



■ IDEXX Cornerstone\* Guide:  
In-House Laboratory  
with IDEXX SmartLink\* Technology

8.3



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## Introduction

This document describes the basic procedural steps for using the IDEXX Cornerstone\* Practice Management System and In-house Laboratory with IDEXX SmartLink\* technology.

This document is best suited to these learners in your practice:

- General staff
- Technicians
- Practice managers
- Owners/decision-makers

Practice managers, owners, and other decision-makers will be particularly interested in the “In-house Laboratory Work Flows, Decisions, and Setup” section.

## PREREQUISITES

- The current version of Cornerstone\* installed at the practice.
- Knowledge of basic Cornerstone navigation.
- Access rights with appropriate laboratory security.
- Setup and customization of In-House Laboratory with IDEXX SmartLink technology. Consult your lab specialist for assistance with troubleshooting profiles. Call 1-800-695-2877 and select Cornerstone, then Cornerstone Lab Support.

Throughout this training, there are references to useful information. These icons will help you identify this information:



Tips enhance the basic information covered in the content.



Notes provide additional information about a step or a procedure.

# IDEXX Cornerstone\* 8.3 Guide: In-house Laboratory with IDEXX SmartLink\* Technology Table of Contents

<b>Introduction.....</b>	<b>3</b>
Prerequisites.....	3
<b><u>In-house Laboratory SmartLink Work Flows, Decisions and Setup</u></b> .....	<b>5</b>
<b>Work Flow Options Overview .....</b>	<b>5</b>
Step 1: Create New Lab Request .....	5
Create a request automatically through a special action (recommended work flow).....	5
Create a request manually.....	5
Run tests without creating a request .....	5
Step 2: Run Test(s) .....	5
Step 3: Post, View, and Communicate Results. ....	5
Step 4: Bill Client .....	6
<b>Decisions and Setup.....</b>	<b>6</b>
<b>Step 1: Create a New Lab Request.....</b>	<b>7</b>
Create a Request Automatically through a Special Action (Recommended Work Flow).....	7
Create a request manually .....	8
Complete the Lab Request .....	8
<b>Step 2: Run Test(s) .....</b>	<b>9</b>
Collect Sample(s) .....	9
Run the Test Using the IDEXX VetLab* Station .....	10
Starting at the IDEXX VetLab Station without a request—additional information .....	12
<b>Step 3: Record, View, and Communicate Results.....</b>	<b>13</b>
View Results, then Post.....	14
Automatically Post Results .....	15
View Detailed Results - Single or Cumulative .....	17
Viewing Results with VetConnect* PLUS.....	19
Viewing New Results Through the IDEXX Message Center .....	20
Daily Step - Check Lab Requests and Results .....	21
Manually Enter Lab Results .....	23
View Profiles .....	24
Recommended Interface Settings .....	24
<b><u>Resources</u></b> .....	<b>25</b>
Online IDEXX Cornerstone Customer Support Center .....	25
Common Troubleshooting Topics, Causes, and Solutions .....	26
<b><u>Appendix</u></b> .....	<b>27</b>
Set Up Invoice Items for a New Instrument .....	27

## Section 1

# In-house Laboratory SmartLink Work Flows, Decisions and Setup

## Work Flow Options Overview

By using the IDEXX VetLab\* Station and the In-House Laboratory with IDEXX SmartLink\* technology, you will see an increase in productivity, a decrease in missed charges, and a decrease in errors made during keying patient information into the In-House analyzers.

IDEXX SmartLink technology connects Cornerstone to IDEXX in-house analyzers, IDEXX Reference Laboratories, and IDEXX Digital Imaging systems for seamless data transfer around the practice.

The SmartLink work flow for in-house laboratory is as follows:

1. Create a new lab request.
2. Run test(s).
3. Post, view, and communicate results.
4. Bill client.

You have several options for completing some of these steps.

### STEP 1: CREATE NEW LAB REQUEST

#### **Create a request automatically through a special action (recommended work flow)**

If you have set up special actions, you can start from the Patient Visit List or other places where you enter an invoice item ID, such as an enhanced medical note or the Electronic Whiteboard. When you choose to perform the special action, the New Lab Request window appears.

You can also set up special actions so that you can start from the Patient Visit List but bypass the New Lab Request window. (See “Decisions and Setup” below.)

#### **Create a request manually**

You can begin from the Patient Clipboard\*, the Lab Requests and Results window, or the Daily Planner. If you begin from any of these windows, the next step is to complete the New Lab Request window.

#### **Run tests without creating a request**

If you have set up the Use SmartLink Billing option, you can begin directly from the IDEXX VetLab Station without creating a request. This work flow bypasses the New Lab Request window. For more information about this option, see “Decisions and Setup” below.

### STEP 2: RUN TEST(S)

Run tests on your in-house laboratory equipment through your IDEXX VetLab\* Station.

### STEP 3: POST, VIEW, AND COMMUNICATE RESULTS.

The recommended work flow is to view the results before posting them to the patient history. However, you can also set up Cornerstone to post results automatically. Once results are posted, you can view single or cumulative results, and you can graph results to view trends.

## STEP 4: BILL CLIENT

If you're using a work flow with SmartLink technology, the final step of billing the client for the requested tests happens automatically. If Cornerstone is not able to match a result to a request (a not requested result) or is not able to match a result to a patient (an orphan) result, then you need to manually resolve the result status and choose to bill or not bill for the test.

## Decisions and Setup

This guide recommends work flows which should be the most efficient and effective for the majority of practices. However, Cornerstone supports a variety of work flows in order to support the needs of different kinds of practices. Below are details to help you decide if some of the alternate work flows are right for your practice.

### Deciding whether to use or bypass the New Lab Request window

The New Lab Request window allows you to record who drew the sample, where on the patient the sample was obtained, and any post-lab instructions from the doctor. The doctor, practice manager, or owner can use this information for calculating commissions, billing price, and/or revenue center, or for quality-checking purposes.

If this information is not needed, bypassing the New Lab Request window saves data entry.

### Items to consider before setting up the Use VetLab Station SmartLink Billing feature:

If you answer "Yes" to any of the following questions, your practice would not want to use the SmartLink billing setting with your current work flow.

#### QUESTIONS:

1. Do you charge one fee for running several profiles together?  
Example: Chem 17, CBC, electrolytes in a custom profile linked to one invoice item charge.
  - YES: SmartLink Billing is not for this practice and should not be used unless you are willing to change your setup and work flow to use a separate invoice item per each profile.
  - NO: Continue to #2
2. Do you charge more than one fee for the same profile?  
Example: Urinalysis profile has two invoice items linked.
  - YES: SmartLink Billing is not for your practice and should not be used unless you are willing to change your setup and work flow to link only one invoice item per each profile.
  - NO: Continue to #3
3. Do you use estimates, group codes, or put all your charges on the PVL/invoice prior to running in-house blood work?
  - YES: SmartLink Billing is not for your practice and you should continue using your current work flow.
  - NO: SmartLink Billing is for you!

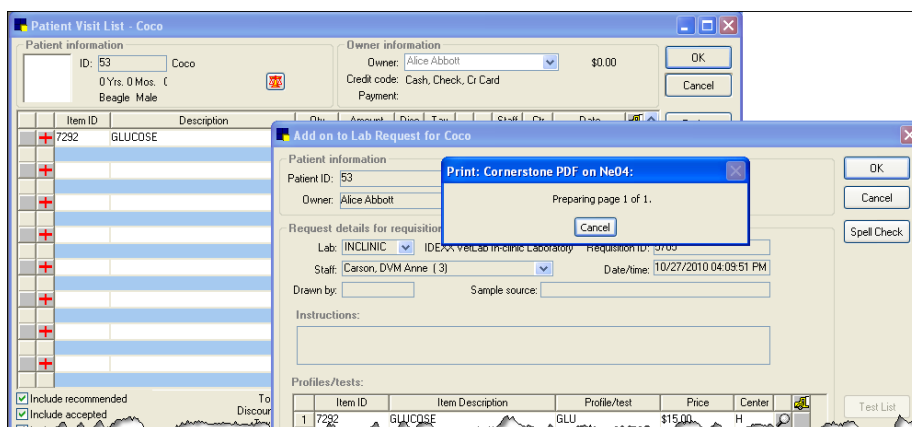
## Step 1: Create a New Lab Request

### CREATE A REQUEST AUTOMATICALLY THROUGH A SPECIAL ACTION (RECOMMENDED WORK FLOW)

#### Begin from Patient Visit List (Recommended Starting Point)

1. From the Patient Clipboard\*, select the appropriate client account.
2. Right-click on the appropriate patient's name and select **Patient Visit List**.
3. Enter invoice item.

