

A system to define Bi-Est potency:

we will compare Bi-Est dose potency to that of estradiol:

(our traditional colleagues still think in terms of E2 potency as the standard & we want their conversion to Bi-Est to be friendly)

Introducing



“milligrams of estradiol equivalency”
“mgeeq”

For example... if you prescribe
3 drops of Bi-Est 30mg/ml (80:20),
Or ½ ml of Bi-Est 2.5 mg/g
how “strong” *are* these dosages?

We will compare it to the mg strength of Estradiol

“Milligrams Estradiol Equivalency” “mgeeq”

Estradiol (E2) is the most potent estrogen

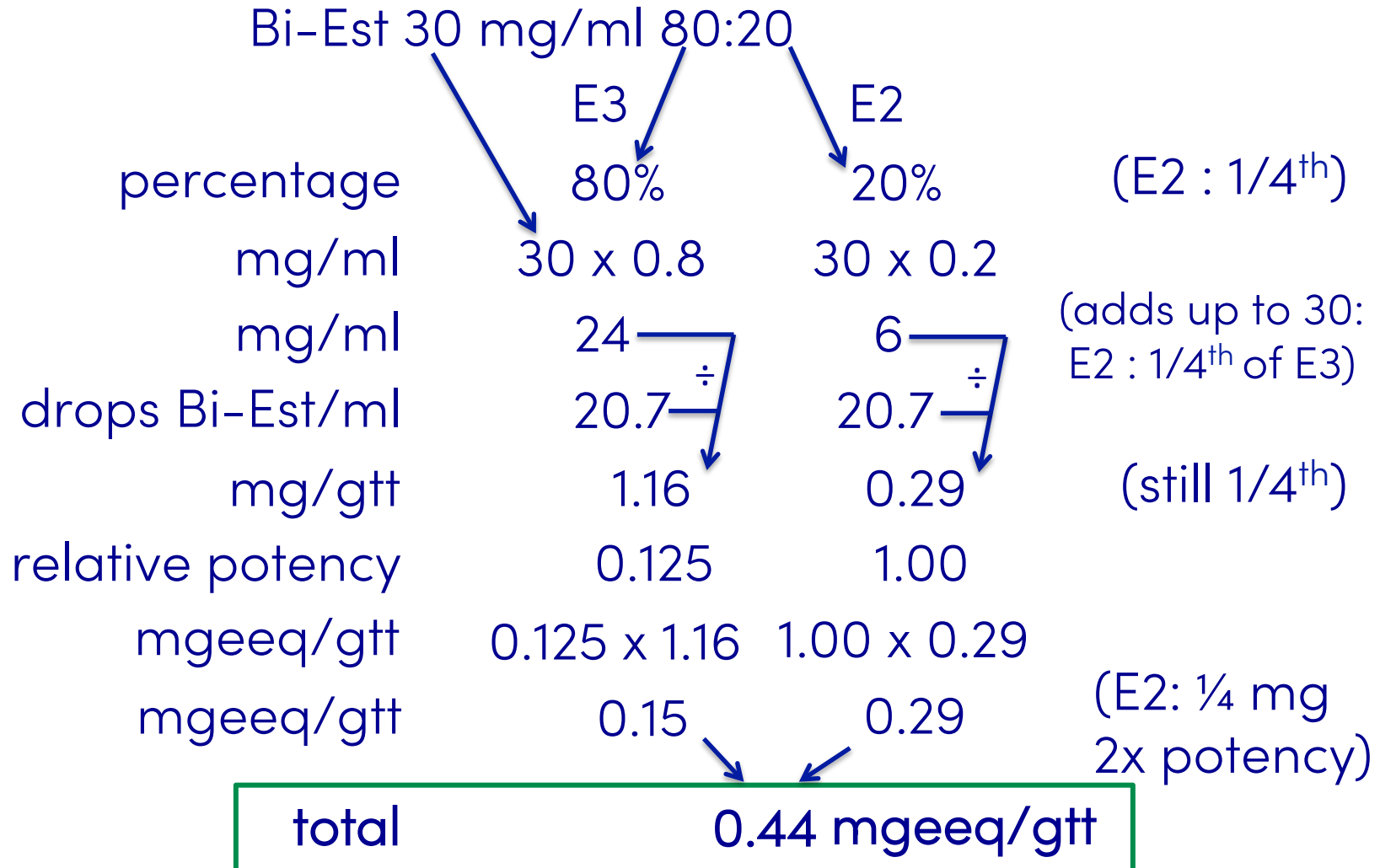
We assign it a “potency,” an
“estradiol equivalency” (eeq), of “1”

