

Preparing for and Managing Chemotherapy: Meet your Team

Kathy Feaganes, PharmD

Laura Yarbrow, PharmD

CANCER SURVIVOR DAY

Objectives

- Background
- Intravenous (IV) Patient Work Up
- Intravenous (IV) Case Presentation
- Intrathecal (IT) Preparations
- Oral Chemo Patient Work Up
- Oral Chemo Case Presentation
- Questions

Background

- Pharmacist Education
 - 4 year program
 - Doctor of Pharmacy
- Pharmacy Residency
 - More intense clinical rotations
 - Ex. Internal Medicine, Ambulatory Care, Oncology, Renal, etc
- Board Certification
 - Certification of specialized skills in pharmacy
 - Ex. Ambulatory, Oncology, Psychiatry, General, etc



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IV Work Up

- Treatment Plan entered
- Work Up
 - Timing
 - Baseline Labs
 - Baseline Tests; EKG, ECHO, Audiogram, PFT
 - Tumor type like HER2, PDL1, EGFR
- Scheduled for 1st infusion
- Reviewed by nursing (height, weight, ROS)
- Chemotherapy orders released to pharmacist...

Treatment Plan Manager - ONCA BREAST PACLITAXEL Q1WEEK - PRL8755

TP Height: 177.8 cm $\Delta +0.0\%$ @ 50 age TP Weight: 36.3 kg $\Delta +0.0\%$ @ 50 age TP BSA: 1.34 m2 $\Delta +0.0\%$ BURKE

ONCA BREAST PACLITAXEL Q1WEEK - PRL8755 - Properties

Cycle 1 - 1/1/2011 through 1/28/2011 (28 days) Planned

Day 1, Cycle 1 - Planned for 1/1/2011

Provider Reminders

Abbreviated Protocol Description
Paclitaxel[80] d1,8,15,22 q28d

Treatment Parameters and Order Schedule

Treatment Parameters - 1
Baseline Labs (one time draw, prior to first cycle):
CBC, Total Bil, ALT, Hep BsAg, Hep ScAb

Treatment Parameters
Lab Parameters to Assess:
Days 1, 8, 15, and 22: ANC greater than 1,500; Platelets greater than 100,000; Total Bil less than or equal to 1.25 times ULN; ALT less than 10 times ULN

Labs Before Treatment (see specific timing below):
Day 1: CBC, Total Bil, ALT - Days 8, 15, and 22: CBC

Ancillary, Take-Home Medications

Cetirizine (ZYRTEC) 10 mg Oral Tab
Take 1 tablet by mouth one hour prior to chemotherapy. *** starting S *** Disp-30 tablet, R-0 • Fill Now

Famotidine (PEPCID AC) 20 mg Oral Tab
Take 2 tablets by mouth one hour prior to chemotherapy. *** starting S *** Disp-60 tablet, R-0 • Fill Now

Dexamethasone (DECADRON) 4 mg Oral Tab
Take 5 tablets PO the night before and again at least 2 hours before the first weekly paclitaxel dose. For the 2nd, 3rd, and 4th weeks, take 3 tablets PO at least one hour before each paclitaxel dose. *** starting S *** Disp-19 tablet, R-0 • Fill Now

Premedications

Treatment

PACLITAXEL 107.22 mg in Sodium Chloride 0.9% 250 mL DVPB
107.22 mg (rounded from 107.2 mg = 80 mg/m2/dose * 1.34 m2 Treatment plan BSA from recorded weight) • intravenous • ONE TIME, 1 dose Starting when released
Begin at 50 mL/hr and titrate as per nursing orders for a total dose over 1 hour. *CHEMOTHERAPY - HANDLE AND DISPOSE OF PROPERLY* Infuse using an in-line filter and non-PVC tubing.

Infusion Pharmacist Initial Work Up

- Review treatment plan for premeds and chemotherapy
- Independent chemotherapy double check by 2 Pharmacist
 - Doses
 - Route of administration
 - Frequency
 - Time of Infusion
 - Labs and corresponding testing
 - Assess past medical history related to chemotherapy
 - Oral Medications
 - Drug Allergies

Preparation

- Product Safety
 - Gowns, Gloves
 - IV Hoods
 - Closed System Transfer Device
 - Sterility
- Formulation
 - IV solution
 - Dry Powder – requires reconstitution
- Compatibility/Stability
- Final product check by Pharmacist

