

Innovación en la asignación de recursos de suelo para nuevas fuerzas productivas: la industria biomédica de Shanghái

CHENG Peng, YANG Ben, FAN Hua

Resumen: La reforma de la asignación del suelo y de otros factores es esencial para las nuevas fuerzas productivas. A partir de la industria biomédica de Shanghái, el artículo analiza la demanda espacial de la innovación, los principios de asignación diferenciada y las respuestas basadas en integración I+D-producción, concentración de servicios, ecología industrial simbiótica y gestión flexible.

Palabras clave: nuevas fuerzas productivas; asignación de suelo; industria biomédica; espacio de innovación; Shanghái

Nota de financiación: Open project of the Shanghai Natural Resources Research Center on new quality productive forces and land-resource allocation innovation (2024Z-K04B); Shanghai Municipal Government decision-consulting project on metropolitan planning and construction.

1 Lógica de demanda espacial y principios de asignación

La innovación aproxima investigación, pruebas, fabricación, servicios y usuarios. La política de suelo debe apoyar proximidad funcional, circulación abierta de factores y calidad del entorno laboral y residencial [9-21].

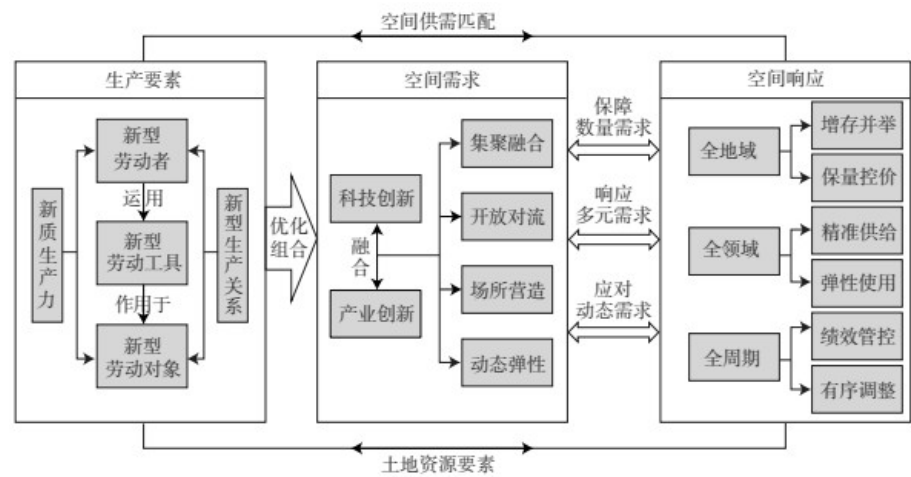


Fig. 1 New quality productive forces and the changing logic of land-resource allocation

2 Industria biomédica y estructura espacial de Shanghái

La biomédica shanghainesa se apoya en instituciones científicas, hospitales, empresas, finanzas e intercambio internacional. Los tres parques representan un parque maduro, una zona periférica de fabricación y un soporte de renovación urbana.

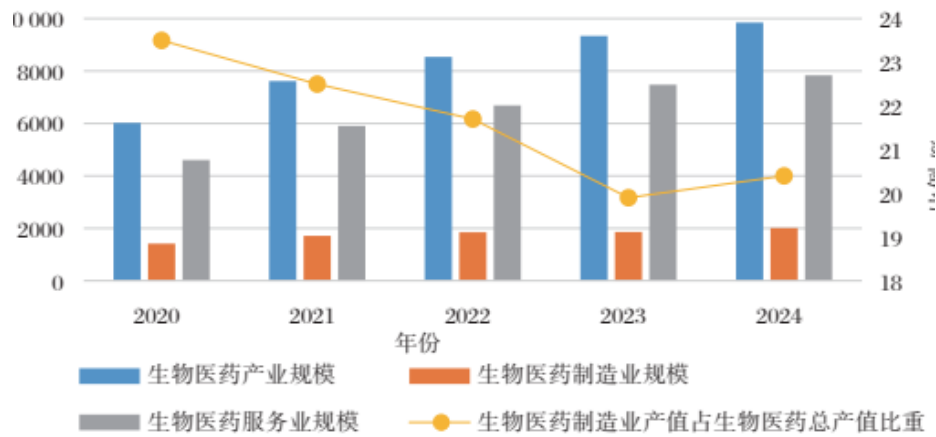


Fig. 2 Development of Shanghai's biomedical industry, 2020-2024

3 Desafíos de asignación

Los problemas incluyen costos altos y distribución desigual del espacio I+D-producción, dispersión de servicios biomédicos, insuficiente calidad del espacio de apoyo y control de usos poco adaptable.

		具体内涵
1	张江生物医药创新引领核心区	重点发展创新药物、高端医疗器械和生物技术服务等
5	五大特色产业区	临港新片区精准医疗先行示范区、东方美谷生命健康融合发展区、金海岸现代制药绿色承载区、北上海生物医药高端制造集聚区、南虹桥智慧医疗创新试验区
X	若干特色产业载体	张江创新药产业基地、临港新片区生命蓝湾、东方美谷医药、湾区生物医药港、北上海生物医药产业园、G60生物医药产业基地、青浦生命科学园等

Tabla 1 Shanghai's 1+5+X biomedical industrial spatial structure

4 Estrategias

Las respuestas fortalecen la estructura Zhangjiang I+D más fabricación en Shanghái, crean clústeres de servicios tecnológicos, mejoran entornos trabajo-vida e introducen gestión flexible según el ciclo empresarial.

