Clini5

ENG

OPERATIVE PROCEDURES TEST OVERVIEW

WARNINGS:

- Always wear talc free latex gloves
- Use only alcohol (e.g. denatured ethyl alcohol) to disinfect the finger tip
- Wipe off any excess of blood around capillary by wiping the latter on the patient's finger
- Make always sure that the capillary is in one of the four corners of the cuvette

TEST		VOLUME	TEST PROCEDURE
Hemoglobin **Haematocrit** **Erythrocytes**	**HB** **HTC** **RBC**	10µl 10µl 5µl	1. Perform blanking by inserting the cuvette WITHOUT THE BLOOD SAMPLE into the reading cell 2. Withdraw the cuvette and add the blood sample collected 3. Close the cuvette and rock gently until the capillary has been completely emptied 4. Insert the cuvette into the same reading cell used for blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
Total cholesterol **Glucose** **Lactic acid**	**CHOL** **GLU** **LACT**	10µl 10µl 5µl	1. Add the blood sample collected to the cuvette, close the cuvette and rock gently until the capillary has been completely emptied 2. Insert the cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 3. Remove the cuvette and add two drops of the enzyme, close the cuvette and gently rock 4. Insert the cuvette into the same reading cell used for blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
Triglycerides	**TRIG**	10µl	1. Add the blood sample collected to the cuvette 2. Fix the plunger cap containing the singledose enzyme on the cuvette paying attention NOT to press the red plunger 3. Rock gently until the capillary has been completely emptied 4. Insert the cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 5. Remove the cuvette and press the plunger to release the enzyme into the solution 6. Gently rock and insert the cuvette into the same reading cell used for blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
CHOL ♦ GLU (BI-test)	**C+G**	10µl	1. Add the blood sample collected to the cuvette, close the cuvette and rock gently until the capillary has been completely emptied 2. Insert the cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 3. Remove the cuvette, add two drops of the enzyme 1, close the cuvette and gently rock 4. Insert the cuvette into the same reading cell used for blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 5. Remove the cuvette, add two drops of the enzyme 2, close the cuvette and gently rock 6. Insert the cuvette into the same reading cell used for the first reading N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE

Cholesterol HDL **HDL**	30µl	1. SET THE CALIBRATION COEFFICIENTS CAL1/CAL2 FOUND ON THE REAGENT PACKAGE 2. Add the blood sample collected to the cuvette 3. Close the cuvette and rock gently until the capillary has been completely emptied. 4 Insert the cuvette into the reading cell N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 5. Remove the cuvette and pour into it the content of the R2 conical tube 6. Close the cuvette, gently rock and insert into the same reading cell used for blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
Free Oxygen Radicals Test **FORT**	20µl	1. Add the blood sample collected into the FORT R2 reagent (conical tube) 2. Rock gently until the capillary has been completely emptied 3. Pour the content of the conical tube into the FORT R1 reagent (cuvette) and rock gently 4. Centrifuge for 1 minute N.B.: ALWAYS BALANCE THE CENTRIFUGE USING THE APPROPRIATE BALANCING CUVETTE 5. Insert the cuvette into the reading cell. N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
Free Oxygen Radicals Defence **FORD**	50µl	1. Pour the content of the S2 reagent (**BLUE** tube) into the C1 cuvette 2. Add 50µl of the S3 reagent using the yellow pipette ; close the cuvette and rock gently 3. Add the blood sample into the S1 reagent (**WHITE** tube) and gently rock 4. Centrifuge for 1 minute to obtain the supernatant N.B.: ALWAYS BALANCE THE CENTRIFUGE USING THE APPROPRIATE BALANCING TUBE 5. Remove the cuvette and add 100µl (2x 50 µl using the yellow pipette) of the supernatant 6. Insert the cuvette into the reading cell N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
Uric Acid **URIC**	50µl (plastic capillary)	1. Add two drops of the enzyme into the cuvette, close the cuvette and rock gently 2. Insert the cuvette into the reading cell 3. Remove the cuvette and add the blood sample collected 4. Close the cuvette, gently rock and centrifuge for 2 minutes N.B.: ALWAYS BALANCE THE CENTRIFUGE USING THE APPROPRIATE BALANCING CUVETTE 5. Insert the cuvette into the reading cell
Glycated Hemoglobin **HbA1c**	10µl	1.SET THE CALIBRATION COEFFICIENTS CAL1/CAL2 FOUND ON THE REAGENT PACKAGE 2.Add the blood sample into the BLUE conical tube containig the R1 reagent and rock gently until the capillary has been completely emptied 3. Allow to stand for 2 minutes at room temperature (20-25°C/68-77°F) until the lysis process is completed 4.Add 10 µl of haemolysate to the R2 cuvette 5. Close the cuvette and rock gently 6. Insert the cuvette into the reading cell N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 7. Remove the cuvette and pour the R3 content into the cuvette 8. Close the cuvette and gently rock 10.Insert the cuvette into the same reading cell N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
Alanine Aminotransferase **ALT-GPT** **Aspartate Aminotransferase** **AST -GOT**	50µl	1.SET THE CALIBRATION COEFFICIENTS CAL1/CAL2 FOUND ON THE REAGENT PACKAGE 2. Add the blood sample into the corresponding R1 conical tube 3. Add 2 drops of the R2 reagent 4. Rock gently until the capillary has been completely emptied 5. Centrifuge for 2 minutes to obtain the supernatant N.B.: ALWAYS BALANCE THE CENTRIFUGE USING THE APPROPRIATE BALANCING TUBE 6. Pour the supernatant into an empty cuvette and close using the cap supplied 7. Insert the cuvette into the reading cell

