Formula	Answer
Total in 24 hours of each opioid Calculate the total amount of each route of each opioid given in the previous 24 hours, including regular and prn doses.	
Consider cross tolerance and calculate the reduction if applicable. To account for the lack of cross tolerance, calculate and subtract 30 % to 50% reduction of the 24hr dose of any opioid being rotated to a new (different) opioid. Clinical judgement is used in determining the degree of reduction. Always confirm with a resource expert if you are unsure.	
One route Using ROUTE conversion ratio (i.e., PO to SC /IV of 2:1), convert to one route of administration.	
One Drug Current Total Using DRUG conversion ratio (i.e., morphine 10 mg PO = hydromorphone 2 mg PO), convert to one drug. Choose the medication you plan to use for regular dosing, convert and add together for 24 hour total	
Choose scheduled dosing times. To choose new regular (ATC) dose, divide total 24hr amount by appropriate interval based on product to be used. For example: divide by 6 for q4hr dose, divide by 2 for q12hr dose, divide by 24 for hourly infusion	
Calculate the breakthrough dose: (BT) Calculate approximately 10% of the total daily dose of the scheduled opioid **Example calculations for breakthrough opioids delivered by:** **Mouth:** morphine 15 mg PO q12hr = 30 mg PO/ 24hr 10% of 30 mg = 3 mg (max dose) PO q1hr prn **SC:** morphine 10 mg q4hr SC = 60 mg SC /24hr 10% of 60 mg = *6 mg (max dose) SC q1hr prn **CSCI:** morphine 2.5 mg q1hr SC continuous infusion = 60 mg SC /24hr 10% of 60 mg = *6 mg (max dose) SC q1hr prn or *3 mg SC q1/2hr prn or *1.5 mg q15 min *clinical judgment may indicate the need to lower the calculated dose	