

## PATIENT COLLECTION INSTRUCTIONS

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## 1 VENOUS BLOOD SAMPLING

Before each blood test, the patient should:

- be fasting for 8-12 hours before the test;
- avoid strenuous physical exercise for 12 hours before the test;
- not smoke from the time they wake up until sample is taken;
- not drink alcohol for 12 hours before the test.

After blood collection is complete, a cotton wool dressing is applied over skin. The patient is asked to maintain pressure over the needle site for at least 5 minutes, without massaging and with arm extended, in order to prevent hematoma formation.

It is recommended that the patient does not strain the arm for at least 30 minutes and abstains from intense sports activity involving the upper limbs for at least three hours after sampling.

### 1.1 BASAL CICLOSPORIN TEST

The patient is asked:

- not to eat or drink anything before the test;
- not to take the usual dose of medication on the day of collection;
- After basal sampling, the second sample is to be taken after two hours: the patient must not eat or drink anything during this time.

### 1.2 PRE-PRANDIAL GLYCEMIA

The sample should be collected 2 hours after breakfast.

### 1.3 POST-PRANDIAL GLYCEMIA

The sample should be taken 2 hours after lunch.

### 1.4 GLYCEMIC CURVE, PREGNANCY GLYCEMIC CURVE AND INSULINEMIC CURVE

The patient should:

- arrive at the Collection Point as soon as it opens;
- be fasting for at least 8 hours and no longer than 14 hours before the test.

The patient should NOT change their diet on the 3 days prior to the test and should exercise as usual.

The test cannot be carried out in case of intolerance or allergy to orange/citrus fruits.

After taking the baseline blood glucose sample and verifying the suitability for the test, the patient is given the dose of glucose solution required by the medical prescription or by the type of curve being tested, to be taken within 5 minutes. For the time required by the kind of curve being tested, the patient is invited not to leave the collection point and not eat or drink.

GLYCEMIC CURVES CHART						
Test Name	Priamo Code	Test	Studiolab Code	Test	Dose of glucose given	Curve Points
Pregnancy Glycemic Curve	L3860 (BS) L5250 (MB) (3 samples)		1166		75 grams	Basal 60' 120'
Oral Glucose Tolerance Test (75 grams)	L0243 (BS) L0074 (MB) <b>(6 samples)</b> L3739 (BS) L5347 (MB) <b>(4 samples)</b> L3738		1079		75 grams	Basal 30' 60' 90' 120' 150'

	<b>(3 samples)</b>			
Insulinemic curve*	L0829 (BS) L0525 (MB) <b>(5 samples)</b>	6533	75 grams	Basal 30' 60' 90' 120'

\* Curve points may be modified as required by the doctor.

## 1.5 MEDICATION

The patient should turn up to the Collection Point on an empty stomach before taking the usual morning medication.

## 2 URINE COLLECTION

**OVERVIEW:** the patient should collect urine for urinalysis and urine culture at their home before going to the collection point; urine can be collected at the Collection Point only and exclusively in the event that the patient declares that he/she has not urinated for more than three hours, as this allows the bladder mucosa to properly contaminate the urine and to preserve the red blood cells (if any) intact; a sample collected without following the above instructions may have a false negative result.

### 2.1 COMPLETE URINE TEST

Wash the external genitalia thoroughly. For complete urine testing, collect a sample of the first morning urine, letting the first catch of urine fall into the toilet. Use the sterile disposable screw-top containers with sampling device for vacuum tubes provided free of charge by Synlab or available in pharmacies; exceptionally, a sterile wide-mouth plastic container with a screw cap, available in pharmacies, is also accepted.

We recommend waiting at least three days after the end of the menstrual cycle.

Collect an amount of urine equal to the maximum level marked on the container and close it very tightly with the appropriate cap.

Do not scotch tape the cap. Label the sample container with your name, surname and date; if you are pregnant, please write "PREGN" on the label.

### 2.2 URINE CULTURE

Urine should be collected in a sterile disposable screw-top container with sampling device for vacuum tubes provided free of charge by Synlab or available in pharmacies; Exceptionally, a sterile wide-mouth plastic container with a screw cap, available in pharmacies, is also accepted.

