



# **SERVICE CHARTER**

Laboratory Medicine Service Anatomical Pathology Medical Genetics

The Laboratory Medicine, Anatomical Pathology, and Medical Genetics Service of MultiMedica consist of three centers of excellence:

- **General Clinical Laboratory** with specialized areas (Clinical Pathology Microbiology and Virology), directed by Prof. Lorenzo Drago.
- Anatomical Pathology and Somatic Molecular Diagnostics Laboratory, directed by Prof. Giuseppe Pelosi.
- Medical Genetics and Molecular Genetics Laboratory, directed by Dr. Maria Cannone.

The laboratory performs analyses in the following fields:

- Allergology
- Autoimmunity
- Clinical Chemistry
- Hematology and Coagulation
- Genetics
- Microbiology and Virology
- Serology
- Proteins and Toxicology
- Histology
- Cytology
- Medical Genetics
- Molecular Genetics
- Immunohistochemistry

The MultiMedica laboratory service is equipped to offer tests with high-quality standards and quick execution, meeting various clinical needs in terms of prediction, prevention, diagnosis, monitoring, and therapeutic surveillance, following criteria of efficiency, effectiveness, and safety management.

The MultiMedica laboratory uses advanced technologies with automated processes that allow the execution of large volumes of analyses not only for MultiMedica Group structures but also for other laboratories or external healthcare facilities.

# List of Services

The full list of services provided by our clinical labs is available at: <a href="https://multimedica.it/documento/elenco-esami-di-laboratorio-anatomia-patologica-e-genetica-medica/">https://multimedica.it/documento/elenco-esami-di-laboratorio-anatomia-patologica-e-genetica-medica/</a>



# **Biological Sample Acceptability Criteria**

The biological sample acceptability criteria and the procedures for repeating the sampling or collection if necessary, follow the guidelines specified in the laboratory manual. These guidelines adopt all the criteria and recommendations indicated by international scientific organizations and literature to ensure reliable analytical data, in order to follow standardized operations for pre-analytical phase and all that allow patients to collect the samples under well-defined baseline conditions. Procedures for collecting and storing samples are standardized as well as the procedures for repeat tests. These explanations are detailed in the procedures of the Laboratory Sampling Centers and the central Laboratory and are available to both internal and external users as needed.

# **Delivery Times**

Delivery times range from 1-2 days for the most common tests to two weeks for more complex tests and/or Anatomical Pathology tests. Further details on each test are available on the intranet page and upon request from the Clinical Lab Secretariat at: +39 02 5540 6622/6573.

#### CONTACTS

Secretary phone: +39 02 5540 6622 / 6572 / 6573 Secretary email: segreteria.multilab@multimedica.it





# LABORATORY MEDICINE

**Director:** Prof. Lorenzo Drago Professor of Clinical Microbiology Department of Biomedical Sciences for Health - University of Milan

Laboratory medicine, also known as clinical pathology or laboratory diagnostics, is open 24 hours a day, 7 days a week. It is a branch of medicine that deals with the analysis of biological samples (blood, urine, tissues, etc.) to obtain information about patients' health. These analyses help physicians diagnose, treat, and monitor diseases.

# Laboratory Medicine and Analysis in MultiMedica

The Laboratory Medicine Service of MultiMedica is accredited and affiliated with the Regione Lombardia and is UNI EN ISO 9001 certified. It performs over 1,200 types of blood tests and other biological sample analyses ranging from the most basic to the most specialized tests.

# **High Quality Standards**

With approximately 2.5 million tests conducted per year, of which 80% are processed on the same day, the clinical laboratory with specialized areas is continuously monitored through various indicators, ensuring the quality of results and user satisfaction.

# Advanced Support for the Hospital System

The Service supports Multimedica hospital system by offering an advanced Point Of Care Testing (POCT) management system, which remotely monitors and evaluates tests performed in emergency situations at the Operational Units of the different Multimedica healthcare facilities. The Microbiology sector also plays a key role in identifying and reporting sentinel germs for the prevention and management of healthcare-associated infections (HAIs).

# **Specialized Sections**

The activities of Laboratory Medicine are organized into six specialized sections:

- Clinical Biochemistry
- Proteins and Toxicology
- Allergology
- Autoimmunity
- Hematology and Coagulation
- Microbiology and Virology, and Serology





# **Specialized Tests**

Specialized tests are also conducted for a wide range of diseases including cardiovascular, oncological, diabetic, and autoimmune conditions.

