Controllab
Side by side with you

HAVE AN ENVIRONMENT

WITH ANALYSIS OF EXCELLENCE

Solutions that Promote Quality

Controllab solutions help the laboratory
to gain recognition from its audience.

PT Proficiency Testing
(External Control)

Periodically checks the accuracy
of the results.

IC Internal Control

It monitors systems analytical
performance with each routine.

SC Strains Control

Authenticated reference strains.

PBIL Laboratory Indicator Benchmarking Program

Monitors laboratory requirements and
improves operational results.

AQM Analytical Quality Management

It unifies the tools of quality and
monitors the analytical performance
of the examen.

CRM Certified Reference Materials

It adds more precision and
traceability to the analytical process.

Learn more about Controllab

Version 17082023

Why be a Controllab partner?

The globalized and technological world in which we live requires more and more agile and accurate information. Additionally, the quality of information is a crucial factor for day-to-day strategic decisions. When we talk about laboratory test results, the quality of information is translated into trust.

In this context, Controllab has been transforming its solutions so that users dedicate their time to the information that needs more attention. Multiple alerts and analytics features have been introduced in quality tools to help speed up laboratory routine decisions and provide reliability in test results.

We are Controllab

Controllab is the largest laboratory quality control company in Latin America, with complete and integrated solutions in the broadest portfolio in the market – there are more than 3,500 tests. Taking care of life is your commitment. It is a full solution company in several segments: clinical, blood bank, veterinary, microbiology, physical-chemical tests and others.

Focused on developing the best user experience, it helps customers to provide accurate, indisputable services that stand out in the national and international markets. It has unique know-how in quality control solutions, has the exclusive support of important scientific societies and the recognition of the main standards related to its performance: ISO 9001, 17025, 17034 and 17043.

Our Numbers

46
years
of history
and performance.

+3500
tests
periodically
analyzed

04
accreditations
with recognized
internationally

20
years
of accreditations
Cgcre/Inmetro

Learn more about Controllab

Accreditations, Certifications and Qualifications

Continuous improvement, based on quality and reliability,
gives Controllab the following recognitions:

PEP 0003 · CRL 0586 · CAL 0214 · PMR 0009

According to the scopes published in www.gov.br/inmetro

REBLAS Nº 023 Controllab Laboratório Habilitado ANVISA RDC 390/2020

ISO 9001 BUREAU VERITAS Certification

Sistema da Qualidade Certificado

Good Manufacturing Practices BPF produtos para a saúde - ANVISA

Partnerships

With the challenge of seeking new paths and expand scientific knowledge to offer better solutions to its customers, **Controllab** establishes partnerships with scientific societies and universities.

SBPC/ML Sociedade Brasileira de Patologia Clínica

Sociedade Brasileira de Medicina Veterinária

Ministry of Health
FIOCRUZ
Fundação Oswaldo Cruz

UK Health Security Agency

NCTC National Collection of Type Cultures

NCPV National Collection of Pathogenic Viruses

NCPF National Collection of Pathogenic Fungi

Learn more about Controllab

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Structure

The Controllab team is formed by a team with more than 400 direct employees, allied to an extensive scope around 100 technical-scientific advisors who maintain their commitment to updating, innovation and the quality of services. Installed in Rio de Janeiro, in approximately 10,000 m² of built area, **Controllab** is divided into two structures:

Preparation of Materials

Designed to comply with Good Manufacturing Practices for items for Proficiency Test, Internal Control, Reference Materials and Control Strains. It has areas of chemical and biological production, quality control laboratory, sterilization areas, cold chambers and freeze dryers.

Services

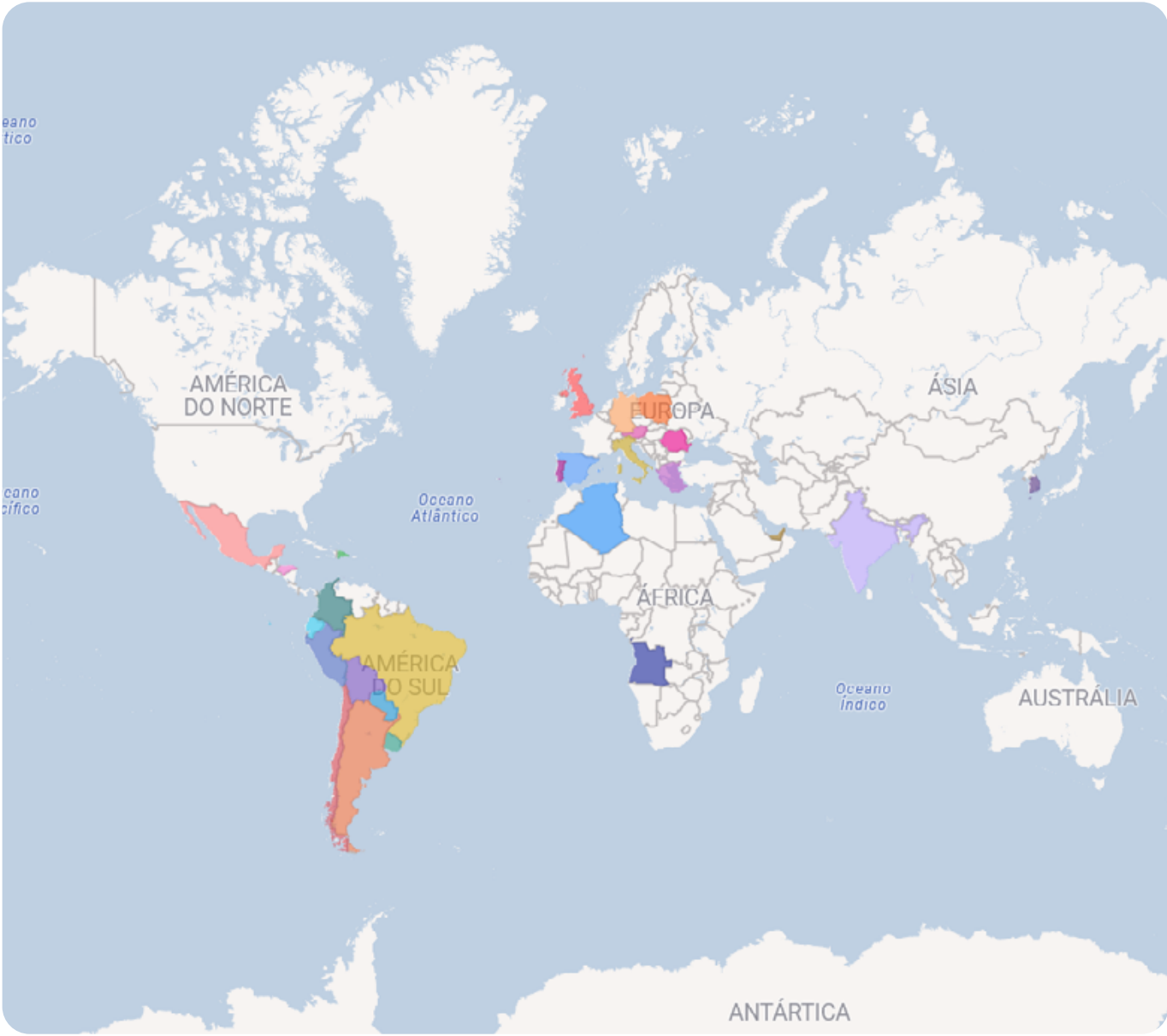
It encompasses all sectors involved in the proficiency test, calibration, advisory, training and business administration management process. Among them, Customer Management, Quality Assurance, Service and Project Management, Information Technology, Marketing and New Business.

