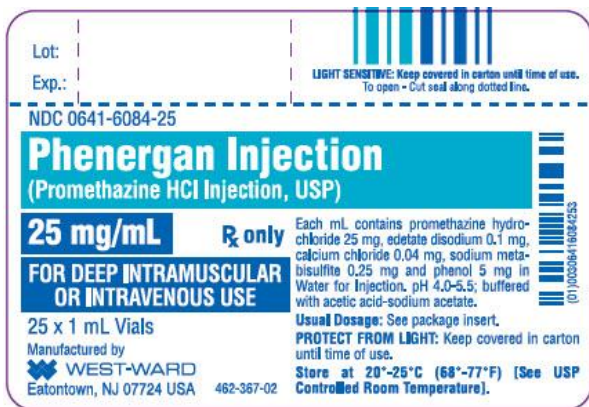


## Dose Calculations and Chemotherapy Applications

- 1- Using the nomogram, find out the BSA
  - a. Mary weighs 6 kg, height is 110 cm.
  - b. Jack weighs 5 lb, height is 19 inches
  - c. Suzanne weighs 25 kg, height is 70 cm.
  - d. Anna weighs 30 lb, height is 90 inches
  
- 2- A child 30 kg, 90 cm needs a Phenergan dose. How many mL would you give the patient if the adult dose is 25 mg?



- 3- How many mL of the Cefaclor would you give 55 lb patient. If the dose is 45 mg/kg/day po divided into 3 doses?



4- Order Morphine gr 1/10

Available Morphine 10 mg/ml

How many mL should the patient be given?

5- The Paclitaxel dose  $135\text{mg}/\text{m}^2$ . The patient is 4'9" & 112 lbs.

How many mg and mL will be administered?



6- A 19-kg patient is prescribed gentamicin 40 mg IVPB twice a day over 20 minutes. The concentration of the vial states 10 mg/mL. The recommended infusion concentration is 2 mg/mL.

- How many milliliters of medication will provide 40 mg of gentamicin?
- How many milliliters of normal saline need to be added to the medication to equal the recommended final concentration?



7- Order: Biaxin 300 mg po twice a day for a child who weighs 80 lb.

Available: Biaxin 125 mg/5 mL.

The recommended dosage is 15 mg/kg/24 h, q12 h.

What is the dosage for this child whose weight is 30 kg. How many milliliters will you administer? \_\_\_\_\_



8- The physician orders Ceclor 400 mg po q12 h for a child who weighs 94 lb. Ceclor is available as 375 mg/5 mL. The recommended dosage is 15 to 20 mg/kg/24 h divided q12 h.

a. What is the safe recommended dosage for this child? \_\_\_\_\_

b. Is the order correct? \_\_\_\_\_

c. If so, how many milliliters will you administer? \_\_\_\_\_



- 9- A child who is diagnosed with leukemia, weighs 50 lb and is 4 feet. The patient is ordered Vumon 165 mg/m<sup>2</sup>, diluted in 250 mL D5W, to be given twice a week. How many of this vial would you use?



- 10- Mary is 160-pound, 5'5" and is to receive prednisone 60mg/m<sup>2</sup>, D 1-10.

Please calculate the dose, and if the pharmacy carries prednisone 1mg, 5mg, 10mg, 20mg, and 50mg tablets, fill in the blanks below

I will dispense \_\_\_\_\_tablets of the \_\_\_\_\_mg strength. She will take tablets on days\_\_\_\_\_

#### References

[www.nr.edu](http://www.nr.edu)

Pediatric dosing book <http://www.coursewareobjects.com/>

<http://wps.pearsoned.com/>

[courses.washington.edu/](http://courses.washington.edu/)