#### Laboratory Excellence

The laboratory's areas of excellence include:

- Differential diagnoses for neurological, pulmonary, and autoimmune diseases
- Diagnostic insights into immune, cardiovascular, metabolic diseases and microbiota

These areas of excellence are pivotal in the medical practice, significantly contributing to the diagnosis and monitoring of complex diseases.

#### **Research and Innovation**

The laboratory also stands out for its research and innovation, participating in translational studies for the development of new biological markers, infection/inflammation markers and innovative molecular systems in microbiological diagnostics (NGS). It is also involved in the study of rare clinical cases in the field of autoimmunity as well as in cardiology, respiratory, and metabolic diseases.

The biocomputational aspects and correlations between various organs (heart, lung, and intestine) and the microbiome, as well as studies on the cardiotoxicity of biological drugs and the incidence of cardiovascular diseases, complement the scientific features of the General Clinical Laboratory and its specialized sections (Clinical Pathology, Microbiology, and Virology).





# ANATOMICAL PATHOLOGY AND SOMATIC MOLECULAR DIAGNOSTICS

# **Director:** Prof. Giuseppe Pelosi

Full Professor of Anatomical Pathology at the University of Milan

Anatomical Pathology is a specialized section of medicine that focuses on diagnosing human diseases through macroscopic and microscopic morphological examinations as well as molecular analysis of organs, tissues and cells. It is divided into three closely integrated branches: Histopathology, Cytopathology, and Diagnostic Autopsy.

Pathological examination allows to distinguish normal cells and tissues from those with abnormalities. The pathological diagnosis is not a laboratory procedure, but the result of deductive-inductive reasoning. The pathological report provides diagnostic, prognostic, and predictive information which is the basis of patient treatment.

The Anatomical Pathology and Somatic Molecular Diagnostics labs at MultiMedica are part of the training programme of the Pathological Anatomy Specialization School at the University of Milan. This section provides accurate and timely diagnoses using histological and cytological material, and body fluids with cutting-edge equipment to ensure the best clinical management of patients in accordance with the latest national and international guidelines.

# **Quality and Controls**

The Anatomical Pathology and Somatic Molecular Diagnostics labs are certified according to the UNI EN ISO 9001-2015 standard (Bureau Veritas).

All methods used are CE-IVD marked and include positive/negative and/or quantitative/qualitative controls, allowing the reliability of reactions to be evaluated in terms of reproducibility of the analytical data obtained. Additionally, external quality verification programs (VEQ) and internal quality controls (CQI) are applied to manage various activities (cytology, histopathology, immunohistochemistry, somatic molecular genetics).

Multimedica clinical teams of Anatomical Pathology and Somatic Molecular Diagnostics organize multidisciplinary tumor pathology meetings.

# Areas of Activity

The labs cover all areas of systematic anatomical pathology with particular focus on:

- Breast pathology
- Thoracic pathology
- Inflammatory and neoplastic skin pathology
- Gastrointestinal pathology
- Hepato-biliary-pancreatic pathology
- Male urogenital pathology
- Gynecological pathology
- Hemolymphopoietic pathology
- Endocrine pathology





- Soft tissue pathology
- Head and neck pathology
- Neuroendocrine pathology
- Neoplasms of unknown primary origin
- Diagnostic autopsy

# **Delivery Times for Outpatient Examinations**

Delivery times are closely monitored and fully comply with the requirements of the Regione Lombardia. Specifically:

- 15 days for PAP tests
- 7 days for extra-vaginal cytology
- 9 days for fine needle aspiration cytology
- 7 days for prognostic-predictive factors
- 10 days for biopsies
- 10-15 days for somatic oncological genetic tests
- 10-15 days for FISH tests

#### **Tests During Hospitalization**

For hospitalized patients, specific delivery times are guaranteed and monitored according to the clinical and administrative needs of activity control. In detail:

- 30 minutes for intraoperative frozen sections
- 60 minutes for sentinel lymph node frozen sections
- Urgent non-frozen respiratory cytology diagnostics (lavage and bronchial aspiration fluids) with reports within 24 hours, and for urgent cytohistological samples declared urgent by the clinician with rapid reporting completed within the day
- 12 days for simple surgical specimens
- 20 days for complex surgical specimens

# **Second Opinion Consultations**

The Anatomical Pathology and Somatic Molecular Diagnostics team at MultiMedica offer accurate and timely second opinion consultations on cytological and histological material prepared elsewhere, covering all areas of Anatomical Pathology.