IV Patient Case

- **Patient**

- Female
- Breast Cancer
- BSA 1.34 m²

- **Chemotherapy Regimen**

- Paclitaxel 80mg/m²
- Administered weekly

Treatment Plan Manager: ONCA BREAST PACLITAXEL Q1WEEK - RL8755

TP Height: 177.8 cm TP Weight: 36.3 kg TP BSA: 1.34 m²

PAClitaxel 107.22 mg in Sodium Chloride 0.9% 250 mL IVPB

107.22 mg (rounded from 107.2 mg = 80 mg/m²/dose × 1.34 m² Treatment plan BSA from recorded weight) • intravenous • ONE TIME 1 dose Starting when released
Begin at 50 mL/hr and titrate as per nursing orders for a total dose over 1 hour. *CHEMOTHERAPY - HANDLE AND DISPOSE OF PROPERLY* Infuse using an in-line filter and non-PVC tubing.

Category: Treatment

Modify Reason: Comment:

Dose: 80 mg/m²/dose 135 mg/m²/dose 175 mg/m²/dose

Weight Type: Treatment Plan TP Recorded TP Ideal TP Adjusted Order-Specific

BSA: 1.34 m² 1.34 m²

Administer Dose: 107.22 mg 80 mg/m²/dose × 1.34 m² (BSA based on [Treatment plan recorded weight: 36.3 kg as of Fri Sep 21, 2018 09:21] Height: 70 in as of Fri Sep 21, 2018 09:21)

= 107.2 mg = 1 mL/6 mg
= 17.87 mL = 6 mg/mL (rounded to the nearest 0.01 mL from 17.8667 mL)
= 107.22 mg

Administer Amount: 107.22 mg

Administer Over: 60 Minutes 3 Hours

Route: intravenous

Frequency: ONE TIME Q7days Q2WK Q3WK

Select scheduling option:

Starting: S Today Tomorrow At:

Or:

Offset: Minutes Hours

Starting when released

Admin. Inst: Begin at 50 mL/hr and titrate as per nursing orders for a total dose over 1 hour.

Prod. Admin. Inst: *CHEMOTHERAPY - HANDLE AND DISPOSE OF PROPERLY* Infuse using an in-line filter and non-PVC tubing.

Note to Pharmacy: Click to add text (F6)

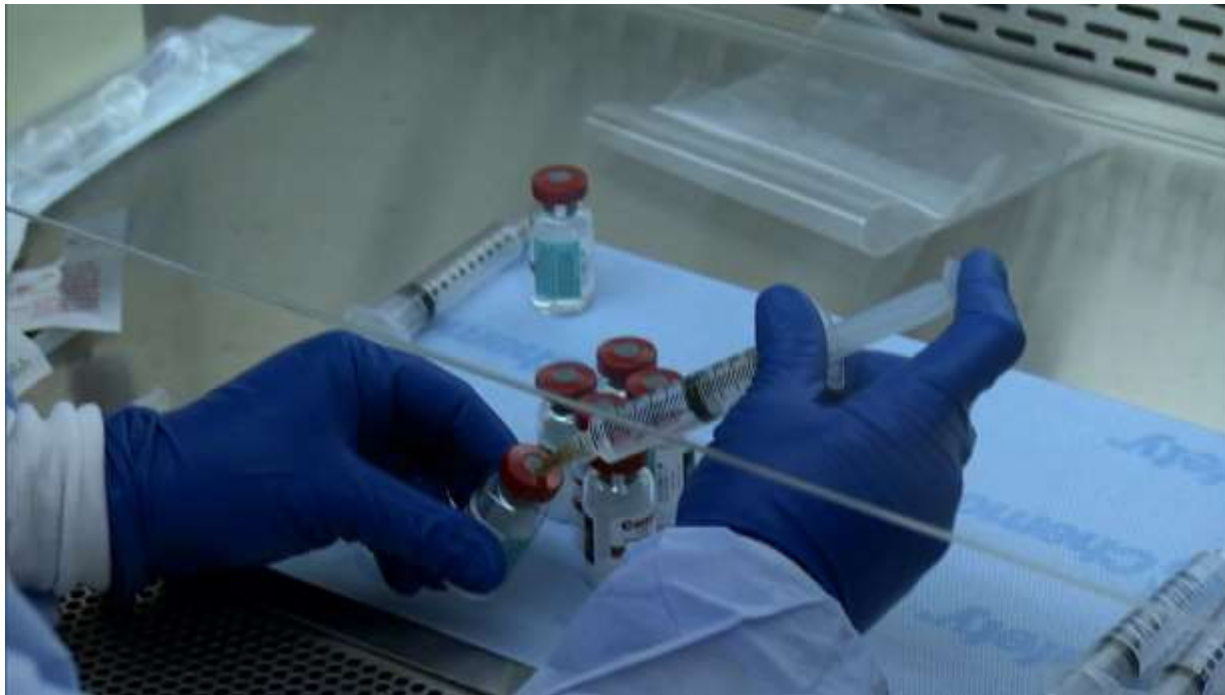
Calculation Worksheet

Drug Frequency	Conc	Dose (mg/m²)	Calc Dose (mg)	Dose (ml)
Paclitaxel 80 mg/m ² weekly	6 mg/ml	80 mg/m ²	107.2 mg	17.87 ml
	mg/ml	mg/m ²	mg	ml

