CORRIGENDUM – 1

Tender Reference No: GTB9/MAHA/2023/08/ACVANALYSER

Tender Name: Automated cell viability analyser

Corrigendum details: Amendment in Technical Specification

Amendment in Technical Specification

Bidder Eligibility Criteria-I

Sl. No	Bidder Eligibility Criteria-I	Complied / Not Complied	Reference Page No.	Remarks, If any
1	The bidder/OEM should have supplied at least 3 similar items to IITs, NITs, IISERs, CSIR Labs or other globally reputed R&D organizations in the last 5 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.			
2	The bidder should provide local service engineer details to attend service-related issues			

Technical Specifications II

Sl. NO	SPECIFICATIONS	Complied / Not Complied	Reference, Page. No.
1	The automated image acquisition and analysis system that must operate andcapture images from within a standard tissue culture CO2 incubator so that precise control of temperature, humidity and other environmental factors such as CO2 and oxygen can be maintained		
2	The optics or stage must move to the areas being imaged.		
3	The objectives do not need to be adjusted for any/reason barring change in magnification		
4	The system must be capable of imaging and analyzing one or more assay plates that conform to the ANSI/SLAS standard for assayplates. These include 384/96- well microplates, 48, 24, 12 and 6-well plates to access contents of the plate for addition of growth factors & supplements.		
5	The system must accommodate the following but must not be limited to the following tissue culture vessels: 75 cm2 and 25 cm2 flasks; 100mm, 60mm and 35 mm dishes; chambered slides and microslides.		

6	The system must possess fully automated, hands-free operation for multiple weeks or exceeding 25 days and must be designed to autofocus and auto expose withoutintervention during this time period. The automated imaging system must return to the same location in a repeated fashion without error over this same time period.		
7	The basic software of system can accommodate the entire user workflow with single, networked package with single Guided User Interface (GUI).		
8	The software must be able to mask, quantify and generate time-based curves based on confluence and fluorescence metrics including but not limited to: Cell Count, Average Area, Total Area, Confluence, Intensity, Average Intensity, or spheroid analysis including diameter, area, volume & circularity		
9	System should be capable of imaging 3D organoids and Spheroids		
10	Set of Software's must be capable of performing Cell migration, Invasion &as well as capable to perform Organoid assays. Separate software's and required accessories should be supplied along with the system.		
11	Control of the system must be distributed over a network and the client software must be able to elicit control of the automated image acquisition and analysis system from any networked computer.		
12	The system must perform whole-well imaging for selected vessels and include software for image navigation and panning.		
13	The system must have high-definition phase contrast optics or similar and Three fluorescent wavelengths of Green/Blue or Orange/ Near IR.		
15	The system must have user swappable and interchangeable optical modules as per need of application		
17	The high-definition optics of the system must image standard 384 well tissue culture plates without any sidewall or meniscus effects.		
18	The system must have the following objectives on an automated turret: 4x PLAN, 10x PLAN FLUOR, and 20x PLAN FLUOR		
19	The system must have a detector with low read noise and detector with linear response to changes in fluorescence.		
20	System should have Data storage capacity of at least 2 terabytes (TB) or more and is expandable to 60 TB with an additional storage module or external hard drive		
21	The instrument must have a fluorescence calibration system and it should be Calibrated at regular intervals		
22	The calibration system also must allow for comparison of intensity values for images that are captured with different objectives and at different acquisition times.		
23	Basic acquisition and image processing software must be supplied along with system should have unlimited free licenses.		
24	A suitable computer should be supplied along with system		
25	A suitable CO2 incubator should be supplied along with the system		
26	A suitable scratch wound assay kit (wound maker) should be supplied along with the system		
	Terms and Conditions		
1	The equipment must have one year warranty. Quote must include 2 years optional warranty and AMC for the 4^{th} and 5^{th} year.		
2	Necessary training and installation to be provided.		

Optional Items:

1. System with capability of z-stacking and the vendor should supply imaging grade ultra-low attachment 96 well plates for spheroid culture and imaging grade 96 well plate for HCS applications.
2. System should be able to handle one or more optical modules along with fluorescence wavelengths in blue \green\orange \red channels
   Metabolism Optical Module
   Ch1: X 473-498 nm/ M 565-591 nm
   Orange: X 524-550 nm/ M 565-591 nm
   NIR: X 648-674 nm/ M 685-756 nm
   HD phase lamp house for Metabolism Optical Module
   Metabolism calibration kitGreen/Red Optical Module:
   Green: X 441-481 nm/ M 503-544 nm
   Red: X 567-607 nm/ M 622-704 nm
   HD phase lamp house for Green/Red Optical Module.
3. System must be capable of direct ATP measurements and analysis in Monoculture and Co-culture with separate set of software and optical module.
4. The software should have capacity of stitching to monitor large objects such as tissue sections and stem cell colonies.

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the Above points with document proof as required. Failing which bidders will be technically disqualified)