PHARM TECH BASICS · ONE-PAGER

Sig Codes and Pharmacy Abbreviations

Frequency, route, form and quantity codes, turning a sig into patient directions, metric units, error-prone abbreviations and Roman numerals

13 sources + more detail
pharmtechbasics.com/sheets/pharm-sig-codes-abbreviations.html
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1 Frequency and timing

CODE	MEANING	NOTE
daily	Once a day	The safe way to write it
qd ⚠	Every day	Error-prone: read as qid. Write 'daily'
qod ⚠	Every other day	Error-prone: read as qd or qid. Write it out
bid	Twice a day	
tid	Three times a day	
qid	Four times a day	
qh	Every hour	
q4h	Every 4 hours	Same pattern: q6h, q8h, q12h
qam	Every morning	
qhs	Every night at bedtime	Accepted on orders; label says 'at bedtime'
hs ⚠	At bedtime	Older lists flag it: also used for half-strength
ac / pc	Before meals / after meals	
prn	As needed	Add the reason if the prescriber gave one
stat	Immediately	Mostly hospital orders
TIW / BIW ⚠	3 / 2 times a week	Error-prone: read as 3 or 2 times a day. Write '3 times weekly'
ud ⚠	As directed	Error-prone: read as unit dose. Write it out

2 Routes, eyes and ears

CODE	MEANING	NOTE
po	By mouth	'per os' ⚠ is error-prone: os read as left eye
sl	Under the tongue	
pr	Rectally	
top	On the skin (topical)	
inh	By inhalation	
im / iv	Into a muscle / into a vein	
SUBQ	Under the skin (subcutaneous)	SC, SQ, sub q ⚠: SC read as SL, SQ as '5 every'
od, os, ou ⚠	Right eye, left eye, each eye	Mixed up with ear codes. Write the words
ad, as, au ⚠	Right ear, left ear, each ear	Mixed up with eye codes. Write the words
ophth / otic	For the eye / for the ear	Check the product matches the site

3 Forms and quantities

CODE	MEANING	NOTE
tab / cap	Tablet / capsule	
susp / sol	Suspension / solution	Suspension: particles in liquid
ung / supp	Ointment / suppository	
gtt	Drop(s)	
mL	Milliliter	The one unit NCPDP wants on oral liquid labels
cc ⚠	Cubic centimeter (= 1 mL)	Error-prone: read as u (units). Write mL
tsp / tbsp ⚠	Teaspoon (5 mL) / tablespoon (15 mL)	Confused with each other (threefold). Convert to mL
disp / #	Dispense / number to dispense (#30)	
sig	Directions for the label	
aa / qs	Of each / a sufficient quantity	Compounding: qs ad 100 mL = enough to make 100 mL
ad lib	Freely, as much as wanted	
ss ⚠	One-half	Read as 55 or sliding scale. Write 'half tablet'

EXAM TIP ⚠ marks codes on ISMP's error-prone list (or older versions of it). Expect a question asking which abbreviation should be written out, or what OD, AU or qod means.

4 Turning a sig into patient directions

Build the label in this order: verb, amount and form, route, how often, how long, and why. Write whole words, no Latin and no abbreviations. Under federal law the label carries the directions for use from the prescription; the pharmacist checks every translation.

SIG	LABEL	QUANTITY
1 cap po tid x 7d	Take 1 capsule by mouth three times a day for 7 days.	1 × 3 × 7 = 21 capsules, 7-day supply
2 gtt OU qid	Place 2 drops in each eye four times a day.	2 × 2 eyes × 4 = 16 drops a day
1 tsp po q6h prn cough	Take 5 mL by mouth every 6 hours as needed for cough.	Up to 4 doses: 20 mL a day at most

SAFETY Convert teaspoons to mL on the label and send a dosing device marked in mL. If a code is unclear (a 'u' that could be a zero, OD on an oral liquid), do not guess: the pharmacist clarifies with the prescriber.

5 Units and metric prefixes

PREFIX	FACTOR	EXAMPLE
kilo (k)	1,000	1 kg = 1,000 g (about 2.2 lb)
milli (m)	0.001	1 g = 1,000 mg; 1 L = 1,000 mL
micro (µ)	0.000001	1 mg = 1,000 mcg. Write mcg, never µg (read as mg)
nano (n)	0.000000001	1 mcg = 1,000 nanograms. Write 'nanogram' (ng read as mg)

- Write 'units' in full: U is read as 0 or 4 (4U as 40), IU as IV or 10.
- Insulin U-100 means 100 units per mL.
- Use L (capital) for liter and mL for milliliter.

6 Error-prone dose designations

WRITE	NEVER	BECAUSE
0.5 mg	.5 mg	Missed decimal: read as 5 mg
5 mg	5.0 mg	Missed decimal: read as 50 mg
10 mg	10mg	Run together: m read as a zero
100,000 units	100000 units	Without the comma: read as 10,000
morphine sulfate	MS, MSO4	Read as magnesium sulfate (and MgSO4 the reverse)

ISMP keeps the long List of Error-Prone Abbreviations, Symbols, and Dose Designations. The Joint Commission's short Do Not Use list (U, IU, QD, QOD, trailing and missing leading zeros, MS, MSO4, MgSO4) binds the organizations it accredits.

7 Roman numerals

I	V	X	L	C	D	M
1	5	10	50	100	500	1,000

A repeated letter repeats its value (III = 3). A smaller letter after a larger one adds (VI = 6, LX = 60); before it, subtracts (IV = 4, IX = 9, XL = 40, XC = 90). Examples: XIV = 14, XXX = 30, XC = 90, CXX = 120.

EXAM TIP Old-style quantities may be written 'Disp #XC' (90) or 'tabs ii' (2). Doses in Roman numerals are error-prone: enter Arabic numerals. Controlled substance schedules are CII to CV.

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