



Element i+™ Quick Steps Guide



Cartridge Type/Calibration Information

Prior to running the first Element i+® Cartridge of a new lot number, the lot-specific calibration data must be loaded into the Element i+ Analyzer. A small USB flash drive is supplied with each box of cartridges. Figure 1

1. Insert the USB flash drive into any of the USB ports located on the back of the analyzer. Figure 2
2. From the Home screen, touch .
3. From the Settings screen, touch Import Cartridge Types/Calibration Info, then touch Import Calibrations.
4. When the screen shows Completed Successfully, touch  and then remove the USB flash drive from the back of the analyzer and return it to the cartridge box.

Note: Retain lot-specific USB flash drives until all cartridges within a box are used.



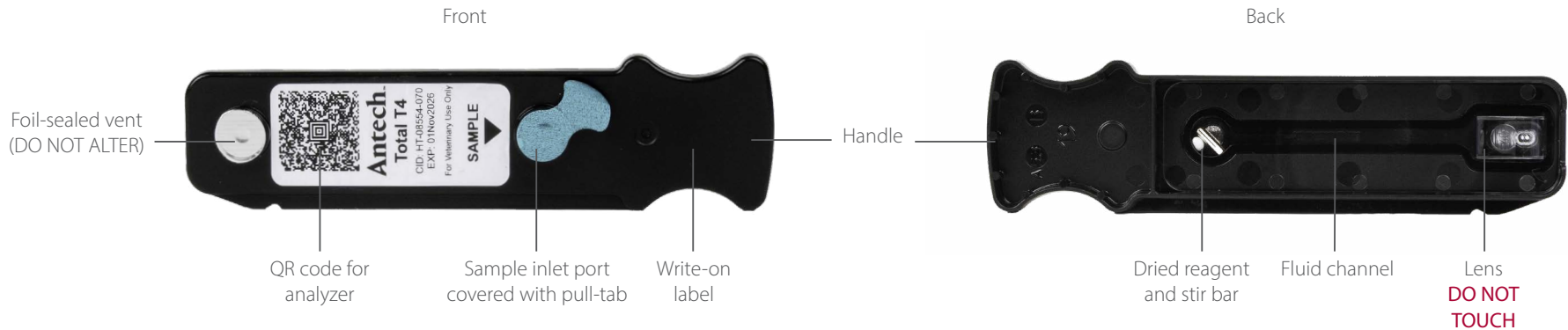
Figure 1



Figure 2

Cartridge Handling

AVOID TOUCHING THE CARTRIDGE BOTTOM • THE ANALYZER READS THROUGH THE BOTTOM



Sample Collection and Handling

Note: Handle all samples and used materials as infectious waste. Wear gloves, glasses and other protective gear for safety.

Antech-Supplied Green Top (lithium heparin) Tubes (GTT)

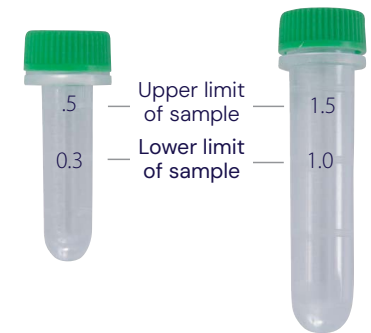
1. Draw patient sample using a 22 gauge or larger needle.
2. Remove needle from syringe to fill a 0.5 mL or 1.5 mL GTT.
3. Fill sample tube.
 - 0.5 mL tube: Fill with at least 0.3 mL of sample (second line).
 - 1.5 mL tube: Fill with at least 1 mL of sample (second line).
 - Immediately invert the tube 5 to 10 times to ensure proper mixing of lithium heparin and sample.
4. Spin sample in Antech-provided centrifuge for a minimum of six minutes. If using a different centrifuge, follow manufacturer instructions for plasma sample preparation.

Note: EDTA (Purple Top Tube) plasma required for NT-proBNP and Nu.Q® testing. See below for more details.



Standard Green Top Tubes, Purple Top Tubes or Red Top Tubes for Collecting Plasma or Serum

1. Draw patient sample using a 22-gauge or larger needle.
 - For NT-proBNP and Nu.Q® testing, place whole blood sample into EDTA Purple Top Tube (PTT) and spin at “blood” (1600 x g or higher) setting for 10 minutes within 1 hour of collection.
 - For all other Element i+ tests, process sample as normal for either lithium heparin plasma or serum samples.
 - RTT serum samples: Allow 15–20 minutes to clot prior to centrifugation.
2. Transfer plasma or serum using Antech-provided minipipette.
 - Use the Antech-supplied yellow 50 µL pipette for the following tests: Total T4 (updated No Diluent test), Nu.Q®, NT-proBNP, and Bile Acids.
 - Use the Antech-supplied blue 100 µL pipette for the following tests: SDMA, Cortisol, Progesterone, cTSH, and cCRP.