These consultations are fee-based and can be requested by the ATTENDING physician, either internal or external, or directly by the patient, by calling the division's secretariat, Monday through Friday, from 8:30 AM to 3:30 PM.



# Somatic Molecular Diagnostics

Numerous somatic molecular determinations are carried out for both diagnostic and research purposes. The molecular diagnostics service is accessible to internal or external attending physicians, or directly to external patients, even just for information, by contacting the division's secretariat from Monday to Friday, from 8:30 AM to 3:30 PM.

#### Research

Several lines of clinical and translational research are pursued focusing on the pathology of breast, gastrointestinal, prostate, and lung tumors as well as rare neoplasms.





# MEDICAL AND MOLECULAR GENETICS

# Director: Dr. Maria Cannone

Medical Genetics is a specialized section of medicine that focuses on the study and diagnosis of human genetic diseases, which are caused by alterations in genes or chromosomes. These alterations can be germline if they involve cells from which female gametes (oocytes) and male gametes (spermatozoa) originate, and somatic if they are present in cells different from those of the germline ones.

Germline genetic alterations are passed down from one individual to their offspring and give rise to hereditary diseases, while somatic genetic alterations are limited to the cells derived from the initially mutated cell, as occurs in benign and malignant human neoplasms. Germline alterations require genetic counseling to assess the risk of hereditary transmission for the patient and within their family, not only for diagnostic purposes but also for prevention. The identification of germline alteration is on the basis of diagnostic and therapeutic pathways for many human diseases, particularly in oncology, cardiovascular and neurological fields.

The Medical Genetics Lab of MultiMedica ensures accurate and timely molecular diagnoses using histological, cytological material and body fluids, along with advanced equipment, in accordance with the latest national and international guidelines. It works closely with the Anatomical Pathology and Somatic Molecular Diagnostics lab at MultiMedica.

# **Quality and Controls**

The quality of activities carried out in the Medical Genetics Lab of MultiMedica is certified according to the UNI EN ISO 9001-2015 standard (Bureau Veritas).

All methods used are CE-IVD marked, and procedures include a system of internal quality controls (CQI) that allows continuous monitoring of the work performed to ensure the quality of the reported tests. Participation in external quality verification (VEQ) guarantees that services comply with international standards and improve the process to ensure customer satisfaction.

#### Areas of Activity

Thanks to its testing activity, the Medical Genetics Lab identifies genetic alterations that may be associated with hereditary diseases or predispositions to developing them. Screening genetic tests allow the identification of individuals at risk of developing a disease, while diagnostic tests confirm or exclude a clinical diagnosis. All delivery times are carefully monitored and fully comply with the requirements of the Regione Lombardia.





# LAB SAMPLING CENTERS

At MultiMedica Lab Sampling Centers in Lombardia you can take a wide range of blood tests and other biological sample analyses. Our central lab in Via Fantoli, Milan, guarantees the execution of basic and specialized investigations with high-quality reports and very rapid turnaround times.

# WHERE AND WHEN CAN I HAVE A BLOOD TEST?

- IRCCS MultiMedica Sesto San Giovanni Via Milanese 300, Sesto San Giovanni (Milan) Monday to Friday from 7:00 to 11:00 – Saturday\* from 7:00 to 10:30
- San Giuseppe Hospital Via San Vittore 12, Milan M2 Sant'Ambrogio Monday to Friday from 7:00 to 11:00 – Saturday\* from 8:00 to 11:00
- MultiMedica Castellanza Hospital Viale Piemonte 70, Castellanza (Varese) Monday to Saturday\* from 7:00 to 11:00
- MultiMedica Limbiate Hospital Via F.lli Bandiera 3, Limbiate (Monza Brianza) Monday to Saturday\* from 7:00 to 9:30 for patients aged 14 and over Monday to Wednesday from 8:30 to 9:30 for patients aged 6 to 14 years
- Specialist Polyclinic Via S.Barnaba Via San Barnaba 29, Milan Monday to Friday from 8:00 to 9:30
- Sampling Point in Via Fantoli Via Fantoli 16/15, Milan Monday to Friday from 7:00 to 10:00

# HOW MUCH DOES A BLOOD TEST COST?

Our Sampling Points are affiliated with the National Health Service (SSN). By presenting a doctor's prescription, you can access services either through the public system or privately via direct payment or insurance agreements.