$$\begin{aligned}\text{Calc Dose} &= 80 \text{ mg/m}^2 \\ &= 80 \text{ mg} * \text{BSA m}^2 \\ &= 80 \text{ mg} * 1.34 \text{ m}^2 \\ &= \mathbf{107.2 \text{ mg}}\end{aligned}$$

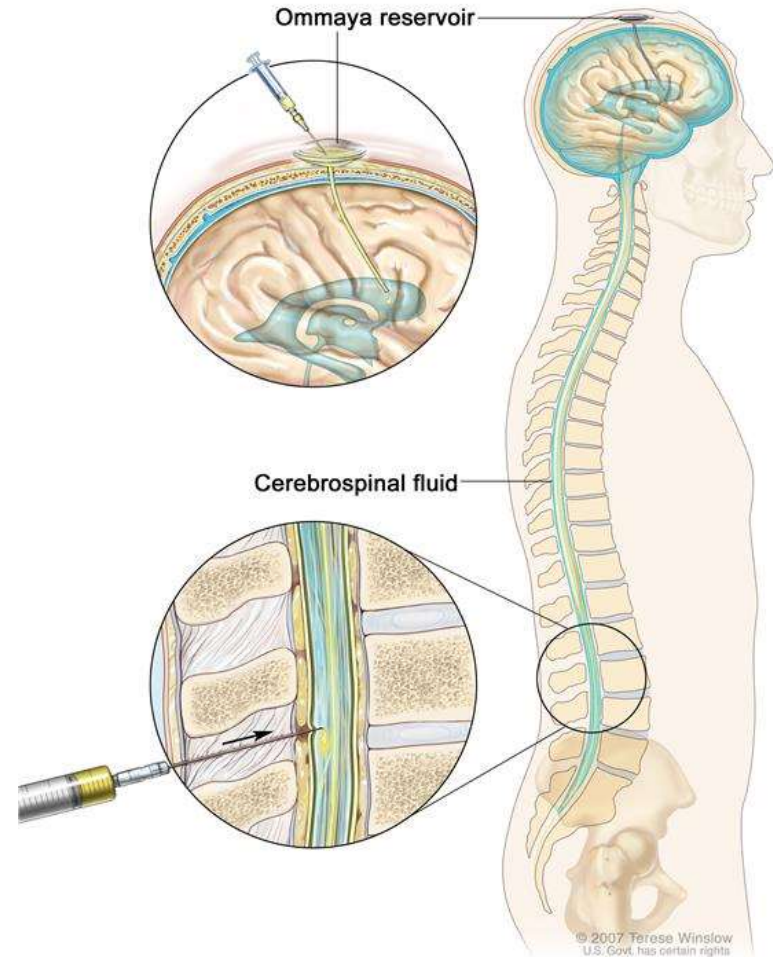
$$\begin{aligned}\text{Dose in (ml)} &= \text{Calc Dose} / \text{Conc} \\ &= 107.2 \text{ mg} / 6 \text{ mg/ml} \\ &= \mathbf{17.87 \text{ ml}}\end{aligned}$$

Preparation Demo



Intrathecal Chemo

- Chemo injected into spinal fluid
- Increased safety
- Group effort
 - Infusion Pharmacy
 - Oncology
 - Interventional Radiology



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Oral Chemotherapy

- A newer option to IV
- Benefits
 - Can take at home
 - Easier administration
- Cons
 - Expensive
 - Less in-clinic visits
 - Still have side effects
 - Pill burden



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Oral chemotherapy Work Up

- Treatment Plan entered
- Work Up
 - Baseline Labs
 - Baseline Tests EKG, ECHO, Urinalysis
 - Tumor type EGFR, ALK, BCR/ABL, HR/ER
- Phone counseling
- Chemotherapy orders released
- Supportive medications released

Oral Chemotherapy Assessment

- Dose
- Frequency
- Quantity dispensed
- Labs
- Tests
- Patient Safety
- Preferred pharmacy for pickup
- Assess copay
- Ordering time
- Treatment released
- Labs frequency determined
- Follow Up

