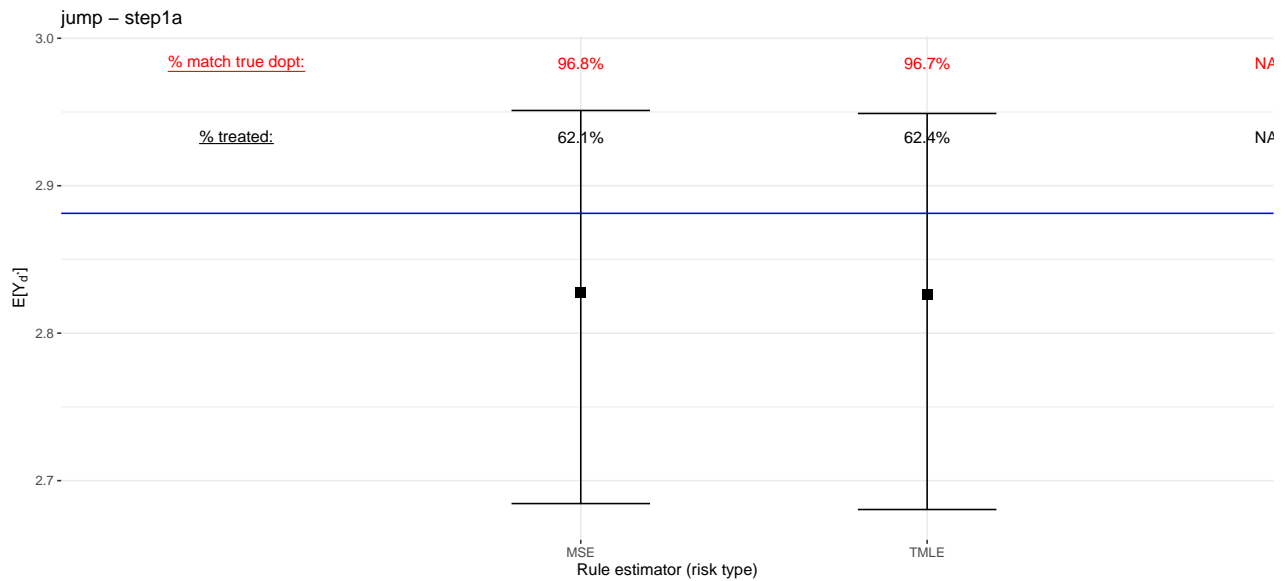# Simulation Results - jump

Vote library = "OWL", "EARL", "optclass", "RWL", "Qlearn", "DonV", "treatall", "treatnone"

1 Step 1

- blip (a) and majority vote (b) SuperLearner
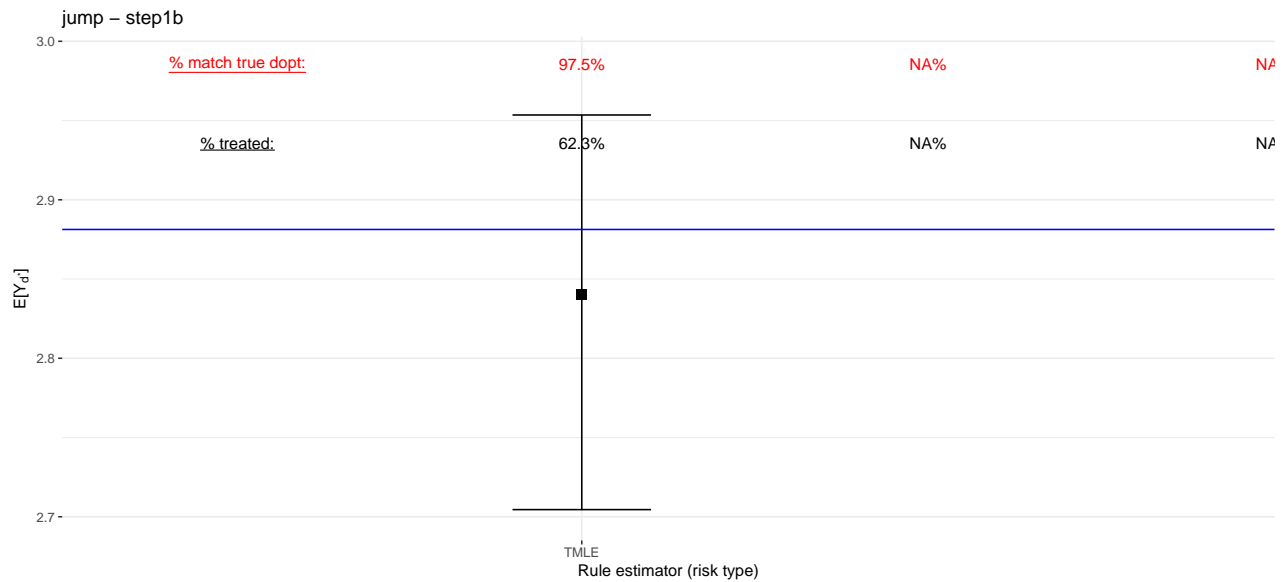- Blip and QAW library = c("SL.glm", "SL.mean", "SL.glm.interaction", "SL.earth", "SL.nnet")

