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# Innovations in Pharmaceutical Manufacturing on the Horizon: A Virtual Dissemination Workshop

28 - 29 Oct 2021

Poll results

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- 4. Which of these innovations do you believe will have the greatest opportunity to advance pharmaceutical manufacturing?
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Welcome (1/3)

060

## 1. Which sector do you identify with?

Pharma Industry



22 %

Biopharma industry



28 %

Academia



13 %

Government



23 %

other



13 %

Welcome (2/3)

058

## 2. What level of engagement did you have with the report?

Read the full report



Read the report summary only



Skimmed over the report and/or summary



On the to-do list



Welcome (3/3)

059

### 3. Did you find the report relevant to your field?

Very much so



Somewhat



Not at all



Not yet in a position to comment



**4. Which of these innovations do you believe will have the greatest opportunity to advance pharmaceutical manufacturing?**

(1/2)

0 4 2

New routes to drug substances

2 %

Co-processed active pharmaceutical ingredients

5 %

Continuous manufacturing

17 %

Process intensification

29 %

Additive Manufacturing

0 %

**4. Which of these innovations do you believe will have the greatest opportunity to advance pharmaceutical manufacturing?**  
(2/2)

0 4 2

Advanced process control and automation



Modeling and digital designs



Modular system





Session 2 (1/5)

0 4 2

**5. To what extent do you believe that innovation in pharmaceutical manufacturing can be accelerated by changes in regulatory policy, procedures, practices or cultures?**

Large extent



Some extent



Little extent



No extent



Session 2 (2/5)

042

**6. Which type of regulatory changes do you believe can best enable innovation:**

Regulations



Guidance



Review practices



Workforce training



None of the above



Session 2 (3/5)

0 4 3

**7. To what extent do you believe that  
pharmaceutical innovation can be enabled by  
INDUSTRY practices?**

Large extent



Some extent



Little extent



No extent



Session 2 (4/5)

0 4 2

## 8. Which industry practices would be most impactful to enable innovation?

Greater willingness to accept risk



Greater transparency regarding manufacturing innovation activities



Increased pre-competitive collaboration to substantially de-risk implementation



increased recognition of manufacturing as a value-driver



Session 2 (5/5)

0 4 3

**9. To what extent do you believe that pharmaceutical innovation can be enabled by ACADEMIC practices?**

Large extent



Some extent



Little extent



No extent



Session 3 (1/2)

030

## 10. Which of these key considerations matters most to you in relation to implementing innovations?

(1/2)

Risk of disrupting timeliness



50 %

Risk in extensive and expensive efforts to gain regulatory approval



37 %

Risk for substantial post-approval commitments



3 %

Uncertainties regarding business case



3 %

Access to trained personnel



3 %

Session 3 (1/2)

030

**10. Which of these key considerations matters most to you in relation to implementing innovations?**

(2/2)

Other

 3 %

Session 3 (2/2)

030

**11. In your opinion, which of the regulatory risks is more influential than the rest in business decisions related to innovations in manufacturing processes?**

Protracted regulatory reviews



Clarity and consistency in the evaluation of residual risk to product quality



Satisfying regulators across different geographic areas

