KENYA MEDICAL SUPPLIES AUTHORITY

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KENYA MEDICAL SUPPLIES AUTHORITY — YOUR PARTNER IN HEALTHCARE

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When replying please quote our ref:

Ref: KEMSA/WB-537819-GO-RFB/25-26 2nd June, 2026

Purchaser: Kenya Medical Supplies Authority (KEMSA)
Project: Health Emergency Preparedness, Response and Resilience (HEPRR) Program
Country: Kenya
Loan No./Credit No.: Credit Number: 74050-KE

To: All interested bidders

CLARIFICATION NO. 2

RFB No: KE-KEMSA-537819-GO-RFB - SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF SPECIALIZED EQUIPMENT FOR A REFERENCE LAB; 1 NO. LIQUID CHROMATOGRAPHY-TANDEM MASS SPECTROMETER

1. It is stipulated that the flow rate range for the LC should be 0.001 to 10.0 mL/min or better with 0.001 mL/min increment. However, when we look at the Mass Spec section, it is stipulated that the Electrospray ionization flow rate should be 0.01 to 2 mL/min. Which flow rate is then required as the MS cannot tolerate flow rates higher than 2 mL/min?

   Response: The two flow rates are independent of each other as indicated. However, LC to MS flow rate of 2 mL/min is acceptable.

2. It is stipulated that the column heater of the LC needs to have a temperature range of 0-80 degrees Celsius. Could you please share what applications will be made use of that require a temperature range below 4 degrees Celsius and above 60 degrees Celsius? This range is not typical, especially the lower end.

   Response: All MS typical applications within pharma will be considered, importantly Nitrosamines. Specification is not limited to the range given. Please

submit any supporting documents (brochure, data sheet, white paper, application notes) to support the provided range.

3. When looking at the Ion Source specifications for the MS, it is stipulated that a temperature of up to 350 degrees Celsius, Chemical Ionization, Electron Ionization energy of 70eV; Adjustable up to 150eV, is required. These are specifications that are geared towards GC-MS/MS but you specified an LC as a front end, please clarify.

   Response: Please quote for LCMSMS only. Equipment that can later be upgraded with Atmospheric Gas Chromatography source will be acceptable.

4. It is stated that Chemical Ionization is required, yet Atmospheric Pressure Chemical Ionization APCI is an optional additional module. These are two very different modes, please clarify what the application is and where APCI would need to be used.

   Response: Because nitrosamine testing is a key application, APCI should be included in the proposed configuration as a standard component rather than offered as an optional extra. In this case, NQCL wish to amend the specifications under Ion Source to read "APCI" instead of "Chemical Ionization (positive and negative modes)" as well as delete "Optional additional module: Atmospheric pressure chemical ionization (APCI) or Atmospheric pressure photoionization (APPI)".

5. The scan rate speed of the MS is mentioned twice, but they are conflicting. In point c, it asks for ≥500 concurrent MRM transitions per method. In point g, it asks for up to 800 transitions per second. What is the application that the LC-MS/MS will be used for and how many compounds will be in the method? This will determine how many MRM's are required.

   Response: These two specifications describe different aspects of MS/MS performance, so they should not be compared directly.

   - **≥500 concurrent MRM transitions per method:** Meaning the instrument can manage and monitor at least 500 programmed MRM transitions within a method.

• **Up to 800 transitions/second:** Meaning, The acquisition speed; the instrument can measure up to 800 individual MRM transitions every second.

6. Please clarify what is meant by Electronic Dynamic Range. Please provide an application that shows what is needed so that we can quote a system that fits the intended use.

   Response: Electronic Dynamic Range (EDR) is the range of ion signal intensities that the detector electronics can measure accurately in a single acquisition without saturation at the high end or loss of signal in the noise at the low end.

   In simple terms, it indicates how well the detector can simultaneously measure very small and very large signals.

   $$\text{Electronic Dynamic Range} = \frac{\text{Smallest measurable signal}}{\text{Largest measurable signal}}$$

   It is often expressed as a ratio or as orders of magnitude.

7. It is specified that the Nitrogen Generator needs to run 40-70 L/min. If the LC-MS/MS that we offer only requires a 35 L/min Nitrogen Generator to function optimally, may we quote on that?

Response: Yes, it can be quoted. Note that you must offer the optimal generator that is approved by the respective manufacturer's recommendation as the right fit or ideal operational buffer for your MS.

Yours faithfully,

Moses Sudi
Procurement Director
FOR: CHIEF EXECUTIVE OFFICER