# HOW CAN I BOOK A BLOOD TEST?

For lab tests, no booking is required. You can walk in on the same day. If you want to avoid the queue at the counter, you can book your test through the ZeroCoda service (not available for the Limbiate location) - ZeroCoda booking service

# WHAT BLOOD TESTS CAN I HAVE?

Our Center offers tests in the following areas:

- Allergology
- Autoimmunity
- Clinical Chemistry
- Hematology and Coagulation
- Microbiology
- Serology





- Proteins and Toxicology
- Histology
- Cytology
- Molecular Biology
- Immunohistochemistry
- Virology

# WHAT ARE THE DELIVERY TIMES FOR RESULTS?

The delivery times range from 1-2 days for the most common tests to up to two weeks for complex tests and/or Anatomical Pathology tests.

Further details on each test are available on the intranet page or upon request by contacting the Lab Management's Secretariat at: +39 02 5540 6622/6573.

Most reports are also available online.

# HOW CAN I GET THE RESULTS OF MY BLOOD TEST?

With MultiMedica's online report service, accessing the reports of your visits and diagnostic tests is simple, fast, and secure.

You can check your results 24 hours a day conveniently from home saving precious time and avoiding travelling.

You can also receive a paper copy of the report, which can be collected at one of our facilities during the specified opening hours.

# **TESTS NOT AVAILABLE ON SATURDAY**

- HLA A-B-C
- HLA DPB1 DQA1 DQB1 DRB
- BK
- Karyotype
- Lymphocyte Subpopulations (Monday to Thursday)
- Resting Prolactin (Monday to Friday)
  - For Sesto S.G. location, by 8:00 AM
  - For Castellanza location, by 8:00 AM
  - For Limbiate location, by appointment only by calling 02/24209715
  - For San Giuseppe Hospital, by 11:00 AM
  - For San Barnaba location, only at 8:00 AM
- Blood Samples in the Prone or Sitting Position (Monday to Friday)
  - For Sesto S.G. location, by 8:00 AM
  - For Limbiate location, by appointment only by calling 02/24209715
  - For San Giuseppe Hospital, by 11:00 AM
  - For San Barnaba location, only at 8:00 AM
- Glycemic Insulinemic Cortisol Profile (Monday to Friday, by 8:00 AM)
  - For Limbiate location, by appointment only by calling 02/24209715
  - For San Barnaba location, only at 8:00 AM
- Curves (Glycemic-Insulinemic-Peptide-Methionine Load) (Monday to Friday, by 8:00 AM)





- For Limbiate location, by appointment only by calling 02/24209715
- For San Barnaba location, the Methionine Load is not available
- Y Chromosome (not available on Saturday in Castellanza)
- Cystic Fibrosis (not available on Saturday in Castellanza)
- Intraerythrocyte Lithium (Monday to Thursday)
- Free Plasma Hemoglobin (Monday to Thursday)
- Cold Agglutinins Cryoglobulins (Monday to Thursday)

# **BLOOD TESTS FOR CHILDREN**

Blood tests for children under 6 years of age are only available at San Giuseppe Hospital in Milan. There are no age limits for stool, urine, and scotch tests.

# HOME BLOOD SAMPLING SERVICE

If you live in Milan you can request a home blood sampling through the MultiMedica 'A Casa Tua' service. Costs:

- Nurse visit (daytime): €35
- If the tests are covered by the public health system, the cost includes the nurse's visit + the ticket fee
- If the tests are done privately, the cost includes the nurse's visit + the cost of the tests

# FREE HEPATITIS C (HCV) SCREENING

MultiMedica participates in the free screening campaign for Hepatitis C (HCV) prevention, promoted by the Regione Lombardia.

People born between 1969 and 1989 can access the Sampling Points and request to take the test free of charge during routine blood tests.

These are the Sampling Points where you can go:

- IRCCS MultiMedica Via Milanese 300, Sesto San Giovanni (Milan)
- San Giuseppe Hospital Via San Vittore 12, Milan
- MultiMedica Limbiate Hospital Via F.lli Bandiera 3, Limbiate (Monza Brianza)
- MultiMedica Outpatient Center Via San Barnaba 29, Milan
- MultiMedica Sampling Point Via Fantoli 16/15, Milan

For more information about the Hepatitis C screening campaign, visit this link.