

HemoCue Hb 201+: Patient Test Procedure



PURPOSE:

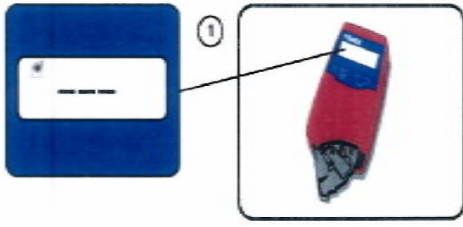
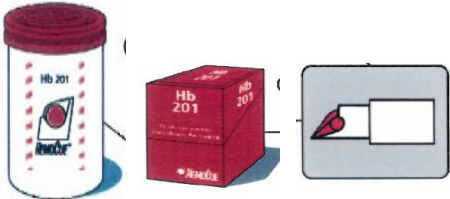
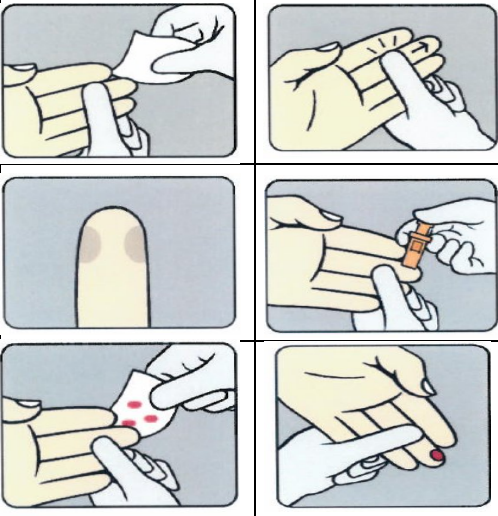

This procedure provides instructions for patient testing of Hemoglobin using the Hemocue Hb 201+ analyzer.

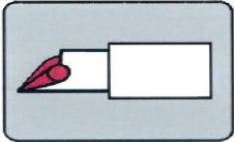


REQUIRED MATERIALS:

- 1) Hemocue Hb 201+ Analyzer, AC adapter, 4 type AA batteries
- 2) Hemocue Hb 201 Microcuvettes (Vial or Individually packaged)
- 3) Lint free tissue
- 4) Microcollection lancing device
- 5) Disinfectant swab (70% isopropyl alcohol in 2% Chlorhexidine)
- 6) Sterile gauze (2 X 2)
- 7) Gloves

PROCEDURE:

		Related Documents
1.	Assemble Materials on workspace	
2.	Place gloves on.	
3.	Obtain HemoCue Hb 201+: Form A - Result Record Form. Confirm: <ul style="list-style-type: none"> • Hemocue Hb 201 Microcuvettes Lot # and expiry is current. • Quality Control Levels Low, Normal, and High are performed on day of patient testing. Results are within range. 	HemoCue Hb 201+: Appendix A - Quality Control Solution HemoCue Hb 201+: Form A - Result Record Form
4.	Identify patient. Use a minimum of two identifiers. <ul style="list-style-type: none"> • name, date of birth, patient identifier number if available. • Document on record form. 	
5.	Turn HemoCue HB 201+ ON <ul style="list-style-type: none"> • Press and hold the left button to activate the display (ON/OFF) • Display shows the version number of the program • All symbols appear on the display. • The analyzer verifies the optic and electronic performance. • Hemocue displays previous result. 	<p>ON/OFF BUTTON </p> <p>Previous RESULT </p>

<p>6.</p>	<p>Prepare HemoCue for loading a microcuvette</p> <ul style="list-style-type: none"> • Pull the microcuvette holder out • After 10 seconds the display will show three flashing dashes and the Hemoglobin symbol • Indicates that self test is passed. • If the Self Test fails note error code. Do not proceed with patient testing. 		<p>HemoCue Hb 201+: Appendix E - Troubleshooting Guide</p>
<p>7.</p>	<p>Obtain HemoCue Microcuvette. Open packaging just before use.</p> <ul style="list-style-type: none"> • Obtain microcuvette from room temperature storage (15-30°C) • Confirm Lot # and Expiry date with Record Form. • Handle microcuvette opposite to fill end. • Place on clean working surface. 		<p>HemoCue Hb 201+: Appendix C - Microcuvettes</p>
<p>8.</p>	<p>Obtain capillary skin puncture device. Use appropriate device as per age of patient.</p>		
<p>9.</p>	<p>Perform capillary skin puncture</p> <ul style="list-style-type: none"> • Patient's hand is warm and relaxed. • Use only the middle three fingers. • Clean the finger with disinfectant. • Allow to air dry. • Place skin puncture device on the side of the fingertip, not in the center. • Apply slight pressure to tip of finger and make the puncture. • Wipe away the first 2 to 3 drops of blood. • Re-apply light pressure towards the fingertip until another drop of blood is formed. 		
<p>10.</p>	<p>Filling the microcuvette with patient sample</p> <ul style="list-style-type: none"> • When blood drop is large enough, fill the microcuvette in one continuous process. • DO NOT REFILL. • Wipe off excess blood from outside of the microcuvette. • Use lint free tissue. 		