Note: Avoid use of serum separator tubes (tiger top) as separator gel may impact test results for certain assays.



Running a Test

1. Obtain a serum or plasma sample.
 - For NT-proBNP and Nu.Q® tests, EDTA (Purple Top Tube) plasma is required.
 - All other Element i+ tests are compatible with serum or lithium heparin plasma.
2. On the main screen, touch Worklist or Manual Test. Figure 3
3. In Worklist mode, select patient and confirm all information is correct. Select test type and confirm sample type. Touch  to proceed.
 - In Manual Mode, enter sample information in the required fields.
 - Touch  to proceed. Figure 4

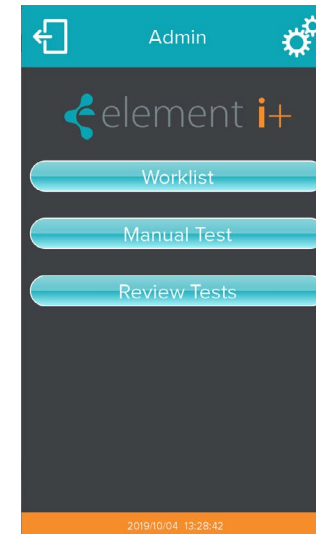


Figure 3

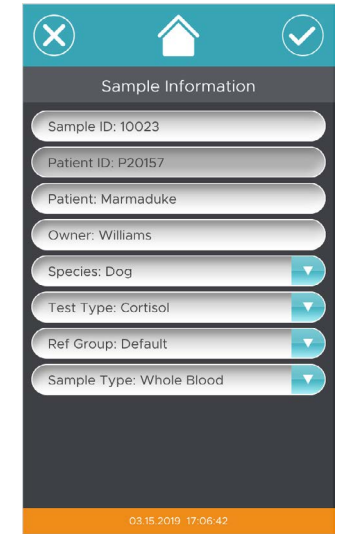


Figure 4

4. Open the pouch by tearing at the notch. Carefully remove the cartridge by the handle and place it on a flat surface. Figures 5 and 6
Note: Do not touch the bottom of the cartridge.

Note: If the cartridge was refrigerated, allow to warm to room temperature for at least 15 minutes before opening the pouch.

Note: Cartridge must be used within 1 hour of removal from pouch.

5. With the cartridge flat on the bench, remove the pull-tab from the sample inlet port and discard. Figure 7

Note: Cartridge must be used within 15 minutes of removing pull-tab.



Figure 5



Figure 6



Figure 7

6. Affix a tip to the fixed volume minipipette required for the desired test. Aspirate sample, insert the pipette tip into the sample port, and dispense the full sample amount into the port. Be sure to input sample on the opposite side from the reagent pellet visible in the sample port, to avoid bubbling of sample. Figure 8

- Use the Antech-supplied yellow 50 μ L minipipette for the following tests: Total T4, Nu.Q[®], NT-proBNP, and Bile Acids
- Use the Antech-supplied blue 100 μ L minipipette for the following tests: SDMA, Cortisol, Progesterone, cTSH, and cCRP




Yellow 50 μ L
Minipipette:
Total T4
Nu.Q[®]
NT-proBNP
Bile Acids



Blue 100 μ L
Minipipette:
SDMA
Cortisol
Progesterone
cTSH
cCRP



Figure 8

7. Touch  on the Prepare Sample screen to open the analyzer door. Figure 9
 - Insert the cartridge until you feel a click and hear a beep. Figures 10 and 11
8. The test will run automatically.
A status bar and countdown timer will display on the screen and the indicator light on the front of the analyzer will blink to indicate a test is running. Figure 12

Note: To cancel during the run, touch X at the upper right of the screen.



