



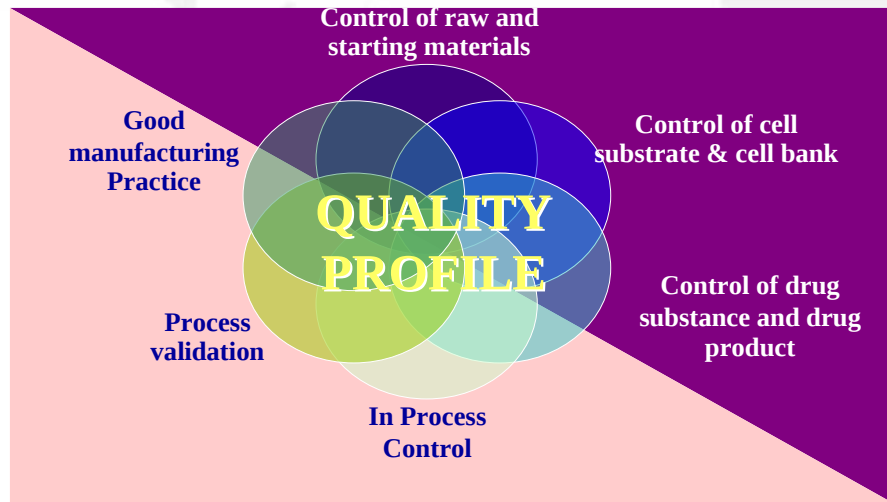
Comparability

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Disclaimer:

- **The information within this presentation is based on the presenter's expertise and experience, and represents the views of the presenter for the purposes of a training workshop.**

Product A / Process A

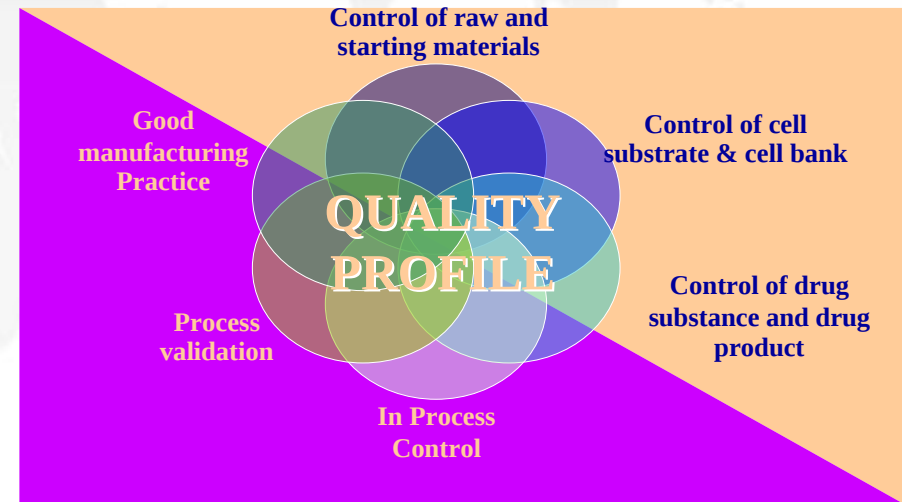
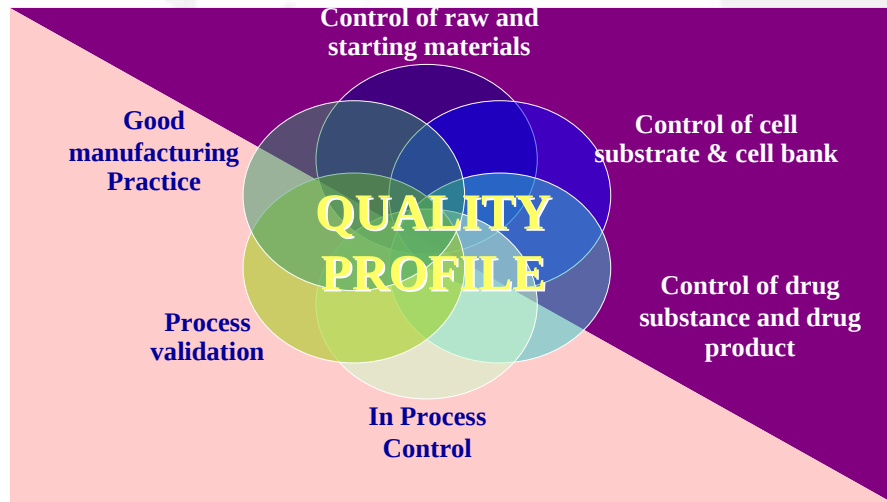


Safety & Efficacy profiles

A

Product A1 / Process A1

Product A2 / Process A2



Safety & Efficacy profiles

A1



Safety & Efficacy profiles

A2



Comparability (ICH Q5E)

- **Comparability exercise:**
 - Goal: to ascertain that pre- and post-change drug product is comparable in terms of quality, safety, and efficacy.
- **Demonstration of comparability:**
 - Does not necessarily mean that the quality attributes of the pre-change and post-change products are identical but highly similar
 - Ensure that differences in quality attributes have no adverse impact upon safety or efficacy of the drug product.
 - Based on combination of analytical testing, biological assays $\pm$ nonclinical and clinical data

Comparability (ICH Q5E)

Evaluation of Quality attributes

no difference observed

- Q “highly similar” & no doubt on analytical procedure
- No impact on S/E foreseen

considered comparable

- Q “highly similar” but doubt on analytical procedure

consider non-clinical/
clinical studies

differences observed

- Q “highly similar” but differences observed
- No impact on S/E expected based on experience & relevant data

may be considered comparable

- Q “highly similar” but differences observed
- Impact on S/E cannot be excluded

consider non-clinical/
clinical studies

- Q significant differences

Not comparable /
out of scope

Comparability (ICH Q5E)

- **Comparability exercise: Extent of data depend on:**
 - Step where the change is introduced
 - Potential impact of the change
 - Suitability of analytical techniques
 - Knowledge of the product & relationship between quality attributes and safety and efficacy
- **Determination of comparability**
 - Combination of analytical testing, biological assays, non-clinical and clinical data in some cases
 - Demonstration of highly similar Quality profiles
 - validation batches, recent batches
 - historical results, sample library
 - stability profile
 - Justification of the suitability of the methods
 - appropriately selected to maximize the potential of detecting differences
 - specification: may not be sufficient
 - characterization: may be required

Comparability (ICH Q5E)

- **Manufacturing process considerations**
 - Well defined process + controls :
 - Assurance that product is produced in a consistent basis
 - Suitability of controls: confirm that process controls in the modified process provide similar or more effective control of the product quality, compared to the original process

Comparability (ICH Q5E)

- **Comparability exercises during development:**
 - Generally performed to demonstrate that nonclinical / clinical data generated with pre- and post-change products are applicable
 - Takes into consideration stage of development, availability of analytical procedures and the available experience
 - If change introduced before non-clinical studies: generally not an issue
 - If introduced in late stages: may be as comprehensive and thorough as the one conducted for an approved product



Thank You!