Total score = 31 / 50

ID # 1502
Homework 1
BIOST 536

The results for parts (a) - (i) for questions 1-7 are given in the following table:

	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7
a.	979	500	394	0.240	163	343	179
b.	511	1000	1269	3500	923	1020	840
c.	51	100	127	350	0.968	102	0.952
d.	50	80	102	84	16	87	18
e.	460	900	1142	3150	16	918	17
f.	12	23	57	79	146	92	161
g.	62	103	159	163	4	179	4
h.	0.81	0.78	0.64	0.52	19	0.49	21
i.	—	—	—	—	0.81	—	0.81

8. The strategies that use pivotal RCTs (problems 1,2 and 3) have a tendency to have higher numbers of tested ineffective drugs with significant results. For this reason, I prefer the strategies that use screening and confirmatory RCTs (problems 4-5 and 6-7). In choosing between these two, I would select the strategy used in problems 4-5, since it performs essentially as well as the strategy used in problems 6-7 but uses fewer people per screening/confirmatory trial than the strategy used in problems 6-7.

9. When using observational data to explore and try to confirm risk factors for particular diseases, we have to consider confounding. Specifically, since we are not controlling treatment assignment, we need to be aware that there may be subject characteristics related to both the treatment and the outcome, which would need to be accounted for in order to obtain an accurate estimate of treatment effect. In addition, since we are obtaining the data observationally, we have to consider our ability to obtain the data necessary for determining treatment effect. For instance, if we are obtaining our data from an external source such as a registry, then the data necessary for testing some ideas may be unavailable.