Oral Chemo Patient Case

- Patient
 - Male
 - Colon Cancer
 - BSA 1.34m²
- Chemotherapy Regimen
 - Capecitabine 1000mg/m²
 - Every 12 hours
 - Take for 14 days, then take 7 days off

Treatment Plan Manager ONCA CAPECITABINE - PRL270

TP Height: 177.8 cm, TP Weight: 66.3 kg, TP BSA: 1.34 m², BURKE

ONCA CAPECITABINE - PRL270 - Properties

Cycle 1 - 1/1/2011 through 1/21/2011 (21 days), Planned

Day 1, Cycle 1 - Planned for 1/1/2011

Provider Reminders

Treatment Parameters and Order Schedule

Treatment Parameters - I

Baseline Labs (one time draw, prior to first cycle): CBC, SCr, Total Bil, ALP, Hep BcAg, Hep BcAb

Treatment Parameters

Lab Parameters to Assess:
Day 1: ANC greater than 1,500; Platelets greater than 100,000; CrCl greater than 50 mL/min; Total Bil less than or equal to 3 times ULN

Labs Before Treatment (see specific timing below):
Day 1: CBC, SCr, Total Bil, ALT

ALT included to monitor hepatic toxicity.

Ancillary Take-Home Medications

Antiemetic level descriptor

Antiemetic default Level 2b1: Prochlorperazine 10 mg PO Q6H #30 as outpt Rx

Prochlorperazine Maleate (COMPazine) 10 mg Oral Tab

Take 1 tablet by mouth every 6 hours as needed for nausea or vomiting == 10 mg, Oral, EVERY 6 HOURS AS NEEDED starting 5 == Disp: 30 tablet, R-2 • Fill now

Treatment Take Home Medications

Dose Guidance

CAPECITABINE DOSE:
Palliative breast or colorectal = 2000 mg/m²/day (= __ mg/day)
Colorectal adjuvant = 2500 mg/m²/day (= __ mg/day)

Capecitabine (XELODA) 500 mg Oral Tab

Take 2 tablets by mouth in the morning and 3 tablets by mouth in the evening for 14 days within 30 minutes after a meal and with plenty of water. Start the evening of day 1 of each cycle. Then off for 7 days. == starting 5 == Disp: 70 tablet, R-0 • Fill now

Nursing

Calculation Worksheet

Drug Frequency	Tablet Strength	Dose (mg/m ²)	Calculated Dose	Patient Dose
Capecitabine 1000 mg/m ² Every 12 hours Days 1-14	150 mg 500 mg	1000 mg/m ²	mg	
		mg/m ²	mg	

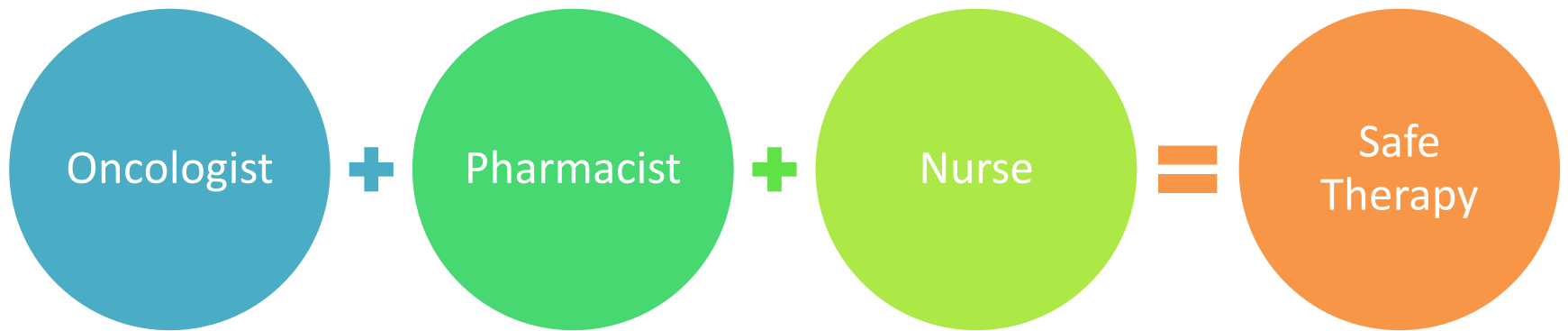


$$\begin{aligned} \text{Calculated Dose} &= 2000 \text{ mg/m}^2 \\ &= 2000 \text{ mg} * \text{BSA m}^2 \\ &= 2000 \text{ mg} * 1.34\text{m}^2 \\ &= 2680 \text{ mg per day} \end{aligned}$$