All processes

are conducted according to Good Manufacturing Practices of the Ministry of Health, AOAC/ISO/IUPAC International Protocol (homogeneity and stability of items), ABNT NBR ISO/IEC 17043: 2011 (Conformity Assessment - General Requirements for Proficiency Tests) and ANVISA/GGLAS 02/43 procedure.

Learn more about Controllab

Controllab is present on four continents and helping more than 12,000 users in their analysis routines.



We are the benchmark when it comes to laboratory quality control data.

Learn more about Controllab

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Promotes excellence in exam analysis

Controllab's Proficiency Testing Program is continuous, with runs at regular intervals (two to four), annual targets and multiple items in varying concentrations for review.

It has an information management system that allows for more agility and efficiency in performance analysis. With dynamic information that **simplifies auditing processes and improves analysis knowledge.**

Discover some of the available areas:

CLINICAL

- SARS-CoV2 (Covid-19)
- Monkeypox
- Point of Care (POCT)
- Hematology
- Urinalysis
- Biochemistry
- Microbiology
- Flow Cytometry
- Arboviruses
- Genetics and Molecular Biology
- Cardiac and Tumor Markers
- Occupational Toxicology
- Cytopathology
- Drugs of Abuse
- Histocompatibility (HLA)
- Reproductive Medicine

HEMOTHERAPY

- Multiple tests for blood banking

VETERINARY

- Multiple tests for veterinary laboratory

MICROBIOLOGY AND PHYSICOCHEMICAL

Multiple analysis for microbiology and tests laboratory, among them:

- Medicines
- Foods
- Water and effluents

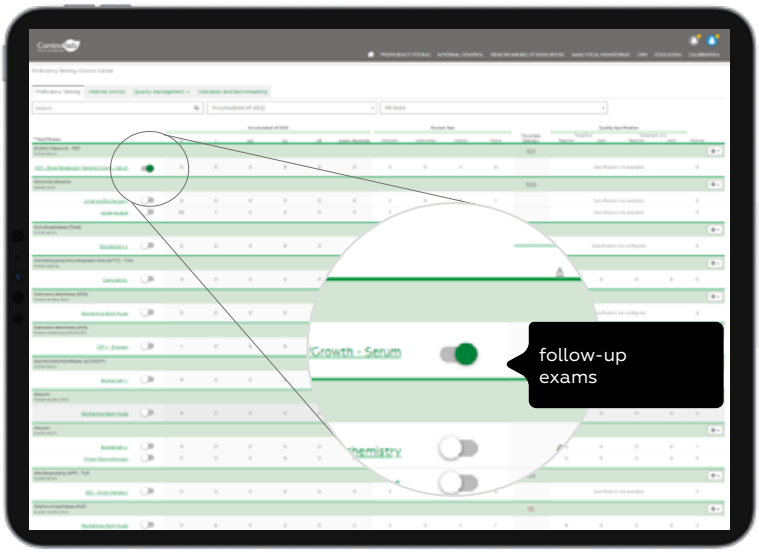
PHYSICOCHEMICAL

Multiple analysis for tests laboratory, among them:

- Fuels
- Pharmaceutical Ingredients

More than 3,500 tests available for Quality Control. This diversity of exams aims to meet the demands of laboratories and growing technological innovation in the segments.

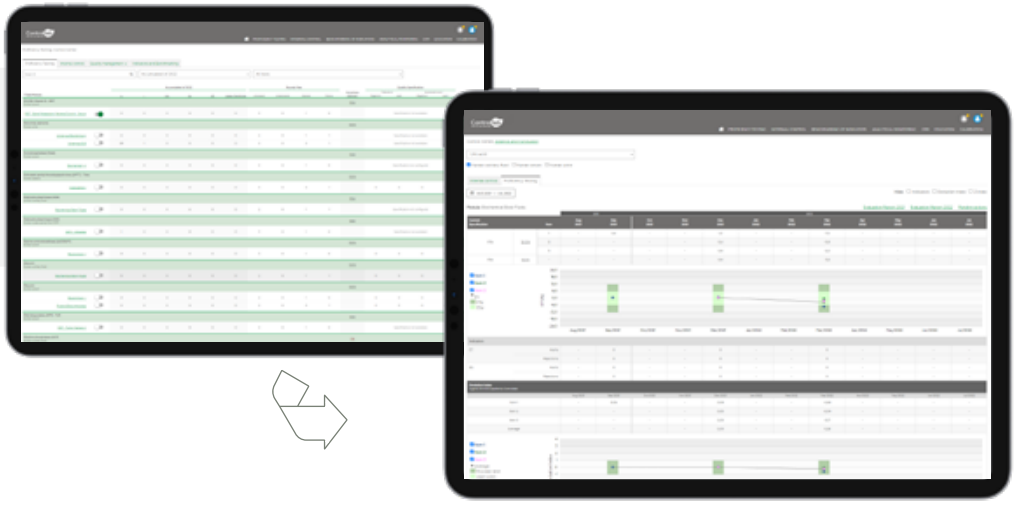
Discover our
Online Catalog

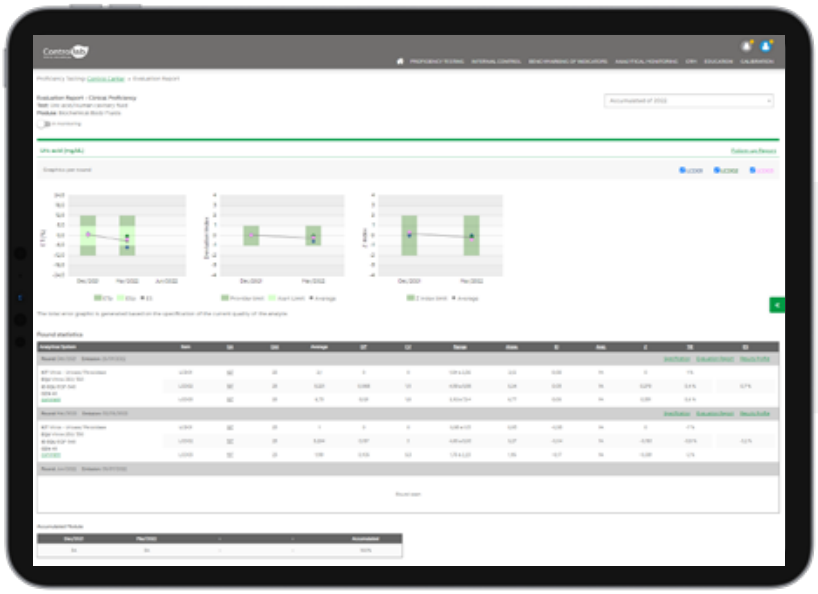


Control center for objective analysis of exams that need immediate action.