- a. If special actions have been set to immediate and no labels or documents have been set to print then the lab request screen will be hidden.
- b. If special actions have been set and documents or labels have been defaulted to print then the New Lab Request window will display briefly and documents and/or labels will print.



4. If Cornerstone is set up to bypass the New Request window, continue with “Run Test” chapter, below. Otherwise, continue with the “Complete the Lab Request” section on the following page.

#### Setup prerequisites to begin from the Patient Clipboard with a special action:

- Special actions must be set up for the lab request with a “When to apply” selection of “Immediately on Invoice/PVL.”
- If you want to bypass the New Request window, do the following:
  1. On the menu bar, click **Activities**, then select **Lab Work > Laboratories**.
  2. Select **IDEXX VetLab In-Clinic Laboratory** and click **Update**. The Lab Information for IDEXX VetLab In-Clinic Laboratory window appears.
  3. Select the **Hide request screen if special action** check box.

#### Begin from Enhanced Medical Note

1. On the medical note, perform in-house laboratory item(s) for which special actions have been set up.
2. When the Special Actions dialog box appears, select **Process**.
3. Continue with “Complete the Lab Request” below.

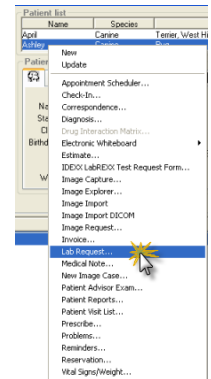
#### Begin from Electronic Whiteboard

1. Create a patient order containing a lab request invoice item.
2. Complete the lab invoice item treatment on the Whiteboard.
3. Complete the patient treatment fields and click **OK**.
4. On the Special Actions dialog box, click **Process**.
5. Continue with “Complete the Lab Request” below.

## CREATE A REQUEST MANUALLY

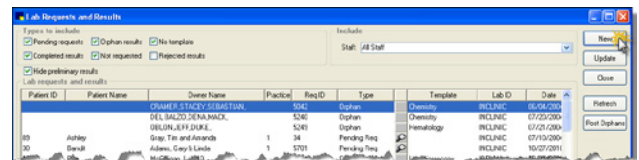
### Begin from Patient Clipboard\*

1. With the client account listed, right-click the appropriate patient's name.
2. Select **Lab Request**.
3. Continue with "Complete the Lab Request" below.



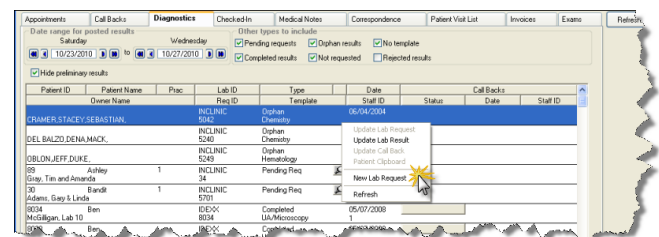
### Begin from Lab Request and Results window

1. Click the Lab Requests and Results button on the toolbar.
2. Select **New**.
3. Choose the patient.
4. Continue with "Complete the Lab Request" below.



### Begin from Daily Planner

1. Right-click on the patient.
2. Select **New Lab Request**.
3. Continue with "Complete the Lab Request" below.



### Begin from the IDEXX VetLab Station Without Creating a Request

You can also begin directly at the IDEXX VetLab Station without creating a request, and charges are still captured if you have set up the Use VetLab Station SmartLink Billing feature. For details on this work flow, see "Run the Test Using the IDEXX VetLab Station."

Although this is not currently recommended work flow, it may offer advantages to some practices. See "Decisions and Setup" earlier in this guide.

## COMPLETE THE LAB REQUEST

1. In the Lab field, verify that **INCLINIC** is selected.
2. From the Staff list, select the staff member who will get credit for the lab work.



When the charges transfer to Patient Visit List, the staff ID listed will be the staff ID entered on the request.

3. Optional: Modify the date and time of the request in the Date/time field.
4. Optional: Type the initials of the staff member who will collect the sample in the Drawn by field.

**New Lab Request**

**Patient information**

Patient ID: 6003 Maggie Spayed Female 11 Yrs. 11 Mos.

Owner: Lab 1 Silverstein Canine Spaniel, Cocker Mix 32.2 pounds

**Request details**

Lab: INCLINIC IDEXX VetLab In-clinic Laboratory Requisition ID: \_\_\_\_\_

Staff: Carson, DVM Anne (AC) Date/time: 12/13/2011 01:24:25 PM

Drawn by: KW Sample source: \_\_\_\_\_

**Instructions:**

\_\_\_\_\_

**Profiles/tests:**

	Item ID	Item Description	Profile/test	Price	Center
1	ELECT	Electrolytes - I STAT	Electrolytes	\$41.50	H
2					
3					
4					

OK Cancel Spell Check Test List



The Drawn by field can be set as a required field by your practice.

- Optional: Type the area and type of collection in the Sample source field. This information is collected by Cornerstone but does not transfer to the IDEXX VetLab\* Station.



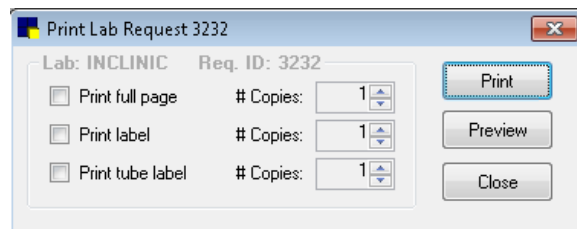
This information prints on the Lab Request Form but is not recorded in the Patient File.

- Optional: Type any staff instructions for the sample in the Instructions area. This information is collected by Cornerstone but does not transfer to the IDEXX VetLab Station.



This information is printed on the Lab Request form but is not recorded in the Patient File.

- In the Profiles/tests area, double-click in the Item ID field to search for and select the profile/test.
- Click **OK**. The lab request is processed and the charge is sent to the Patient Visit List.
- On the Print Lab Request window, choose the selection you want.



## Step 2: Run Test(s)

### COLLECT SAMPLE(S)

After you make the lab request in Cornerstone and have a label in hand, now would be the time to collect your sample. Collect the sample according to the diagnostic test. An example of sample collection training can be found at [idexxlearningcenter.com](http://idexxlearningcenter.com). See the Online Course, *Learning More About the Catalyst Dx® Analyzer*.



## RUN THE TEST USING THE IDEXX VetLab\* STATION

After you collect the sample, you're ready to run the sample on the appropriate analyzer. This lesson is a brief overview of the IDEXX VetLab\* Station screens and IDEXX in-house analyzers within the context of the Cornerstone work flows using SmartLink technology. For more in-depth information, see the *IDEXX VetLab Station Operator's Guide*.

1. On the Home screen, select the patient from the patient queue in the **Pending** tab (if you created a request).

If are using the work flow of starting at the IDEXX VetLab Station without a request, select the patient from the **Census** tab.

2. Tap **Run**.
3. Confirm the Reason for Testing.
4. Tap the appropriate instruments.
5. Tap **Run**.



Invoice items must be linked to appropriate In-house Lab Profiles. See "Set Up Invoice Items for a New Instrument" in the Appendix to this guide or see the *Cornerstone Administrator's Guide*.



### Run a requested test that has not yet been run (while request is pending)

In some situations, you may not run all of the tests in a request at the same time. For example, you might request a Chem10, CBC, and Urinalysis. If you run only the CBC initially, use the following procedure when you are ready to run the other two tests.

1. On the IDEXX VetLab Station Home screen, select the patient from the patient queue in the **Pending** tab, and tap **Run**.
2. Confirm the Reason for Testing.
3. Tap the appropriate instruments.
4. Tap **Run** or tap **Append Results**.

**Note:** Different buttons appear depending on versions of Cornerstone and IDEXX VetLab Station software that you are using.

The results of this test will be shown in Cornerstone with the rest of the tests in this request, and all the tests will be recorded as part of the same run on the IDEXX VetLab Station.



