



Tufts Center for the Study of Drug Development

TUFTS UNIVERSITY

Impact REPORT

ANALYSIS AND INSIGHT INTO CRITICAL DRUG DEVELOPMENT ISSUES

Personalized medicine gains traction but still faces multiple challenges

Key hurdles relate to science, regulation, reimbursement, clinical adoption

- 13% of currently marketed drugs have pharmacogenomic information on the label, up from 10% in 2010.
- Biopharmaceutical firms said they expect investment in personalized medicines to increase 33% over the next 5 years.
- Oncology products continue to rank highest in terms of average share of personalized medicines in development across all phases, followed by neurology and cardiovascular drugs.
- Biomarker identification and diagnostic test development ranked highest in terms of scientific challenges, followed by regulatory and reimbursement issues.
- Physician unfamiliarity remains a barrier in the clinical adoption of personalized medicines, while proof of clinical utility poses a major reimbursement hurdle.