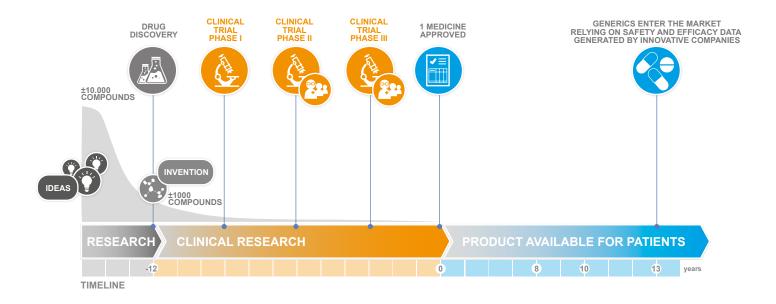




Benefits of a clinical research strategy for Turkey A roadmap for innovation-driven growth

CLINICAL RESEARCH: DEVELOPING NEW TREATMENTS THAT BENEFIT PATIENTS

Clinical trials are necessary in developing a new medicine, they serve to test its efficacy and safety. They are crucial for the patients that participate in them as they offer the chance to receive a new treatment, that has potential to improve their quality of life, help the management of their disease, or in some cases prolong or save their lives. Clinical trials also represent a major opportunity for the economy. Our study looks at how Turkey can strengthen its clinical research ecosystem and outlines a set of concrete actions which would help Turkey obtain its goal set out in 11th Development Plan to become a leader in clinical research. The study offers recommendations and suggestions on how cooperation between the Turkish government, the regulator and the innovative pharmaceutical industry in a clinical research strategy for Turkey could be a win-win relationship for all, with patients and the Turkish economy as the final beneficiaries.



THE PHARMACEUTICAL INDUSTRY IN TURKEY



\$7.7 billion size of the Turkish pharmaceutical market



\$327.7 million the value of clinical research in Turkey annually (June 2019)



\$44.5 million million the total estimated value of the employment generated through clinical research annually



1.5% the estimated ratio of Turkish pharmaceutical industry R&D spend to the total pharmaceutical market size in 2018, well below the estimated ratio globally of 14.9%



521 is the number of clinical trials in 2019 which can be increased to 1200 in 8 years

MAKING TURKEY A LEADING PLAYER IN INNOVATION

Innovation and R&D are crucial for economic growth, creating more healthcare resilience, and improving global competitiveness.



Turkey has the potential to become a global top 10 country in clinical research



Globally, Turkey is 17th in terms of pharmaceutical market size but ranks 26th in terms of the total number of clinical trials. In order to increase Turkey's attractiveness as a clinical trial destination, the country's clinical research infrastructure, capacity and skills need to improve significantly.

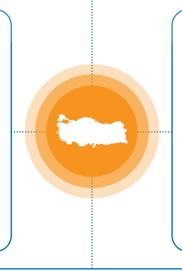
Our recommendations to strengthen Turkey's position as a global hub for clinical research

PATIENT RECRUITMENT	PROCESS	INFRASTRUCTURE	COSTS & INCENTIVES
 Establish a central patient database Design a patient referral system Raise public awareness 	 Streamline and cetralize documents and ethics committe submission Reinforce implementation of ethical review standards 	 Build an investigator network Increase capacity in a wider range of institutions Provide formal education, academic incentives, career advancement opportunities Revise R&D regulation Establish clinical research centres with dedicated staff 	 Improve accounting systems in healthcare institutions Increase incentives for companies to run clinical research in Turkey



Clinical research is a key tool to achieve Turkey's economic policy objectives

A clinical trial strategy would allow the government to achieve greater economic development, create more value-added, foster innovation and R&D, reduce the trade deficit, and support a healthier and health-resilient society.





Clinical research benefits Turkey's economy, healthcare and patients

Clinical research leads to lower medical costs for research subjects, lower financial burden for the Social Security Institution, additional income and more resilience for the healthcare system and State, and generates employment.

Being a top 10 clinical research country would mean nearly tripling its number of clinical trials

Addressing the recommendations and adapting to global trends could make Turkey a regional leader in 3-8 years, a policy objective put forward in Turkey's 11th Development Plan. **This would lead to:**



total clinical research value and approximately 70,000 patients enrolled in clinical trials annually by 2027.



involved in more than 1,600 clinical trials



annual value of innovative medicines provided to Turkish patients

Beyond its economic contribution to the system, a growing volume of clinical research would also help to improve the quality of healthcare services and extend the experience, global network and visibility of healthcare professionals involved in research.