### Request and run an additional test (while request is pending)

1. On the Cornerstone menu bar, select **Activities>Lab Work>Add on to a Lab Request**.
2. Type the patient ID, or press F2 to search.
3. Select a request in the **Lab request history** table and click **Select**.
4. Add a test in the **Profiles/Tests** table and click **OK**.
5. On the IDEXX VetLab Station Home screen, select the patient from the patient queue in the **Pending** tab, and tap **Run**.
6. Confirm the Reason for Testing.
7. Tap the appropriate instruments.
8. Tap **Append Results**.

### Request and run an additional test (after request is completed)—recommended work flow

If all the tests you requested have been run, the request is listed in the Recent Test Results list on the right of the IDEXX VetLab Station Home screen, and is shown as Completed on the Lab Requests and Results window in Cornerstone.

If the test results lead you to want to run additional tests, follow the process below. This will ensure that all results are properly assigned in both Cornerstone and the IDEXX VetLab Station.

1. On the Cornerstone menu bar, select **Activities>Lab Work>Add on to a Lab Request**.
2. Type the patient ID, or press F2 to search.
3. Select a request in the **Lab request history** table and click **Select**.
4. Add a test in the **Profiles/Tests** table and click **OK**.
5. On the IDEXX VetLab Station Home screen, select the patient from the patient queue in the **Pending** tab, and tap **Run**.
6. Confirm the Reason for Testing.
7. Tap the appropriate instruments.
8. Tap **Append Results**.

### Alternative: Run an additional, not requested test starting on the IDEXX VetLab Station (after request is completed)

If all the tests you requested have been run, the request is listed in the Recent Test Results list on the right of the IDEXX VetLab Station Home screen, and is shown as Completed on the Lab Requests and Results window in Cornerstone.

Use the following procedure if you want to add an additional test by starting on the IDEXX VetLab Station.

1. On the IDEXX VetLab Station Home screen, select the patient from the patient queue in the **Recent Test Results** list, and tap **Add Test**.
2. Confirm the Reason for Testing.
3. Tap the appropriate instruments.
4. Tap **Append Results**.

**Note:** Because this test was not part of the original request, the result appears in Cornerstone as not requested.

## STARTING AT THE IDEXX VetLAB STATION WITHOUT A REQUEST—ADDITIONAL INFORMATION

Be aware of the following information if you use the work flow of starting from the IDEXX VetLab Station without creating a request:

- Access to the Census List on the IDEXX VetLab Station requires software version 2.31 or later.
- Running lab work from the Census List on the IDEXX VetLab Station screen **will not** create a pending request in Cornerstone.
- If you create a lab request in Cornerstone and use the Census List to run lab work on the IDEXX VetLab Station screen, duplicate charges are created on the patient's Patient Visit List and/or invoice.
- The VetLab Station SmartLink Billing setting only works for a single profile or test. Example: If your practice has a profile for a chemistry panel and a hematology panel, and you run them both starting from the Census List, they come back as two separate results and bill as two separate profiles not as a single profile.
- If you select the option to **Use VetLab Station SmartLink Billing**, the **Require Requests** options must be selected also to prevent charges from being missed.
- Always verify that the staff ID on the Patient Visit List (PVL) is correct so that the right staff member gets credit for the charges.

When using the Census List to run lab work, you may encounter not requested results. This occurs for the following reasons:

- If SmartLink Billing is activated when there are two invoice items attached to one laboratory profile in Cornerstone.
- If SmartLink Billing is not activated all results run from the Census List will return to Cornerstone as a "Not Requested."

You will be given an opportunity to resolve these not requested results during invoicing.

You can set up Cornerstone to prompt you whenever not requested results are returned by doing the following:

1. In the menu bar, select **Activities**, then **Lab Work > Laboratories**.
2. Select select **INCLINIC** and click **Update**.
3. Select the **Warn in invoicing if Not Req results exist** check box.

You can further automate this work flow and take advantage of automatic billing by enabling the Use SmartLink Billing setting. This setting automatically applies the charges to the Patient Visit List when the set of results received is an identical match to one and only one invoice item.

1. In the menu bar, select **Activities**, then **Lab Work > Laboratories**.
2. Select select **INCLINIC** and click **Update**.
3. Select the **Use VetLab Station SmartLink Billing** check box and the **Require Requests** check box.

## Step 3: Record, View, and Communicate Results

### Posting Options

You have two configuration options for posting and viewing results. Your practice could:

- View results, then post (recommended)

OR:

- Automatically post results.

See the diagrams on the following pages for these options.

## VIEW RESULTS, THEN POST

1

If you have chosen to view the results before posting to the patient file you will need to access the result from the *Lab Request and Results* window.

Types to include:  
☒ Pending requests  
☒ Completed results  
☒ Orphan results  
☒ Not requested  
☒ No template  
☒ Rejected results

Staff to include:  
 Staff: All Staff

Buttons: New, Update, Close, Refresh, Post Orphans

Patient ID	Patient Name	Owner Name	Req ID	Type	Template	Lab ID	Date
135	Tequila	Marvin, Tony	5082	Not Req	Chemistry	INCLINIC	06/12/2004
114	Suzy	Adams, Belinda	5133	Not Req	Chemistry	INCLINIC	06/24/2004
179	Ollie	King, Calvin & Daphne	5106	Not Req	Hematology	INCLINIC	06/16/2004
890	Napoleon	Smith, Kenneth L.	5106	Completed	Chemistry	INCLINIC	06/16/2004
890	Napoleon	Smith, Kenneth L.	5167	Completed	Chemistry	INCLINIC	07/03/2004
98	Macbeth	Evans, Paul & Ann	5245	Completed	Chemistry	INCLINIC	07/20/2004
98	Macbeth	Evans, Paul & Ann	5074	Completed	Chemistry	INCLINIC	06/11/2004
39	Lorzo	Jones, Agnes L.	5637	Pending Req	Chemistry	INCLINIC	07/12/2004
1359	Kay's Fancy	Peterson Farms,	5700	Pending Req	Chemistry	INCLINIC	07/15/2004
214	Jasper	Adams, Amy	5699	Pending Req	Chemistry	INCLINIC	07/12/2004
304	Iris	Trapper, Jeff & Sandy	5650	Pending Req	Chemistry	INCLINIC	07/12/2004
70	Haniet	Baker, Vern	5641	Pending Req	Chemistry	INCLINIC	07/12/2004
41	Goldie	Shmitz, Laura	36	Pending Req	Chemistry	INCLINIC	07/28/2004
796	Fredica	Jones, Agnes L.	5627	Pending Req	Chemistry	INCLINIC	07/12/2004
248	Elmo	Baker, Vern	5210	Completed	Hematology	INCLINIC	07/13/2004
248	Elmo	Baker, Vern	5105	Completed	Hematology	INCLINIC	06/16/2004
111	Darwin	Curtis, Ginger	5640	Pending Req	Chemistry	INCLINIC	07/12/2004

2

Select the Completed result you wish to post to a patient's file, click Update and change the status to Posted.

**Note:** If this result is not a valid result you do have an option to reject this Laboratory result and NOT post it to the patient's file.

Patient information  
 Patient ID: 890  
 Name: Napoleon  
 Species: Canine  
 Sex: Neutered Male  
 Age: 0 Yrs. 0 Mos.  
 Owner: Kenneth L. Smith

Chemistry  
 Status: Posted  
 Date: 6/16/2004  
 Time: 5:56 PM  
 Lab: Fred Jones, DVM IDEXX VetLab In-clinic Laboratory

Test	Results	Reference Range	Low	Normal	High
ALB	= 3.4 g/dL	2.7 - 3.8			
ALKP	= 51 U/L	23 - 212			
ALT	= 29 U/L	10 - 100			
AMYL	= 625 U/L	500 - 1500			
BUN/UREA	= 28.3 mg/dL	7 - 27			
Ca	= 11.3 mg/dL	7.9 - 12			
CHOL	= 251 mg/dL	110 - 320			

Buttons: OK, Cancel, Reassign, Print

4

At this point you may review the results, graph cumulative results, void results or reassign these results to another patient.

3

The results will post to the patient's file.

Patient information  
 Client ID: 6000  
 Name: Lab Silverstein  
 Pet Owner  
 Address: 903 Jenna Drive  
 City: Eau Claire  
 State: WI  
 Postal Code: 54703  
 Email: silverstein@silverstein.com  
 Referred by: 5000 A0 Garcia

Lab  
 Status: Posted  
 Date: 7/27/2004  
 Time: 1:00 PM  
 Lab: IDEXX VetLab In-clinic Laboratory

Test	Results	Reference Range
Chloride	= 112.3 mmol/L	105.0 - 119.0
CHOL	=	
Potassium	= 4.97 mmol/L	3.50 - 5.50
Sodium	= 150.1 mmol/L	145.0 - 157.0

Buttons: Summary, Text, Problems, Diagnosis, Prescriptions, Medical Notes, Lab, Weights, Full Size View, Find, Find Next, Go To Date

## AUTOMATICALLY POST RESULTS

1

The results will automatically transfer into the patient's file if you have chosen not to view the results before posting. Access the patient's file to view the results

**Warning:** If you select this option you will not have the option to reject a result. You do have the option to Void a result; voided results remain in the patient's file.


The screenshot displays the IDEXX SmartLink software interface. The top section shows client and patient information. The client is Lab Silverstein, and the patient is Maggie, a female Terrier Fox Smooch. The interface includes tabs for Client information, Patient information, Summary, Text, Problems, Diagnosis, Prescriptions, Medical Notes, Lab, and Weights. The Lab tab is currently selected, showing a table of lab results. The table has columns for Date, Staff, and Expanded History. The results are for a chemistry panel performed on 7/27/2004 by staff member 1. The results include Chloride, Potassium, and Sodium, all of which are within the reference range. The Sodium result is manually entered.


Date	Staff	Expanded History
7/27/2004	1	Chemistry results from Lab: IDEXX VetLab In-clinic Laboratory Requisition ID: 0 Posted Final Test Result Reference Range Chloride = 112.3 mmol/l 105.0 - 119.0 CHOL = Potassium = 4.97 mmol/l 3.50 - 5.50 Sodium = 150.1 mmol/l 145.0 - 157.0 Manually entered.

2

At this point you may review the results, graph cumulative results, void results or reassign these results to another patient.

## To Manually Post Results to the Patient File:

1. Select the **Lab Requests and Results** button  to access the Lab Requests and Results window.
2. Select the completed lab result for the patient.

Lab requests and results								
Patient ID	Patient Name	Owner Name	Req ID	Type		Template	Lab ID	Date
39	Lonzo	Jones, Agnes L.	5637	Pending Req			INCLINIC	07/12/2004
179	Ollie	King, Calvin & Daphne	5106	Not Req		Hematology	INCLINIC	06/16/2004
135	Tequila	Marvin, Tony	5082	Not Req		Chemistry	INCLINIC	06/12/2004
8002	Ben	McGilligan, Chris Brown	8002	Completed		UA/Microscopy	IDEXX	05/07/2008
8004	Jack	McGilligan, Chris Brown	8004	Completed		Hematology	IDEXX	06/17/2008
8004	Jack	McGilligan, Chris Brown	8004	Completed		Chemistry	IDEXX	06/17/2008
8034	Ben	McGilligan, Lab 10	8034	Completed		UA/Microscopy	IDEXX	05/07/2008
8040	Jack	McGilligan, Lab 11	8040	Completed		Hematology	IDEXX	06/17/2008

3. Select **Update**.
4. In the Status field, select **Posted**. You can also reject the results at this point.

Status:	Completed
	Completed
	Posted
	Rejected

5. Click **OK**.
6. Close the Lab Requests and Results window.

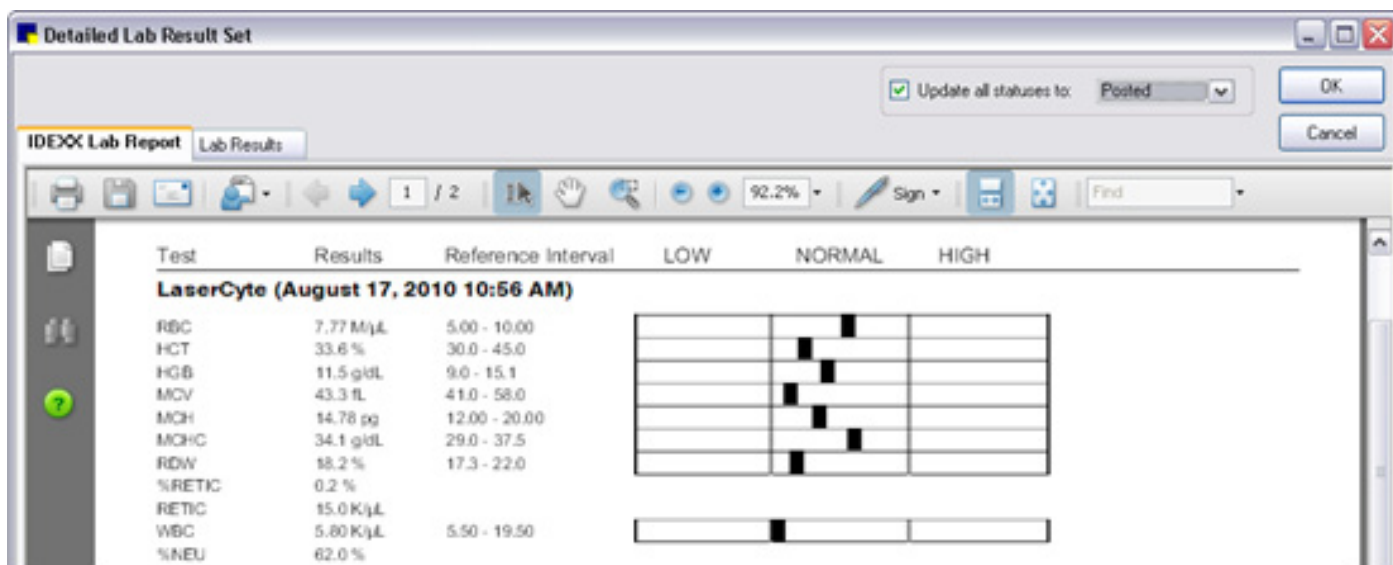
## To post a group of results (Cornerstone 8.1 or later):

If all results for a laboratory request have the same status (Completed or Rejected), you can change the status for all results at once.

1. On the Patient Clipboard, type the client ID and press TAB. (Press F2 to search.)
2. Select the patient from the Patient list.
3. Double-click the report line on the **Summary**, **Text**, or **Lab** tab to open the result report. If all results for the laboratory request share the same status, the "Update all statuses to" check box is available.

**Note:** If the OK button is disabled, you either do not have permission to update the result type(s) or there are not-requested, orphan, posted, or preliminary results. If the button is active, continue with the next step. Otherwise, see Tip, below.

4. Select the **Update all statuses to** check box, and then select the desired status (Completed, Posted, Rejected).



5. Click **OK**.




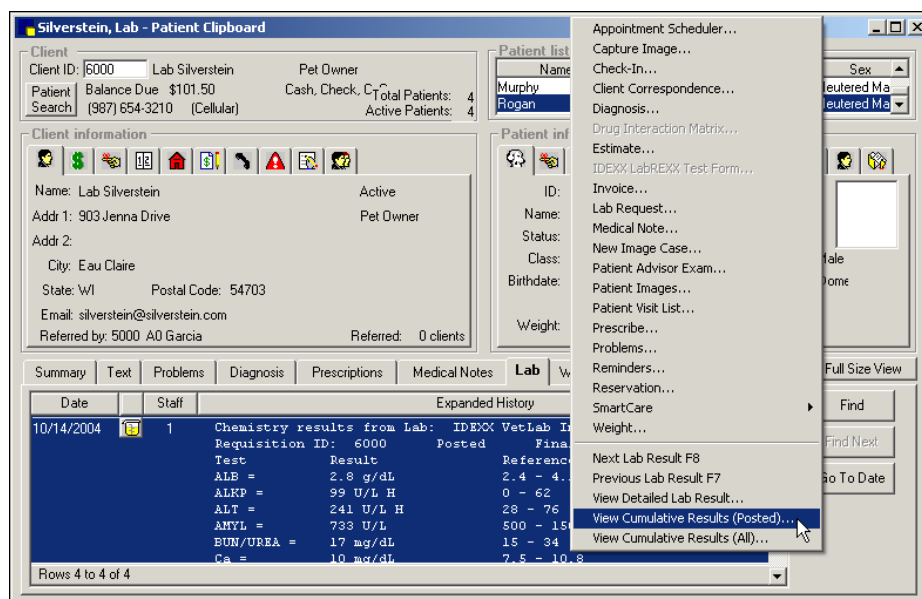
If all results do not share the same status, change the status of individual results as follows:

1. After double-clicking the result report in Step 3 above, select the Lab Results tab.
2. From the Lab Result drop-down list, select the test you want to update.
3. In the Status field, select the new status, and click **OK**.