In case of acute symptoms, the sample can be collected at any time; in all other cases (check-ups in pregnant women, post-therapy check-ups, etc.), in order to provide reliable data on the bacterial load, the **first morning sample** is the most valuable; otherwise, the sample of urine should be collected **at least three hours** after a previous urination.

Urine should be collected using the "mid-stream" technique, as follows:

- wash your hands thoroughly;
- thoroughly clean your genitals with soap and warm water, and thoroughly rinse the genital area;
- women should keep the labia majora apart with one hand and men should keep the skin of the glans completely retracted during skin cleansing and sample collection procedure;
- begin urinating in the toilet and stop;
- resume urinating directly into the sterile container, avoiding touching the inside and rim. Do not overfill half of the container;
- finish urinating into the toilet;
- Close the container, checking that you have collected an amount of urine equal to the MAX volume of the container (50 mL).

Take the sample to the Lab as soon as possible; If there is a delay in handing in the sample, the container should be kept refrigerated for no longer than 48 hours.

Any antibiotic treatment should be suspended at least one week prior to collection unless otherwise indicated by the healthcare.

#### First morning urine

Collection should be performed at least one week after the end of any antimicrobial therapy.

Collection should not be performed during the menstrual period, if possible.

- wash your hands thoroughly;
  - thoroughly clean the urethral orifice and the surrounding area;
  - urinate in the sterile container to collect a small amount of urine (about 15/20 ml);
  - stop urinating and finish urinating in the toilet;
  - Close the container tightly.
- To detect URINARY ANTIGENS, the collection should be carried out in a sterile wide-mouth container (WITHOUT ANY PRESERVATIVES) and the urine volume collected must be equal to 5/10 ml;
  - To detect URINARY PARASITES, the urine collection should be performed in the middle of the morning and should be preceded by about twenty bends on the knees: this allows a better elimination of parasites, if any, from the bladder.

Take the sample to the Lab as soon as possible; If there is a delay in handing in the sample, the container should be kept refrigerated for no longer than 48 hours.

### 2.3 URINE CULTURE FROM ADHESIVE PLASTIC BAG COLLECTION

To collect this urine sample, it is necessary to have a sterile adhesive plastic bag, which can be found in pharmacies; The procedure is as follows:

- wash your hands thoroughly with soap and water;
- wash the patient's pubic area and external genitals with soap and water, rinse thoroughly and dry with disposable paper towels;
- apply the sterile bag (available in pharmacies) to the genital area, covering the perineum and pubic area;
- leave the bag "in situ" for **no more than 60 - 90 minutes, replace it if necessary and repeat the procedure;**
- as soon as the urine has passed, remove the bag;
- seal the bag properly and place it upright in a sterile wide-mouth urine container;
- Do not pour the urine into another container.

Take the sample to the Lab as soon as possible; If there is a delay in handing in the sample, the container should be kept refrigerated for no longer than 24 hours.

### 2.4 NONACIDIFIED 24-HOUR URINE COLLECTION

Nonacidified 24-hour urine collection should be performed for the following analytes:

17-Ketosteroids	
Oxalic acid (oxalate)	
Uric acid	
Urinary aldosterone	
Amylasuria	
Beta 2 microglobulin	
Urinary calcium	
24-h Urine citrate	
Urea clearance	The urine sample must be collected and handed in on the same day
Creatinine clearance	The urine sample must be collected and handed in on the same day

Urinary chlorine	
Addis Count	
Urinary cortisol	
Coproporphyrins	Protect from light
24-h Urine creatinine	
Dosage of kappa and lambda light chains (Bence-Jones proteinuria)	
Urine protein electrophoresis	
24-h urine Iron	
Urinary phosphorus	
Glycosuria	
Hydroxyprolinuria	For 48 hours prior to starting the 24-h urine collection and during the collection, you should not eat the following foods: meat, meat products, broth and meat extracts, products containing jelly, fish, sweets and eggs. During this time, you should avoid taking medication, after checking with your GP.
Immunofixation	
Urinary magnesium	
24-h Microalbuminuria	
Total porphyrins	Protect from light
Urinary potassium	
Proteinuria	
24-h Urine copper	
Urinary sodium	
Uroporphyrins	Protect from light

Collect all day and night urine as follows:

- start the 24-hour collection by completely emptying bladder and discarding 1<sup>st</sup> morning urine into the toilet. Record this time as the start time of the collection (e.g. 7:00 a.m.);
- collect all day and night urine in the container;
- on the following morning, finish the collection with the urine emitted at the same time as the previous day (e.g. 7:00 a.m.) in the same container;
- mix thoroughly, measure the total volume of urine collected and take a sample to the laboratory. If it is not possible to measure the urine volume, take all the urine you have collected to the laboratory.

