

Pre-bid Clarification

E-Tender No. 043 AIIMS/BPL/STORES/CIF/LC-MS/2019-20 Dated: 01.07.2019

Supply, Installation, Testing & Commissioning of Triple Quadrupole LC-MS/MS System to the Central Instrumentation Facility

Tender Sl. No.	Tender Condition	Pre-bid Query/ Suggestion	Clarification
Queries raised/suggestion by M/S Waters			
3.4	Mass Range: 5-1200amu or better	Mass Range: 5-2000 amu or better	Suggestion Accepted Mass Range: 5-2000 amu or better
3.4-a	a. MRM ESI Positive mode: 1pg/ μ L on column reserpine should give S/N greater than 90,000:1 OR Instrument detection limit (IDL) of 4 femtograms based on 1 μ L injection volume based on MRM mode m/z 609 to 195 m/z using unsmoothed data at flowrate of 0.4ml/min.	1pg/ μ L on column reserpine should give S/N greater than 200,000:1 OR Instrument detection limit (IDL) of 4 femtograms based on 1 μ L injection volume based on MRM mode m/z 609 to 195 m/z using unsmoothed data at flowrate of 0.4ml/min.	1pg/ μ L on column should give S/N greater than 100,000:1 OR Instrument detection limit (IDL) of 4 femtograms based on 1 μ L injection volume based on MRM mode m/z 609 to 195 m/z using unsmoothed data at flowrate of 0.4ml/min.
3.4-b	MRM ESI Negative mode: 1pg/ μ L on column chloramphenicol should give S/N greater than 60,000:1 based on 1 μ L injection volume based on MRM mode m/z 321 to 152.10 m/z	1pg/ μ L on column chloramphenicol should give S/N greater than 100,000:1 based on 1 μ L injection volume based on MRM mode m/z 321 to 152.10 m/z	Suggestion Accepted
3.5	Scan speed: Should have the scan speed of 12,000amu or higher	Should have the scan speed of 20,000 amu or higher	Suggestion Accepted
3.6 a.	Advanced ESI and APCI source with positive and negative polarity switching of 50 milliseconds or less.	Advanced ESI and APCI source with positive and negative polarity switching of 20 milliseconds or less.	Not Acceptable
3.6 i	The ion source must operate up to a temperature of 400 degrees C or more.	The ion source must operate up to a temperature of 650 degrees C or more.	Not Acceptable
3.8	High performance tandem quadrupole of MS1/MS2 geometry	High performance tandem quadrupole of MS1/MS2 geometry	Suggestion Accepted

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	with mass range of 5-1200 Da or more.	with mass range of 5-2000 Da or more.	
3.9 d	Multiple MRM acquisition rate with dwell time of 2 Milli Sec or less per MRM channel should eliminate the crossstalk.	Multiple MRM acquisition rate with dwell time of 1 Milli Sec or less per MRM channel should eliminate the crossstalk.	Not acceptable
3.11	Dynamic range: 5 orders of magnitude or better	6 orders of magnitude or better	Not acceptable
3.12	Mass spectrometer should have the following scan options: <ul style="list-style-type: none"> • Full scan • Selected Ion monitoring/ recording (SIM/SIR) • Product ion scan • Precursor ion scan • Neutral loss scan • Multiple Reaction Monitoring (MRM) • MS and MS/MS in a single injection with matrix background monitoring) 	Kindly include following Specifications: Simultaneous full scan MS and MRM in single injection to monitor background interference for better method development (Proof document/application note is enclosed along with technical tender document)	Not acceptable
4.3	<ul style="list-style-type: none"> • Light Source : D2 Lamp & Tungsten lamp • Bandwidth : 1.2 nm to 8 nm • Wavelength accuracy : +/- 1 nm • Wavelength Precision : +/- 0.1 nm • Drift : 5×10^{-4} AU/h 	<ul style="list-style-type: none"> • Light Source : D2 Lamp OR Tungsten lamp • Wavelength Remove • Wavelength Precision : +/- 0.1 nm • Drift : 5×10^{-3} AU/h 	Light Source : D2 Lamp OR Tungsten lamp <ul style="list-style-type: none"> • Wavelength accuracy : +/- 1 nm • Wavelength Precision : +/- 0.1 nm • Drift : 5×10^{-3} AU/h
4.4	Column Oven: Column temperature control should be 5 degree centigrade above ambient to 95 degree centigrade, programmable in 1 degree C increments.	Column temperature control should be 5 degree centigrade above ambient to 90 degree centigrade, programmable in 1 degree C increments.	Suggestion Accepted
4.6	Columns: <ul style="list-style-type: none"> • UHPLC C18 Column (150 x 2.1, 1.9 micron) – at least 5 Nos. • UHPLC C8 Column (150 x 2.1, 1.9 micron) – at least 2 Nos. 	Columns: Following columns should be provided <ul style="list-style-type: none"> • UHPLC C18 Column (150 x 2.1, sub 2 micron) – at least 5 Nos. • UHPLC C8 Column (150 x 2.1, sub 2 	Suggestion Accepted

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micron) – at least 2
Nos.