	<ul style="list-style-type: none"> • Be careful not to touch the open end of the microcuvette which will result in blood being drawn out of the microcuvette. • Look for air bubbles in the filled microcuvette, if present, discard. • Small bubbles around the edge can be ignored. 		
<p>11. Hemoglobin measurement.</p>	<ul style="list-style-type: none"> • Place the filled microcuvette in the cuvette holder. • Within 10 minutes of filling the microcuvette if there is a delay. • Gently slide the cuvette holder to the measuring position. • During the measurement the hourglass symbol will display. 		
<p>12. Hemoglobin Result</p>	<ul style="list-style-type: none"> • Hemoglobin value is displayed after 15-60 seconds. • The result will remain on the display as long as the cuvette holder is in the measuring position. • Do Not open the cuvette holder until the result is documented • If using batteries, the analyzer will automatically turn off after 5 minutes 		
<p><i>Note: If the analyzer turns off automatically – turn the analyzer ON – the result displayed would be the current patient result.</i></p>			
<p>13. Hemoglobin Result Recording</p>	<p>On the Patient/QC Record Sheet include:</p> <ul style="list-style-type: none"> • Hemoglobin value (g/L) • date/time performed. • Operator Identifier 		
<p>14. Hemoglobin Result Review</p>	<p>Hemocue Hb 201+ expected values (as per manufacturer guidelines):</p> <ul style="list-style-type: none"> • Adult males: 130-170 g/L • Adult females: 120-150 g/L • Infants, after neonatal period 110-140 g/L • Children 2-18 years: gradual increase to adult ranges. See Reference Hospital Ranges Appendix G • Critical values: <90 g/L or > 170 g/L <p>Repeat any unexpected values or critical values.</p> <ul style="list-style-type: none"> • Confirm with reference laboratory. Notify physician. 		<p>HemoCue Hb 201+: Appendix F - Reference Intervals</p>

15.	Discard Microcuvette	
	Discard microcuvette <ul style="list-style-type: none"> • Appropriate waste container for infection control. • Clean cuvette holder if contamination is visible with disinfectant wipe. • Cuvette holder is cleaned after each day of use. 	

REFERENCES

HemoCue Hb 201+ Operating Manual. HemoCue AB, Box 1204 SE-262 23 Angelholm, Sweden.
info@hemocue.se www.hemocue.com

- 1 Dacie and Lewis SW, *Practical Hematology Ninth edn.* Lewis SV Bain BJ and Bates I, eds., Churchill Livingstone Publishers, 2001
- 2 Lilleyman J, Hann I and Blanchette V (eds) *Pediatric Hematology, 2nd edn.*, Churchill Livingstone, 1999
- 3 Nathan DG and Orkin SH (eds) *Nathan and Oski's Hematology of Infancy and Childhood, 5th edn.*, WB Saunders Company, Philadelphia, 1998
- 4 Soldin SJ, Brugnara C, Hicks JM (eds) *Pediatric Reference Ranges, 3rd edn.*, AACCC Press, 1999

HemoCue Hb 201 Microcuvettes, Package Insert. HemoCue AB, Box 1204 SE-262 23 Angelholm, Sweden. info@hemocue.se www.hemocue.com

Eurotrol HemoTrol, Assayed Controls for In Vitro Diagnostic Use, Package Insert. Eurotrol B.V. Postbus 722 6710 BS Ede, The Netherlands office@eurotrol.com www.eurotrol.com

REVISION & APPROVAL LOG

Version	Revision Type	Description of Change	Revision Date	Technical Approval	Medical Approval
1.0		New document	Jun 2012	Elvira Kozak	Dr. Cathy Halstead
1.1	Minor	Document title and number change. Upload to QMS document control	28 Dec 2016		Dr. Benjamin Jung

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