**N.B.:** Urine should be stored in a cool place during collection.

## 2.5 ACIDIFIED 24-HOUR URINE COLLECTION

Acidified 24-hour urine collection should be performed for the following analytes:

Acidified 24-hour urine tests	Notes
5-Hydroxyindoleacetic acid	For 48 hours prior to starting the urine collection and during the collection, you should not eat the following foods: pineapple, avocados, bananas, kiwis, blackberries, red plums, eggplant, tomatoes, dried fruit, coffee, tea and chocolate. During this time, you should stop medication, if advised by your doctor, or communicate the name of the drugs being taken during collection.
Vanilylmandelic acid	For 48 hours prior to starting the urine collection and during the collection, you should not eat the following foods: avocados, bananas, kiwis, dried fruit,

Acidified 24-hour urine tests	Notes
	coffee, tea and chocolate. During this time, you should stop medication, if advised by your doctor, or communicate the name of the drugs being taken during collection.
Urinary adrenaline/norepinephrine	
Urinary dopamine	
Urinary metanephrine	
Urinary normethanephrens	
24-h Urinary serotonin	For 48 hours prior to starting the urine collection and during the collection, you should not eat the following foods: pineapple, avocados, bananas, kiwis, blackberries, red plums, eggplant, tomatoes, dried fruit, coffee, tea and chocolate. During this time, you should stop medication, if advised by your doctor, or communicate the name of the drugs being taken during collection.

Collect all day and night urine as follows:

- start the 24-hour collection by completely emptying bladder and discarding 1<sup>st</sup> morning urine into the toilet. Record this time as the start time of the collection (e.g. 7:00 a.m.);
- proceed with acidification: place 4 full tablespoons of muriatic acid available on sale, 10-12% concentration, on the bottom of the urine collection container and add all urine passed, day or night. Stir thoroughly whenever you add some urine;
- on the following morning, finish the collection with urine emitted at the same time as the previous day (e.g. 7:00 a.m.) in the same container;
- mix thoroughly, measure the total volume of urine collected and bring a sample to the laboratory. If it is not possible to measure the urine volume, take all the urine you have collected to the laboratory.

**N.B.** During the collection, urine must be stored at room temperature in a cool place, away from heat sources and sunlight.

**CAUTION: USE EXTREME CAUTION WHEN USING MURIATIC ACID AS IT IS HIGHLY CORROSIVE AND IRRITATING.**

### 3 STOOL COLLECTION FOR STOOL TESTING (COMPLETE TEST) AND CULTURE TESTS

Loose stools, i.e. stools emitted during the acute phase of the disease and before starting antibiotic therapy, offer the best quality material for microbiological research.

Stools should be collected using a suitable catching device, from which a sample will be put into the appropriate container.

Any antibiotic therapy should be suspended for at least one week unless otherwise indicated by the healthcare provider; make sure no water or urine contaminates the feces during collection, so as not to compromise the microbiological result;

For complete stool testing, it is necessary to use a sterile container and collect any mucous or blood parts. The specimen should reach the laboratory as quickly as possible.

Take the sample to the Lab as soon as possible, within 48 hours from collection; if there is a delay in handling the sample into the laboratory, the sample can be stored in the refrigerator.

### 4 RESEARCH FOR INTESTINAL PARASITES

It is recommended to collect at least three stool samples on three different days, it being understood that, if there is a medical prescription, the healthcare provider's instructions should be followed.

Considering that many substances and some drugs (vaseline oil, barium, bismuth, antibiotics, antimalarials and non-absorbable antidiarrheal drugs) interfere with the detection of intestinal protozoa, it is strongly recommended to stop taking them at least one week before carrying out the test.

Stool samples must be collected in an adequate quantity (one walnut) since smaller quantities of stool can make the test falsely negative; they must be sent to the laboratory in a stool collection container carefully closed with a screw cap and must arrive within a maximum of 48 hours of each collection. In case of late delivery, the sample can be stored at  $5\pm 3^{\circ}\text{C}$ .

