

Process for Ordering Rituximab through the Rheumatology Service

Date: February 10, 2017

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1. Determine if Rituximab is appropriate for the patient. Complete Pharmaceutical Prior Authorization in CPRS.
2. Rituximab is an antineoplastic medication and requires IMED consent. This is found in the CPRS→Tools menu→IMED consent→Hematology and Oncology →Chemo-Basic →Rituximab. The facility chemotherapy nurses will not administer without the consent form completion.
3. Discuss with the veteran what date to commence the infusion. Explain to the veteran that there are two infusions approximately two weeks apart. Advise the patient the infusion takes about 5-6 hours to complete. Of note: rituximab costs \$8000 per infusion cycle.
4. Call the MSA on 3F (Chemotherapy Infusion Clinic) at extension 2045 and schedule a date and time for both infusions.
5. Order labs in CPRS under Rheumatology orders (#48 rituxan labs) scheduled prior to each infusion. Of note, these include the following: CBC, AST, ALT, Alk Phos, Albumin, Total Bilirubin, Creatinine, BUN, CRP, ESR and Urinalysis.
6. Test all patients for Hepatitis B. Hepatitis B serology panel includes hepatitis B surface antigen (HBsAg), anti-hepatitis B core antibody (total anti-HBcAb), and anti-hepatitis B surface antibody (anti-HBsAb). If HBsAg or anti-HBcAb is positive place GI consult for evaluation and treatment. Testing should be completed within 6 months prior to the start of the initial and subsequent infusions (same day is acceptable, but not preferred). If Hepatitis B surface antibody (anti-HBsAb) is negative consider vaccination.
7. Subsequent courses may be administered every 24 weeks (based on clinical evaluation), if necessary may be repeated no sooner than every 16 weeks.
8. Recommend monitoring total immunoglobulins (IGA, IGG, IGM) prior to starting a second cycle.
9. Rituximab to be ordered in Vista Chemotherapy Manager (VCM). Based on the following citation: Emery, Paul et al. "The efficacy and safety of rituximab in patients with active rheumatoid arthritis despite methotrexate treatment: Results of a phase IIB randomized, double-blind, placebo-controlled, dose-ranging trial," *Arthritis & Rheumatism*, 2006, Volume 54 (5): 1390-1400.
<http://www.ncbi.nlm.nih.gov/pubmed/16649186>
10. Consider/Recommend holding the veteran's antihypertensive medications on the day of the infusion due to potential hypotension from rituximab.
11. Place rituximab order in VCM.

Starting VCM:

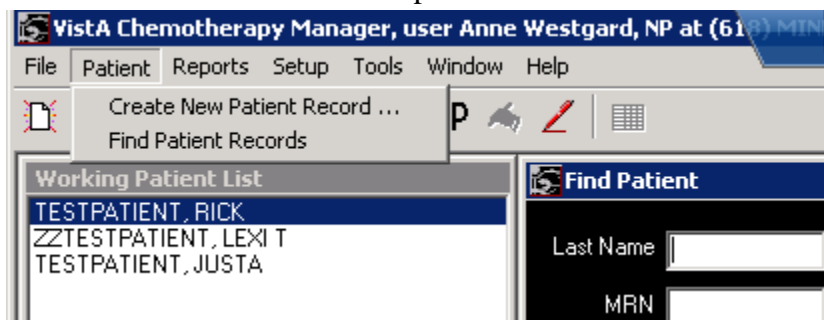
CPRS→Tools menu→ More→VCM→ enter PIV card credentials→ double click



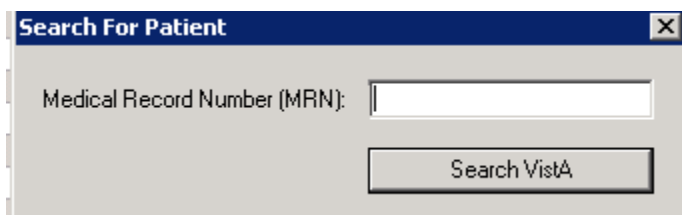
MIN LIVE VCM icon→enter CPRS access and verify codes.

Enrolling Patient:

Click on **Patient** button from top left ribbon and select “Create New Patient Record”



Enter the patient’s full Social Security Number in the MRN field and press the **Search Vista** button.



VCM will search for a matching patient in Vista and import basic patient information including most recent height, weight, and allergies.

