# "Mirror, mirror on the wall, Which TCI model is the fairest of them all?"

## Propofol

### Marsh
≥16y/o ≤150kg

TBW

$C_{pt}$ or modified Marsh $C_{et}$ ('fast' $k_{e0}$ 1.21)
Large $V_1$ → ↑ induction dose
TBW only factor – mg/kg/hr same for all
Overdoses in ↑BMI – consider adjusted BW

### Schnider
BMI ♀<35 ♂<42

LBM (TBW, ht, sex)
TBW, ht
Age

$C_{et}$ with ↑ targets ($k_{e0}$ from TTPE 1.6 min)
↓ dose cf. Marsh
Fixed $V_1$ → slow $C_{pt}$ induction
James eq. for LBM → wt limits (see graph)
Underdoses in ↑BMI, overdoses in ↓BMI

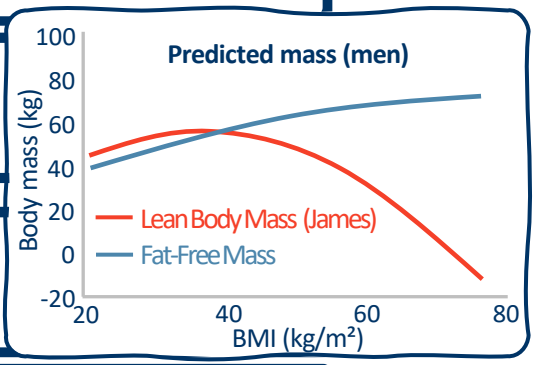
### Eleveld
FFM (TBW, ht, sex)
Ht, sex, age
Postmenstrual age (<6 mo)
Concomitant opioids

$C_{et}$ suggested
Induction: ↑ Marsh $C_{pt}$ & Schnider; ↔ Marsh $C_{et}$
Elderly: ↓ Marsh, ↔ Schnider; ↑BMI: in between
Better in extremes; ↓ variability
↓ familiarity

### Paedfusor
1-16y/o 5-61kg

TBW
Age

↑ $V_1$ cf. adults
V ∝ weight
Widely used
↑BMI?




## Remifentanil

### Minto
≥12y/o ≥30kg
BMI ♀<35 ♂<42

LBM (TBW, ht, sex)
Age

$C_{pt}$ or $C_{et}$
Widely used
James eq.
Underdoses in ↑BMI

### Eleveld
FFM (TBW, ht, sex)
Ht, sex, age
Postmenstrual age (<6 mo)

$C_{pt}$ less likely to overdose in older & ↑BMI
Few ↑BMI pts in studies
May overdose in <2y/o & <30y/o with BMI >40
↓ familiarity

**PERUSE before you Infuse: The safest model is the one you know!**

Data and graph: *Absalom AR, Mason KP. Total intravenous anesthesia and target controlled infusions. 1st ed. 2017.*

Dr Balazs Hollos @cannula_service