## VIEW DETAILED RESULTS - SINGLE OR CUMULATIVE

Once lab results are posted to the patient file, they are stored as part of the patient's medical history and can be viewed and printed at any time. Results can be viewed either as a single detailed result or as a cumulative result. Cumulative results can be graphed.

1. Access the client on the Patient Clipboard\*.
2. In the Patient list area, click the green arrow  button, and then move your cursor over the patients' names to expand the Patient list.
3. Select the patient.
4. Select the Lab tab.
5. Right-click a chemistry result.
6. Select a menu option.



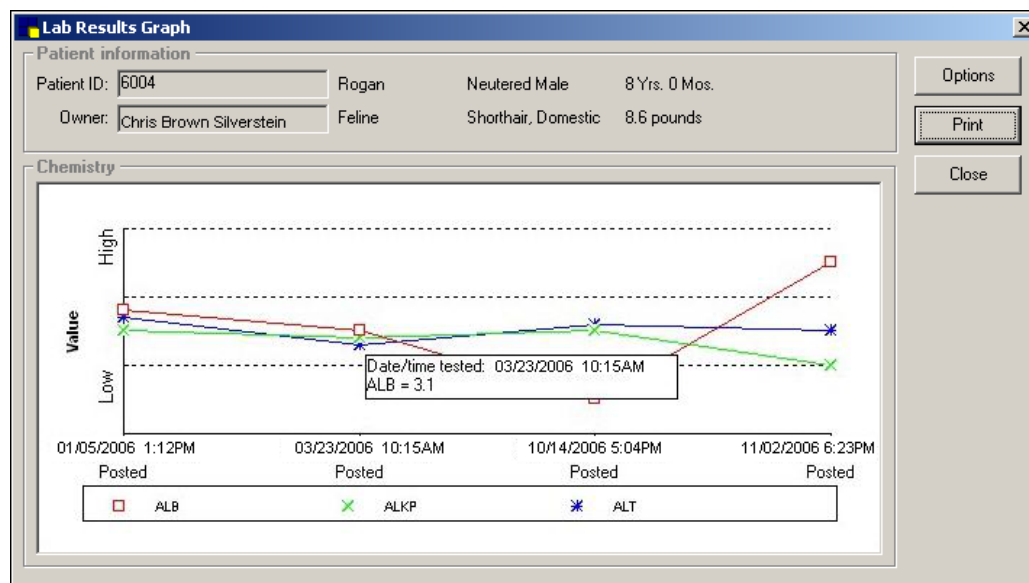
**Example:** Below is an example using sample data. View the example to become aware of result comparison capabilities. This activity continues at step 7.

This example compares the results for the laboratory tests performed on **12/14/2010** and **1/2/2011**.

Cumulative Lab Results for Rogan				
Patient information				
Patient ID:	6503	Rogan	Neutered Male	7 Yrs. 8 Mos.
		Feline	Shorthair, Domestic	8.6 pounds
Req ID:	6000	6500	6501	6001
Time Run:	12/14/2010 5:04 pm	01/2/2011 6:04 pm	01/2/2011 6:23 pm	12/14/2010 5:23 pm
Staff:	Fred Jones, DVM	Fred Jones, DVM	Fred Jones, DVM	Fred Jones, DVM
Lab ID:	INCLINIC	INCLINIC	INCLINIC	INCLINIC
Status:	Posted	Posted	Posted	Posted
Client:	Lab Silverstein	Lab Silverstein	Lab Silverstein	Lab Silverstein
ALB	= 2.8	= 2.8		
ALKP	= 99	H = 54		
ALT	= 24.1	H = 102	H	
AMYL	= 733	= 733		
AST			= 49	= 80
BUN/UREA	= 17	= 17		H

- Optional: You may graph the lab results. To graph the test results, select **View Cumulative Results (Posted)** or **View Cumulative Results (All)**.
- Select the test names for the tests you want to graph.
- When the appropriate tests are selected (highlighted), click **Line Graph** and the test results graph will be displayed.

To view the data point values, move your mouse over a data point as shown below.



- To print the graph, click **Print**.
  - **Close** all open windows to return to the Patient Clipboard.
- To view the detailed results for **7/16/2009**, right-click on the result and select **View Detailed Lab Results**.
  - From the Detailed Lab Results for (patient's name) window, view the patient's detailed results.
    - From the Detailed Lab Results for (patient's name) window, you can print, void, and reassign the test results.
    - Voided results are hidden in the patient file and can be viewed by clearing the **Hide Voided Items** option. When voided results are displayed, they are marked with "(Voided)."

Print	Void	Reassign
Print	<div>Chemistry</div> <div>Status: Posted</div> <div>Test: AST = 80 U/L</div> <div>Test: CK = 1058 U/L</div>	Reassign

**Detailed Lab Results for Rogan**

Patient information

Patient ID: 6503 Rogan Neutered Male 7 Yrs. 8 Mos.  
 Owner: Lab Silverstein Feline Shorthair, Domestic 8.6 pounds

Chemistry

Status: Posted 10/14/2004 Thursday 5:04 PM Fred Jones, DVM  
 Req ID: 6000 IDEXX VetLab In-clinic Laboratory

Test	Results	Reference Range	Low	Normal	High
ALB	= 2.8 g/dL	2.4 - 4.1			
ALKP	= 99 U/L	0 - 62			
ALT	= 241 U/L	28 - 76			
AMYL	= 733 U/L	500 - 1500			
BUN/UREA	= 17 mg/dL	15 - 34			
Ca	= 10 mg/dL	7.5 - 10.8			
CREA	= 0.8 mg/dL	0.8 - 2.3			

Comments

9. Close all open windows.

## VIEWING RESULTS WITH VETCONNECT\* PLUS

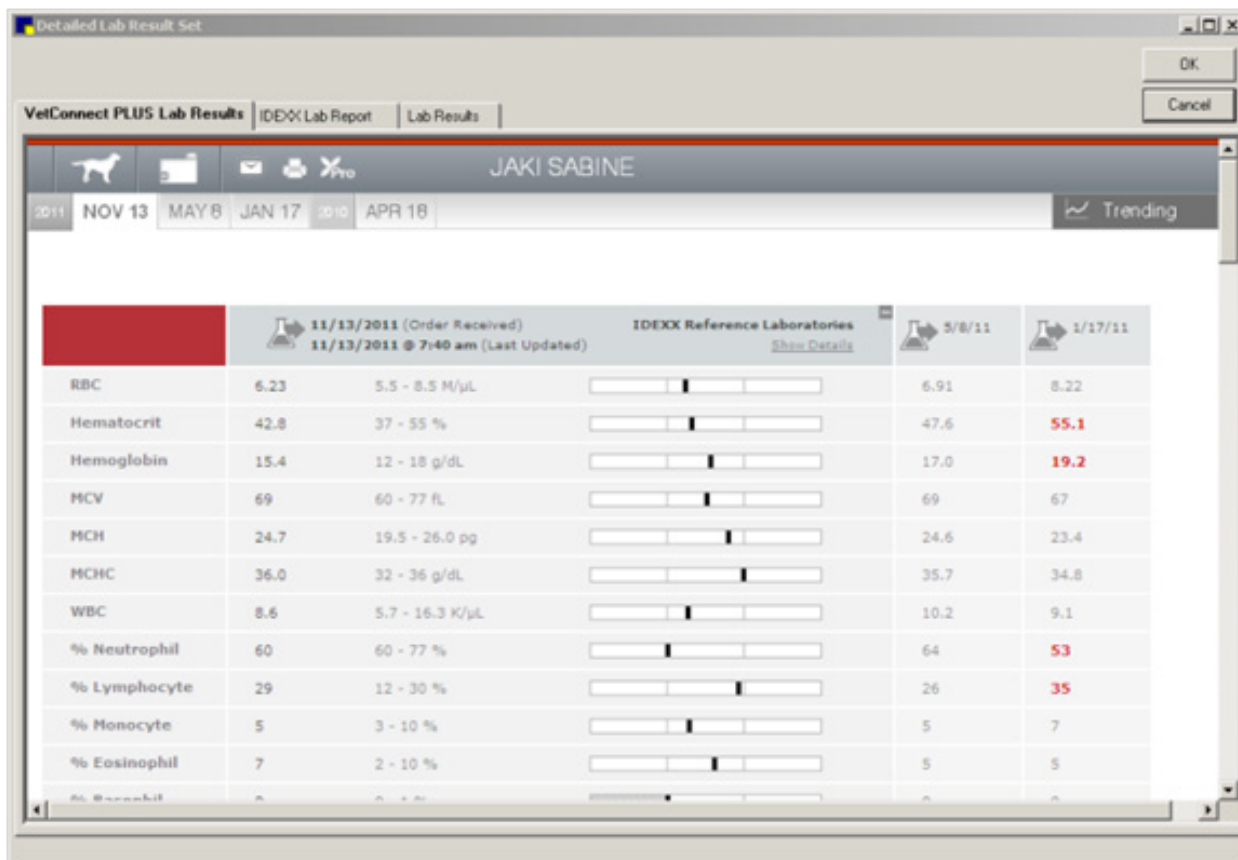
Starting with version 8.3, Cornerstone includes optional access to VetConnect\* PLUS, a powerful web-based tool that lets you view and compare IDEXX in-house diagnostics and IDEXX Reference Laboratories data side by side.

