



CURRENT TRENDS IN THE DEVELOPMENT OF THE PHARMACEUTICAL INDUSTRY: GLOBAL AND NATIONAL EXPERIENCE

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Relevance: the pharmaceutical market remains one of the key sectors of the global economy: rising healthcare expenditures, demographic changes, and technological innovations are shaping new requirements for quality, marketing, and production localization. In 2024–2025, the United States, China, and Germany became leaders in terms of sales volume, setting benchmarks for regulatory frameworks and competitive practices for developing markets, including Uzbekistan.

Purpose of the study: to analyze current global and national trends in the development of the pharmaceutical industry in order to identify key growth drivers, barriers, and best practices, as well as to develop practical recommendations for accelerating the harmonization of the regulatory framework, improving production quality, and increasing the competitiveness of domestic pharmaceutical manufacturers in regional and global markets.

Materials and methods: Materials: open sources (national regulatory authorities and specialized publications), legal and analytical reviews on Uzbekistan, reports from regulators in the USA/China/Germany, and industry analytical briefs. Methods: comparative analysis of regulatory frameworks and GMP practices, content analysis of marketing strategies and available statistical data, synthesis of international best practices, and assessment of their applicability to the national context.

Results: a comparative analysis was conducted of current trends in quality, marketing, and production conditions in the pharmaceutical sector between the USA/China/Germany and the Republic of Uzbekistan. The study identified the strengths and weaknesses of the national industry and proposed strategic directions for its development.

Quality	
Uzbekistan:	USA/Germany/China:
Active regulatory modernization, establishment of a Certification and Inspection Center, implementation of a national GxP system, development of roadmaps for harmonization with international standards. Practice of state GMP inspections during the registration of imported medicines.	Strict quality regulation system, regular inspections and public reports on production quality; strong supply chain control and risk monitoring, active GMP updates in 2024–2025.
Marketing	
Uzbekistan:	USA/Germany/China:
Marketing practices; digital channels and pharmaceutical marketing.	Advanced multichannel strategies, strong digital marketing presence, targeted engagement of physicians and patients, significant role of pharmacovigilance and pricing policy.
Production conditions	



Uzbekistan:	USA/Germany/China:
State programs for production localization, mandatory GMP inspections for registration, roadmaps for standard harmonization; infrastructure and production scale remain limited compared to global leaders.	High degree of automation, well-developed infrastructure for research and production, sustainable supply chains, and significant investment in biotechnology.

Conclusions: the pharmaceutical industry of Uzbekistan is undergoing active transformation and demonstrates a systematic approach to development: a regulatory framework has been established, a national pharmacopoeia has been developed, innovation clusters are being formed, and measures to support domestic manufacturers and investors are being implemented. At the same time, in order to reach the level of the world's leading pharmaceutical powers, the country needs to accelerate the implementation of international quality standards, strengthen inspection and laboratory infrastructure, digitalize marketing, train qualified specialists, and attract strategic investments. With consistent implementation of these steps, Uzbekistan has the potential to secure a stable and competitive position in both regional and international pharmaceutical markets.