

Stability Analysis

Stability analysis is a very interesting field in pre-formulation research. Under the influence of various environmental factors (such as temperature, humidity, and light), the stability of active pharmaceutical ingredients (API) or the stability of pharmaceutical products is evaluated. This is helpful to study the internal stability of candidate drug molecules and obtain useful information, it is important to improve the integrity of pharmaceutical products and prevent changes in their physical, chemical and pharmacological properties.



CD Formulation can provide you with stability analysis services of active ingredients and excipients, and our scientists will help you to make a decision for operational and procedural conditions that can ensure the physical and chemical stability and pharmacological activity of the product to minimize potential formulation and stability issues.

Why Stability Analysis in Pre-formulation Research?

- Generate useful information of environmental factors (e.g., temperature, light, humidity etc.) that influence the quality of drug products.
- Establish the chemical, physical and microbiological changes how to influence the effectiveness, stability and safety of the final drug product.

- Establish storage conditions

Our Stability Analysis Services

- Solid-state stability analysis
- Solution-state stability analysis
- APIs-excipients compatibility analysis

Our Methods for Stability Analysis

- Thermogravimetric Analysis (TG)
- Raman Spectroscopy
- FT-IR Spectroscopy
- Differential Scanning Calorimetry (DSC)
- High-performance Liquid Chromatography (HPLC)
- X-ray Diffraction

Deliverable

- Data analysis
- Provide full study report

How to Contact Us?

If you have a requirement about stability analysis services, please contact us by phone or email, our colleagues will reply to you within three working days.

References

1. Moisei A, Gligor F, Bojiță M, *et al.* Compatibility and Stability Studies of Antihypertensive/Excipients by Thermal Methods, Used in the Preformulation Phase[J]. *Farmacia*, 2014, 62(6): 1239-1248.

2. Bynum K C. Preformulation and Early Phase Method Development[M]//*Separation Science and Technology. Academic Press, 2011, 10: 361-396.*