

Birla Institute of Technology and Science Pilani, KK Birla Goa Campus
Department of Biological Sciences

Ref No-BITS/15_26/Tender/SK/001-A

Date:21.08.2025

Quotations are invited for pharmacokinetic study as per the specifications and technical details outlined below. The quotation should be submitted by 28.08.2025

Specifications and Technical Details

Study title: Multiple Escalating dose (3 doses) pharmacokinetic study of Sailin-HbS (an Ayurvedic formulation) following oral route of administration in male Sprague-Dawley rats.

Objective:

To determine the plasma and whole blood pharmacokinetics of 5 analytes in Sailin-HbS, following a multiple dose oral administration in male Sprague-Dawley rats.

Study title	Multiple Escalating dose (3 doses) pharmacokinetic study of Sailin-HbS (an Ayurvedic formulation) following oral route of administration in male Sprague-Dawley rats.
Objective	To determine the plasma and whole blood pharmacokinetics of 5 analytes in Sailin-HbS, following a multiple dose oral administration in male Sprague Dawley rats.
Study type	Pharmacokinetic study
GLP compliance	Non-GLP
Test items	Sailin-HbS, an Ayurvedic formulation
Sex/Strain/Species	Male/Sprague-Dawley/Rats
Age/Body weight	7 to 10 weeks/200–250 g
Acclimatization Period	Animals to be acclimatized for at least 3 -5 days in the study room prior to dose administration under test conditions.
Total number of animals	36 rats
Number of groups	6 groups (3 dose escalation groups plasma and 3 for RBC analysis)
Number of animals/groups	6 rats/group
Groups	Group 1: 300mg/kg (plasma) Group 2: 1,000mg/kg(plasma) Group 3: 2,000mg/kg (plasma) Group 4: 300mg/kg (RBC) Group 5: 1,000mg/kg (RBC) Group 6: 2,000mg/kg (RBC)
Route of administration	PO (In all groups) – Orally via gavage
Frequency of dosing	QD
Treatment	Sailin-HbS Ayurvedic formulation
Dose (mg/kg body weight)	PO: 300, 1,000, 2,000 mg/kg
Formulation strength (mg/mL)	TBD
Formulation vehicle	Normal Saline
Blood sampling procedure	Serial sampling
Site of Blood collection	Retro orbital

Blood sampling time points	0.08, 0.25, 0.5, 1, 2, 4, 6, 8 and 24 hr post-dose (Total 9 time points/rat) total 9 time points.
Total number of plasma samples	54 samples per group; Total: 54x6= 324 samples
Matrix	Plasma, Whole Blood
Analyte	Following 5 analytes from Sailin-HbS formulation <ul style="list-style-type: none"> • Piperine – from Piper species • Curcumin – from Turmeric • 4-Hydroxybenzoic acid – from Sorghum • 4-Hydroxyphenylacetic acid – from Pterocarpus • Eugenol or β-Caryophyllene –from Clove
Clinical signs and Observations	Animals to be observed for any apparent clinical signs of ill-health and toxicity during the study period.
Method development	Analytical method development for 5 analytes mentioned above, Calibration curve development for plasma and RBC.
Instrument	SCIEX 6500 LC-MS
Bioanalysis	Fit for purpose analytical method using LC-MS/MS.
PK Data analysis	C ₀ , C _{max} , T _{max} , AUC _{0-t} , AUC _{0-inf} , T _{1/2} , K _{el} , MRT _{last} , V _d , Cl, etc.
Study Report	Pharmacokinetic study report in word document to be prepared and shared.

Test Compound

Sailin-HbS Ayurvedic Formulation

Eligibility Criteria:

- The Bidder shall provide the Registration number of the firm along with the GST and the PAN Number issued by the concerned authorities.
- Separate technical and price bids should be uploaded on company letterhead duly signed by an authorized signatory.
- The Technical Bid must contain a Technical Compliance sheet with details of experimental protocols and methods for the PK studies. Any published catalogue/experimental protocol/manufacture website as proof for compliance, if available, should be provided for each technical point.
- The technical bid should mention the time necessary for each experiment.
- List of customers for whom similar studies were performed by the company should be provided.
- Price Bids should contain the prices, terms of delivery, sales, payment terms, etc.
- The bidder must not be blacklisted by any government or private organization. A certificate or undertaking to this effect must be submitted.

No Commitment to Accept Lowest or Any Tender:

- Birla Institute of Technology and Science Pilani, KK Birla Goa Campus shall be under no obligation to accept the lowest or any other offer received in response to this tender notice and shall be entitled to reject any or all offers. The Institute will not be obliged to meet and have discussions with any vendor or to listen to any representations.

Price Quotation:

- Comprehensive price (INR) to be quoted which includes all necessary pricing and taxes.

- Vendor will need to provide a bank guarantee in lieu of advance payment.

Professor Suman Kundu

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