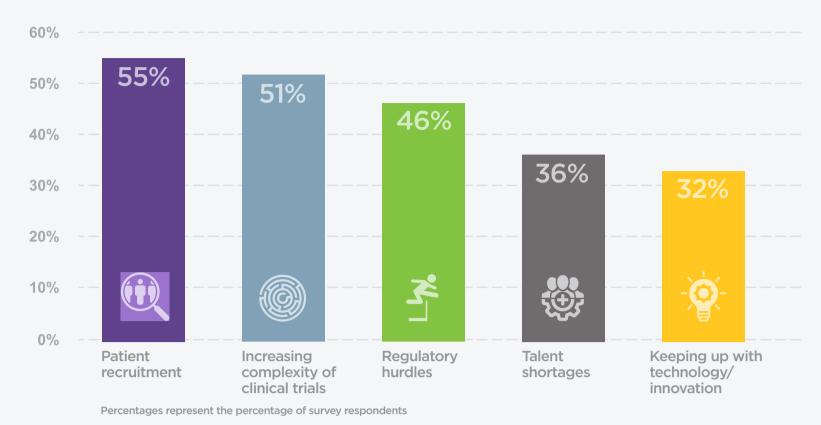
Organizational Challenges and Top **Opportunity Areas for Drug Developers**

Top 5 Challenges

PPD surveyed more than 150 drug developers worldwide to gather insights on the state of the drug development industry.



Drug developers reported that the COVID-19 pandemic and evolving industry landscape have created various disruptions, increasing challenges in executing clinical trials.



Patient recruitment, including patient retention and population diversity (55%)

Respondent quote:

"Clinical studies are becoming larger, longer and more complex, leading to increased competition for study centers and individual patients.'

Increasing complexity of clinical trials (51%)

Respondent quote:

"COVID-19 increased trial complexity to a new dimension."

Regulatory hurdles (46%)

Talent shortages (36%)

Keeping up with technology/innovation, including hybrid and decentralized trials (32%)

Top challenges based on company size:



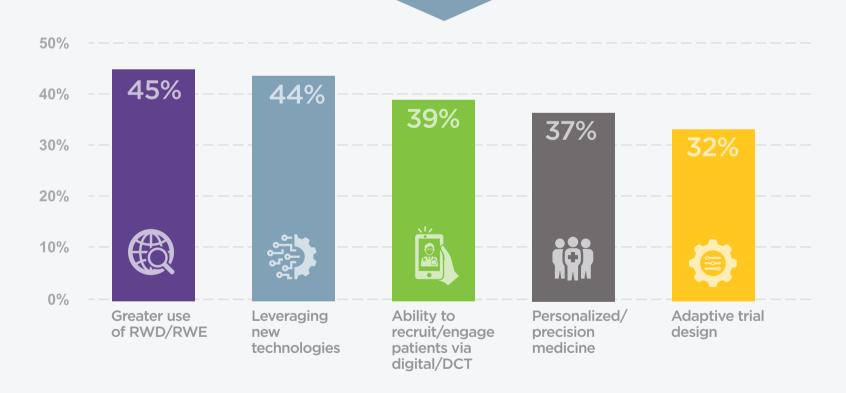
Biopharma Trial complexity



Biotech

Funding and elongated study startup times

Top 5 Opportunities



Greater use of real-world data (RWD) and real-world evidence (RWE) to complement data from clinical trials (45%)

Leveraging new technologies in drug development (e.g., mRNA, drug discovery platforms) (44%)

Ability to recruit/engage patients via digital/DCT (39%)

Personalized/precision medicine (37%)

Adaptive trial design (32%)

With the right expertise, insights and capabilities, biopharma and biotech companies can overcome the challenges listed above, advance clinical studies and bring therapies to market faster.

PPD, Thermo Fisher Scientific's clinical research business, is a leading global contract research organization focused on delivering life-changing therapies. Check out: **ppd.com/industry-trends**