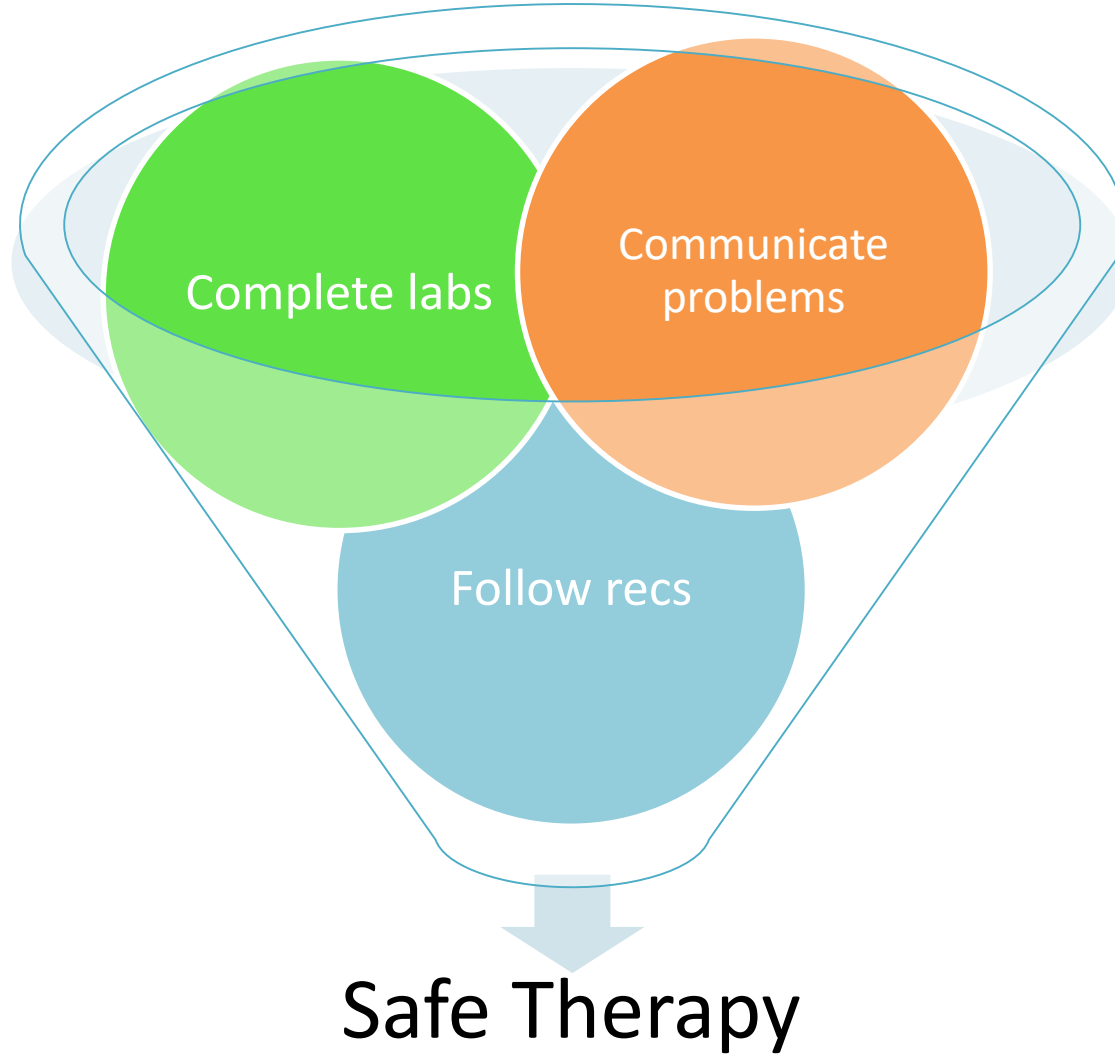
Take every 12 hours on days 1-14, then off for 7 days
 Patient Dose = 2680mg per day

Option	Tablet Combination	Total Dose Per Day	How many tablets Per day	How many tablets Sent to pharmacy
A	2 x 500mg AM 3 x 500mg PM	2500mg	5 tablets	70 x 500mg tablets
B	2 x 500mg AM 1 x 150mg AM + 3 x 500mg PM	2650mg	6 tablets	70 x 500mg tablets 14 x 150mg tablets

Clinic's Role



Patient's Role



Questions

