15 November 2022
EMA/601355/2021

Agenda – Joint EMA-FDA Workshop:

Efficacy of monoclonal antibodies in the context of rapidly evolving SARS-CoV-2 variants

15th December 2022, 13:00 – 17:00 (WEBEX)

Objectives:

- To bring together the expertise of academics, clinicians, industry and regulatory bodies to address the acceptability and challenges of alternative strategies to support the development of novel monoclonal antibody therapies including those based on prototype products that have demonstrated safety and efficacy in clinical trials.
- To discuss the current evidence for the use of surrogates of clinical efficacy (e.g., neutralisation titers, PK/PD modelling, viral load) to support the activity of already approved/authorised monoclonals and the development of novel monoclonal antibodies against variants of concern.
- Foster potential way(s) forward to support the development of novel monoclonal antibody therapies

Scientific Programm:

Chairs: Marco Cavaleri (EMA) and Adam Sherwat (FDA)

Item	Agenda		Time
Introduction Remarks			
1.	Problem statement presentation • Regulatory challenges • Fast evolution of VOCs with immune evasion capacity • Feasibility of clinical trials in the dynamic epidemiological situation	**Adam Sherwat (FDA)** **Marco Cavaleri (EMA)**	10 min
Current evidence and potential ways forward			
2.	Overview of the clinical trials that led to the authorisation or EU-approval of monoclonal antibody therapies	**Eugenia Di Meco (EMA)**	10 min
3.	Overview of data on neutralization activities of monoclonal antibodies against Variants of Concern (VoC)	**Daniel Sheward (Karolinska Institute,**	10 min

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4.	Utility of virologic assessments as a marker of progression to severe disease based on data from the ACTIV-2 trial	**Michael Hughes (Harvard School of Public Health; US)**	10 min
5.	PK/PD modelling approach: strengths and weaknesses	**Tim Bensman (FDA)**	15 min
6.	Evidence in support of the use of serum neutralisation data to justify a dose increase of monoclonal antibodies to tackle new variants	**Timothée Bruel (Institute Pasteur, FR)**	10 min
7.	Cross validation between variants: What have we learned from vaccine studies	**Peter Gilbert (Fred Hutchinson Cancer Center, US)**	10 min
8.	Correlation between protection and *ex-vivo* neutralization in the context of pre-exposure prophylaxis	**Dean Follmann (NIAID, US)**	15 min
Break 10-15 minutes			
9.	Correlates of protection using a neutralisation approach	**Miles Davenport (Kirby Institute, AUS)**	15 min
10.	Considerations regarding assessment of a modified mAb product related to a prototype mAb product in addressing emerging SARS-CoV-2 variants – a CMC perspective	**Joanna Zhou (FDA)**	10 min
11.	Industry perspective on potential methodological approaches (e.g., utilization of neutralization titers, PK/PD modeling) to predict or assess the clinical efficacy of novel monoclonal antibodies (including those based on prototype products that have demonstrated safety and efficacy in clinical trials)	**Industry**	30-45 min
Discussion			
12.	Open discussion on potential way forward 1. What are the strengths and weaknesses of the following modalities for bridging efficacy from a monoclonal antibody (mAb) product that has already demonstrated safety and efficacy in clinical trials to a new mAb product? ○ Immunobridging approaches based on serum neutralization titres (SNT) ○ PK\PD modelling ○ Pharmacodynamic markers ○ Others 2. What are the are the advantages and disadvantages of comparing the activity of a new product against current circulating variants to the activity of a prior product against variants that were in circulation during the clinical trial that demonstrated efficacy of the prior product?	**Contribution of all participants**	60 min

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	3. What are potential way(s) forward for development of new mAb products that are not based on mAb products/platforms that have already demonstrated safety and efficacy in clinical trials? 4. Please comment on whether there are different considerations for developing products for prophylaxis vs treatment. **Chairs:** Marco Cavaleri (EMA) Adam Sherwat (FDA)		
Closing Remarks			
13.	**Summary of actions and next steps** Close of meeting	**Marco Cavaleri (EMA)** **John Farley (FDA)**	5 min