At the Enrollment screen enter information in the required fields.

Enroll New Patient

<p>Identification</p> <p>Social Security: 000000053</p> <p>MRN 2: </p> <p>Last Name: Ztestpatient</p> <p>First / MI: Herby T</p> <p>Date Of Birth: 1/ 1/1900</p> <p>Gender: <input checked="" type="radio"/> male <input type="radio"/> female</p>	<p>Clinical</p> <p>Attending: Westgard, Anne, NP</p> <p>Fellow: </p> <p>Dx / Date: RHEUMATOLOGY-Rituximab 2017 Jan</p> <p>Path: </p> <p>TNM: </p> <p>Stage: </p> <p>Allergies: <input type="radio"/> none known <input checked="" type="radio"/> has allergies Edit</p>
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Initial Weight - Height

60 in

12/ 7/2016 155 lbs

Is this the correct patient and is the information complete?

Yes No

Click the Accept button and the General tab of the patient in the Chemotherapy Record will display.

Click “Orders” tab within the patient record.

Chemotherapy Record for HERBY T. ZZTESTPATIENT

General | Medical | Dx 1 | Dx 2 | **Orders** | Tests | Metrics

<p>Identification</p> <p>Social: 000000053</p> <p>MRN 2: </p> <p>Last Name: ZZTESTPATIENT</p> <p>First MI: HERBY T</p> <p>DOB: 1/1/1900 117</p> <p>Gender SSN: M 000-00-0053</p>	<p>Employment/School</p> <p>Status: </p> <p>Employer: </p> <p>Title/Dept: </p> <p>Address: </p> <p>City: </p> <p>State Zip: </p>
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<p>Address</p> <p>Address: VAMC</p> <p>City: MINNEAPOLIS</p> <p>State Zip: MN 55417</p>	<p>Communication</p> <p>Tel (h): 6127222000</p> <p>Tel (w): </p> <p>Mobile: </p> <p>Email: </p>	<p>Status</p> <p>Type: Alive, On Therapy</p> <p>Death: </p> <p>Lost: </p>
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<p>Location</p> <p> </p>	<p>Default Treatment Facility</p> <p>Minneapolis VAHCS (612) 467-47</p>	<p>Insurer/Method of Payment</p> <p> </p>
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<p>Attending MD</p> <p>Westgard, Anne, NP</p>	<p>Pharmacist</p> <p> </p>
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Then click on the **Assign Tx** button

Chemotherapy Record for HERBY T. ZZTESTPATIENT

General	Medical	Dx 1	Dx 2	Orders
<div>Assign Tx</div>				
Date	Cycle	Orders		VCM Status

Then highlight **Rituximab template (Rheumatology)** and then click Assign Tx button

Assign Treatment Plan for RHEUMATOLOGY-Rituximab

Enter text to find:

+Rituximab Template (Rheumatology)@

☐ All Treatment Plans
☒ Disease Specific Treatment Plans
☐ Stage Specific Treatment Plans

Show treatment plans containing

Filter List

Begin at Cycle # 1

Assign Tx View Cancel

Fill in the answer to question 1 as **No**.

Establish Line of Therapy

Question 1

Has the patient received any chemotherapy for this diagnosis prior to enrollment in VistA Chemotherapy Manager?

☐ Yes ☒ No

Question 2

How many different chemo regimens has the patient received for this diagnosis prior to enrollment in VistA Chemotherapy Manager?

Question 3

Is the regimen now being assigned the same as (a continuation of) the most recent pre-VistA Chemotherapy Manager therapy?

☐ Yes ☐ No

Question 4

Does the patient have metastatic disease?

☐ Yes ☐ No

OK Cancel

The orders will appear on the Orders tab

File Patient Reports Setup Tools Window Help

P Tox TP

Chemotherapy Record for HERBY T. ZZTESTPATIENT

General	Medical	Dx 1	Dx 2	Orders	Tests	Metrics
				Assign Tx	<input checked="" type="radio"/> Dx 1 <input type="radio"/> Dx 2	
Date	Cycle	Orders	VCM Status	VistA Status		
Tue 02-14-17	1	Rituximab (Rheumatology) Days 01 to 14	Next			
Tue 02-28-17	1	Rituximab (Rheumatology) Days 15 to 28				

Double click on the top/highlighted order. Select a start date and click the **Continue** button.