Learn more about Proficiency Testing

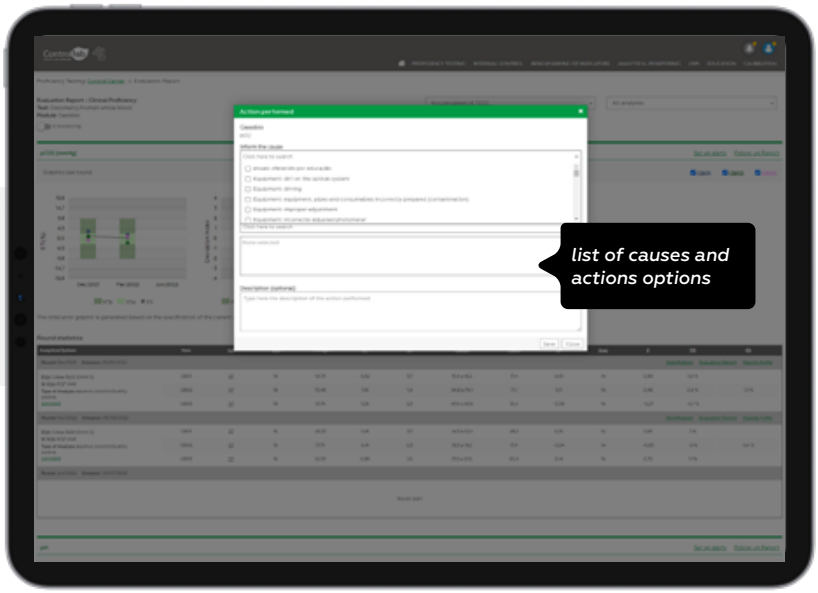
Management summary which simplifies the tracking and consultation of exam information.





Graphs in period evaluation and over time to analyze trends and help prevent and identify the causes of non-conforming results.

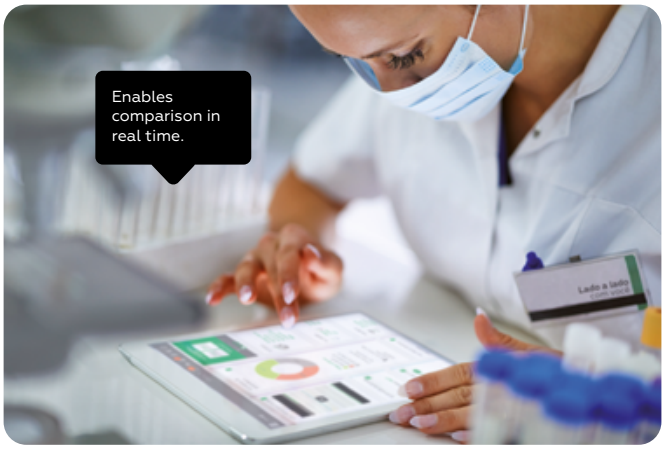
History and tracking actions on the results that show the treatment of results for audits and promote the evolution of management.



Learn more about Proficiency Testing

Internal Control

CI ONLINE



Prevents failures in exam results

Participate in **CI** ONLINE, an Internal Control program that promotes more **efficiency and precision** to the analytical process.

In **CI** ONLINE, the laboratory can use Controllab samples (valued by interlaboratory), internal control materials from other suppliers available on the market and those developed by the laboratories themselves, with visualization of the behavior of the results in a single Control Center. This **flexibility** makes for more practicality and productivity in the processes of analysis and routine monitoring.

At CI ONLINE, your laboratory:

- Keeps the **history and tracking** of actions on the results.
- It **integrates with the laboratory information system (LIS)** and completely automates the routine of internal controls.
- Apply multiple rules consistent with the reality of the laboratory.
- Analyzes performance behavior between reagent lots.
- Track the process with graphs over time (Levey Jennings).
- It is alerted when the result exceeds the specified goal.

Learn more about Internal Control

Strains Control

We changed the maintenance of microorganisms

Investing resources in continuous passages is no longer your laboratory's job.

Routine maintenance of strain

Inoculum
Seeding
Incubation
Cryoprotectant
Sterile Vials
Lyophilization
Freezing

7 steps

That consumes more time, structure, records and analysis. It can generate unwanted mutations and loss of viability.

Control Strain Program

Inoculum
Seeding
Incubation

3 steps

That reduce records, streamline processes and provide more time for exam analysis.

Lyophilized strains of NCTC and NCPF origin. Accompanied by a certificate of analysis containing the characteristics of the microorganism.

with unique identification for your laboratory

Controllab performs the passages and sends strains immediately until the 3rd. generation to meet CLSI, BrCAST - EUCAST, AFNOR, FDA, ISOs, Pharmacopoeia regulations, among others. Meets the processes of accreditation and regulatory bodies.

The program uses NCTC and NCPF licensed strains. Authenticated reference strains are of paramount importance for the control of clinical examinations. By joining the **Strains Control Program**, the laboratory has access to a service with internationally recognized quality standards.

In addition to Brazil, countries such as Argentina, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Suriname, Uruguay and Venezuela can benefit from this initiative.

NCTC National Collection of Type Cultures

NCPV National Collection of Pathogenic Viruses

NCPF National Collection of Pathogenic Fungi

Learn more about Strains Control

Version 17082023

Gram and AFB controls help laboratories evaluate new dye/reagent lots.

GRAM CONTROL

Smear slides containing *Staphylococcus aureus and Escherichia coli* microorganisms.

AFB CONTROL

Smear slides containing *Mycobacterium tuberculosis and Escherichia coli* microorganisms.

This practicality of internal control programs for bacteriology allows the laboratory to simplify the routine, gain more agility and reduce costs and time involved in tests and records to ensure the quality of controls and evidence in audits.

Microorganism	NCTC®	ATCC®	WDCM
Bacteroides distasonis	11152	8503	–
Bacteroides ovatus	11153	8483	–
Bacteroides vulgatus	11154	8482	–
Corynebacterium pseudodiphtheriticum	11136	10700/7091	–
Corynebacterium renale	7448	19412	–
Klebsiella oxytoca	8167	–	–
Kocuria rhizophila	8340	9341	–
Proteus mirabilis	11938	29906	00023
Proteus vulgaris	4175	13315	–
Staphylococcus xylosus	11043	29971	–
Shigella flexneri	12698	12022	00126
Stenotrophomonas maltophilia	10257	13637	–
Yersinia enterocolítica	11176	–	–

Nota 1: *UKHSA licensed NCTC and CPF Strains are equivalent to the ATCC® strains referenced in this table.*

Nota 2: *Other strains not listed available on request.*

Learn more about Strains Control

Pathological Anatomy/Cytopathology

	C	H	A
General Pathological Anatomy	C		A
Gynecological Cytopathology	C		A
Non-Gynecological Cytopathology	C		A
Dermatopathology	C		A
Immunohistochemistry: Breast	C		A

Flow Cytometry

	C	H	A
CD34+	C	H	
Diagnosis of Leukemia	C	H	
Paroxysmal Nocturnal Hemoglobinuria (PNH)	C	H	
Lymphocyte Panel	C	H	

Coagulation/Haemostasis

	C	H	A
Platelet Aggregation	C	H	
Lupus Anticoagulant	C	H	
Anti-Xa Activity	C	H	
Coagulation and Haemostasis	C	H	
D-dimer	C	H	
Platelet Anti-Aggregation Drugs	C		
Thromboelastogram	C		

Coprology/Occult Blood

	C	H	A
Calprotectin	C		
Coprology	C		
Eosinophils Research: Stool	C		
Fecal Occult Blood	C		

