



National Institute of  
Pharmaceutical Education  
& Research (NIPER)



*National Institute of Pharmaceutical Education and Research (NIPER), SAS Nagar is the first National Level Institute in pharmaceutical Sciences with a proclaimed objective of becoming a centre of excellence for advanced studies and research in pharmaceutical sciences. The Government of India has declared NIPER as an "Institute of National Importance". It is an autonomous body set up in total area of 130 acres under the aegis of Ministry of Chemicals and Fertilizers, Government of India. The institute is conceived to provide leadership in pharmaceutical sciences and related areas as related areas. NIPER is the first Govt. Institute to have OECD GLP Certification in India. NIPER has been ranked first by MHRD in NIRF-2018 ranking in pharmacy category in India.*

**Contact Details:**

Dr Dipika Bansal, MBBS, MD, DM  
Assistant Professor, Clinical Research Unit, Department of Pharmacy Practice,  
Incharge NBC, NIPER, Mohali. Email: [dipikabansal@niper.ac.in](mailto:dipikabansal@niper.ac.in)  
For further detail on training programme check the NIPER website ([www.niper.gov.in](http://www.niper.gov.in))

Sector-67, SAS Nagar (Mohali) 160062  
0172- 2214682-87, 2292000 Ext. 2145, 2146

**National Bioavailability Centre**  
**NIPER, Mohali (India)**  
Fundamental of Bioavailability Bioequivalence studies: A  
Practical and Scientific approach  
**2019**

## NATIONAL BIOAVAILABILITY CENTRE (NBC)

NIPER being leading institute in Pharmaceutical Sciences in India, took initiative and set up NBC in 1998. The Centre is equipped with all the requirements including a 24 bedded facility for conducting the Bioavailability and Bioequivalence studies.



## BIOAVAILABILITY AND BIOEQUIVALENCE

Bioavailability (BA) is the rate and extent to which active ingredient is absorbed from a drug product and is available at the site of action. Bioequivalence (BE) is defined as the property wherein two drugs with identical active ingredient or two different dosage forms of the same drug possess similar BA when administered at the same molar dose under similar conditions in an appropriately designed study.

Bioequivalence testing plays a vital role in generic drug development. Pharmaceutically equivalent multi-source pharmaceutical products must be shown to be Bioequivalent to one another in order to be considered interchangeable.

## **Title: Fundamentals of Bioavailability and Bioequivalence studies: A Practical and Scientific approach**

### **Topics covered:**

1. Conceptualizing BA/BE Studies
2. Recruitment and Screening of Human Volunteers
3. Plan and Conduct of BA/BE studies-Dosing, Blood Sampling Techniques, Plasma Separation, Archival of BAE Data

### **This training shall be organized keeping in view of the following audience:**

- M.Pharm/Ph.D Students in Pharmacology/Clinical Research/ Hospital Pharmacy/ Pharmaceutics

- Students/Personnel interested in Practical conduct of BA/BE studies

- B. Pharm/Pharm D students (3rd / 4th year)

**Training fee:** Rs 20,000/- for a batch of 20-25 students

**Duration of Training:** 4-5 hours

### **Course Faculty**

- Introduction of Staff and BA/BE studies - Dr. Dipika Bansal

- Basics, Concept and requirements of BAE studies in India - Dr. Amit Kondal

- Practical Session-I- Conducting BA/BE studies - Mr. Inderjit Singh/Dr. Dipika Bansal

- Practical Session-II- Conducting BA/BE studies - Ms Kanwaljit Kaur/Dr. Amit Kondal

- Practical Session-III- Conducting BA/BE studies - Mr. Shantaram R. Bhade/Dr. Dipika Bansal

- Conclusion

- Question & Answer session

### **Other Facilities**

The Centre has Audiovisual consenting, Volunteer Tracking Reader & Scanner, HIV counseling room, Clinical examination room, ICU, Archiving, Pharmacy and Quality Assurance facilities for BA/BE studies.