1.1 Blip-based SL (a)

	MSE	TMLE
Bias	-0.05378	-0.05470
Variance	0.00586	0.00466
MSE	0.00875	0.00765
coef.SL.glm	0.14699	0.11458
coef.SL.mean	0.04465	0.13949
coef.SL.glm.interaction	0.06114	0.09331
coef.SL.earth	0.11612	0.12141
coef.SL.nnet	0.40014	0.22561
coef.SL.svm	0.06508	0.09737
coef.SL.rpart	0.16588	0.20823

Table 1: jump - step1a

1.2 vote-based SL (b)

jump – step1b

% match true dopt:	97.5%	NA%	NA
% treated:	62.3%	NA%	NA

TMLE
Rule estimator (risk type)

	TMLE
Bias	-0.04090
Variance	0.00380
MSE	0.00547
coef.DonV.DonV.SL.glm_All	0.02505
coef.DonV.DonV.SL.mean_All	0.04141
coef.DonV.DonV.SL.glm.interaction_All	0.02834
coef.DonV.DonV.SL.earth_All	0.04695
coef.DonV.DonV.SL.nnet_All	0.05050
coef.DonV.DonV.SL.svm_All	0.03660
coef.DonV.DonV.SL.rpart_All	0.12815
coef.Qlearn.Qlearn.SL.glm_All	0.04434
coef.Qlearn.Qlearn.SL.mean_All	0.04067
coef.Qlearn.Qlearn.SL.glm.interaction_All	0.02534
coef.Qlearn.Qlearn.SL.earth_All	0.03875
coef.Qlearn.Qlearn.SL.nnet_All	0.04016
coef.Qlearn.Qlearn.SL.svm_All	0.03591
coef.Qlearn.Qlearn.SL.rpart_All	0.06685
coef.OWL	0.04362
coef.EARL	0.02692
coef.optclass	0.16482
coef.RWL	0.03084
coef.treatall	0.04379
coef.treatnone	0.04099

Table 2: jump - step1b

2 Step 5

- blip (a) and majority vote (b) SuperLearner
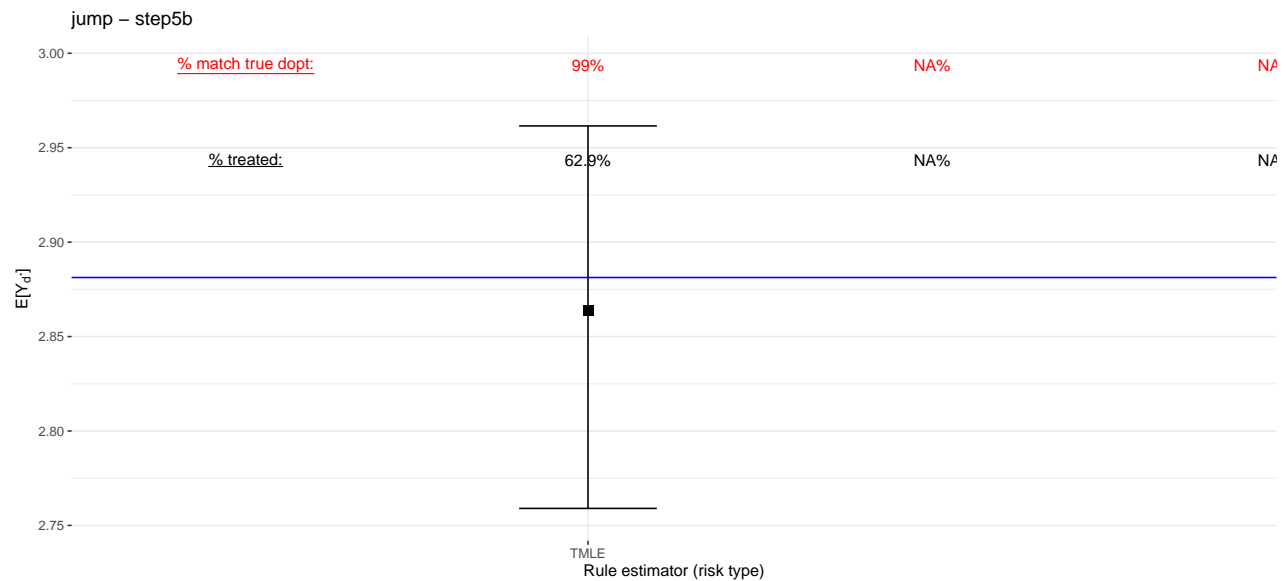
- incorrect glm QAV, incorrect glm QAW