Diabetes/ Hemoglobins

	C	H	A
Diabetes mellitus	C		
Diabetes Markers	C		
Glycated Hemoglobin	C		
HbS: Sickle Test	C		
Hemoglobinopathies	C	H	
Hemoglobin H Research	C		
Osmotic Fragility	C		

Neonatal Diagnosis

	C	H	A
Immunoglobulin M - Umbilical Cord	C		
Neonatal Bilirubin	C		
Neonatal Therapy	C		
Neonatal Screening	C		
Neonatal Screening - Infectious Diseases	C		

Infectious Diseases/Serology

	C	H	A
Adenovirus	C		
Anti-HAV (Hepatitis A)	C		
Anti-HBc (Hepatitis B)	C		
Anti-HBe	C		
Anti-HBs	C		
Anti-HCV	C		
Anti-HDV (Hepatitis D)	C		
Anti-HIV	C		
Anti-HTLV	C		
Aspergillus sp.	C		
Bartonella henselae	C		
Borrelia burgdorferi	C		
Brucelose	C		
Candida albicans	C		
Mumps	C		
Chagas	C		
Chikungunya	C		
Chlamydia trachomatis	C		
Cytomegalovirus (CMV)	C	H	
Clostridium tetani	C		
Coronavirus (SARS-CoV2)	C		
Dengue IgG, IgM e NS1	C		
Entamoeba histolytica	C		
Erythroparvovirus B19	C		
Yellow fever	C		
Giardia lamblia	C		
Hantavirus	C		
HBeAg	C		
HBsAg	C		
Helicobacter pylori	C		
Herpes (HSV)	C		
Histoplasmosis	C		
Leptospirosis	C		
Leishmaniose Visceral	C		
Mycoplasma pneumonie	C		
Paracoccidioidomycosis	C		
Parainfluenza 1,2,3 and 4	C		
Coronavirus Neutralizing Antibodies Research (SARS-CoV2)	C		
Widal Reaction	C		
Rubella	C		
Measles	C		
Syphilis	C		
Toxoplasmosis	C	H	
Varicella-Zoster	C	H	
Epstein-Barr Virus (EBV)	C		
Zika virus	C		

Gasometria

	C	H	A
Gasobio	C		
Gasobio: Hematocrit	C		
Gasometry	C		
Oximetry	C		

Genetics and Molecular Biology

	C	H	A
Acinetobacter baumannii	C		
Adenovirus	C		
Apolipoprotein E	C		
Aspergillus spp.	C		
Bordetella	C		
Brucella spp.	C		
Campylobacter	C		
Candida	C		
Chagas	C		
Chikungunya	C		
Chlamydia trachomatis	C		
G-Banding Karyotype: Constutional	C		
G-Banding Karyotype: Fetal	C		
G-Banding Karyotype: Tumor	C		
Cytomegalovirus	C		
Citrobacter	C		
Clostridium difficile	C		
Coronavirus (SARS-CoV2)	C		
Dengue	C		

C Clinical Analyzes H Hemotherapy A Pathological Anatomy and Cytopathology

See more program details in our Online Catalog

PT Proficiency Testing

IC Internal Control

	C	H	A
Enterobacter	C	H	A
Enterococcus	C	H	A
Enterovirus	C	H	A
Epstein Barr	C	H	A
Erythroparvovirus B19	C	H	A
Escherichia coli	C	H	A
Factor V Leiden - Mutation Research	C	H	A
Yellow fever	C	H	A
Giardia sp.	C	H	A
Hemocromatosis - Mutation Research	C	H	A
Hepatitis (HEV)	C	H	A
Hepatite B (HBV)	C	H	A
Hepatite C (HCV)	C	H	A
Hepatitis Delta (HDV)	C	H	A
Herpes Simplex Virus (HSV)	C	H	A
Histoplasma capsulatum	C	H	A
HIV	C	H	A
HTLV	C	H	A
Bloodstream Infections and Sepsis	C	H	A
Respiratory Infections and Pneumonia	C	H	A
Influenza A and B	C	H	A
STIs and Vaginosis	C	H	A
Janus kinase 2 (JAK-2) - Mutation Research	C	H	A
Klebsiella	C	H	A
Legionella	C	H	A
Leptospirose	C	H	A
Mayaro	C	H	A
Meningitis and Encephalitis	C	H	A
Monkeypox (MPX)	C	H	A
MTHFR - Mutation Research	C	H	A
Mycobacterium tuberculosis	C	H	A
Mycoplasma pneumoniae	C	H	A
NAT - Molecular Biology	C	H	A
Neisseria gonorrhoeae	C	H	A
Norovirus	C	H	A
Human Papillomavirus (HPV)	C	H	A
Paracoccidioides brasiliensis	C	H	A
Poliomavirus BK	C	H	A
Poliomavirus JC	C	H	A
Prothrombin - Mutation Research	C	H	A
Rotavirus	C	H	A
Salmonella	C	H	A
Sequencing - Coronavirus (SARS-CoV2)	C	H	A
Sequencing - Bacterial Genome Detection	C	H	A
Sequencing - Detection of Genome Fungi and Yeasts	C	H	A
Sequenciamento: Detecção do Genoma Viral	C	H	A
Sequencing - Neonatal Screening	C	H	A
Fetal Sexing	C	H	A
Sporothrix schenckii	C	H	A
Staphylococcus	C	H	A
Group A Streptococcus	C	H	A
Toxoplasma gondii	C	H	A
Varicella-Zoster	C	H	A
Parentage Testing (Paternity/Maternity)	C	H	A
Molecular Epidemiology Surveillance	C	H	A
Zika Virus	C	H	A

Hematology / Hematoscopy

	C	H	A
Bone Marrow Biopsy	C	H	A
Hematology Automation	C	H	A
Manual Hematology	C	H	A
Hematoscopy	C	H	A
Hemoparasitology	C	H	A
Myelogram	C	H	A
LE Cell Search	C	H	A
Pesquisa de Corpúsculos de Heinz	C	H	A
Automated Reticulocytes	C	H	A
Manual Reticulocytes	C	H	A
Donor Selection	C	H	A
Erythrocyte Sedimentation Rate (ESR)	C	H	A

Blood components

	C	H	A
Blood components	C	H	A

Histocompatibility

	C	H	A
Antigen HLA-B-27	C	H	A
Molecular Typification HLA	C	H	A

Immunoassays/Endocrinology

	C	H	A
Anemia	C	H	A
Catecholamines	C	H	A
Specialized Hormones	C	H	A
Hypertension Markers	C	H	A
Bone Marrow / Growth Markers (Serum and Urine)	C	H	A
Tumor Markers	C	H	A
Lipid profile	C	H	A
Procalcitonin	C	H	A

Imuno-hematologia/Medicina Transfusional

	C	H	A
Immunohematology - Automation	C	H	A
Immunohematology - Elution	C	H	A
Immunohematology - Rh and Kell Phenotypes	C	H	A
Immunohematology - General	C	H	A
Immunohematology - IAI	C	H	A
Immunohematology - Crossmatch	C	H	A
Immunohematology - TAD	C	H	A
Immunohematology - Anti-A Anti-B and Anti-D Titer	C	H	A

