

ICS 03.120.20
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**CERTIFICATION AND ACCREDITATION INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

RB/T 031-2020

**Guidance on the selection, review and use of proficiency
testing
(English Translation)**

Issued on: August 26, 2020

Implemented on: December 1, 2020

Issued by: National Certification and Accreditation Administration

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Reference

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009:

This standard was proposed and managed by the National Certification and Accreditation Administration Committee:

Drafting organizations of this standard: China National Accreditation Center for Conformity Assessment, Testing and Evaluation Center of China Academy of Inspection and Quarantine, China Standard Chemical Research Institute, Chinese Center for Disease Control and Prevention:

Introduction

Proficiency testing is the use of inter-laboratory comparisons to evaluate participants' abilities in accordance with pre-established criteria: Participating in proficiency testing is a laboratory an important means of quality assurance, helps the laboratory evaluate and prove the reliability of its measurement results, discover its own problems, and improve the laboratory Technical ability and management level: The results of the proficiency test can be used as an effective proof of the laboratory's technical capabilities, for the management department, customers and Provide basis for selection, evaluation and accreditation of competent laboratories by other stakeholders:

As the main body to participate in proficiency testing, laboratories should comprehensively consider internal quality control based on their own needs and external requirements for proficiency testing:

Based on factors such as level, personnel capabilities, equipment conditions, risks, and operating costs, rationally plan and actively seek appropriate proficiency verification plans:

In addition to the proficiency testing programs organized by recognized proficiency testing providers (PTP), there are a large number of industries Organizational operation proficiency testing plan: For the proficiency testing program carried out by the accredited PTP within its accreditation scope, the laboratory can Choose to participate and directly use the proficiency test results: For other proficiency testing programs, laboratories can refer to this standard to verify them to Confirm whether it meets the requirements:

The choice of proficiency testing plan and Guidelines for the use of verification and results

1 Scope

This standard provides guidelines for the selection, verification and results utilization of proficiency testing plans:

This standard applies to proficiency testing participants and stakeholders (such as management departments or laboratory customers) to select, verify, and use capabilities the verification results can also provide guidance for the laboratory to carry out quality control:

2 Normative references

The following documents are indispensable for the application of this document: For dated reference documents, only the dated version applies to this article Pieces: For undated references, the latest version (including all amendments) applies to this document:

GB/T 27043-2012 General requirements for conformity assessment proficiency verification
ISO 13528 uses statistical methods for proficiency testing (Statistical methods for use in proficiency testing by interlaboratory comparison)

3 Terms and definitions

The terms and definitions defined in GB/T 27043 and ISO 13528 are applicable to this document: For ease of use, the following is repeated Certain terms and definitions in GB/T 27043:

Proficiency testing

Use inter-laboratory comparisons to evaluate participants' abilities in accordance with pre-established guidelines:

Note 1: Some proficiency testing providers in the medical field use the term "external quality assessment (EQA)" to indicate their proficiency testing plan and/or more broadly plan:

Note 2: Rewrite GB/T 27043-2012, definition 3:7:

Proficiency testing scheme Design and operate one or more rounds of proficiency testing in a specific field of testing, measurement, calibration or inspection:

Note 1: A proficiency testing plan can include one or more specific types of testing, calibration or inspection of proficiency testing samples:

Note 2: Rewrite GB/T 27043-2012, definition 3:11:

Assigned value

The value assigned to the specific properties of the proficiency testing sample:

Note: Rewrite GB/T 27043-2012, definition 3:1:

Outlier

Observations in a set of data that are considered inconsistent with other data in the set:

Note 1: Outliers may come from different populations, or the results of incorrect records or other gross errors: