~~IN~~-After CLASS CHALLENGE

	No treatment	UH	LMWH
Risk of PE	10%	1%	1%
Risk of major bleeding	0%	4%	2%
Treatment costs	$0	$500	$1,000
Costs of PE	$10,000		
Costs of major bleeding	$15,000		
Mortality of PE	20%		
Mortality of major bleeding	15%		

PE = pulmonary embolism
MB = major bleed
UH = unfractionated heparin (aka standard heparin)
LMWH = low molecular weight heparin

1) Calculate the one-year costs for each of the three strategies

Costs	No treatment	UH	LMWH
Treatment	0	500	1000
Risk of PE * costs of PE	0.1*10,000 = 1,000	0.01*10,000 = 100	0.01*10,000 = 100
Risk of MB * costs of MB	0	0.04*15,000 = 600	0.02*15,000 = 300
Total	1,000	1,200	1,400

2) Calculate the risk of death for each strategy

Mortality	No tx	UH	LMWH
Risk of PE * mortality of PE	0.1*0.2 = 0.02	0.01*0.2 = 0.002	0.01*0.2 = 0.002
Risk of MB*Mortality of MB	0	0.04*0.15 = 0.006	0.02*0.15 = 0.003
Total	0.02	0.008	0.005

3) Calculate how much extra costs is required to avoid one death for

a) UH v. no treatment: (1200-1000)/(0.02-0.008) = $16,667

b) LMWH v no treatment: (1400-1000)/(0.02-0.005) = $26,667

c) LMWH v. UH: (1400-1200)/(0.008-0.005) = $66,667