Immunology / Proteins

	C	H	A
Allergy	C	H	A
Anticardiolipin	C	H	A
Anti-CCP	C	H	A
Antiphospholipid Antibodies	C	H	A
Antistreptolysin O	C	H	A
Anti-thyroperoxidase (Anti-TPO)	C	H	A
Autoimmunity	C	H	A
Cryoglobulins	C	H	A
ANA Hep-2	C	H	A
Rheumatoid Factor	C	H	A
Circulating Immunocomplexes	C	H	A
Immunofixation of Proteins - Serum and Urine	C	H	A
Interleukins	C	H	A

C Clinical Analyzes H Hemotherapy A Pathological Anatomy and Cytopathology

See more program details in our Online Catalog

C Reactive Protein (CRP) C H A
Specific Proteins, Protein Electrophoresis and Immunoproteins C H A

Body liquids

Vitreous humor C H A
Cavity Liquids Cell Count by Automation C H A
Multiparameter Cavity Liquids C H A
Líquido Sinovial Cristais/Estruturas Cristalinas C H A
CSF - Amino Acid C H A
CSF - Automated Cell Counting C H A
CSF - Immunology C H A
CSF - Alzheimer's Markers C H A
CSF - Tumor Markers C H A
CSF - Microscopy C H A
CSF - Multiparameter C H A
CSF - HIV Research C H A
CSF - HTLV Research C H A
Eosinophil Research: Nasal Mucus C H A
Saliva C H A
Sweat C H A

Cardiac Markers

Coenzyme Q10 C H A
Cardiac Markers C H A
Cardiac C Reactive Protein (hsPCR) C H A

Maternal-Fetal Medicine

Fetal Risk Assessment: 1st trimester C H A
Fetal Risk Assessment: 2nd trimester C H A
Bacteriology - Amniotic Liquid C H A
Biochemistry - Amniotic Liquid C H A
Lamellar Body Count (CCL) C H A
Fetal Growth C H A
Fetal Fibronectin C H A
Vaginal wash C H A
Evaluation of fetal bilirubin C H A
Pre-eclampsia Markers C H A
Pulmonary maturity C H A
Hemoglobin F Research - Flow Cytometry C H A
Surfactant / Albumin Ratio (TDx-FLMII) C H A
Premature rupture of membranes: Fern Test C H A
Clement's Test (TC) C H A
Maternal Screening C H A
Test of Ianetta C H A
PH Determination Test C H A
Phenol Testingl C H A
Nile Blue Test (Kittrich) C H A
Kleihauer-Betke test (Hemoglobin F) C H A
Rosette Test C H A

Reproduction Medicine

Biochemistry of Sperm C H A
Sperm Cell Count by Automation C H A
Sperm Cell Count on camera C H A
Sperm Morphology C H A
Sperm Motility C H A
Sperm Vitality C H A

Microbiology

Adenovirus - Antigen C H A
AFB Bacilloscopy C H A
Ambulatory and Hospital Bacteriology C H A
GRAM Bacterioscopy C H A
Bordetella sp. - Culture C H A
Clostridium difficile - Toxin A and B C H A
Clostridium difficile - Antigen C H A
Coronavirus (SARS-CoV2) - Antigen C H A
Colon Count - Urine C H A
Coproculture C H A
Cryptococcus neoformans - Antigen C H A
Culture of Epidemiological Surveillance (CES) C H A
Dosage of Beta D-glucan C H A
Dosage of Galactomannan C H A
Giárdia lamblia - Antigen C H A
Leprosy C H A
Helicobacter pylori - Antigen C H A
Helicobacter pylori - Ureasa C H A
Anaerobic Blood Culture C H A
Histoplasmosis - Antigen C H A
Legionella - Antigen C H A
Legionella pneumophila - Culture C H A
Micobacteriology C H A
Mycology C H A
Neisseria gonorrhoeae - Culture C H A
Norovirus - Antigen C H A
Meningitis Panel C H A
Parasitology C H A
Acanthamoeba Research C H A
Anaerobic Research C H A
Diphtheria Bacillus Research - Microscopy C H A
Pneumocystis jirovecii -Microscopy C H A
Rotavirus - Antigen C H A

Therapeutic Drugs Monitoring

Immunosuppressive Drugs C H A
Therapeutic Drugs C H A

Clinical Chemistry

Amino Acids - Plasma C H A
Biochemistry C H A
Biliary Calculus C H A
Serum Calprotectin C H A
Cystatin C C H A
Glucose 6-Phosphate Dehydrogenase (G6PD) C H A
C Vitamin C H A
K Vitamin C H A
Vitamins (B-Complex): plasma and whole blood C H A

RDT/ Point of Care (POC)

Anti-HBs C H A
Anti-HCV C H A
Anti-HIV C H A

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See more program details in our Online Catalog

- Chagas — C
- Bioquímica — C
- BNP — C
- Ketone — C
- *Chlamydia:* Antigen — C
- Coagulation — C
- Mycobacterium tuberculosis complex: Antigen — C
- Coronavirus (SARS-CoV2): Antigen — C
- D-dimer — C
- Drugs of Abuse — C
- Filariosis — C
- Glucose — C
- HBsAg — C
- HCG (Serum and Urine) — C
- Hemoglobin - HemoCue (Donor Selection) — C H
- Hormones — C
- Coronavirus Immunology (SARS-CoV2) — C
- Immunology Yellow Fever — C
- Influenza A and B — C
- Lactoferrin — C
- *Legionella Pneumophila:* Antigen — C
- Metabolism Markers Bone/Growth: Serum — C
- Tumor Markers — C
- Cardiac Panel — C
- Coronavirus Neutralizing Antibodies Research (SARS-CoV2) — C
- Cardiac C-reactive protein — C
- Syphilis — C
- *Group A Streptococcus:* Antigen — C
- Troponin I — C
- Troponin T — C
- Urine Biochemistry — C
- Respiratory Syncytial Virus (RSV) — C
- Premature Membrane Rupture — C

Molecular TLR

- Coronavirus (SARS-CoV2) — C
- Influenza A and B — C
- Respiratory Syncytial Virus (RSV) — C

Occupational Toxicology/Abuse Drugs

- Drugs of Abuse - Hair — C
- Drugs of Abuse - Saliva — C
- Drugs of Abuse - Urine by Automation — C
- Organochlorines and Organophosphates — C
- Toxicology (Serum, Urine and Total Blood) — C
- Toxicology-Volatile (Serum, Urine and Total Blood) — C

Urinalysis

- Organic Acids — C
- Urinary Sugars (Carbohydrates) — C
- Amino Acids - Urine — C
- Kidney Stone — C
- Cytomegalic Inclusion Cells — C
- Protein Electrophoresis - Urine — C
- Mucopolysaccharides — C
- Research on Erythrocytic Dysmorphism — C
- Eosinophils Research: Urine — C
- Porphyrins — C
- Porphobilinogen (PBG) — C
- Absorption test of D-xylose — C
- Risk Kidney Stones — C
- Urinalysis - Biochemistry — C
- Urinalysis EAS — C
- Urinalysis - Sedimentoscopy and counting by Field and Chamber — C
- Urinalysis - Automated Sedimentoscopy — C
- Urinalysis Sedimentation - Identification — C

