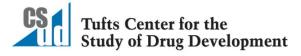
Tufts Center for the Study of Drug Development

Briefing

Cost of Developing a New

November 18, 2014



Tufts | School Medici

E-mail: C
Twitte
#

Dhai



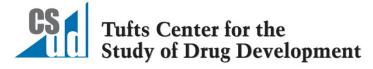


Innovation in the Pharmaceutical Industry: New Estimates of R&D Co

Joseph A. Di

Director of Ec

Tufts Center for the Study of D



R&D Cost S
Boston, MA, No

TUFTS UNIVERSITY



Study Coauthors

Henry G. Grabowski, Ph.D.

Professor Emeritus, Department of Economics Director, Program on Pharmaceutical and Health Economics Duke University

Ronald W. Hansen, Ph.D.

William H. Meckling Professor of Business Administration Senior Associate Dean for Program Development Simon Business School University of Rochester





Agenda

- " Main Finding
- Data and Methods
- Clinical approval rates, phase transition rates, and ou pocket costs per approved compound
- Development times, the discount rate, and capitalize per approved compound
- " Post-approval cost estimates
- R&D cost growth rates
- Cost drivers





Main Finding:

The estimated average pre-tax industry cost per new prescription drug approval (inclusive of failurand capital costs) is:

\$2,558 million





DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

