

Prescribing Bi-Est

Understanding E3 & E2 ratio

Calculating Potency

Bi-Est

Prevalence in formulations

Estriol

E3

E3:E2

Estradiol

E2

80:20

73:27

70:30

60:40

50:50

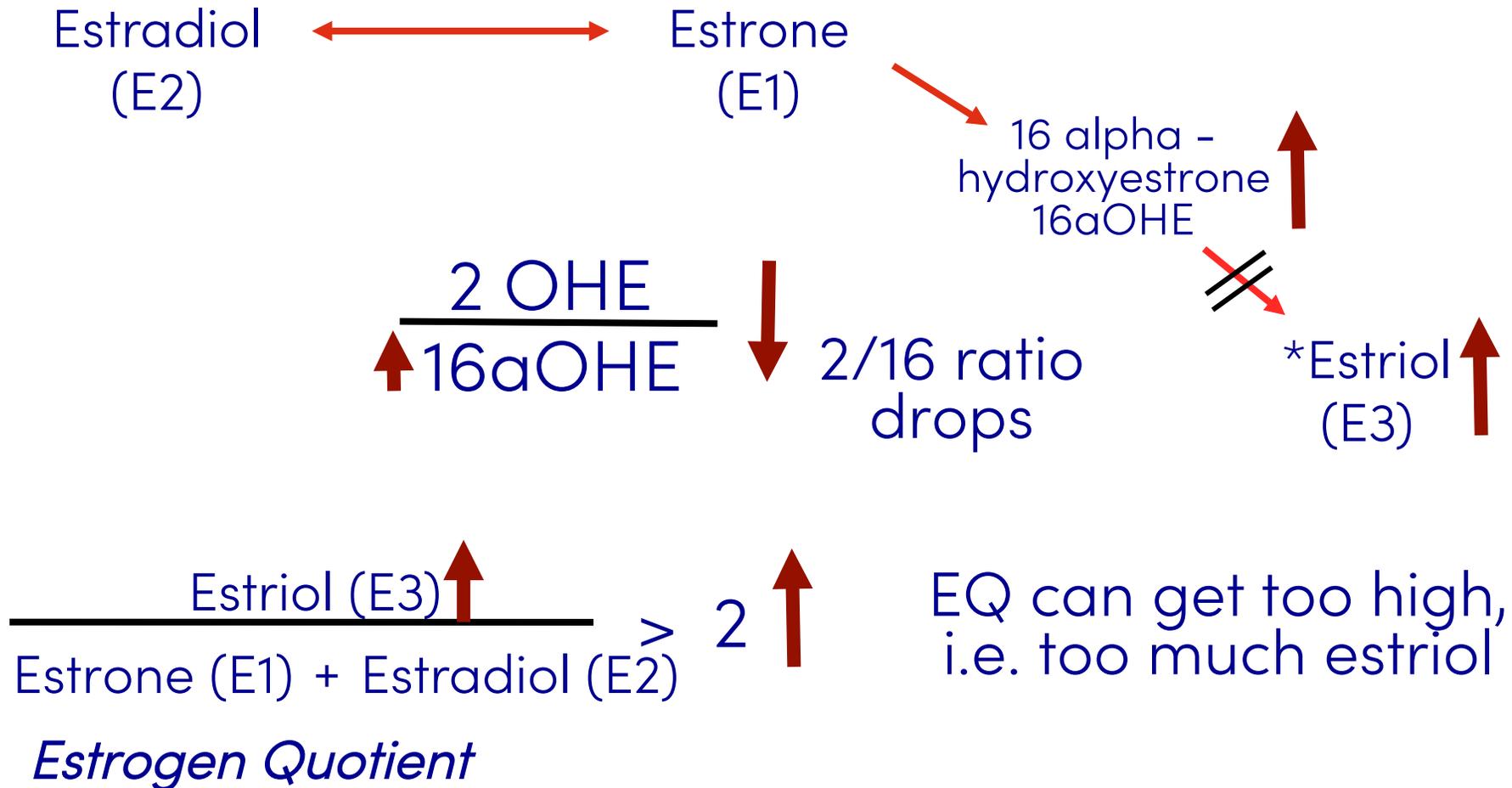
& even <50:>50 eg. 30:70

Choice of ratio Ultimately based upon Sx's & testing

Caution: when you decrease E3 you increase E2,
thus >> potency

Choice of Ratio of E3:E2

Ultimately based upon testing



My preferred EQ:

$$EQ = 2 - 4$$

EQ > 4 is quite acceptable if...

...if symptom alleviation is good

and the 2OH/16aOH ratio is >2

Relationship of serum estrogens and estrogen metabolites to postmenopausal breast cancer risk: a nested case-control study

Conclusions: Women with more extensive hydroxylation along the 2-pathway may have a reduced risk of postmenopausal breast cancer. Further studies are needed to clarify the risks for specific EM and complex patterns of estrogen metabolism. This will require aggregation of EM results from several studies.

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Breast Cancer Research 2013, 15:R34

Conclusions:

Women with more extensive hydroxylation along the 2-pathway may have a reduced risk of postmenopausal breast cancer.

Dosage: How do we understand the *Potency of Bi-Est?*

Potency: e.g. the difference between Xanax
0.5 mg and 5 mg

Bi-Est (E3 + E2) has variation in....

- mg/ml:
 - Gels: 2.5 mg/ml, 1.25 mg/ml, 2.75 mg/ml, or any mg/ml
 - Oils: 30 mg/ml, 25 mg/ml, 41 mg/ml, or any mg/ml
- ratio of E3 and E2:
 - 80:20, 73:27, 70:30, 60:40, 50:50, 20:80, etc.
- Difference in potency of E2 and E3 ($E2 = E3 \times 8$)
 - 1mg Bi-est \neq 1mg Estradiol