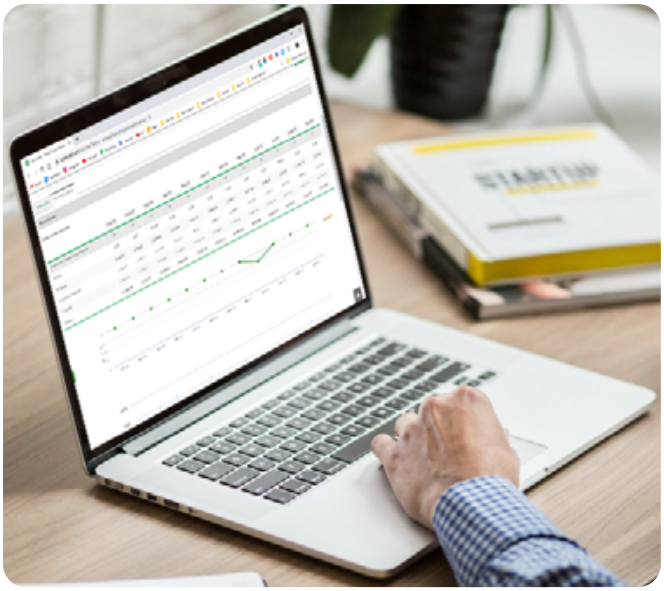
Processes Qualification

- Physical and Chemical Analysis of Water — C H
- Microbiological Analysis of Water — C H
- Spectrophotometer — C H

C Clinical Analyzes H Hemotherapy A Pathological Anatomy and Cytopathology

See more program details in our Online Catalog

Laboratory Indicator Benchmarking Program



Indicators that promote results for the laboratory

To promote effective process improvements, improve performance, identify new opportunities and keep the organization sustainable, **the laboratory needs to quantify its performance and compare it with the market.**

PBIL is a laboratory management solution developed in partnership with SBPC/ML - Brazilian Society of Clinical Pathology/Laboratory Medicine, a Controllab partner since 1977.

By participating in PBIL, the laboratory identifies in real time whether the efforts and strategies applied in the processes are competitive against their peers, based on concrete evidence. This evidence helps to reduce costs, **increase efficiency and routine productivity.**

The data reported in the program are analyzed by a multidisciplinary team (including statisticians) at Controllab, which **acts as a third-party company, providing impartiality** and confidentiality to the reported data.

Controllab follows a code of ethical conduct & compliance integrated with national and international laws for the general protection of data. The program has a detailed manual and description for reliability and standardization of information.

Operation

Monthly, the laboratories access the benchmarking from data reported or obtained directly from the LIS. When registering, the laboratory receives a password to access the Online System on the Controllab website.

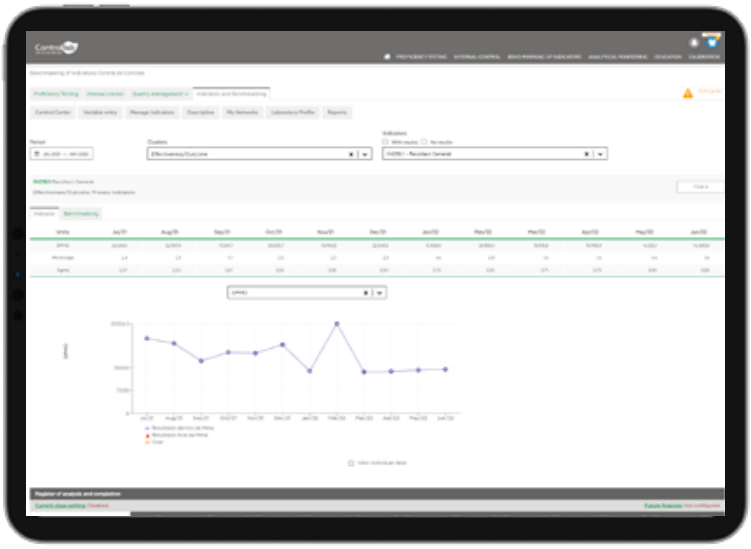
The guarantee of confidentiality is provided by a unique and non-transferable participation code and the use of exclusive passwords to access data.

- Broad and comprehensive scope of indicators
- Comparison between networks (support or brands)
- Setting goals to achieve certain goals
- Indicators internationally harmonized and aligned with the IFCC
- Integration with LIS providers to simplify data collection
- Advisory Group of Experts active in monitoring the program

Learn more about Benchmarking Program for Laboratory Indicators

Version 17082023

Laboratory Indicator Benchmarking Program



Efficient processes have effective indicators

Indicators Available in PBIL

There are more than 150 indicators available for the laboratory. To simplify data collection and improve access to information, partner companies integrate the LIS with the PBIL, promoting more agility in processes and reliability in the information made available in real time for decision-making.

This convenience is already available in the solutions of the following partners:

confidentia We care about solutions · Karyon Consultoria em Informática · Matrix · PIXEON A saúde move o nosso mundo. · Shift PULSA PELA VIDA

Consult them to know the integrated systems

RESOURCES MANAGEMENT INDICATORS

- Corrective maintenance index
- **Mean time between failures:** biochemistry equipment (MTBF)
- Staff expenses
- **Distribution of expenses:** physical area and resources, secondary, equipment, materials, personnel, services and transport
- Disallowances general and by operator
- Absenteeism
- hours worked per employee
- **Personal productivity:** general, pathological anatomy and cytopathology, billing, reception, receptionist, technique, own and franchised collector
- **Rotativity:** general and reception
- **Training:** enforcement of planned training load, training events, hour of external and internal training
- **LIS Efficiency:** episodes of system crash, self-check results efficiency and times of system crash

ORGANIZATIONAL MANAGEMENT INDICATORS

- Received and responded customer manifestations
- **Customer satisfaction:** individual and physician
- Net Promoter Score (NPS)
- Participation in research of Net Promoter Score (NPS)

Learn more about Benchmarking Program for Laboratory Indicators

PROCESS INDICATORS

» **Storage error:** incorrect storage before scanning
» **Transport error:** samples damaged during transport, samples with excessive transport time, samples transported at incorrect temperature and samples not received
» **Collection error:** incorrect container, volume insuficiente, proporção incorreta do volume de amostra/anticoagulante, incorrect sample
» Coagulated samples
» **Contamination:** samples of microbiology, hemoculture samples and urine culture samples
» **Hemolysis:** samples in general and biochemistry area
» Samples with less than 2 patient-related identifiers
» Samples with error in patient identification
» Unidentified samples
» Errors in patient identification
» **Tests incorrectly added and not included in the medical requisition:** nonhospitalized and hospitalized
» **Exams not registered:** non-hospitalized and hospitalized
» **Incorrect exams name:** non-hospitalized and hospitalized
» Collection in inappropriate time
» **Inappropriate medical requests related to informed clinical issues:** non-hospitalized and hospitalized
» **Medical requests without clinical questions:** non-hospitalized
» **Non-intelligible medical requests:** non-hospitalized and hospitalized
» TAT preanalytical (by exams)
» Transcription errors of results due to LIS failure
» Errors in manual transcription of results
» **Proficiency Testing:** inadequate performance related to previously treated cause
» **Proficiency Testing:** inappropriate performance
» **Internal Control:** tests with out-of-specification results
» **Internal Control:** analytical runs with random error (RE) above the comparison group (by exams)
» **Internal Control:** EA per exam, EA per exam/equipment and EA per reagent/batch
» **Technical production:** by exam and by equipment
» **Tubes collected per patient:** general and laminated by tube type
» **Tube exams:** general and laminated by tube type
» TAT analytical phase (by exams)
» Unpublished reports
» Index of interpretive comments in report
» Incorrect reports
» Failure to communicate critical results
» **Communication of late critical results:** non-hospitalized and hospitalized patients
» **Average time for reporting critical outcomes:** non-hospitalized and hospitalized patients
» **Delayed Outcomes:** non-hospitalized patients
» **TAT 90 Percentile:** INR, Potassium, Troponin and WBC
» TAT Global (by exam)
» TAT post-analytical phase (by exams)
» **Recollect:** general and statified, non-hospitalized and hospitalized patients
» Incorrect results released
» Accidents with sharps
» **Accident at work:** general