Figure 10

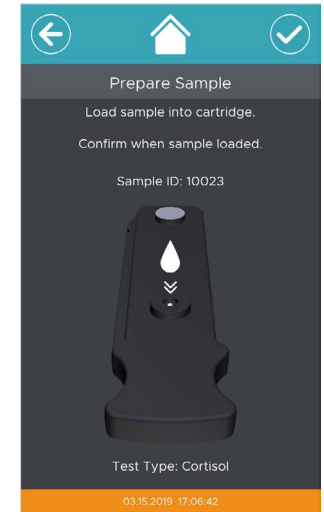


Figure 9



Figure 11

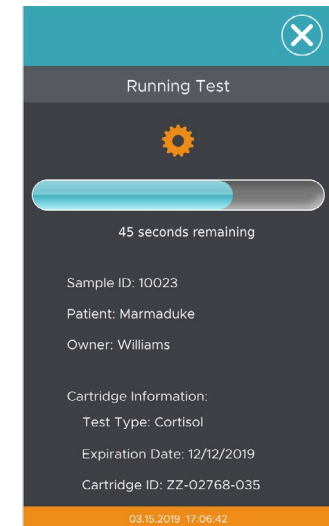



Figure 12

9. Upon test completion, patient results will display on the screen.
- Touch  to exit results screen. Figure 13
 - The screen will provide an indication when it is safe to remove the used cartridge. Figure 14

Note: Do not attempt to remove cartridge before signaled by analyzer.

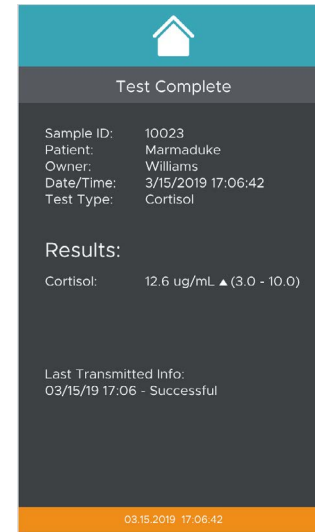


Figure 13



Figure 14

Error Message	Error Type	Action
The inserted cartridge has already been run.	Used cartridge.	A cartridge can only be run one time. Get a new untested cartridge and re-run the sample.
The inserted cartridge has expired.	Cartridge shelf life exceeded.	Dispose of expired cartridge and run sample on a non-expired cartridge.
The inserted cartridge contains an invalid barcode.	Did not recognize the barcode.	Select a new cartridge.
Unable to read the barcode from the inserted cartridge.	Barcode not read.	Verify that barcode is not damaged and retry the cartridge. If error persists, select a new cartridge.
The inserted cartridge is of an unknown test type.	Cartridge Definition File not loaded in Analyzer Software.	Load the Cartridge Type/Calibration Info for that specific cartridge lot (see instructions in this User Manual). The Cartridge Definition File is provided on a USB flash drive in cartridge box or contact Antech Technical Support Services.
Wrong Cartridge Inserted – Do you wish to proceed?	Cartridge inserted does not match requested test.	Update the sample information to indicate test type matching the cartridge type.
Calibration information needed.	Instrument has no record of cartridge lot information.	Install the corresponding Cartridge Definition Files for the cartridge lot being used.
There was an unknown error processing the cartridge.	General error.	Must run a new cartridge. If the problem repeats, re-start the instrument.
Error connecting to hardware.	Internal instrument communication.	Restart the instrument. If problem persists, contact Antech Technical Support Services.
Unexpected error editing reference range.	General error.	Confirm reference ranges are set in the Administrator settings.
Unexpected error deleting reference range.	General error.	Confirm reference ranges are set in the Administrator settings.
Auto communication failed, please check connection.	Network not connected.	Verify the network is available and that the Ethernet cable, or Wi-Fi is connected and configured properly.

Technical Support and Ordering Supplies

For Technical Resources, please visit CustomerPortal.Heska.com/ResourceLibrary

US

For questions regarding the Element i+, contact Antech Technical Support Services:

Phone: [800-872-1001](tel:800-872-1001), [option 3](#) or email: vetsupport@heska.com

For questions regarding individual Element i+ tests, contact Antech Specialty Product Technical Support:

Phone: [800-872-1001](tel:800-872-1001), [option 5](#) or email: allergy.lvid@antechdx.com

To order additional Element i+ tests:

Phone: [800-872-1001](tel:800-872-1001), [option 1](#) ► [option 2](#), or email: Orders@Heska.com

E-commerce portal: customerportal.heska.com

Canada

For questions regarding the Element i+ and individual Element i+ tests, contact Antech Technical Support Services:

Phone: [866-382-6937](tel:866-382-6937), [option 1](#) or email: labsupport.ca@antechdx.com

To order additional Element i+ tests:

Phone: [866-382-6937](tel:866-382-6937), [option 3](#) or email: orders.ca@antechdx.com

E-commerce portal: heskavetshop.com

Scan this QR code for the Element i+ Product Manual



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