2.1 Blip-based SL (a)
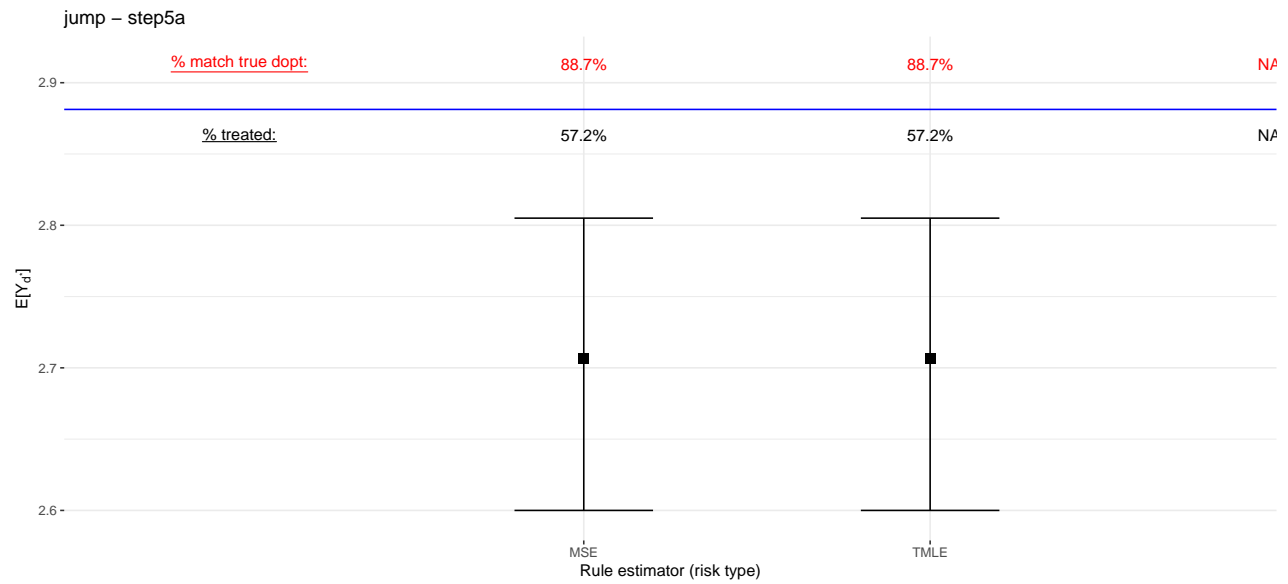
jump – step5a

	MSE	TMLE
Bias	-0.17497	-0.17497
Variance	0.00275	0.00275
MSE	0.03336	0.03336
estimates..1.....grep.colnames.estimates..1.....pattern....coef...	1.00000	1.00000

Table 3: jump - step5a

2.2 vote-based SL (b)

jump – step5b

	TMLE
Bias	-0.01759
Variance	0.00281
MSE	0.00312
coef.DonV.SL.glm_All	0.02398
coef.Qlearn.SL.QAW.incorrect_All	0.02613
coef.OWL	0.04719
coef.EARL	0.03596
coef.optclass	0.74239
coef.RWL	0.04182
coef.treatall	0.05089
coef.treatnone	0.03163

Table 4: jump - step5a