DEMORAPHIC INDICATORS

» **Report delivery:** by email, by web, at home, by phone or fax and collected in the laboratory
» **Examinations per patient:** general and stratified by public, private and health insurance
» Public served, outpatients and inpatients
» **Recollection system:** own, third-party and franchised patients
» Outsourcing
» Average ticket
» **Exam volume:** private, operator, public and courtesy

Learn more about Benchmarking Program for Laboratory Indicators

Version 17082023

Planning and monitoring of analytical performance

In Analytical Quality Management (AQM), information on the performance of the exam in the Proficiency Testing and in the Internal Control are unified to define the Analytical Quality Specification strategy. **Expanding the analysis of the analytical performance of the exam. With that, the definitions occur with less than 3 minutes/exam.**

MORE CONFIDENCE IN EXAM RESULTS

By evaluating the cross-data between the leading exam control solutions, the laboratory delivers faster, more accurate and safer results to the patient.

The laboratory only looks at what really needs attention.

PROVES TECHNICAL COMPETENCE

It keeps the inaccuracy and inaccuracy of the analyzes under control, in accordance with the goals established by the laboratory and analytical indicators that simplify the management.

FAVORS OBTAINING CERTIFICATIONS AND ACCREDITATIONS

The AQM maintains records and tracking of actions on results. Favoring transparency for accreditations and others, which require the demonstration of **objective evidence that proves the planning, monitoring and evaluation of the routine analytical.** The definitions that meet the predefined requirements are automatically completed by the system.

REDUCES ANALYTICAL COSTS AND INCREASES PRODUCTIVITY

It reduces the use of reagents associated with analyzes caused by false rejections, lack of analytical planning or inadequate use of control rules.

MAKES QUALITY SPECIFICATION UNCOMPLICATED

Didactically **compact** the main **references of Biological Variation and State of the Art to define the specification strategy.** Develops a culture of analytical determinat ion in teams.

Insert more accuracy and traceability to the analytical process

Attentive to the needs of the laboratory public, Controllab provides Certified Reference Materials (CRM), an important tool in the quality control of analytical routines.

CHEMICAL PROPERTY

Potencial Redox

- CRM Redox Potential 200,0 mV
- CRM Redox Potential 229,0 mV
- CRM Redox Potential 400,0 mV
- CRM Redox Potential 476,0 mV

Electrolytic Conductivity Solution

- CRM Electrolytic Conductivity Solution 1,50 µS/cm
- CRM Electrolytic Conductivity Solution 5,00 µS/cm
- CRM Electrolytic Conductivity Solution 25,00 µS/cm
- CRM Electrolytic Conductivity Solution 50,00 µS/cm
- CRM Electrolytic Conductivity Solution 100,0 µS/cm
- CRM Electrolytic Conductivity Solution 500,0 µS/cm
- CRM Electrolytic Conductivity Solution 1400 µS/cm
- CRM Electrolytic Conductivity Solution 5000 µS/cm
- CRM Electrolytic Conductivity Solution 12800 µS/cm

Buffer Solution for pH

- CRM Buffer Solution for pH 1,7
- CRM Buffer Solution for pH 4,0
- CRM Buffer Solution for pH 6,9
- CRM Buffer Solution for pH 9,2
- CRM Buffer Solution for pH 10,0

PHYSICAL PROPERTY

Degree Brix at 20 °C

- CRM Refractive Index at 20 °C: 0,0 g/100 g
- CRM Refractive Index at 20 °C: 12,0 g/100 g
- CRM Refractive Index at 20 °C: 35,0 g/100 g
- CRM Refractive Index at 20 °C: 49,0 g/100 g
- CRM Refractive Index at 20 °C: 60,0 g/100 g

Turbidity

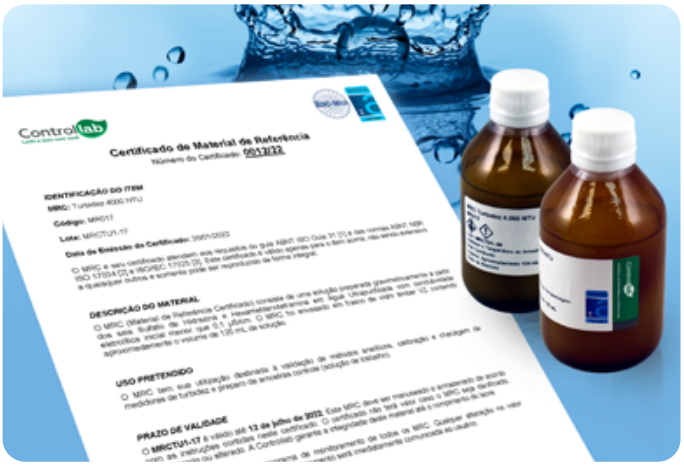
- CRM Turbidity 4000 NTU

Fusion Point

- CRM Fusion Point 47 °C a 49 °C
- CRM Fusion Point 69 °C a 71 °C
- CRM Fusion Point 113 °C a 115 °C
- CRM Fusion Point 121 °C a 123 °C
- CRM Fusion Point 158 °C a 161 °C
- CRM Fusion Point 164 °C a 166 °C

Color

- CRM Color 500 mg/L Pt-Co



Learn more about Certified Reference Materials

ENVIRONMENTAL

- CRM Cyanide 1,000 mg/L
- CRM Chloride 1,000 mg/L
- CRM Residual Chlorine 1,000 mg/L
- CRM Fluoride 1,000 mg/L
- CRM Nitrate as Nitrogen 1,000 mg/L
- CRM Nitrite as Nitrogen 1,000 mg/L
- CRM Ammonia Nitrogen 1,000 mg/L
- CRM Orthophosphate 1,000 mg/L
- CRM Dissolved Oxygen 0 mg/L
- CRM Salinity 35 PSU
- CRM Total Dissolved Solids 1,000 mg/L
- CRM Sulfate 1,000 mg/L

CLINICAL AND BIOLOGICAL PROPERTIES

CRM Qualitative Reference Cultures

The Fungi and Bacteria Bank of your laboratory

BACTERIAS

CRM	NCTC ®	WDCM	ATCC ®
CRM *Acinetobacter baumannii*	12156	–	19606
CRM *Acinetobacter baumannii*	13304	–	–
CRM *Aeromonas hydrophila*	12902	–	35654
CRM *Alcaligenes faecalis*	12904	–	35655
CRM *Bacillus cereus*	10320	00001	11778 19637 / 9634
CRM *Bacillus subtilis*	10400	00003	6633
CRM *Bacteroides fragilis*	9343	–	25285
CRM *Burkholderia cepacia*	10743	–	25416
CRM *Campylobacter jejuni*	11351	–	33560
CRM *Campylobacter jejuni*	13367	00005	33291
CRM *Clostridium perfringens*	8237	00007	13124 / 19408
CRM *Clostridium perfringens*	13170	00201	–
CRM *Clostridium sporogenes*	532	00008	19404
CRM *Clostridium sporogenes*	12935	–	11437
CRM *Cronobacter sakazakii*	11467	00214	–
CRM *Citrobacter freundii*	9750	–	8090
CRM *Clostridium bifermentans*	506	00079	–
CRM *Clostridium difficile*	13566	–	43593
CRM *Clostridium septicum*	547	–	12464
CRM *Enterobacter hormaechei*	13870	–	700323
CRM *Enterococcus hirae*	13383	–	10541
CRM *Enterobacter cloacae*	10005	00083	13047
CRM *Enterococcus faecalis*	775	00009	19433
CRM *Enterococcus faecalis*	12697	00087	29212
CRM *Enterococcus faecalis*	13379	00085/00152	51299