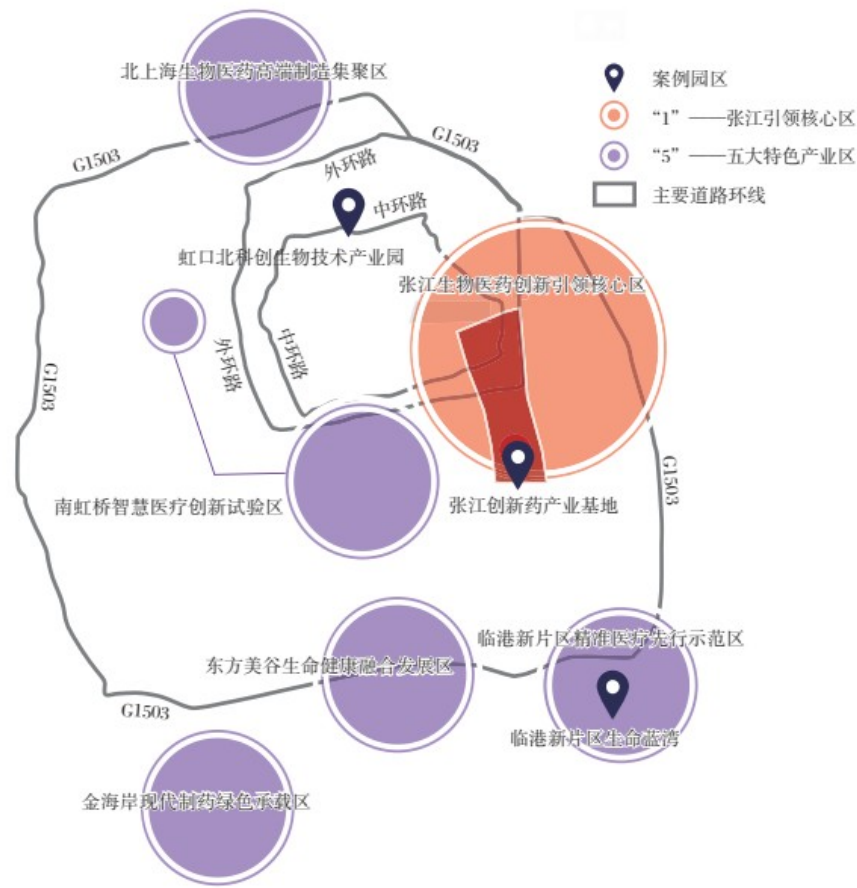


Fig. 3 Location of the three case parks within Shanghai's biomedical spatial structure

5 Conclusión

El caso muestra que la asignación de suelo para nuevas fuerzas productivas debe ajustarse por territorio, sector y ciclo de vida, no solo aumentar la oferta de suelo.

园区	建设时间	规划面积 / km ²	开发主体	空间区位	空间类型	发展阶段
张江创新药产业基地	2019年4月	3.13	张江集团	城市近郊	新建更新并存型, 张江核心区	成熟型
临港新片区生命蓝湾	2020年9月	4.39	临港集团 奉贤公司	城市远郊	新建型, 特色产业区	成长型
虹口北科创生物技术产业园	2024年4月	0.039	北科创集团	中心城区	更新型, 特色产业载体	起步型

Tabla 2 Overview of the three case parks

类型	名称	核心功能
园区	张江药谷	研发主导,兼具临床和注册上市、应用推广、国际交流、金融咨询等
	张江创新药产业基地	产业化为主,兼具研发服务、中试等
	临港新片区生命蓝湾	产业化为主,兼具研发服务、中试、出海等
	虹口北科创生物技术产业园	合成生物领域的CRO研发服务等
楼宇/集聚区	科研机构导向 徐汇枫林生命健康产业园、黄浦广慈—思南国家转化医学创新产业园区、环同济医学院生命健康总部基地等	临床研究、研发外包、中试孵化等
	商务环境导向 南京西路总部集聚区、淮海路—新天地总部集聚区、前滩总部集聚区等	总部研发为主,兼具营销展示、国际交流等
	特殊政策导向 外高桥医疗器械总部集聚区、新虹桥国际医学园区等	离岸研发、数据跨境流动、国际交流等

Tabla 3 Distribution of selected biomedical service spaces in Shanghai

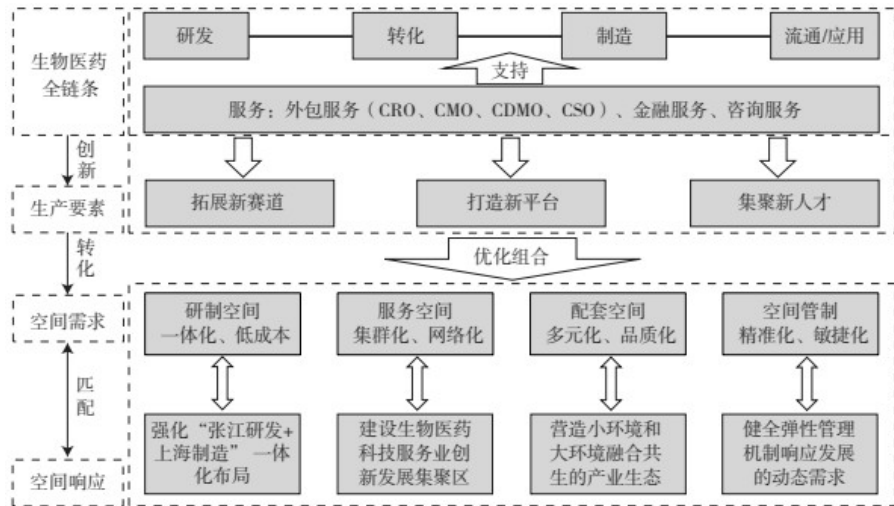


Fig. 4 Whole-chain biomedical innovation and the proposed spatial response

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