Joint BWP / QWP workshop with stakeholders in relation to **prior knowledge and its use in regulatory applications**

How to Use Prior Knowledge in Defining the Control Strategy

EMA, London; 23 November 2017

efpia
European Federation of Pharmaceutical Industries and Associations

ebe
european biopharmaceutical enterprises

Vaccines Europe
An industry for healthy lives

medicines for europe
better access. better health.

EMA Prior Knowledge Workshop

Case study
Use of Prior Knowledge to Support Specification Setting for a Multivalent Vaccine

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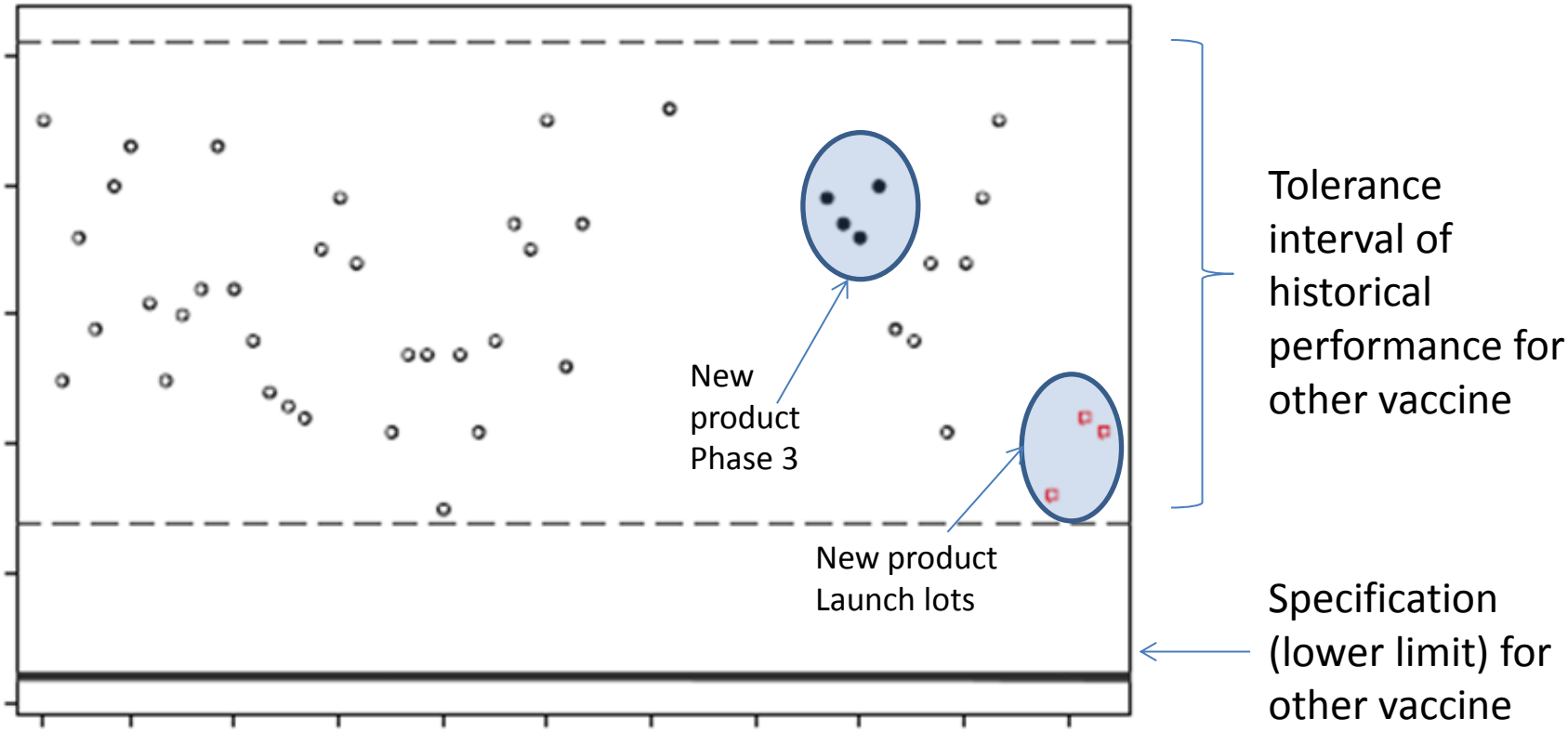
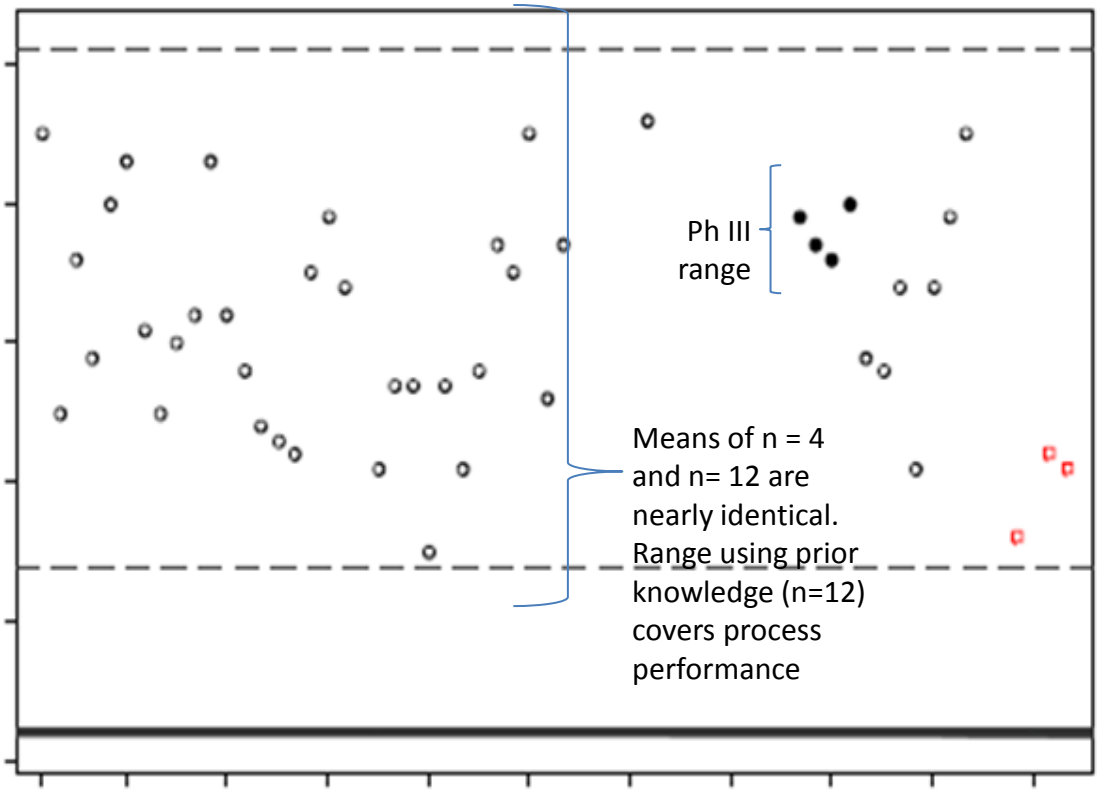
Acknowledgements:
Nancy Cauwenberghs, Director Regulatory Affairs, Vaccines **(Presenter)**