Estriol (E3) is approximately $1/8^{\text{th}}$ (x 0.125) as potent as E2

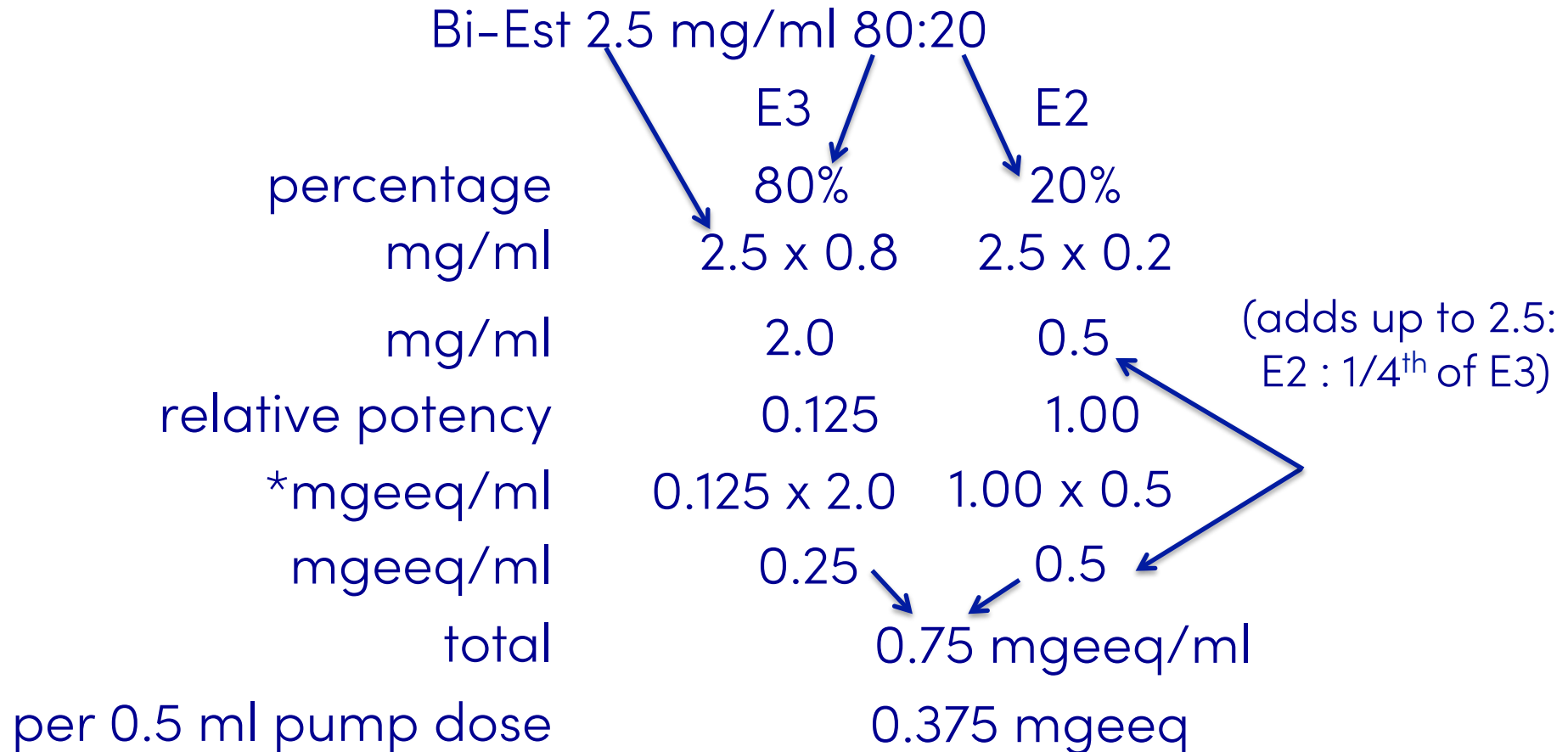
We assign it a “potency,”
an “estradiol equivalency” (eeq) of 0.125

