



ABSTRACT

Review Article

A REVIEW ON QUALITY BY DESIGN (QbD) APPROACH IN PHARMACEUTICAL DRUG DEVELOPMENT

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A novel idea called Quality by Design (QbD) has been developed to improve the quality of pharmaceutical goods. It is a crucial component of the contemporary strategy for pharmaceutical quality, notwithstanding inherent process and material variability. Although QbD is the greatest means to ensure quality in all pharmaceutical goods, it also presents a significant barrier for the sector because its processes are set in stone. It is crucial to specify the desired product presentation profile [Target Product Profile (TPP), Target Product Quality Profile (TPQP)] and identify key quality attributes (CQA) within this idea of QbD during the creation and growth of a product. An emerging concept called QbD provides pharmaceutical manufacturers with better self-regulated flexibility. The article discusses the pharmaceutical QbD technique and how it may be used to the development of the pharmaceutical product in the context of drug development.

Key words: Quality by Design (QbD) ;Target product Quality Profile (TPQP);Critical Quality Attributes(CQAs); Pharmaceutical quality by design; process understanding; Design space

www.pharmaerudition.org Aug. 2022, 11(2), 1-13