Rituximab (Rheumatology) Days 01 to 14 - Cycle # 1

February 2017

S	M	T	W	T	F	S
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March 2017

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April 2017

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Day #1

acetaminophen (INPT) 650 mg per dose
diphenhydramine 50 mg per dose
methylprednisolone 100 mg per dose
rituximab 1000 mg per dose
meperidine 25 mg per dose
0.9% sodium chloride 0 KVO for 500 ml KVO-Only
CBC & Diff
LFT's
albumin serum
creatinine blood
BUN (blood urea nitrogen)
urinalysis
C-Reactive Protein
ESR
Hepatitis B Serology Panel Serum

Subsequent Orders

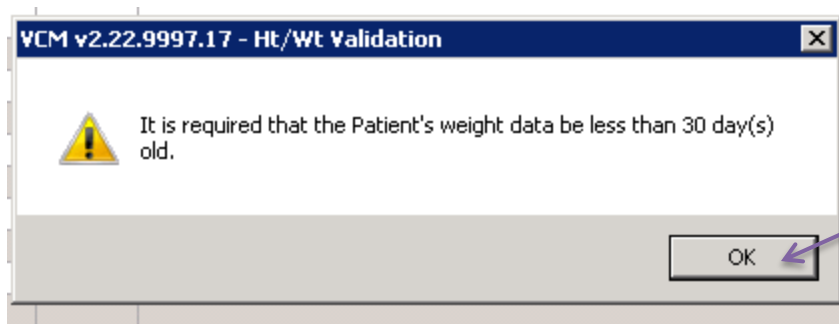
☐ Reset start dates of all subsequent orders
☒ Reset future orders of same treatment plan
☐ Do not reset start dates of subsequent orders

Test Scheduling

☒ Include tests when sliding calendar dates

Reset Start Date ◀ ▶ Continue Cancel

Double click the highlighted Order, if the patient's weight is > 30 days the following will display. Select Ok.