N.B. the sample must not be contaminated with urine or water.

#### 4.1 TAPE TEST

**CAUTION: *E. vermicularis* eggs are very infectious and can adhere to the skin;** therefore, during all steps of sample collection and preparation, wear protective gloves and wash your hands thoroughly after the procedure. The Laboratory will provide you with all the supplies you need (glass slide and transport container).

Sampling should be performed as soon as the person wakes up, before defecating or bathing.

- press the sticky side of the **transparent** adhesive tape over the anal area;
- remove the adhesive tape and transfer it on the glass slide provided by the laboratory, sticky side down, creaseless;
- label the sample with the patient's name, surname and date of birth;
- 24 hours after the first collection, repeat the test two more times or as many times as necessary to collect the number of samples required by the doctor.

Samples should reach the laboratory as soon as possible, within 48 hours of each sample collection. If there is a delay in handling the samples in to the laboratory, they can be stored in the refrigerator.

#### 4.2 STOOL COLLECTION FOR OCCULT BLOOD TEST

For occult blood testing, you are asked to use the containers provided by the Lab.

##### General Instructions

- Keep the stool collection tube out of the reach of children.
- The liquid inside the tube should not be swallowed or come into contact with the eyes or mucous membranes. The tube is leakproof. If contact occurs, please seek medical assistance right away.
- Collect the sample immediately after defecation.
- If required, label the specimen tube as follows:

**D** Date of Collection

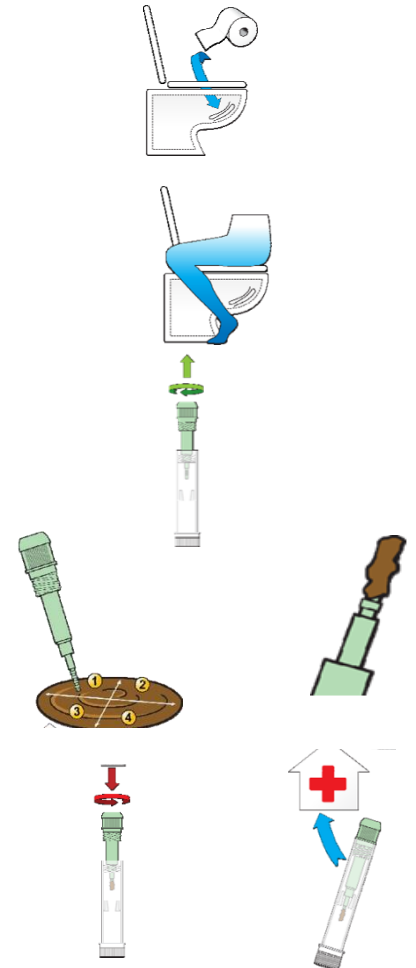
**ID** Sample Identification Code

**N** Patient Name

- Do not insert the tube or part of it into the anus.
- Do not collect stool if you have diarrhea, during menstruation, in the case of rectum bleeding (e.g., hemorrhoids or other reasons), or if stool is contaminated with urine.
- Use the device only once.
- Do not open or attempt to open the transparent cap.
- If you are using a sample collector, please follow the instructions on it. Then follow the sample collection procedure starting from step 3.

Please follow these collection instructions carefully:

1. Place some toilet paper into the toilet.  
If you are using a collection device, please follow the instructions on it. Then go to step 3.
2. Pass feces onto the toilet paper, avoiding contact with water or urine. It's easier if you sit on the toilet backward.
3. Unscrew the green lid cap, keeping the tube upright. Do not shake the upside-down tube.
4. Dip the lid into the stool touching four different areas and making a cross on the surface.  
Only lid grooves should be covered with feces.  
Do not collect excess stool.
5. Reinsert the green cap and screw it tightly. Do not reopen. Gently shake the tube.
6. Return the collection testing device to the Lab within one week if you keep it at room temperature; otherwise, keep the collection tube in the refrigerator and return it within 2 weeks.



### 4.3 STOOL COLLECTION FOR CALPROTECTIN AND ELASTASE TESTING

The sample for this test should be made of formed, not watery stools.

