

## Training Course Agenda

# PDA EU00191 CMC Regulatory Compliance Strategy for Recombinant Proteins, Monoclonal Antibodies and Biosimilars

DAY 1 – Thursday 26 September 2024	
9:00	<b>Welcome and Introduction</b> <ul style="list-style-type: none"> <li>Collecting Participants Expectations</li> </ul>
9:10	<b>Challenges from the Protein-Based Biopharmaceutical Landscape (90 min)</b> <ul style="list-style-type: none"> <li>Discussion of the CMC challenges due to the increasing diversity of these market-approved biopharmaceuticals (rProteins, mAbs, BsAbs, Fc fusion proteins, Fab fragments, ADCs, biosimilars)</li> <li>The critical role that Genetic/Process/Analytical Development groups, Manufacturing, QA/QC and Regulatory Affairs have in assuring that CMC regulatory compliance protects patients</li> </ul>
10:30	<i>Coffee Break</i>
11:00	<b>CMC Regulatory Compliance Differences (90 min)</b> <ul style="list-style-type: none"> <li>Overview of the FDA/EMA regulatory systems in place for these products (IND → BLA; IMPD → MAA)</li> <li>Why these products are not regulated like chemical drugs</li> </ul>
12:30	<i>Lunch Break</i>
13:30	<b>Risk-Managed CMC Regulatory Compliance Strategy (90 min)</b> <ul style="list-style-type: none"> <li>Why a risk-managed approach to CMC regulatory compliance is absolutely necessary for these products</li> <li>Introduction to the '<u>Minimum</u> CMC Regulatory Compliance <u>Continuum</u>' risk-based approach</li> </ul>
15:00	<i>Coffee Break</i>
15:30	<b>Recommended Risk-Based Approach for Biopharmaceuticals (90 min)</b> <ul style="list-style-type: none"> <li>How three interactive risk-based components protect patients – CMC Regulatory, cGMPS, Quality System</li> <li>Application of Quality by Design (QbD) – QTPP, CQA, CPP – and Quality Risk Management (QRM)</li> </ul>
17:00	<i>End of Training Course Day 1</i>

**DAY 2 – Friday 27 September 2024**

9:00	<p><b><u>Applied</u> Risk-Managed CMC Regulatory Compliance Strategy Across the Manufacturing Process (90 min)</b></p> <ul style="list-style-type: none"> <li>• Raw materials and components – risk reduction procedures</li> <li>• Starting materials (MCB/WCB)</li> <li>• Upstream cell culture production processes</li> </ul>
10:30	<i>Coffee Break</i>
11:00	<p><b><u>Applied</u> Risk-Managed CMC Regulatory Compliance Strategy Across the Manufacturing Process (90 min)</b></p> <ul style="list-style-type: none"> <li>• Downstream purification processes to the bulk drug substance stage</li> <li>• Conjugation of the drug substance (pegylation, antibody-drug conjugates (ADCs))</li> <li>• Formulation and drug product manufacturing processes</li> <li>• Administering the final drug product prepared in the clinic</li> </ul>
12:30	<i>Lunch Break</i>
13:30	<p><b>Challenges in Demonstrating Product Comparability After Manufacturing Changes (90 min)</b></p> <ul style="list-style-type: none"> <li>• Regulatory authority guidance in planning for product comparability studies</li> <li>• Three risk-based considerations to reduce residual uncertainty of product comparability</li> <li>• Biosimilarity and interchangeability for biosimilars</li> <li>• Industry experience in implementing product comparability after manufacturing process changes</li> </ul>
15:00	<i>Coffee Break</i>
15:30	<p><b>Critical Manufacturing/Quality-Focused Meetings with Regulatory Authorities (90 min)</b></p> <ul style="list-style-type: none"> <li>• CMC regulatory compliance deficiencies can seriously delay clinical development advancement</li> <li>• Meeting opportunities with regulatory authorities for biopharmaceuticals</li> <li>• Intensity of the regulatory authority review process to obtain market approval</li> </ul>
16:30	<b>Q&amp;A</b>
17:00	<i>End of Training Course</i>