wonderful math for your pleasure and enjoyment...

POTENCY of Bi-Est: "mgeeq" ("milligrams of estradiol equivalence")



POTENCY of Bi-Est dosage:



Thus, if a woman was applying Bi-Est 2.5 mg/ml 80:20, 0.5 ml (1 pump) b.i.d., she would be using a dosage equivalent in potency to 0.75 mg/d of estradiol

* mgeeq = "milligrams of estradiol equivalence"

Bi-Est

Prevalence in formulations

Estriol
E3

E3:E2

Estradiol
E2

Be mighty cautious:

when you
decrease E3



80:20

73:27

70:30

60:40

50:50



you increase E2

Thus, you >>>

potency

& even <50:>50

eg. 30:70

Choice of ratio Ultimately based upon Sx's & testing

Caution when you increase the E2 content:

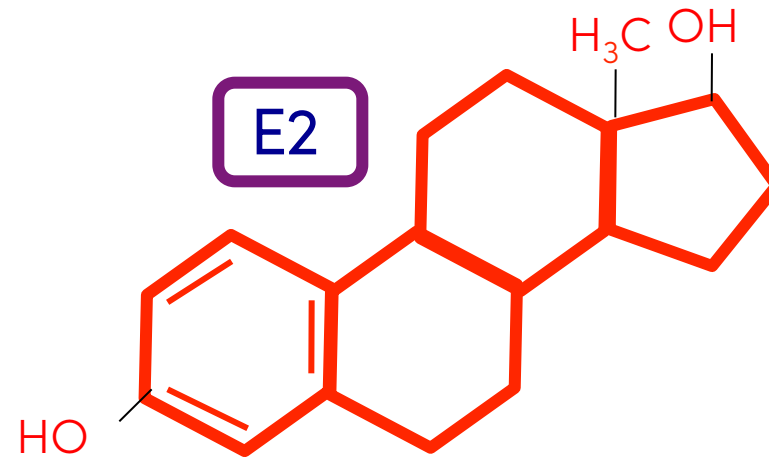
	Bi-Est 30 mg/ml 60:40		
		E3	E2
percentage		60%	40%
mg/ml	30×0.6		30×0.4
mg/ml	18		12
			(adds up to 30)
drops Bi-Est/ml	$20.7 \div$		20.7
mg/gtt	0.87		0.58
relative potency	0.125		1.00
mgeeq/gtt	0.125×0.87		1.00×0.58
mgeeq/gtt	0.11		0.58
			Previous 80:20
total	0.69 mgeeq/gtt		0.44 mgeeq/gtt

30 mg/ml: 60:40 is 1.6 times as potent 80:20

Ovarian Hormone Secretion in a Young Woman

Ovary: 70 – 500 mcg/day E2

0.07- 0.5 mg/d (0.07 to 0.5 mgeeq/d)



Transdermal:

How many mgeeq Bi-Est should be applied?