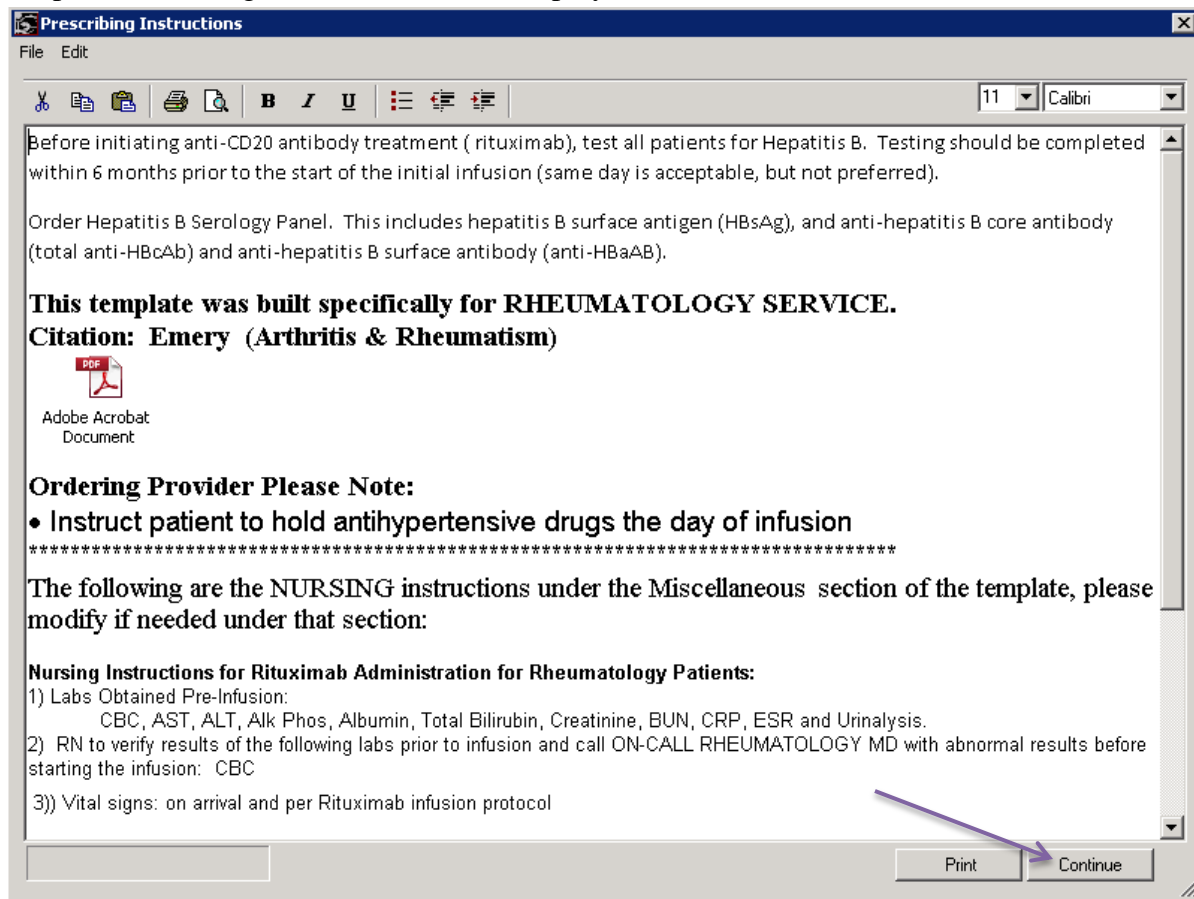


Post the patient's most recent weight and then select Orders tab

The "Chemotherapy Record for HERBY T. ZZTESTPATIENT" interface. It features a tabbed menu at the top with "General", "Medical", "Dx 1", "Dx 2", "Orders" (circled in red), "Tests", and "Metrics". Below the tabs, there are sections for "Height and Weight" and "Vital Signs". A "Use as baseline wt:" field contains the value "155.00". A table displays patient data with columns for Timestamp (HT), Height (in), Timestamp (VT), Weight (lbs), BSA (m2), and Initials. The table contains five rows of data. On the right side of the table, there are icons for adding, deleting, printing, and saving records.

Timestamp (HT)	Height (in)	Timestamp (VT)	Weight (lbs)	BSA (m2)	Initials
12/7/2016 8:33:05 AM	60.00	12/7/2016 8:33:05 AM	155.00	1.73	
11/17/2016 1:12:03 PM	60.00	11/17/2016 1:12:03 PM	150.00	1.70	
10/20/2016 12:39:59 PM	68.00	10/20/2016 12:39:59 PM	140.00	1.75	
8/25/2016 12:39:39 PM	72.00	8/25/2016 12:39:39 PM	198.00	2.14	
6/3/2016 12:20:15 PM	74.00	6/3/2016 12:20:15 PM	200.00	2.18	

Helpful Prescribing Instructions screen displays. Select **Continue** button.



Labs display and most cases the labs are not back when the orders are signed. They need to be completed prior to Pharmacy processing the order. Select **Continue** button.

This display is the standard order set for the rituximab infusion

Fellows will select the **Save icon**. Providers with prescribing privileges for rituximab will select the **Sign icon**.

HERBY ZZTESTPATIENT [Rituximab (Rheumatology) Days 01 to 14 - Cycle # 1] Begin on Tue, Feb 14, 2017

File Notes Tools

ht in	wt real lbs	wt ideal	IBW adj %	wt adj ideal	BSA real	BSA ideal	BSA adj ideal
60.00	160.00	110.23	0	110.23	1.75	1.45	1.45

lbs m2

Drugs Tests IV Fluids Miscellaneous Citations

Dosing Rules Dosing Limits Administration Miscellaneous Treatment Factors

Rheumatology Fellows please **Highlight and Select** the Provider who will be responsible for signing the order.

Queue a Cosigner

- Ishani. Areef
- Khan. Fatima
- Klein. Mark
- Krug. Hollis**
- Leffler-mccabe. Michael
- Leraas. Murray
- Luikart. Sharon
- Mahowald. Maren
- Mariash. Evan
- Masoud-doctor. Bobbie
- Masoud. Bobbie
- McCarten. John
- McCutcheon. Shannon
- Meekins. Gregg
- Notermann. Lucille
- Otterness. Sara
- Palmer. Deirdre

Select Save Cancel Orders

Do the same ordering process with the second highlighted order.

Chemotherapy Record for HERBY T. ZZTESTPATIENT

General Medical Dx 1 Dx 2 Orders Tests Metrics

Assign Tx

Date	Cycle	Orders	VCM Status	VistA Status
Tue 02-14-17	1	Rituximab (Rheumatology) Days 01 to 14	Queued	
Tue 02-28-17	1	Rituximab (Rheumatology) Days 15 to 28	Next	

Rheumatology Providers select sign icon **Pen in Hand**.

The Rituximab order set displays

DO NOT EXECUTE! DO NOT EXECUTE! DO NOT EXECUTE! DO NOT EXECUTE! DO NOT EXECUTE! DO NOT EXECUTE!



Minneapolis VA HCS (612) 467-4793
VA Midwest Health Care Network (VISN 23)
Hematology Oncology (1116)
One Veterans Drive
Minneapolis, MN 55417-2300

000-00-0053
ZZTESTPATIENT, HERBY T.
dob 1/1/1900 (117) Male
Anne Westgard, NP

CHEMOTHERAPY ORDERS BEGIN ON 2/14/2017

Rituximab (Rheumatology) Days 01 to 14- Cycle 1

Height 60.00 in Weight 160.00 lbs BSA 1.75 m2 Creatinine 1.10 mg/dL Hemoglobin 11.0 g/dL

ANC (neutrophil count) 1100/mm3
Bilirubin total 1.10 mg/dL
Creatinine blood 1.10 mg/dL
ESR 110 mm/hr
Hemoglobin 11.0 g/dL

Hepatic Enzyme antibody (HEAb) (Anti-HEAb) 1.10 μM
Hepatic Enzyme antigen (HEAg) 1.10 μM
Platelet count automated 110,000/mm3
WBC (white blood cell) 11,000/mm3

CHEMOTHERAPY MEDICATION GROUPS (NAMES OF DRUGS)	DOSE BASE	UNIT	DOSE	ROUTE	SCHEDULE AND DAYS	INITIALS
acetaminophen (INPT)	650 mg/dose	NA	650 mg	PO	QDAY on day 1	
	Administer at least 30 minutes before monoclonal antibodies..					
diphenhydramine	50 mg/dose	NA	50 mg	IV	QDAY on day 1	
	Administer by IVPB over 15 minute(s) in 50 ml 0.9% sodium chloride. Administer at least 30 minutes before monoclonal antibodies..					
methylprednisolone	100 mg/dose	NA	100 mg	IV	QDAY on day 1	
	Administer by IVPB over 30 minute(s) in 50 ml 5% dextrose in water. Administer at least 30 minutes before monoclonal antibodies..					
rituximab	1000 mg/dose	NA	1000 mg	IV	QDAY on day 1	
	Administer by infusion T@1 in 500 ml 0.9% sodium chloride. Concentration 2mg/ml. Unless instructed otherwise, infuse per Rituximab protocol..					
meperidine	25 mg/dose	NA	25 mg	IV	ONCALL PRN on day 1	
	Administer by syringe over 5 minute(s). For rituximab rigors. May repeat if no relief in 15 minutes..					

DISCLAIMER: Order checks presented in VCM will not include the Dose or Rate Limit exceptions. However, internal dose limit warnings will display as VCM alerts. Drug orders executed in VCM are not subject to correction or changes made to the VCM drug order. (A change made at the VCM level is not recorded in the VCM order).

ALL DRUG ORDERS TO BE FILLED GENERALLY UNLESS PRESCRIBER WRITES "D/W" (DISPENSE AS WRITTEN) IN THE ADJACENT BOX

FORMULAE USED: Cockcroft-Gault (renal body weight), Mosteller Equation, BSA

CI= Continuous infusion

Page 1...ORDERS CONTINUED ON THE NEXT PAGE...

1/30/2017	5:29 PM	Westgard, Anne, NP			

Select and **Print & Process Order**, labs will redisplay select **Continue**

Order checks will display press Accept Orders. If Critical Orders severity displays you must enter a reason for overriding.

Order Checks

Item#	Severity	Order Check Description
(1 of 4)	Moderate	Duplicate Therapy: Order(s) exist for {ACETAMINOPHEN 500MG TAB [ACTIVE NON-VA]} in the same therapeutic categor(ies): Non-Narcotic Analgesic/ Antipyretic, Non-Salicylate
(2 of 4)	Moderate	Duplicate Therapy: Order(s) exist for {SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 500ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED]} in the same therapeutic categor(ies): Parenteral Solutions Containing Sodium
(3 of 4)	Moderate	Duplicate Therapy: Order(s) exist for {SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 500ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 50ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED]} in the same therapeutic categor(ies): Parenteral Solutions Containing Sodium
(4 of 4)	Moderate	Duplicate Therapy: Order(s) exist for {SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 500ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 50ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED], SODIUM CHLORIDE 0.9% 1000ML INJ [UNRELEASED]} in the same therapeutic categor(ies): Parenteral Solutions Containing Sodium

