Optimizing Pharmaceutical Laboratory Efficiency and Productivity

Within the pharmaceutical industry, an immense pressure exists to progress potential therapeutic candidates through the pipeline quicker than ever before. With pharmaceutical laboratories being on the front-line of drug development, the pressure for lab leaders to optimize the speed and efficiency of their operation is a crucial element of this bigger picture.

When medicine has the potential to address critical unmet medical needs, the pharmaceutical laboratory’s need for speed becomes vital. When medicines have the potential to address critical unmet medical needs, the pharmaceutical laboratory’s need for speed becomes vital.

Promoting efficiency to improve lab productivity and economics

Drug discovery, development and delivery: a timeline

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<th>Stage</th>
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<td>Drug Discovery</td>
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<td>2</td>
<td>Preclinical Studies</td>
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Drug discovery, development and delivery can take 12 years on average. The average time from drug discovery to approval and market access is 12 years. Within the pharmaceutical industry, an immense pressure exists to progress potential therapeutic candidates through the pipeline quicker than ever before. With pharmaceutical laboratories being on the front-line of drug development, the pressure for lab leaders to optimize the speed and efficiency of their operation is a crucial element of this bigger picture.

What drives productivity pressures in pharmaceutical laboratories?

1. The Pharma Laboratory Leaders Survey tells us that:
   - 65% of lab leaders would welcome new innovations to increase laboratory efficiency
   - 70% of lab leaders say one of the most common strategies they use emerging to progress medicines through the pipeline quicker is improving document control of the samples as fast as possible
   - 83% of lab leaders found their current workflow requires optimization

2. Key facts:
   - In 2019, Agilent partnered with market research company Frost & Sullivan in India, Japan, China, South Korea and USA to run an independent, blinded survey to better understand the challenges, pain points and future of the pharmaceutical laboratory leaders.
   - The Pharma Laboratory Leaders Survey targeted laboratory leaders: Agilent Technologies partnered with market research company Frost & Sullivan in India, Japan, China, South Korea and USA to run an independent, blinded survey to better understand the challenges, pain points and future of the pharmaceutical laboratory leaders.

3. Who was surveyed?
   - Laboratory leaders working in bio-tech and CRO laboratories
   - Lab leaders working in big pharma
   - Lab leaders working in small and medium sized companies
   - Lab leaders working in government

4. How many leaders were surveyed?
   - 650 lab leaders, globally

5. From which countries?
   - Germany, Switzerland, Austria, India, China, South Korea, USA

6. What was the objective of the survey?
   - To better understand the challenges, pain points and future of the pharmaceutical laboratory leaders

7. To learn more about Agilent solutions visit: www.agilent.com

Innovations to increase sample throughput
- Improving document control of the samples
- Other strategies include new methodologies to increase sample throughput
- By finding ways to improve efficiencies, standardize workflows and aid laboratory leaders in meeting their organizational and personal goals... quickly!