Only a percentage will get absorbed
& actually function



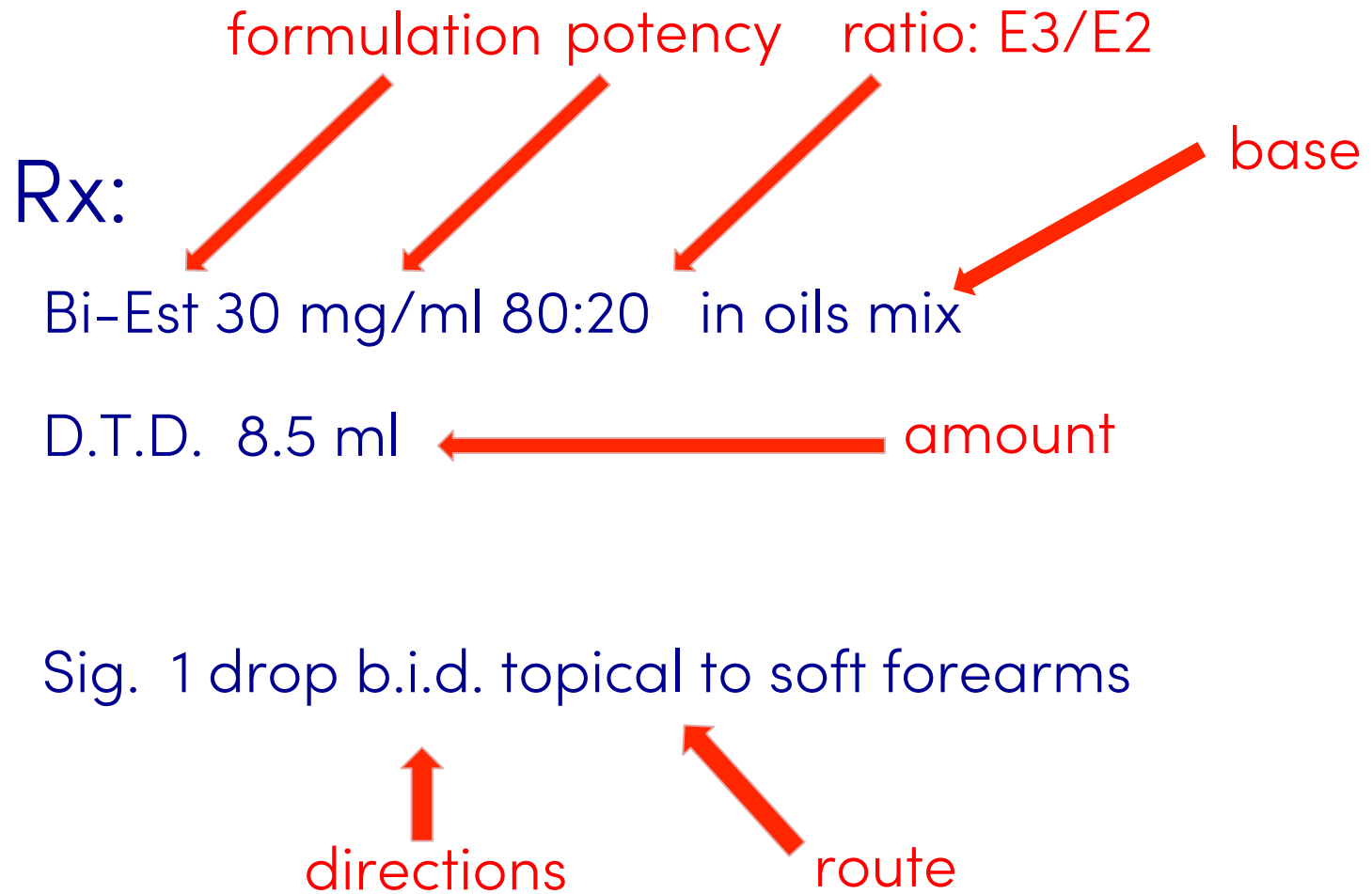
Right Estrogen Formulation:

Bi-Est

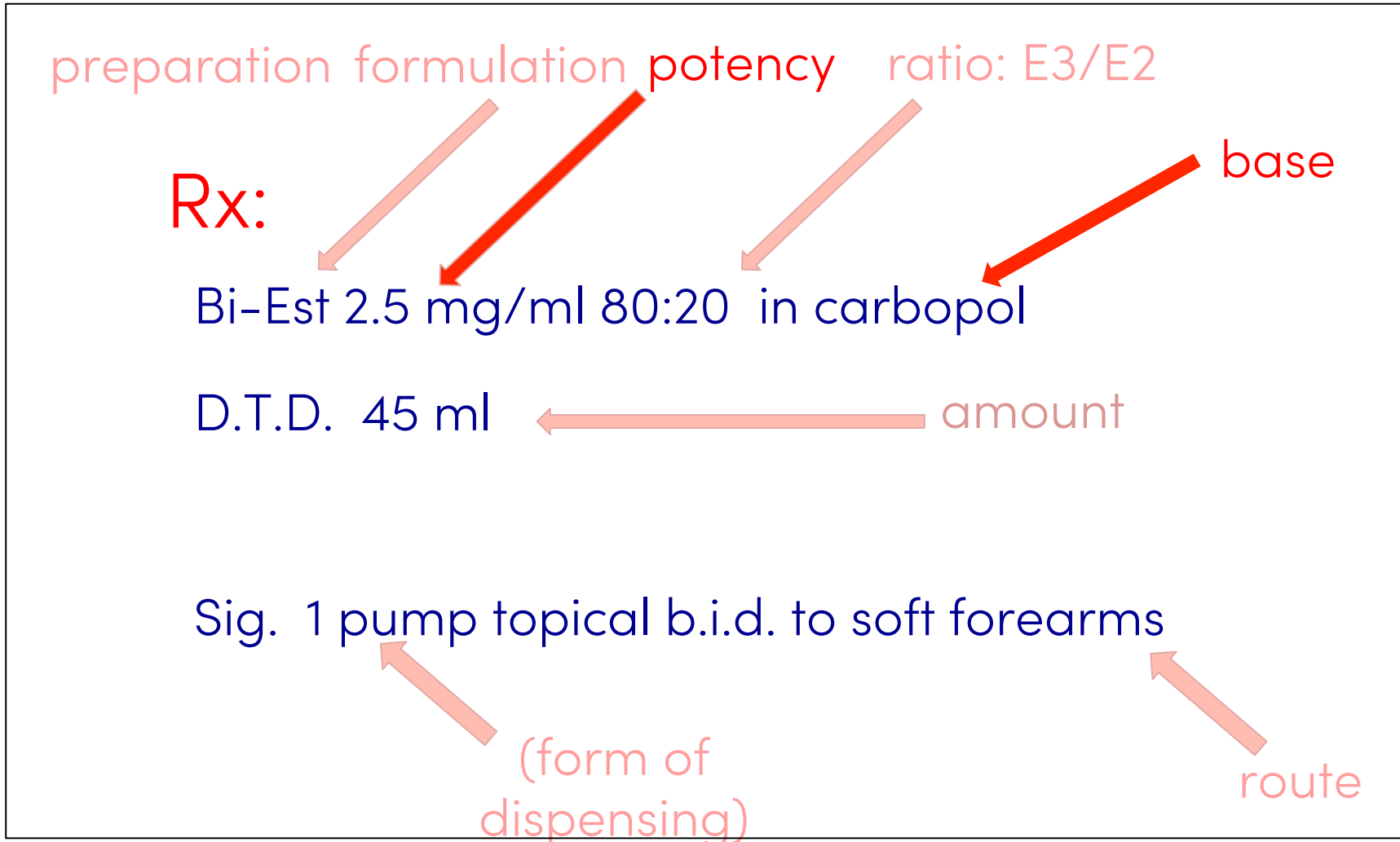
80:20 common

? 70:30, 60:40, etc

Any Bi-Est Rx Requires:



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