Table 1: Comparative analysis for the impact of cross-fitting on TMLEs and one-step estimators in conjunction with the use of random forests. RF refers to random forest with 500 trees and a minimum node size of 5 for a continuous variable and 1 for binary, and CF denotes random forest with cross fitting using 5 folds.

	TMLEs						**One-step estimators**					
	$\psi_{dnorm}(\hat{Q}^\star)$		$\psi_{densratio}(\hat{Q}^\star)$		$\psi_{bayes}(\hat{Q}^\star)$		$\psi^+_{dnorm}(\hat{Q})$		$\psi^+_{densratio}(\hat{Q})$		$\psi^+_{bayes}(\hat{Q})$	
	RF	CF	RF	CF	RF	CF	RF	CF	RF	CF	RF	CF
n=500												
Bias	0.557	-0.015	0.603	0.079	0.602	0.018	0.720	-0.082	0.856	-0.152	0.745	-0.074
SD	0.358	0.556	0.323	0.500	0.333	0.545	0.336	0.577	0.438	0.552	0.313	0.573
MSE	0.438	0.309	0.467	0.256	0.473	0.297	0.630	0.340	0.925	0.327	0.653	0.333
CI coverage	28.2%	71.8%	58%	77.3%	23.5%	75%	15.3%	70.6%	32.4%	69.9%	11.9%	73.1%
CI width	0.759	1.206	1.355	1.200	0.760	1.234	0.762	1.221	1.352	1.203	0.762	1.250
n=1e+03												
Bias	0.542	-0.007	0.580	0.068	0.578	0.021	0.697	-0.055	0.861	-0.159	0.715	-0.045
SD	0.259	0.384	0.239	0.353	0.245	0.376	0.250	0.394	0.341	0.387	0.238	0.388
MSE	0.361	0.147	0.393	0.129	0.394	0.142	0.548	0.158	0.857	0.175	0.567	0.152
CI coverage	13.5%	70.9%	35.9%	75.8%	9.5%	73.1%	5.6%	69.9%	14.7%	67.9%	3.9%	71.6%
CI width	0.535	0.833	1.002	0.843	0.536	0.846	0.537	0.841	0.999	0.844	0.538	0.854
n=2e+03												
Bias	0.522	0.000	0.553	0.061	0.551	0.020	0.663	-0.033	0.761	-0.213	0.679	-0.027
SD	0.206	0.283	0.193	0.267	0.198	0.278	0.205	0.287	0.247	0.282	0.198	0.284
MSE	0.315	0.080	0.343	0.075	0.343	0.078	0.481	0.083	0.641	0.125	0.500	0.081
CI coverage	5.5%	68.9%	13%	74%	3.4%	70.5%	1.2%	68.2%	3.7%	60.4%	0.8%	69%
CI width	0.377	0.583	0.658	0.615	0.378	0.590	0.378	0.588	0.657	0.617	0.379	0.596