



GRRMDP

Global Regulatory requirements for Good Manufacturing and Distribution practices in Pharmaceutical /Biopharma industries

Only WHO guidelines are available for hold time studies. Rest as below:

EMA Guidelines:

The European Medicines Agency (EMA) emphasizes that hold time studies should be performed during the development phase on pilot-scale batches and confirmed during the process validation of commercial-scale processing.

- The guidelines require that the maximum storage period for bulk products be declared in the marketing authorization application (MAA). If the storage exceeds 30 days, stability data must be provided to support the chosen bulk packaging.

The U.S. FDA guidelines:

for hold time studies emphasize the importance of establishing maximum allowable hold times for in-process and bulk drug products to ensure product quality and stability.

Attached WHO guidelines