VetConnect PLUS works within the standard Cornerstone workflow for viewing results and has an enhanced format for viewing, comparing, and graphing result data. You can also visit [vetconnectplus.com](http://vetconnectplus.com) to view your results in a browser.

Using VetConnect PLUS, you can:

- View the latest IDEXX test results in an enhanced and interactive window as soon as they are sent from the IDEXX Reference Laboratories or from your in-house analyzers.
- See the complete history of a patient's known IDEXX test results.
- Compare results from IDEXX Reference Laboratories and IDEXX VetLab\* Station tests side by side. (To do so, you must activate VetConnect PLUS on IDEXX VetLab Station.)
- Graph and view trends for IDEXX test results with the click of a button.

Following is an example of a VetConnect PLUS tab.




### To use VetConnect PLUS from the IDEXX Lab Report:

1. In the Cornerstone software, open the patient record, and then use your preferred method to open an IDEXX Lab Report that contains the test results you want to see (for example, double-click an IDEXX Lab Report on the Summary tab in the Patient Clipboard).  
The Detailed Lab Result Set window opens.
2. Select the VetConnect PLUS tab.  
See the *Cornerstone User's Manual* or online help for more information about using VetConnect PLUS features.
3. When finished, close the results window.

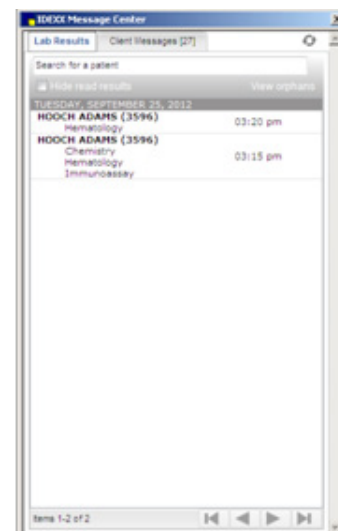
### VIEWING NEW RESULTS THROUGH THE IDEXX MESSAGE CENTER

The IDEXX Message Center lists all recently returned results from IDEXX Reference Laboratories and the IDEXX VetLab\* Station.

1. Click the IDEXX Message Center button  on the toolbar, then click **Lab Results**. The IDEXX Message Center lists all recently returned results from IDEXX Reference Laboratories and the IDEXX VetLab Station.
2. To open a result, right-click it and select **Open**.





The IDEXX Message Center button appears in red and black when new messages and/or lab results have been added since the last time you looked at the message center.



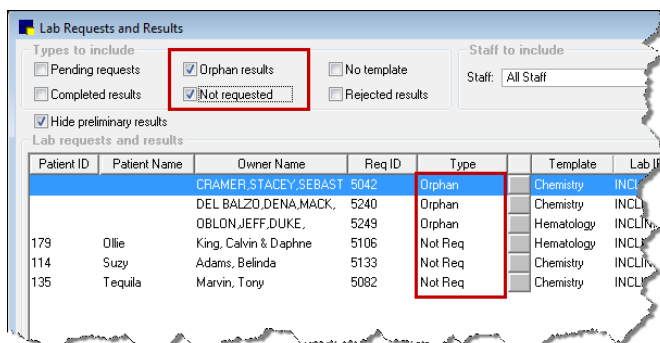
## DAILY STEP - CHECK LAB REQUESTS AND RESULTS

One important daily step to complete is checking your Lab Requests and Results window for Orphan and/or Not Requested results that need to be resolved. Checking this window daily will help alleviate billing issues, patient record errors and could improve the effectiveness and efficiency of your practice.

### Check on Lab Requests and Results Window

1. Use the **Lab Request and Results**  toolbar button to access the Lab Requests and Results window.
2. In the Types to include area select the result type you want to view.  
 You can also click the Type column heading to sort the lab results by lab type.

#### Sort using Types to include area check boxes



Lab Requests and Results

Types to include:

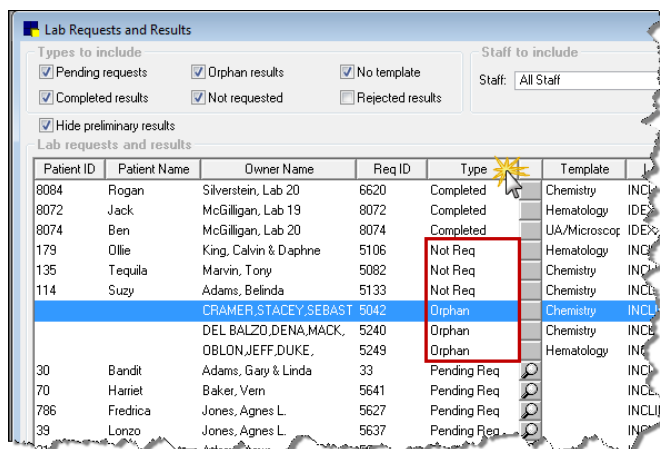
- ☐ Pending requests
- ☒ Orphan results
- ☐ No template
- ☐ Completed results
- ☒ Not requested
- ☐ Rejected results

Staff to include: All Staff

☒ Hide preliminary results

Patient ID	Patient Name	Owner Name	Req ID	Type	Template	Lab ID
		CRAMER, STACEY, SEBAST	5042	Orphan	Chemistry	INCL
		DEL BALZO, DENA, MACK,	5240	Orphan	Chemistry	INCL
		OBLON, JEFF, DUKE,	5249	Orphan	Hematology	INCL
179	Ollie	King, Calvin & Daphne	5106	Not Req	Hematology	INCL
114	Suzy	Adams, Belinda	5133	Not Req	Chemistry	INCL
135	Tequila	Marvin, Tony	5082	Not Req	Chemistry	INCL

#### Sort by clicking Type column heading



Lab Requests and Results


Types to include:

- ☒ Pending requests
- ☒ Orphan results
- ☒ No template
- ☒ Completed results
- ☒ Not requested
- ☐ Rejected results