MULTIPLE TEST	VOLUME	TEST PROCEDURE
LDL Cholesterol LDL **HDL** **CHOL** **TRIG**	Calculated (Friedewald formula) 30µl 10µl 10µl	**Preparation** <u>SET THE HDL CALIBRATION COEFFICIENTS CAL1/CAL2 FOUND ON THE REAGENT PACKAGE</u> Prepare: • HDL cuvette, CHOL cuvette, TRIG cuvette • HDL R2 (conical tube), CHOL enzyme, TRIG enzyme (monodose cap) • 1 x 30 µl capillary and 2 x 10 µl capillaries
		1. Collect the blood samples in the following order: HDL (30µl), CHOL (10µl), TRIG (10µl) and add them into the corresponding cuvettes 2. Close the cuvettes (for the TRIG cuvette fix the plunger cap containing the singledose enzyme paying attention NOT to press the red plunger) and rock gently until the capillaries have been emptied 3. Insert the HDL cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 4. Insert the CHOL cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 5. Remove the CHOL cuvette, add two drops of the enzyme CHOL, close the cuvette and gently rock 6. Insert the CHOL cuvette into the same reading cell where blanking has been performed N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 7. Insert the TRIG cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 8. Remove the TRIG cuvette and press the plunger to release the enzyme into the solution 9. Gently rock and insert the TRIG cuvette into the same reading cell where blanking has been performed N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 10. Remove the HDL cuvette and pour the content of the conical tube R2 into the cuvette 11. Close the HDL cuvette, gently rock and insert into the same reading cell where blanking has been performed N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE

Cardiovascular risk **HDL** **CHOL**	Calculated (Framingham study) 30µl 10µl	Preparation: <u>SET THE HDL CALIBRATION COEFFICIENTS CAL1/CAL2 FOUND ON THE REAGENT PACKAGE</u> Prepare: • HDL cuvette, CHOL cuvette • HDL R2 (conical tube), CHOL enzyme • 1 x 30 µl capillary and 1 x 10 µl capillary
		1. Collect the blood samples in the following order: HDL (30µl), CHOL (10µl) 2. Close the cuvettes and rock gently until the capillaries have been emptied 3. Insert the HDL cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 4. Insert the CHOL cuvette into the reading cell to perform blanking N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 5. Remove the CHOL cuvette, add two drops of the enzyme CHOL close the cuvette and gently rock up and down several times 6. Insert the CHOL cuvette into the same reading cell where blanking has been performed N.B.: POSITION THE CAPILLARY TUBE IN THE CORNER OF THE CUVETTE 7. Remove the HDL cuvette and pour the content of the conical tube R2 into the cuvette 8.Close the HDL cuvette, gently rock and insert into the same reading cell where blanking has been performed N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE

Multiple test	VOLUME	Procedure
REDOX INDEX **FORD** **FORT**	Calculated 50µl 20µl	Preparation • FORD: White and blue conical tubes, FORD cuvette • FORT: White conical tube and FORT cuvette • 1 x 50 µl capillary and 1 x 20 µl capillary • Yellow pipette , 2 x yellow tips
		1. FORD: Pour the content of the S2 (BLUE conical tube) into the C1 cuvette and add 50µl of the S3 reagent using the yellow pipette 2.Close the FORD cuvette and rock gently until the reagent has been completely dissolved. Place the cuvette into the reading cell 3. In the meantime: collect the blood samples (50 µl – FORD test and 20 µl – FORT test) and add them into the corresponding conical tubes 4. Close the FORT and FORD conical tubes and gently rock until the capillaries have been completely emptied 5. Pour the content of the FORT conical tube into the FORT R1 cuvette and rock gently. 6. Centrifuge for 1 minute FORT cuvette and FORD conical tube N.B.: ALWAYS BALANCE THE CENTRIFUGE USING THE APPROPRIATE BALANCING CUVETTE (FORT) AND BALANCING TUBE (FORD) 7.Insert the FORT cuvette into the reading cell N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE 8. Remove the FORD cuvette and add 100 µl of the supernatant (2x 50 µl using the yellow pipette) 9. Insert the FORD cuvette into the same reading cell N.B.: POSITION THE CAPILLARY IN THE CORNER OF THE CUVETTE
ALT/AST **ALT** **AST**	Calculated 50µl 50µl	Preparation: SET THE AST AND ALT CALIBRATION COEFFICIENTS CAL1/CAL2 FOUND ON THE REAGENT PACKAGE Prepare: • Conical tubes of AST (**blue**) and ALT (**white**) • 2 x 50 µl capillaries • AST semi-micro cuvette and ALT semi-micro cuvette • AST R2 reagent and ALT R2 reagent
		1. Collect two 50 µl blood samples and add them into the corresponding conical tubes. Rock gently until the capillaries have been completely emptied 2. AST: Add 2 drops of the R2 AST reagent and rock gently 3. AST: Centrifuge the conical tube for 2 minutes to obtain the supernatant N.B.: ALWAYS BALANCE THE CENTRIFUGE USING THE APPROPRIATE BALANCING TUBE 4. AST: Pour the supernatant into the empty AST cuvette and close it using the cap supplied 5. Insert the cuvette into the reading cell 6. Once the AST reading is over : Add 2 drops of the R2 ALT reagent into the ALT conical tube and rock gently 7. ALT: Centrifuge the conical tube for 2 minutes to obtain the supernatant N.B.: ALWAYS BALANCE THE CENTRIFUGE USING THE APPROPRIATE BALANCING TUBE 8. ALT: Pour the supernatant into an empty ALT cuvette and close the cuvette using the cap supplied 9. Insert the cuvette into the reading cell