Please enter a reason for overriding CRITICAL order check(s):

Change note title to your usual Rheumatology Note Title and enter **Electronic Signature** and select **Sign Cycle**

Review Medical Order

Ordered By: WESTGARD, ANNE

Note Date/Time: 1/30/2017 5:48 PM

Visit:

Note Title: RHEUMATOLOGY CLINIC APN NOTE

Patient: ZZTESTPATIENT, HERBY THREEE

Place Orders:

- ACETAMINOPHEN (INPT) TAB 650MG PO QDAY ROUTINE
Administer at least 30 minutes before monoclonal antibodies.
- DIPHENHYDRAMINE INJ, SOLN 50 MG in SODIUM CHLORIDE 0.9% INJ 50 ML IV Piggyback over 15 minute(s)
Administer at least 30 minutes before monoclonal antibodies.
IV PIGGYBACK QDAY
- METHYLPREDNISOLONE INJ, SOLN 100 MG in DEXTROSE 5% WATER INJ, SOLN 50 ML IV Piggyback over 30 minute(s)
Administer at least 30 minutes before monoclonal antibodies.
IV PIGGYBACK QDAY
- RITUXIMAB INJ, SOLN 1000 MG in SODIUM CHLORIDE 0.9% INJ 500 ML Infuse T@1 Conc=2mg/mL. Unless instructed otherwise, infuse per Rituximab protocol.
INTRAVENOUS

Order Release Workflow

- ☒ Release Orders to VistA
- ☒ Release TIU Note to VistA

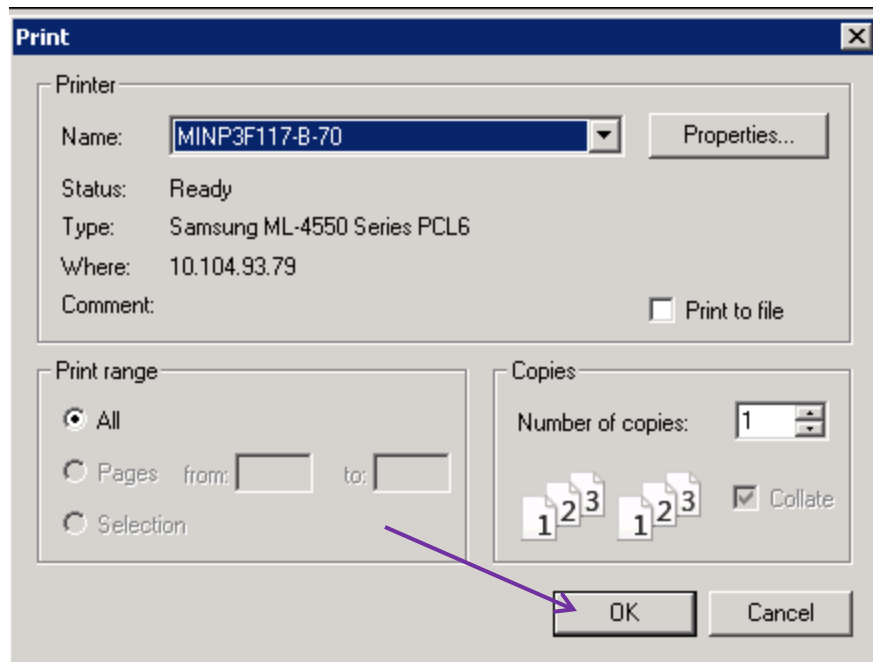
Electronic Signature: [Masked Signature]

Additional Signer:

Disclaimer: Order checks presented in VCM will not include the Dose or Rate Limit exceptions. However, internal dose limit warnings will display as VCM alerts. Drug orders executed in VCM are not subject to correction for changes made to the VistA drug order. (A change made at the VistA level is not recorded in the VCM order).

