

## **Circular**

Date: 24/01/2025

Dear students,

We are pleased to announce that the session based on the significance and application of PK/PD studies in Clinical research will take place with the following details.

Name of Resource Person: Mr. Sagar Thakkar, Project Manager, Axis Clinicals Ltd., Ahmedabad, Gujarat.

Date: 25/01/2025

Time: 10:00 a.m. to 11:00 a.m.

Venue: L. J. Institute of Pharmacy

Kindly remain present during the session.

Regards

Dr. Shreeraj Shah

Director and Principal, LJIP

A comprehensive report on PIILLS  
session organized by  
L.J. INSTITUTE OF PHARMACY



*Internal Quality Assurance Cell (IQAC)*  
*of*

***L.J. Institute of Pharmacy***

(PCI & DSIR Approved, NBA Accredited (B.Pharm Program), ESTD: 2004)

*Organizes*

**PHARMACY-INDUSTRY INSTITUTE LINKED LECTURE SERIES**  
**(PIILLS)**

**“Significance and Application of PK/PD Studies  
in Clinical Research”**

25<sup>th</sup> January 2025 (Saturday) | Time – 10:00 to 11:00 AM

**Mr. SAGAR THAKKAR**

Axis Clinicals Ltd.,  
Ahmedabad, Gujarat, India  
Designation: Project Manager

(Clinical Research , Medical Monitoring, Data Management  
and Cross-functional leadership)



**VENUE:**

**ROOM NO. 319 , 3<sup>RD</sup> FLOOR, LJIP AUDITORIUM**



**Date:** January 25, 2025

**Time:** 10:00 AM to 11:00 AM

**Venue:** LJIP Auditorium

The L.J. Institute of Pharmacy (LJIP) conducted a thought-provoking and enlightening session as part of its PIILLS (Pharmacy Industry-Institute Linked Lecture Series) initiative on January 25, 2025. This session, focusing on the "Significance and Application of PK/PD Studies in Clinical Research," was led by Mr. Sagar Thakkar, a distinguished Project Manager at Axis Clinicals Ltd. Approximately 100 students and 10 faculty members attended the session, highlighting the keen interest of the LJIP community in advancing their understanding of clinical research.

### **Inauguration and Welcome**

The event commenced at 10:00 AM with an official inaugural ceremony. Dr. Dipa Israni, Head of the Department of Pharmacology at LJIP, welcomed Mr. Sagar Thakkar with a heartfelt address. As a gesture of respect and cultural significance, Dr. Israni presented Mr. Thakkar with a holy Tulsi pot, symbolizing purity and growth. This gesture reflected the institute's emphasis on blending traditional values with modern educational practices.

### **Key Highlights of the Lecture**

Mr. Thakkar's presentation delved deeply into the foundational principles of Pharmacokinetics (PK) and Pharmacodynamics (PD), elucidating their vital roles in clinical research. The session was structured to cover:

- **Drug Response Curve (DRC):** Mr. Thakkar detailed how the relationship between drug concentration and its effect can guide dosage determination and therapeutic windows.
- **Absorption, Distribution, Metabolism, and Excretion (ADME):** He explained these pharmacokinetic processes with practical relevance, emphasizing how they affect drug action.
- **Potency and Efficacy:** The differentiation between the strength of a drug's effect and its maximum achievable effect was discussed in detail, with clinical correlations.
- **Bioavailability:** The importance of ensuring that an adequate amount of the drug reaches systemic circulation was highlighted, with examples from clinical studies.

Mr. Thakkar employed a blend of theoretical explanations and practical examples, which helped bridge the gap between academic concepts and their real-world applications. Notable examples included comparisons of pharmacokinetic and pharmacodynamic profiles in Schizophrenia and Cancer patients, showcasing how PK/PD studies tailor treatments to individual patient needs.

## **Enhancing Practical Understanding**

The interactive format of the session added significant value to the learning experience. Mr. Thakkar actively engaged the audience by:

1. **Encouraging Participation:** Students were invited to share their interpretations and pose questions, fostering a collaborative learning environment.
2. **Live Examples:** He presented clinical scenarios, such as drug dose adjustments for oncology and psychiatric conditions, to clarify complex topics.
3. **Simplified Explanations:** Complex terminologies and concepts were broken down into simpler terms, ensuring clarity and comprehension.

The use of relatable examples and case studies underscored the importance of PK/PD studies in optimizing drug development and ensuring patient safety.

## **Q&A Session and Student Interaction**

The concluding segment of the session featured a dynamic Q&A round, where students and faculty members explored various facets of PK/PD applications. Queries ranged from the role of PK/PD in early-phase clinical trials to its impact on personalized medicine. Mr. Thakkar's patient and detailed responses gave attendees a comprehensive understanding and actionable insights. His approachable demeanor and willingness to address even intricate questions were greatly appreciated.

## **Concluding Remarks**

The session wrapped up at 11:00 AM with a vote of thanks delivered by the event organizers. Faculty members and students expressed their gratitude to Mr. Sagar Thakkar for his enlightening lecture, which enriched their knowledge and provided practical perspectives on the application of PK/PD studies in clinical research.

This PIILLS session reaffirmed LJIP's commitment to academic excellence and its role in bridging the gap between theoretical education and industry practices. It left the attendees inspired, motivated, and better equipped to pursue their academic and professional aspirations.

The institute looks forward to organizing more such sessions under the PIILLS initiative to continue fostering innovation and learning within the pharmacy field.