#### Important

- **WARNING:** the supply contains 2-Methyl-4-isothiazolin-3-one (CAS No.: 2682-20-4). In case of accidental contact with the aqueous solution contained in the supply, rinse the affected area thoroughly and thoroughly clean the surfaces involved. Seek medical assistance in the event of eye contact or skin reactions.
- do not use the collection containers after the expiration date printed on the labels.
- the device (before collection) can be stored at room temperature (cool and shaded place), if it is not possible to guarantee storage at 2-8°C;
- do not reuse the collection container;
- avoid collecting the sample if the stool is not solid.

Please collect the stools sample as follows:

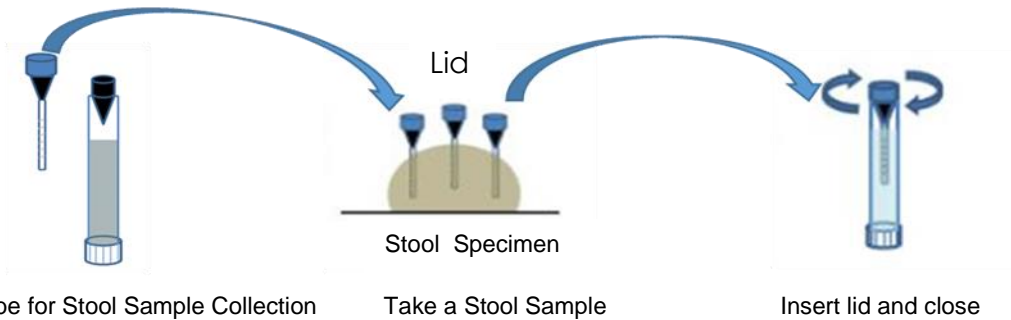
- empty the bladder to avoid contaminating the sample with urine;
- label the collection container with last name, first name and date of birth;
- collect the stools making sure that the sample does not come into contact with water;
- hold the blue-cap specimen container upright and unscrew the collection lid;
- dip the collection lid into the stool sample over 3/5 different areas until the lid grooves are completely covered with stools.

**CAUTION: Make sure all grooves are completely filled with feces. It does not matter if the stick tip is covered with feces; excess stools will be removed in the next step;**



- Insert the collection lid back into the specimen container and screw cap tightly. The rubber lid stopper will remove excess stools;

Once collected, the sample can be stored at room temperature for a maximum of 8 hours; after this time, the device must be stored at 2-8°C for 7 days.



## 5 VAGINAL SWAB AND VAGINAL-RECTAL SWAB

The patient:

- should abstain from sexual activity for 24 hours prior to the test;
- should have stopped any antibiotic or antifungal treatment for at least one week;
- should have stopped any hormonal, probiotic or other local therapy (creams, candles, eggs, douches,..) for at least one week;
- should not have performed any vaginal irrigations for 24 hours prior to the test;

Test cannot be taken during the menstrual cycle (except in cases where acute symptoms make it essential to take the sample during this period as well).

## 6 CERVICAL SWAB

The patient:

- should abstain from sexual activity for 24 hours prior to the test;
- should have stopped any antibiotic therapy for at least one week and should not have performed any vaginal irrigations for 24 hours prior to the test.

Test cannot be taken during the menstrual cycle (except in cases where acute symptoms make it essential to take the sample during this period as well);

Test cannot be taken after the thirty-sixth pregnancy week or in the case of a high-risk pregnancy.

## 7 URETHRAL SWAB

The female patient:

- should abstain from sexual activity for 24 hours prior to the test;
- should have stopped any antibiotic or antifungal treatment for at least one week;
- should not have performed any vaginal irrigations for 24 hours prior to the test;
- should not take the test during the menstrual cycle;
- should not have urinated for 3 hours prior to the test.

The male patient:

- should abstain from sexual activity for 24 hours prior to the test;
- should have stopped any antibiotic and antifungal treatment for at least one week;
- should not have urinated for 3 hours prior to the test.

## 8 SPUTUM COLLECTION

### 8.1 FOR CULTURE TESTING

- collect the sample in the morning BEFORE YOU DRINK OR EAT anything, using a sterile, wide-mouth container;
- rinse your mouth well with water;
- perform a deep expectoration and collect the sputum directly into the sterile container.

It is important that the sample is not made up of saliva alone; If this occurs, repeat the collection. For those people who find it difficult to collect sputum, it is advisable to consult a doctor about taking mucolytics or expectorants for two days prior to the test.