CRM	NCTC ®	WDCM	ATCC ®
CRM *Enterococcus faecalis*	13763	00210	33186
CRM *Enterococcus faecium*	12202	–	–
CRM *Escherichia coli*	9001	00090/00155	11775
CRM *Escherichia coli*	11954	–	35218
CRM *Escherichia coli*	12241	00013	25922
CRM *Escherichia coli*	12900	00014	700728
CRM *Escherichia coli*	13216	00202	–
CRM *Escherichia coli*	13353	–	–
CRM *Escherichia coli*	13476	–	–
CRM *Escherichia coli*	13846	–	–
CRM *Escherichia coli*	12923	00012/00196	8739
CRM *Haemophilus influenzae*	8468	–	–
CRM *Haemophilus influenzae*	12699	–	49247
CRM *Haemophilus influenzae*	12975	–	49766
CRM *Haemophilus influenzae*	13377	–	10211
CRM *Klebsiella aerogenes*	10006	00175	13048
CRM *Klebsiella pneumoniae*	9633	00097	13883
CRM *Klebsiella pneumoniae*	13368	–	700603
CRM *Klebsiella pneumoniae*	13438	–	–
CRM *Klebsiella pneumoniae*	13440	–	–
CRM *Klebsiella pneumoniae*	13442	–	–
CRM *Klebsiella pneumoniae*	13443	–	–
CRM *Klebsiella pneumoniae*	13809	–	BAA 1705
CRM *Legionella pneumophila*	11192	00107	33152
CRM *Legionella pneumophila*	12821	00205	–

Certified Reference Materials

BACTERIA

CRM	NCTC®	WDCM	ATCC®
CRM *Listeria innocua*	11288	00017	33090
CRM *Listeria monocytogenes*	11994	00019	–
CRM *Listeria monocytogenes*	13372	–	7644
CRM *Listeria monocytogenes*	13627	00020	19111
CRM *Micrococcus luteus*	7743	–	10240
CRM *Mycobacterium smegmatis*	8159	–	19420
CRM *Neisseria gonorrhoeae*	8375	–	19424
CRM *Neisseria gonorrhoeae*	12700	–	49226
CRM *Pseudomonas aeruginosa*	10662	00114	25668
CRM *Pseudomonas aeruginosa*	12903	00025	27853
CRM *Pseudomonas fluorescens*	10038	00115	–
CRM *Streptococcus equi*	7023	–	43079
CRM *Salmonella enterica*	6017	00029	BAA-2162
CRM *Salmonella enterica*	12023	00031	14028
CRM *Salmonella enterica*	6676	–	–
CRM *Staphylococcus aureus*	6571	00035	9144
CRM *Staphylococcus aureus*	7447	00033/00195	6538P
CRM *Staphylococcus aureus*	10788	00032/00193	6538
CRM *Staphylococcus aureus*	12493	00212	–
CRM *Staphylococcus aureus*	12973	00131	29213
CRM *Staphylococcus aureus*	12981	00034	25923
CRM *Staphylococcus aureus*	13373	00211	43300
CRM *Staphylococcus aureus*	13552	–	–
CRM *Staphylococcus aureus*	13811	–	BAA-977
CRM *Staphylococcus aureus*	13812	–	BAA 976
CRM *Staphylococcus aureus*	13813	–	BAA 1708
CRM *Staphylococcus aureus*	14033	–	BAA 1026
CRM *Staphylococcus epidermidis*	11047	00132	14990
CRM *Staphylococcus epidermidis*	13360	00036	12228
CRM *Streptococcus agalactiae*	8181	–	13813
CRM *Streptococcus pneumoniae*	12977	–	49619
CRM *Streptococcus pyogenes*	12696	–	19615
CRM *Streptococcus mutans*	10449	–	25175
CRM *Vibrio furnissii*	11218	00186	–
CRM *Vibrio parahaemolyticus*	10903	00037	17802

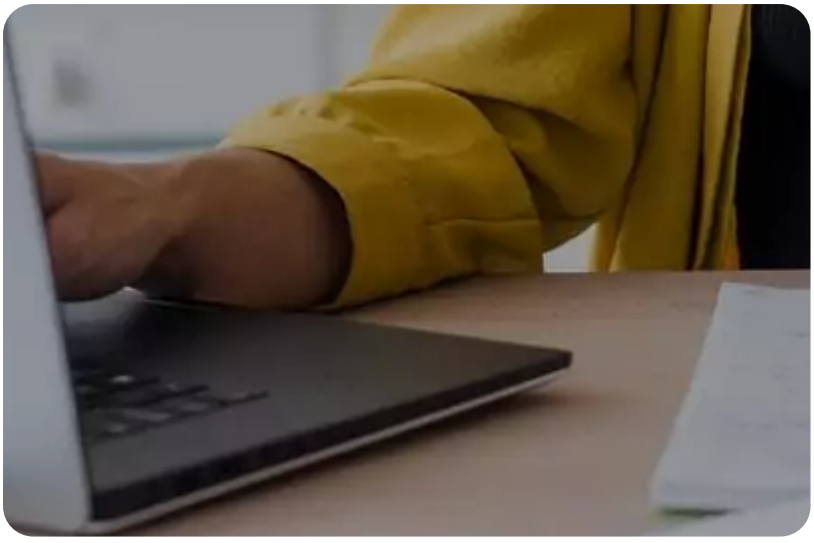
FUNGI

CRM	NCPF®	ATCC®	WDCM
CRM *Aspergillus brasiliensis*	2275	00053	16404
CRM *Candida albicans*	3179	00054	10231
CRM *Candida albicans*	3255	00055	2091
CRM *Candida albicans*	3939	–	90028
CRM *Saccharomyces cerevisiae*	3191	–	9763
CRM *Saccharomyces cerevisiae*	3275	–	2601

Meets BrCAST recommendations

Meets CLSI recommendations

Note 1: *The NCTC and NCPF strains authorized by UKHSA are equivalent to the ATCC® strains referred to in this table.*



Educating to promote quality

Since 1990, the **Controllab** Team and its advisors have been developing educational actions with the purpose of promoting the recycling of knowledge and the improvement of laboratory activities.

Originated by the scarcity of information for the laboratories, this work has been perpetuated thanks to the accumulated experience and the constant exchange of information with clients.

Some materials and tools are exclusive to Controllab customers, such as illustrated questionnaires, forms and instructions for quality control and equipment/materials.

Other materials are freely available to the laboratory community. They include articles, manuals/books, translations and course/lecture materials.

Learn more about Distance Learning

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