Patent: a powerful indicator to measure drug innovation

An example on anti-Alzheimer's drugs

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Alzheimer's disease (AD) is a serious illness with dramatically increasing incidence. Tremendous worldwide efforts have been exerted to find better ways to treat the disease, delay its onset, and prevent it from progressing. In order to discover future anti-AD medicines more rationally, it is crucial to understand the evolving process of existing related technologies from the perspective of technology flow. Patent citation has been broadly used as a powerful tool to capture technology flows. In this context, this research collects patent data of anti-AD drugs, both marketed and in the research and development (R&D) pipeline. It further constructs a patent citation network to visualize the technology flows within this domain. The research therefore provides an overall profile of technology flows of anti-AD drugs. In addition, it identifies and analyzes interactive associations and a temporal roadmap of technology clusters. Finally, it provides recommendations on anti-AD drugs for researchers, investors, and policymakers.