Staff to include: All Staff

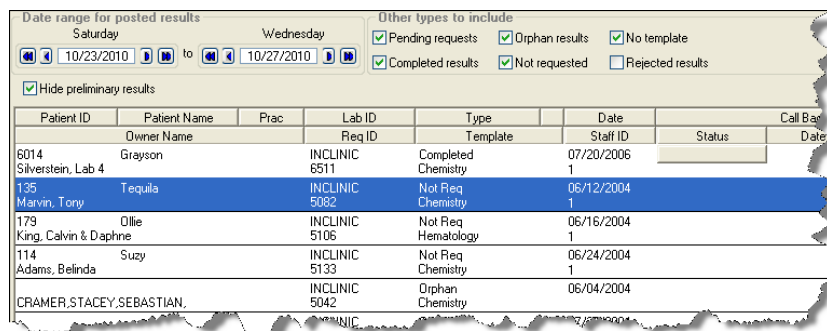
☒ Hide preliminary results

Patient ID	Patient Name	Owner Name	Req ID	Type	Template	Lab ID
8084	Rogan	Silverstein, Lab 20	6620	Completed	Chemistry	INCL
8072	Jack	McGilligan, Lab 19	8072	Completed	Hematology	INCL
8074	Ben	McGilligan, Lab 20	8074	Completed	UA/Microscop	INCL
179	Ollie	King, Calvin & Daphne	5106	Not Req	Hematology	INCL
135	Tequila	Marvin, Tony	5082	Not Req	Chemistry	INCL
114	Suzy	Adams, Belinda	5133	Not Req	Chemistry	INCL
		CRAMER, STACEY, SEBAST	5042	Orphan	Chemistry	INCL
		DEL BALZO, DENA, MACK,	5240	Orphan	Chemistry	INCL
		OBLON, JEFF, DUKE,	5249	Orphan	Hematology	INCL
30	Bandit	Adams, Gary & Linda	33	Pending Req	Chemistry	INCL
70	Harriet	Baker, Vern	5641	Pending Req	Chemistry	INCL
786	Fredrica	Jones, Agnes L.	5627	Pending Req	Chemistry	INCL
39	Lorzo	Jones, Agnes L.	5637	Pending Req	Chemistry	INCL

3. Resolve any outstanding orphan and/or not requested results.  
 See procedural steps for “Resolve Not Requested Results” and “Resolve Orphan Results” later in this guide.
4. Close the Lab Requests and Results window.

### Alternative: Check on Daily Planner

1. Select **Daily Planner > Diagnostics** tab to access the lab results.
2. Use the Other Types to include filters and headings to customize and sort the results.
3. Resolve any outstanding orphan and/or not requested results.
4. Close the Daily Planner window.



Date range for posted results: Saturday 10/23/2010 to Wednesday 10/27/2010

Other types to include:

- ☒ Pending requests
- ☒ Orphan results
- ☒ No template
- ☒ Completed results
- ☒ Not requested
- ☐ Rejected results

☒ Hide preliminary results

Patient ID	Patient Name	Prac	Lab ID	Type	Date	Call Back
	Owner Name		Req ID	Template	Staff ID	Status
6014	Grayson	INCLINIC	6511	Completed	07/20/2006	1
	Silverstein, Lab 4			Chemistry		
135	Tequila	INCLINIC	5082	Not Req	06/12/2004	1
	Marvin, Tony			Chemistry		
179	Ollie	INCLINIC	5106	Not Req	06/16/2004	1
	King, Calvin & Daphne			Hematology		
114	Suzy	INCLINIC	5133	Not Req	06/24/2004	1
	Adams, Belinda			Chemistry		
	CRAMER, STACEY, SEBASTIAN,	INCLINIC	5042	Orphan	06/04/2004	
				Chemistry		

## Resolve Not Requested Results

A not requested result occurs when tests listed on a pending request in Cornerstone do not match the tests run.

1. From the Lab Requests and Results window, select the not requested lab result you want to resolve.
2. Click **Update**.
3. Select to either bill or not bill the client.
  - Select **Bill this client** if you want to bill the client. If you select to bill the client you will be prompted to enter the invoice item that corresponds to the tests completed.
  - Select **Do not bill this client** if the client is not to be billed.
4. Select the *Staff* member who requested the test.
5. Enter the **Invoice Item ID** and **Revenue Center**, if applicable.
6. Click **OK**.
7. To post the results, follow the “To Manually Post Results to the Patient File” instructions.

## Resolve Orphan Results

Orphan results occur when the client and/or patient information on results received from the lab does not match client/patient information in Cornerstone.

1. From the Lab Requests and Results window, select the orphan result you want to resolve.
2. Click **Update**.
3. Type the patient ID in the **Patient ID** field.
4. Verify the correct owner displays in the **Owner** field. If not, select the correct owner from the list.
5. Select to either bill or not bill the client.
  - Select **Bill this client** if you want to bill the client. If you select to bill the client you will be prompted to enter the invoice item that corresponds to the tests completed.
  - Select **Do not bill this client** if the client is not to be billed.
6. Select the **Staff** member who requested the test.
7. Enter the Invoice Item ID and Revenue Center, if applicable.
8. Click **OK**.
9. To post the results, follow the “To Manually Post Results to the Patient File” instructions.

## To Resolve Multiple Orphan Results

If you have a number of orphan results, you can resolve them by having Cornerstone automatically assign them to the patients that are the best matches.

1. On the Lab Requests and Results window, clear all the filter check boxes except **Orphan**, and review the orphan results that are listed.
2. Select **Post Orphans**.
3. On the Post Orphans dialog box, select a laboratory in the Lab ID drop-down menu, specify a date range, and click **OK**.

**Note:** It may take a few moments for Cornerstone to resolve the orphan results. The software will resolve any orphan results that it can match based on patient ID or the combination of client name and patient name. Resolved results will be posted to patient history, but no new charges will be added to client accounts.
4. On the Lab Requests and Results window, check to see if any orphan results from that time range remain on the list. If so, use the “Resolve Orphan Requests” instructions above.

## MANUALLY ENTER LAB RESULTS

This feature is available to all Cornerstone users to input test results into a patient's file. If you're using Cornerstone version 6.0 or later, a note appears in the patient's lab record to indicate that the results were entered manually.

1. **Activities > Lab Work > Manually Enter Lab Results.**
2. Type the patient ID in the Patient ID field. You may press F2 to search.
3. Verify the correct owner displays in the Owner field. If not, select the correct owner from the list.
4. Select the lab for which you want to enter the results.
5. Select the staff member who is entering the lab results.
6. Verify the correct date and time. If you need to change the date and/or time, place your cursor in the field and type the correct date and time.

7. Select the **Template** for which you want to enter the results.



You can create a custom template, if necessary.

8. Enter the results by filling in the following fields:

- **Operator**
- **Value**
- **Units**
- **High/Low**
- **Low Value**
- **High Value**



If default ranges do not display after entering results, they have not been set up. If the patient falls into one of the Lab Age Groups set up on the system, the units, low values, and high values entered will be saved as defaults.

9. To add any applicable notes to the test result, click **Comments**.



Be sure that the following setup tasks have been completed before you manually enter lab results:

1. Set up any templates you want to use for manually entering lab results. (**Activities > Lab Work > Templates**, then click **New**.)
2. Set up lab age groups for any species for which you'll be manually entering lab results. (**Lists > Species**, then select a species, click **Update**, and click **Lab Age Grps**.)
3. Set up default test ranges. (**Activities > Lab Work > Default Test Ranges**, then fill in the Default Test Ranges dialog box, click **OK** and repeat for additional test ranges.) This step can only be completed after steps 1 and 2.

## VIEW PROFILES

Individual tests make up a profile, which is used to request lab work.

1. On the **Activities** menu, select **Lab Work > Profiles**.
2. To view the tests within a profile, select that profile in the list and click **Update**.

## RECOMMENDED INTERFACE SETTINGS

To update settings for the IDEXX VetLab Station interface:

1. Select **Lab Work> Laboratories> IDEXX VetLab In-Clinic Laboratory**.
2. Click **Update**.

Recommended settings:

- **Use requisition IDs**—Ensures consistent requisition IDs.
- **Units**—In U.S. always use “Common units.”
- **Require Requests**—Laboratory results are automatically matched to pending requests.
- **Use special actions**—Lets you create special actions that generate lab requests.
- **Warn in invoicing if Not Req results exist**—Displays a warning message at invoicing if a patient has not-requested results. Helps prevent missed lab charges.



Tips:

- If you allow special actions for lab requests, then **do not** select “Hide request screen if special action.” Hiding the request screen will prevent you from reviewing the request form generated by the special action.