Case Study: For new multivalent vaccine using drug substance from existing vaccine, Phase III lots exhibit release test with tighter distribution than historical process performance.



Problem: Setting a specification based solely on Ph III experience would result in tight specification and rejection of launch lots within historical performance

Solution: use prior knowledge of process performance, including clinical studies on other vaccine



To support clinical relevance of a wider specification, supplement the Ph III data set (n=4) with batches from clinical trials of previously approved product (n = 12). *(N=12 data not shown)*

Using only new vaccine's Ph III data would have created too narrow a range, resulting in discard of launch materials.

Solution was accepted during MAA question and answer period.

Use of Prior Knowledge allows for rationale specification setting

- Case study is illustrates key message from the general considerations

Use of prior knowledge allows setting specifications beyond clinical exposure for new product while maintaining assurance of patient safety and efficacy.

- It allows minimizing differences in specifications across agencies and across products.

- It prevents unnecessary write offs and avoiding vaccines shortages stemming from specifications which do not cover process performance.

Points for Consideration: How to include prior knowledge in MAA?

1. Include reference to product where prior knowledge resides?
   - Not a full solution - Depending on age of information being referenced, the data may be hard for regulators to locate, especially across multiple products, and may be impossible if the referenced product is not approved in the desired market.
2. Include basic summary statistics of prior knowledge?
   - May not provide adequate context of data applicability to new product.
3. Include graphical presentation of prior knowledge, designating the data sourced from prior knowledge vs new product data?
   - **Preferred solution**. Provides information in easily interpretable fashion.
4. Include full tabular version of prior knowledge
   - Most complete solution, but may be challenging to respond within Q&A timeframe if data resides in legacy systems (retired computer systems, paper notebooks, etc.) which are hard to access quickly.

In our case study, we used a combination of these measures