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	-0.241	-0.029	-0.275	-0.095	-0.282	-0.052	-0.223	-0.013	-0.057	-0.053	-0.244	-0.032
SD	0.418	0.798	0.370	0.722	0.368	0.776	0.426	0.839	0.560	0.817	0.393	0.826
MSE	0.233	0.637	0.212	0.530	0.215	0.605	0.231	0.703	0.317	0.669	0.214	0.682
CI coverage	53.3%	66.7%	92.2%	74.2%	54.6%	70.4%	54.9%	65.3%	86%	69.2%	55.5%	68.8%
CI width	0.705	1.575	1.590	1.659	0.713	1.638	0.707	1.576	1.596	1.661	0.712	1.637
n=1000												
Bias	-0.239	-0.038	-0.268	-0.092	-0.271	-0.060	-0.225	-0.028	-0.081	-0.050	-0.240	-0.047
SD	0.297	0.558	0.269	0.518	0.269	0.549	0.309	0.578	0.399	0.575	0.291	0.573
MSE	0.145	0.312	0.144	0.277	0.146	0.305	0.146	0.335	0.165	0.333	0.142	0.330
CI coverage	44.1%	66.7%	89%	72.7%	41.8%	69%	43.3%	65.2%	84.8%	68.1%	43.8%	67.1%
CI width	0.496	1.090	1.184	1.162	0.500	1.117	0.496	1.089	1.186	1.162	0.500	1.117
n=2000												
Bias	-0.239	-0.032	-0.261	-0.071	-0.265	-0.045	-0.218	-0.026	-0.087	-0.035	-0.231	-0.036
SD	0.223	0.417	0.205	0.392	0.206	0.412	0.232	0.426	0.282	0.436	0.222	0.425
MSE	0.107	0.174	0.110	0.158	0.113	0.172	0.102	0.182	0.087	0.191	0.103	0.182
CI coverage	33.8%	65.1%	72.5%	72.9%	30.2%	65.9%	36.5%	63.7%	81.5%	69.7%	33.9%	64%
CI width	0.350	0.764	0.765	0.863	0.352	0.778	0.351	0.763	0.766	0.863	0.352	0.778