Queries Raised /Suggestion M/s SCIEX

Tender Sl. No.	Tender Condition	Pre-bid Query/ Suggestion	Clarification
3.4	MRM ESI Positive mode: 1pg/uL on column reserpine should give S /N greater than 90,000:1 OR Instrument detection limit (IDL) of 4 femtograms based on 1uL injection volume based on MRM mode m/z 609 to 195 m/z using unsmoothed data at flowrate of 0.4ml/min. (Proof document /application note to be enclosed along with technical tender document)	MRM ESI Positive mode: 1pg/uL on column reserpine should give S /N greater than 300,000:1 b. MRM ESI Negative mode: 1pg /uL on column chloramphenicol should give S/N greater than 300,000:1 based on 1uL injection volume based on MRM mode m/z 321 to 152.10 m/z	MRM ESI Positive mode: 1pg/uL on column reserpine should give S /N greater than 100,000:1 OR Instrument detection limit (IDL) of 4 femtograms based on 1uL injection volume based on MRM mode m/z 609 to 195 m/z using unsmoothed data at flowrate of 0.4ml/min. (Proof document /application note to be enclosed along with technical tender document) b. MRM ESI Negative mode: 1pg /uL on column chloramphenicol should give S/N greater than 100,000:1 based on 1uL injection volume based on MRM mode m/z 321 to 152.10 m/z c. APCI Mode: 1pg/uL on column 17-alpha-hydroxyprogesterone and or steroid compound should give S /N greater than 30:1 based on 1uL injection volume Note: Participating bidders have to demonstrate the sensitivity in the presence of technical team of AIIMS Bhopal. In case, bidder is not able to demonstrate their claims their bid will be rejected.
3.6	Source: The solvent compatibility should be from 100% aqueous to 100% organic, with full gradient capability. It	Kindly remove this point	The solvent compatibility should be from aqueous to 100% organic, with full gradient capability. It should be capable of taking non-volatile buffers specifically.

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	should be capable of taking non-volatile buffers specifically.		
4.3	<p>Detector</p> <ul style="list-style-type: none">Light Source : D2 Lamp & Tungsten lampBandwidth : 1.2 nm to 8 nmWavelength accuracy : +/- 1 nmWavelength Precision : +/- 0.1 nmDrift : 5×10^{-4} AU/h	<p>Kindly make changes as below</p> <ul style="list-style-type: none">Light Source : D2 Lamp OR Tungsten lampAlso remove below pointsBandwidth: 1.2 nm to 8 nmWavelength Precision : +/- 0.1 nm	<p>Light Source : D2 Lamp OR Tungsten lamp</p> <ul style="list-style-type: none">Wavelength accuracy : +/- 1 nmWavelength Precision : +/- 0.1 nmBandwidth: 1.2 nm to 8 nmDrift : 5×10^{-3} AU/h
8	<p>Work Station and Operating System</p> <p>Two Suitable branded computers compatible with the equipment (one for Data acquisition and another for data Analysis) should be provided.</p> <ul style="list-style-type: none">It should have Core i7 Processor, 8 Gb DDR3 1600Mhz SDRAM (or more), 2 TB HDD with RAID 1 Configuration, DVD Writer, with preinstalled latest Windows Operating System.These PCs should be RoHS compliant and can be used as an acquisition workstation or stand-alone processing computer.Should be supplied with two 27" LED monitors and one Laserjet duplex printer (Black & white Laser Beam printing)	<p>Since the acquisition PC comes directly from factory along with its graphics and cards for the seamless integration so request you to please change the processor from i7 to i5, however if required another system we can provide with i7 processor</p>	<p>Not acceptable</p>
10	<ul style="list-style-type: none">All required standards for Mass calibration and tuning, UHPLC calibration should be providedDocuments, Kits & standards etc as required should be	<p>The kit for targeted metabolomic shall also include the internal std and all the necessary reagent to perform the test</p>	<p>Not Acceptable</p>

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<p>supplied along with the instrument.</p> <ul style="list-style-type: none"> The vendor should supply necessary kits /chemicals / standards needed for running the following panels and implement the method and workflow at our lab: <ul style="list-style-type: none"> New born screening (960 tests) <ul style="list-style-type: none"> Targeted <p>metabolomics panel (for 200 tests) of 188 metabolites (consisting of 21 amino acids, 21 biogenic amines, 40 acyl carnitines, hexose, 76 phosphatidylcholine, 14 lysophosphatidylcholines, 15 sphingomyelins</p> <ul style="list-style-type: none"> In addition, bidder should also quote separately the pricing of above reagents. 		
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