

Multidimensional Impacts of the Alzheimer's Drug Development Pipeline Publications

Integrating **bibliometric**, **Altmetric**, **policy**, and **patent** indicators reveals impact that citations alone miss. Thanks to advances in the application of **public records** and **AI**, the digital footprint of an academic series — and of its authors — can now be traced at scale, opening a far wider view of a body of work's **academic reach** and **real-world, practical implications**. Applied to the annual Alzheimer's **Drug Development Pipeline** series (**2014–2026**), this multidimensional lens captures influence spanning **academia**, **the public**, **policy**, and **industry** over the decade.

Scholarly citations • academic influence

Altmetric attention: news, social & blogs

Policy citations across 38 countries & IGOs

Patent citations from 25 holders worldwide

Positive social sentiment by 2023–25

Since 2016, the annual **Alzheimer's Disease Drug Development Pipeline (CTO Pipeline)** publication series has comprehensively characterized the AD clinical trial landscape by tracking therapeutic agents, mechanisms of action, and trends in drug development. As one of the most **highly cited and widely downloaded** resources in AD research, the series has informed **researchers, clinicians, industry, and policymakers** worldwide.

However, traditional citation metrics capture only a **portion** of its overall influence. In this study, we evaluated the **multidimensional impact** of the CTO Pipeline series (**2014–2026**) by examining scholarly citations, where and how the papers are cited, and their influence on policy and other indicators of research translation — to better understand how the series has shaped Alzheimer’s disease **research, policy, and translation**.

annual papers span 2014–2026 dimensions

The series. An annual review — launched 2014 (*“few candidates, frequent failures”*) — cataloguing every agent in active Alzheimer’s clinical trials each year; now a **field-standard reference** on AD drug development.

Why this case study. The CTO Pipeline publications were selected because they provide an **annual, longitudinal overview** of agents in active AD clinical trials. This analysis evaluated the **2014–2026** papers — **11 publications** tracking AD drug mechanisms of action, targets, trial phases, and development trends.

Each paper is profiled on five complementary dimensions, integrated into a single longitudinal impact profile per paper and across the series:

- 1 **Academic.** Citations (Google Scholar, Dimensions) + Mendeley readership.
- 2 **Public & media.** Altmetric attention — news, social media & blogs.
- 3 **Policy.** Sage Policy Profiles document citations + geographic mapping.
- 4 **Industry.** Patent-citation analysis linking research to commercial uptake.
- 5 **Temporal sentiment.** Longitudinal NLP of social-media mentions.

These impact measures likely **underestimate** the full influence of the CTO Pipeline series. Some readers and/or citations are **difficult to track**, policy or industry use may not always be clearly documented, and social-media or readership data can be **incomplete**. Older papers also have had **more time** to gain citations and attention.

- 1. Expand citation capture** by using additional databases, platform APIs, and AI-assisted tools to identify citations that may be missed by standard searches.
- 2. Improve tracking of policy and industry influence** by manually reviewing policy documents, patents, reports, and other sources where the CTO papers may be cited or used indirectly.
- 3. Develop a more automated pipeline** to update citation, readership, policy, patent, and media metrics over time as new CTO Pipeline papers are published.

Take-home: Impact is multidimensional — *beyond citations* reveals reach that traditional metrics miss.

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