Keep sputum sample refrigerated and hand it in as soon as possible (within 48 hours after collection).

### 8.2 FOR DETECTING CANCER CELLS

Sputum should be collected in the morning before eating or drinking anything, using a special container provided by the Lab. The sputum should be collected as follows:

- rinse your mouth well with water;
- perform a deep expectoration (do not collect saliva only);
- collect the sputum directly into the container.

For those people who find it difficult to collect sputum, it is advisable to consult the doctor about taking mucolytics or expectorants for two days prior to the test.

## 9 SEMEN CULTURE

- the patient should abstain from sexual activity for 72 hours prior to the test;
- the patient should have stopped any antibiotic and antifungal medication for at least one week;
- collection can be performed at home, as long as the specimen is immediately handed in to the Laboratory;
- collection should be preceded by urination and a thorough cleaning of the external genitalia and hands;
- the semen specimen should be collected by masturbating into a sterile screw cap container.

In case of late delivery, the specimen should be stored in the refrigerator for no more than 24 hours.

## 10 THREE-SAMPLE URINE CYTOLOGY TEST

Collect the urine using the wide-mouth containers provided by the Laboratory; the patient's name, surname and date of birth should be indelibly written on the containers.

It is mandatory to carry out the test on the second urine of the morning; it is advisable that the collection is done on samples from three consecutive days. The sample should be collected as follows:

- eliminate the first morning urine;
- drink about one liter of water or other non-alcoholic and non-carbonated beverage;

After drinking, wait about two hours, going about your normal daily activities. While waiting, avoid sitting or lying for a long time;

- wash your genitals thoroughly;
- collect the second morning urine in the container provided by the Lab;
- repeat the procedure on three consecutive days;

At the end of the three-day collection, take the three specimens to the Lab.

It is not necessary to refrigerate the samples, unless temperatures are being too high. Room temperature is recommended.

### Caution:

The collection container contains a PRESERVATIVE; therefore, it should not be thrown away or dispersed in the environment.

Some substances that make up the preservative are toxic or flammable.

It is advisable **to store closed containers at room temperature (15-25°C), away from heat sources and flames, not to ingest, avoid skin or eye contact and keep out** of the reach of children. If eye contact occurs, wash thoroughly with water and a decongestant ophthalmic solution. In the case of ingestion, drink plenty of water, avoid emetics, milk or charcoal and consult a doctor bringing this leaflet for reference.

## 11 COLLECTION OF CERVICAL AND VAGINAL CELLS: CONVENTIONAL SMEAR OR LIQUID PHASE

The patient:

- should abstain from sexual activity for 48 hours prior to the test;
- should not have had any topical treatment (candles, ovules, creams..) or vaginal irrigations for 24 hours prior to the test and must have suspended any local therapies at least 3 days before carrying out the test.

The use of lubricant is absolutely not recommended as it interferes with sample preparation and reporting.

The sample can be collected up to 5 days before the menstrual cycle and only 5 days after the end of the period.

With regard to pregnant patients, screening programs recommend performing pap smears within the first pregnancy trimester (12 weeks and 6 days), as there are no contraindications to any collection procedure when pregnant; however, testing can be postponed postpartum if the patient has already been tested in the previous three years.

## 12 C13 UREA BREATH TEST

To obtain a reliable result, the patient should:

- be resting and fasting for at least 6 hours or overnight;
- not be on antibiotics and not have taken drugs that inhibit gastric secretion for at least 1 month, unless otherwise required by the healthcare provider.

The patient should inform of any allergy to citrus fruits or urea and of any problems that may have emerged during previous breath tests.

## 13 LACTOSE BREATH TEST

To obtain a reliable result, the patient should:

- have stopped any lactic ferments treatment preferably for a week, or, in any case, strictly for at least 3 days;
- abstain from eating or smoking from midnight before the test;
- show up on an empty stomach on the morning of the exam. Only NON-sparkling water is allowed;
- inform about any medication they are taking as it may affect the test results.

During testing, the patient should follow these instructions in order not to alter the composition of the exhaled air:

- do not eat;
- do not smoke;
- avoid leaving the laboratory or performing any physical activity;
- drink only small quantities of still (non-sparkling) water.