compared to existing models, EBP provided superior performance in terms of affordability, fairness, and continuous treatment, via means-testing and tiered discounts delivered digitally.

Operational complexity and regulatory adjustments will be obstacles; however, they can be minimized by strong governance, robust digital infrastructure, and collaborative relationships with payers and hospitals. Hybrid models – such as using EBP with confidential pricing, risk-sharing agreements, and sin tax subsidies – can provide additional scale and sustainability for EBP models.

Stakeholders have expressed most support for EBP out of all the prototypes tested, therefore it demonstrates potential as a core competency for MNC pharma companies desiring to achieve a competitive advantage in affordability-driven markets.

In conclusion, innovative financial methods are not only practical but required for closing the gap between product innovation and equitable access in emerging markets. Successful application of these methods will require a paradigmatic shift away from one-size-fits-all global playbooks toward locally adaptable, patient-centric strategies that emphasize affordability, operational flexibility, and collaboration with stakeholders — positioning MNC pharma companies for long-term growth and positive social outcomes.

CONCLUSION

Stakeholder preference analysis reveals a clear preference for Equity-Based Pricing (EBP) over Standard Pricing among patients seeking access to innovative medicines not covered by public reimbursement, with EBP outperforming across six key dimensions: financial feasibility, fairness, treatment continuity, emotional well-being, satisfaction with means-test assessment, and willingness to advocate. By adjusting prices according to financial need, EBP substantially reduces financial barriers and encourages treatment continuity, and despite moderate emotional well-being scores attributable to the complexity of means-test eligibility, patients nonetheless perceive the process as more transparent and fair than Standard Pricing, translating into higher advocacy for the model. From the perspective of multinational pharmaceutical companies, EBP offers meaningful gains in brand equity and corporate social responsibility, while for policymakers and payers it aligns well with health equity objectives and offers long-term cost benefits, notwithstanding initial integration costs. Provided that regulatory frameworks are appropriately adjusted and cross-sector partnerships are established, EBP holds strong potential to improve health outcomes and advance universal health coverage goals, though operational challenges related to complexity, fraud risk, and scalability must be systematically addressed. Future research should examine the long-term sustainability and scalability of EBP across a broader range of emerging market contexts and therapeutic areas, with particular attention to the design of robust means-test mechanisms and the development of standardised regulatory frameworks capable of mitigating fraud while preserving the model's equity objectives.

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