



CASE-STUDY:

# Overcoming Challenges in a Bioequivalence Assessment Study of Octreotide Acetate Injection

## Study Details



The study aimed to compare the bioavailability and characterize the pharmacokinetic profile of Octreotide Acetate Microspheres for intramuscular Injection (30 mg), with the reference product.

An open-label, balanced, randomized, two-treatment, single-period, parallel, single-dose bioequivalence study was carried out by Lambda in normal healthy adult male subjects under fasting conditions. The study was sponsored by a prominent pharmaceutical company in China and intended for submission to the US FDA, adhering to the necessary standards.

# Challenges Overcame



Challenges	Solutions
<p><b>Long-duration study having multiple ambulatory visits for post dose PK sampling lasting spanning nearly 6 months.</b></p>	<p>The extensive experience in conducting studies of extended duration played a pivotal role in substantially reducing incidents of subject non-reporting. This was achieved through diligent adherence to timely follow-ups and effective communication strategies with the study participants, resulting in heightened compliance levels.</p>
<p><b>High sample size</b></p>	<p>A qualified, trained, and highly experienced study team was employed to handle all logistics with precision, ensuring consistent on-time execution of study-related activities. This approach guaranteed strict adherence to timelines and efficient management of tasks, particularly in relation to the timely collection of samples.</p>

# Challenges Overcame



Challenges	Solutions
<b>Subject recruitment</b>	Utilized a substantial volunteer database and a dedicated team of experienced subject recruiters to efficiently address subject recruitment challenges.
<b>Additional safety tests in screening</b> i.e. USG abdomen, TFT, S. Amylase, S. Lipase, S. ALP.	Utilized an in-house Central Lab with capabilities for real-time processing of safety samples, enabling quick generation and release of safety reports, thus ensuring swift screening of eligible subjects with minimal Turn Around Time.
<b>Number of expected AEs and SAEs</b>	24/7 Medical Oversight: Implemented round-the-clock availability of Study Physicians during housing and ambulatory visits to handle any unexpected Adverse Events or Serious AEs, closely monitored by the Principal Investigator.

## Achievements:



- Enrolled approximately 250 healthy male volunteers based on stringent selection criteria, aligning with the study protocol, involving multiple ambulatory sample visits.
- Demonstrated expertise in managing stratified (Based on subjects' body weight) randomization during subject enrolment.
- Effectively addressed clinical conduction challenges by implementing meticulous micro-level manpower management strategies to handle multiple study groups simultaneously.

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