





Subject: Invitation to participate in an international External Quality Assessment for Corynebacterium diphtheriae diagnostics

Dear Colleague,

We are pleased to invite your laboratory to participate in an **international External Quality Assessment (EQA) focused on the diagnostics of** *C. diphtheriae*. This EQA initiative is jointly organized by Professor Andreas Sing and Dr. Anja Berger from the Bavarian Health and Food Safety Authority (LGL) and the WHO Collaborating Centre for Diphtheria, Dr. Stefanie Schindler from the Austrian Agency for Health and Food Safety (AGES, Austrian Reference Centre), and Dr. Vladimira Hinic and Prof. Adrian Egli from the Institute of Medical Microbiology, University of Zurich (IMM UZH).

The **primary aim** of this international EQA is to standardize and improve the diagnostic capabilities for *C. diphtheriae*, a critical undertaking given the occurrence of intermittent large-scale outbreaks, and *C. ulcerans* as an emerging and potentially toxigenic zoonotic pathogen. Participating laboratories will receive a set of 13 isolates, including ten clinical isolates of *C. diphtheriae* and *C. ulcerans* and three negative control strains. The assessment will benchmark essential diagnostic methods such as bacterial culture, organism identification, PCR for toxin detection, the Elek test, and whole-genome sequencing (WGS). To participate effectively, **laboratories should be able to culture and identify** *C. diphtheriae* **and** *C. ulcerans* **and perform toxin detection (either PCR or Elek test).**

Participants will be provided with a **dedicated form to submit their results**, which will subsequently undergo comparative analysis. Each participating center will **receive individualized feedback** and have the **opportunity to discuss their diagnostics with our organizing team**. Additionally, a webinar will be hosted to present and discuss the aggregated results and methodological insights. Findings from this EQA are planned for presentation at an upcoming ESCMID conference, and we aim to publish the comprehensive results in a peer-reviewed scientific journal.

Participation in this EQA will play a vital role in **enhancing laboratory preparedness**, **harmonizing global diagnostic standards**, **and strengthening capacity** to respond effectively to diphtheria outbreaks. We sincerely hope that your laboratory will join this important initiative.

Should you have any questions or require further clarification, please do not hesitate to contact any member of our organizing team directly.

We kindly ask you to confirm your participation by 19th September 2025 via email (vhinic@imm.uzh.ch), so we may finalize the necessary logistical arrangements.

Thank you very much for considering this invitation. We look forward to your valuable participation.

Yours sincerely,

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