



*INNOVATION IN DRUG  
DEVELOPMENT:  
NAVIGATING THE  
OPTIONS*



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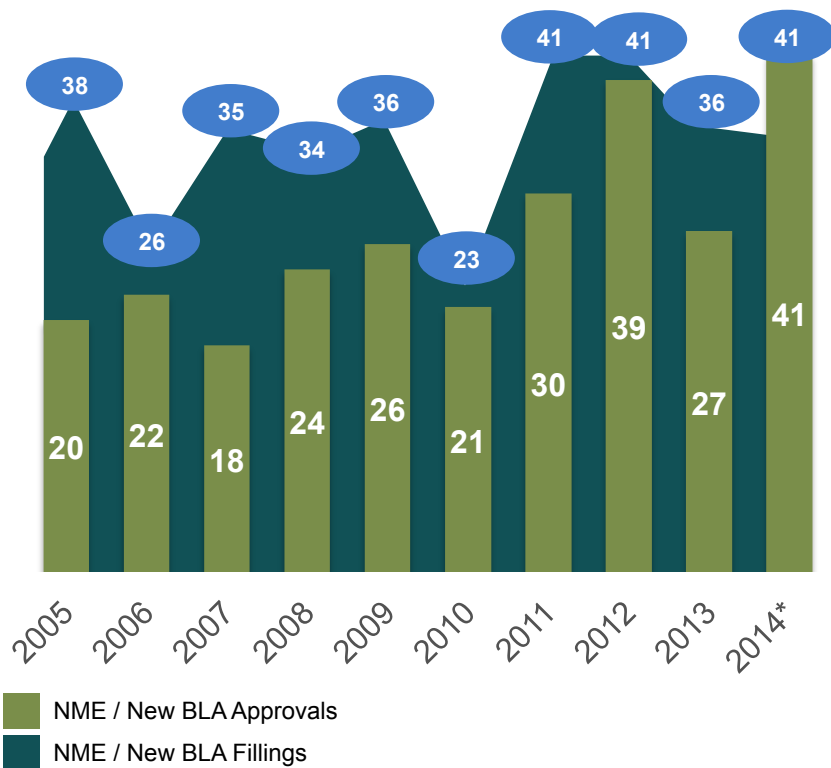
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## **Innovation in Drug Development: Navigating the Options**

# IMPROVING R&D PRODUCTIVITY REMAINS THE KEY OPPORTUNITY FOR THE INDUSTRY



After decades of decline in R & D productivity, recent data shows gradual improvement; Leveraging accelerated pathways is one of the more viable means of continuing this trend

Sources:  
 U.S. Food and Drug Administration, Center for Drug Evaluation and Research  
 "Novel New Drugs 2014 Summary," January 2015  
 Evaluate Pharma, BCG analysis

# FDA PROVIDES A NUMBER OF ACCELERATED PATHWAYS

	Qualifications	Benefits
<b>Fast track</b>	<ul style="list-style-type: none"> <li>• Serious condition AND</li> <li>• Demonstrate the potential to address unmet medical need OR</li> <li>• Designated as a QIDP</li> </ul>	<ul style="list-style-type: none"> <li>• Expedited development and review</li> <li>• Rolling review</li> </ul>
<b>Breakthrough therapy</b>	<ul style="list-style-type: none"> <li>• Serious condition AND</li> <li>• Substantial improvement over standard</li> </ul>	<ul style="list-style-type: none"> <li>• Expedited development and review</li> <li>• Rolling review</li> <li>• Guidance on efficient drug development</li> <li>• Organizational commitment</li> </ul>
<b>Accelerated approval</b>	<ul style="list-style-type: none"> <li>• Serious condition AND</li> <li>• Meaningful advantage over standard AND</li> <li>• Surrogate endpoint that is reasonably likely to predict clinical benefit</li> </ul>	<ul style="list-style-type: none"> <li>• Approval based on an effect on a surrogate or intermediate clinical endpoint</li> </ul>
<b>Priority review</b>	<ul style="list-style-type: none"> <li>• Serious condition AND</li> <li>• Improvement in safety or effectiveness OR</li> <li>• Designated as a QIDP OR</li> <li>• Priority review voucher</li> </ul>	<ul style="list-style-type: none"> <li>• Shorter clock for review of marketing application (6 month vs 10 month)</li> </ul>
<b>QIDP</b>	<ul style="list-style-type: none"> <li>• Serious condition AND</li> <li>• Antibacterial or antifungal drugs for human use</li> </ul>	<ul style="list-style-type: none"> <li>• Expedited development and review</li> <li>• Rolling review</li> <li>• Additional 5 year exclusivity</li> </ul>
<b>Orphan drug</b>	<ul style="list-style-type: none"> <li>• Serious condition AND</li> <li>• Rare medical condition AND</li> <li>• Lack of existing methods or treatment OR</li> <li>• Significant benefit to those affected by condition</li> </ul>	<ul style="list-style-type: none"> <li>• Tax incentives</li> <li>• Enhanced patent protection and marketing rights</li> <li>• Clinical research financial subsidization</li> <li>• Government assistance in development</li> </ul>