OPIOID ROTATION CALCULATION WORKSHEET

Formula	Answer
Total in 24h of EACH opioid	
Calculate the total amount of each route of each opioid given in the previous 24h, including regular and prn doses.	
Consider cross tolerance and calculate the reduction, if applicable.	
To account for lack of complete cross tolerance, calculate and subtract 20% to 50% reduction of the 24h dose of any opioid being rotated to a new (different) opioid. Clinical judgment 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 SUBQ/IV of 2:1), convert to one route of admin-istration.	

Using DRUG conversion ratio (i.e., morphine 10 mg PO = hydromorphone 2 mg PO), rotate to one drug. Choose the medication you plan to use for regular dosing,	
rotate and add together for a new 24h total.	
Choose scheduled dosing times	
To choose new regular (ATC) dose, divide total 24h amount by appropriate interval based on product to be used.	
For example: divide by 6 for q4h dose; divide by 2 for q12h dose; divide by 24 for hourly infusion	
Calculate the breakthrough dose: (BT)	
Example calculations for breakthrough opioids delivered by:	
 Mouth: morphine 15 mg PO q12h = 30 mg PO/24h 10% 	
of 30 mg = 3 mg (max dose) PO q1h prn • SUBQ:	
morphine 10 mg q4h SUBQ = 60 mg SUBQ/24h 10% of 60 mg = *6 mg (max dose) SUBQ q1h	
prn or *3 mg SUBQ q30min prn	
 CSCI: morphine 2.5 mg q1h SUBQ continuous infusion = 60 mg SUBQ/24h 	
10% of 60 mg = *6 mg (max dose) SUBQ q1h prn or *3 mg SUBQ q30min prn or *1.5 mg SUBQ q15min prn	* Clinical judgment may indicate the need to lower the calculated dose or round to the strength of opioid available on the formulary