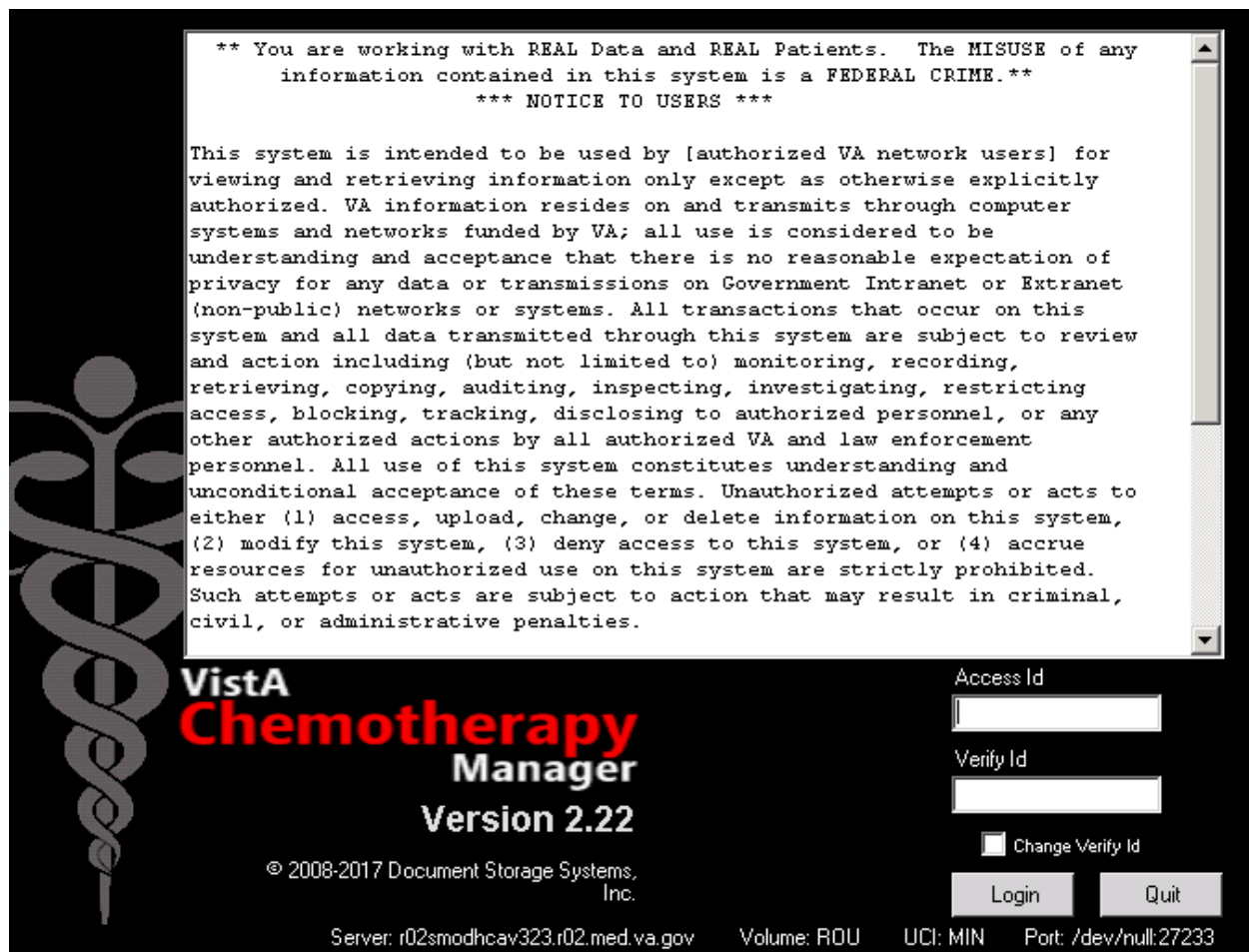
Buttons: Display Order Checks ... Sign Cycle Print Report Cancel

Select Ok at the Print display, it is defaulted to the correct printer. It displays twice.

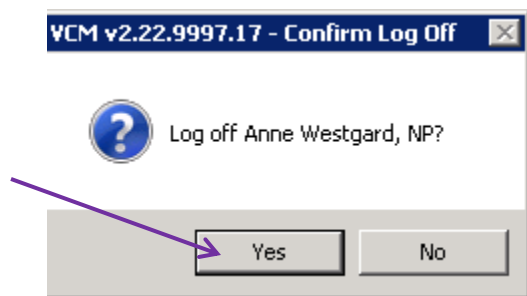


To Log Off, close the patient record. Double click on the **Key icon** on the upper left hand ribbon





Select Quit



Select Yes.

Double click the handshake to log off the VCM server

