

**Department of Biochemistry
University of Delhi, South Campus
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Ref No-UDSC/BIOCHEMISTRY/SK/915

Date: 22.09.2021

Quotations are invited through e-procurement for pharmacokinetic studies so as to be submitted latest by 12.10.2021

Specifications and Technical Details

Evaluation of Pharmacokinetic (PK) parameters of 4 test compounds in Male Sprague Dawley Rats as per the following study design

Study title	:	Single dose pharmacokinetic study of 4 Test compounds (1-coumarin; 2-perimidine; 3-quinoline; 4-quinolone) following IV-bolus (one formulation) and oral (one formulation) route of administration in Male Sprague-Dawley rats
Objective	:	To determine the plasma pharmacokinetics and bioavailability of Test compound following a single dose IV-bolus (one formulation) and oral (one formulation) administration in Male Sprague-Dawley rats
Study type	:	Pharmacokinetic study
GLP compliance	:	Non-GLP
Test items	:	4 Test compounds (1-coumarin; 2-perimidine; 3-quinoline; 4-quinolone)
Sex/Strain/Species	:	Male/ Sprague-Dawley/ Rats
Age/Body weight	:	7 to 10 weeks/ 250 – 300 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	:	32 rats
Number of groups	:	4 groups
Number of animals/group	:	8 rats/ group
Route of administration	:	IV (Group 1) – Through lateral tail vein PO (Group 2) – Orally via gavages
Frequency of dosing	:	Single
Treatment	:	4 test compounds
Dose (mg/kg body weight)	:	1-coumarin : 4 mg/kg (IV), 24 mg/kg (PO) 2-perimidine : 15 mg/kg (IV), 100 mg/kg (PO) 3-quinoline : 3 mg/kg (IV), 18 mg/kg (PO) 4-quinolone : 3 mg/kg (IV), 18 mg/kg (PO)
Formulation strength (mg/mL)	:	Appropriately; Compound highly soluble in DMSO
Formulation vehicle	:	DMSO
Blood sampling procedure	:	Serial sampling
Site of Blood collection	:	As per standard method
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	:	36 samples per group , total samples 144 samples
Matrix	:	Plasma
Analyte	:	4 Test compounds
Clinical signs and Observations	:	Animals to be observed for any apparent clinical signs of ill-health and toxicity during study period
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 , %F, etc.
Study Report	:	Pharmacokinetic study report in word document to be prepared and shared

Test Compounds

1- Coumarin

Class of compound : Coumarin

Molecular weight:192.17g/mol

***In vitro* evaluation and animal model tests against the target protein accomplished. Anti-hypertensive in L-NAME induced hypertensive rats as well as in spontaneously hypertensive rats. Anti-cardiac hypertrophic in isoproterenol induced cardiac hypertrophic rats.**

2 – Perimidine

Class of compound : Dispiro perimidine

Molecular weight:392.5g/mol

***In vitro* evaluation and animal model tests against the target protein accomplished. Anti-hypertensive in spontaneously hypertensive rats.**

3 - Quinoline

Class of compound : Quinoline

Molecular weight:325.4 g/mol

***In vitro* evaluation and animal model tests against the target protein accomplished. Anti-hypertensive in L-NAME induced hypertensive rats as well as in spontaneously hypertensive rats. Anti-cardiac hypertrophic in isoproterenol induced cardiac hypertrophic rats.**

4 - Quinolone

Class of compound: Quinolone

Molecular weight:259.34 g/mol

***In vitro* evaluation and animal model tests against the target protein accomplished. Anti-hypertensive in L-NAME induced hypertensive rats. Anti-cardiac hypertrophic in isoproterenol induced cardiac hypertrophic rats.**

Eligibility Criteria:-

- The Bidder shall provide the Registration number of the firm along with the LST/ CST/ WCT No. and the PAN Number issued by the concerned authorities.
- Separate technical and price bid should be uploaded on company letter head duly signed by authorised signatory.
- 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 Delhi University. A Certificate or undertaking to this effect must be submitted.

No Commitment to Accept Lowest or Any Tender:-

- University of Delhi 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. University of Delhi will not be obliged to meet and have discussions with any vendor, and or to listen to any representations.


Price Quotation:-

- Comprehensive price (INR) to be quoted which includes all necessary pricing and taxes. CDEC will be provided, if needed.
- Vendor will need to provide bank guarantee in lieu of advance payment.

The supplier should provide tender through e-procurement site.



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