Lab Information for IDEXX VetLab In-clinic Laboratory

Lab information

Name: IDEXX VetLab In-clinic Laboratory Lab ID: INCLINIC

Address:

City:

State/prov: Postal code:

Requisition numbers

☐ Manually enter requisition IDs

☒ Use requisition ID ranges

☐ Use patient ID for requisition ID

Requisition ID ranges

Current range: Next ID: 3,218

End ID: 999,999,999

Warning trigger: 2,000

Next range: Begin ID: 0

End ID: 0

Units: Common units

Display color:

Cumulative display: Ascending

Preferences

☐ Use as default lab

☐ Review results before posting

☐ Require sample drawn by info

☐ Use order numbers

☐ Close partial pending profiles

☒ Require requests

☐ Use favorites list

☒ Use special actions

☐ Hide request screen if special action

☒ Warn in invoicing if Not Req results exist

☐ Use VetLab Station SmartLink billing

Print preferences

☐ Print full page # Copies: 1

☐ Print label # Copies: 1

☐ Print tube label # Copies: 1

☐ Print VetTest barcodes

IDEXX LabREXX

☐ Create LabREXX test request forms

☐ Print using InkSaver

☐ Automatically update prices

☐ Allow prices to go down

For creating new lab invoice items

☐ Do not create items automatically

Class ID:

Sub Class ID:

Markup pct: %


## Section 2

# Resources

### ONLINE IDEXX CORNERSTONE CUSTOMER SUPPORT CENTER

The Support Center offers an extensive knowledge base of information to help you find the answers you need – 24 hours a day, 365 days a year. This resource section will familiarize you with the Support Center and demonstrate search techniques for lab-related topics.

There are two ways to access the Online Cornerstone Support Center and you'll arrive on the home page below.

1. Access directly from within the IDEXX Cornerstone\* Practice Management System. (**Help > Support Center** or ).
2. At an Internet browser window, enter Cornerstonehelp.com.

#### Online Support Center Home Page



Small Animal Health

In-house Diagnostics

Reference Laboratories

Practice Management

[Home](#) > [Small Animal Health](#) > [Practice Management](#) > [Cornerstone Practice Management System](#) > [Online Support](#)

## IDEXX Cornerstone® Customer Support Center

### Welcome to our online Cornerstone® Customer Support Center

We are excited to offer you this self-service support option. If you have an active support contract for Cornerstone, you can search our extensive knowledge base of information to find the answers you need—**24 hours a day, 365 days a year!**

We know you're busy. We want to help you find the answers you need to keep your computer system and your practice running smoothly.

#### Quickly and easily get help on:

- Locating the correct report
- Setting up reminders
- Changing setups and defaults
- End-of-period procedures

...and so much more!

**Log in and start searching now!**

Is this your first visit? [Register now >](#)

**Don't have an active support contract?** Call **1-800-283-8386**, option 4, to sign up.

If you don't find what you're looking for here, [contact customer support](#) or call **1-800-695-2877**.

#### Business Hours

Monday–Friday: 6:30 a.m.–8:00 p.m. CT

Saturday: 7:00 a.m.–4:00 p.m. CT



By keeping your Cornerstone Support Contract current you will have access to all of these documents and much more.

## COMMON TROUBLESHOOTING TOPICS, CAUSES, AND SOLUTIONS

The following table summarizes common issues, causes, and more explanation, where applicable.

Why am I getting orphan and/or not-requested test results?	
Possible Causes	Solutions
<p>Your practice requested an add-on test for a requisition that was already complete and for which results had been returned.</p> <p>When the laboratory sends the result for the add-on test, it also resends all the original results for the requisition:</p> <ul style="list-style-type: none"><li>• The original results will be labeled as Not Req or Orphan (depending on the Cornerstone version).</li><li>• The new add-on result will also be labeled Not Req or Orphan, if you did not enter the add-on request into Cornerstone.</li></ul>	<p>Follow the steps in this guide for <b>Resolving Orphan Results</b> or <b>Resolving Not Requested Results</b>.</p>
<p>Multiple pending requests were created for the same patient.</p> <p>Earlier versions of Cornerstone software (version 7.5 or earlier ) have no way to identify which results go with which requests for the same patient.</p>	<p>Follow the steps in this guide for <b>Resolving Orphan Results</b> or <b>Resolving Not Requested Results</b>.</p>
<p>Results can appear as not requested or orphan, if you use work flows other than those described in this guide, including:</p> <ul style="list-style-type: none"><li>• Not creating a lab request within Cornerstone, and not using the Use VetLab SmartLink Billing feature.</li><li>• Entering in patient in manually using the Analyze Sample option on the IDEXX VetLab* Station.</li><li>• Entering in tests manually on lab analyzers connected to the IDEXX VetLab Station.</li></ul>	<p>Follow the steps in this guide for <b>Resolving Orphan Results</b> or <b>Resolving Not Requested Results</b>.</p>
<p>In some cases, special characters in patient name or the client name may cause not requested or orphan results.</p>	<p>Follow the steps in this guide for <b>Resolving Orphan Results</b> or <b>Resolving Not Requested Results</b>.</p>

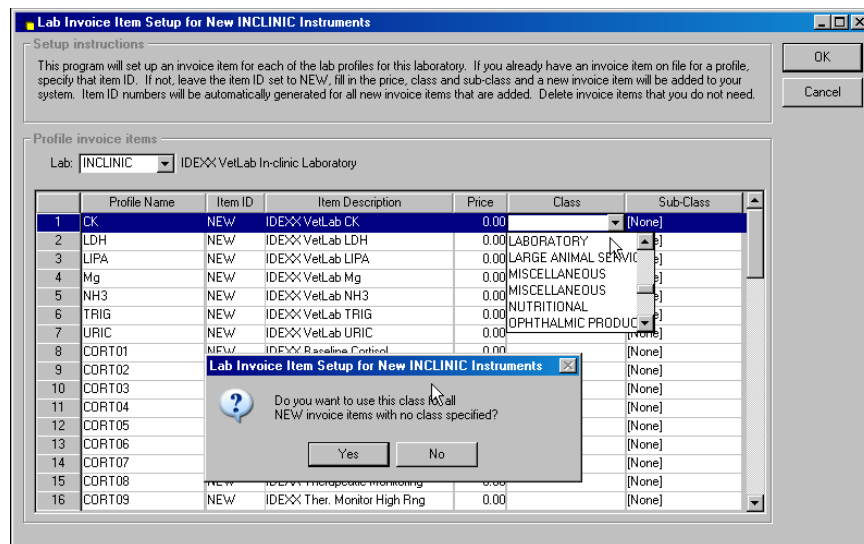
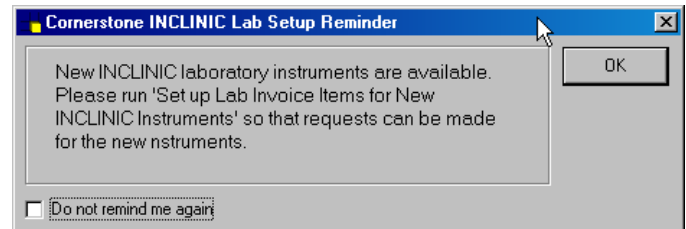
## Section 3

# Appendix

### SET UP INVOICE ITEMS FOR A NEW INSTRUMENT

How to set up invoice items for a new laboratory instrument.

1. After you connect a new in-house analyzer to the IDEXX VetLab Station, log in to Cornerstone as an administrator. The Cornerstone INCLINIC Lab Setup Reminder message is displayed.
2. Review the message and click **OK**.
3. Select **Activities > Lab Work > Setup Lab Invoice Items for New INCLINIC Instruments**.
4. Update existing invoice items (or create new ones) and link them to the profiles that can be run on the new analyzer. You can also create or update custom-made profiles, as needed.



- You can delete any of the items on the list that you do not want to create at this time. To Remove and Set up invoice items during a Setup Session:
  - a. Choose one of the following:
    - To remove a sequential group of lab invoice items, press and hold the **Shift** key and click the first invoice item in the groups and then click the last invoice item of the group you want to delete.
    - To remove several invoice items that are not sequential hold the **Ctrl** key and click the invoice items to be removed.
  - b. Press **Ctrl + D**.
- They will appear the next time you access this window.
- You can link invoice items you have already set up in Cornerstone for tests/profiles. **F2** in the *Item ID* field and search for and select the item to link.

5. Click **OK**.



The new invoice items are created.

6. The next time the Lab Setup Reminder message is displayed, if all analyzer profiles have been linked to invoice items, check the Do not remind me again box, and click **OK**.