Table 1: Comparative analysis of TMLEs and one-step estimators under model misspecifications when the outcome is not in the district of the treatment.

	TMLEs									One-step estimators								
	$\psi_{dnorm}(\hat{Q}^\star)$			$\psi_{densratio}(\hat{Q}^\star)$			$\psi_{bayes}(\hat{Q}^\star)$			$\psi_{dnorm}^+(\hat{Q})$			$\psi_{densratio}^+(\hat{Q})$			$\psi_{bayes}^+(\hat{Q})$		
	Linear	SL	CF	Linear	SL	CF	Linear	SL	CF	Linear	SL	CF	Linear	SL	CF	Linear	SL	CF
n=500																		
Bias	-0.551	-0.059	-0.069	-0.002	-0.038	-0.013	-0.516	-0.037	-0.022	-0.558	-0.077	-0.062	0.053	-0.015	0.040	-0.528	-0.060	-0.016
SD	1.114	1.126	1.158	1.118	1.128	1.132	1.144	1.117	1.176	1.122	1.123	1.176	1.246	1.145	1.149	1.168	1.111	1.188
MSE	1.545	1.270	1.344	1.250	1.273	1.281	1.573	1.247	1.381	1.568	1.267	1.385	1.555	1.310	1.321	1.642	1.237	1.410
CI coverage	92.1%	91.1%	95.4%	95.1%	92.2%	96%	93.1%	91.6%	95.4%	92.5%	91.3%	95.4%	93.8%	92.1%	94.8%	93.2%	92.1%	95.4%
CI width	4.463	4.036	4.697	4.461	4.070	4.614	4.542	3.993	4.731	4.538	4.046	4.706	4.578	4.069	4.590	4.658	3.983	4.746
n=1000																		
Bias	-0.615	-0.056	-0.059	-0.021	-0.008	-0.012	-0.581	-0.025	-0.022	-0.619	-0.065	-0.057	0.074	-0.019	0.010	-0.586	-0.041	-0.016
SD	0.820	0.840	0.860	0.799	0.825	0.829	0.847	0.832	0.858	0.825	0.837	0.861	0.869	0.829	0.837	0.857	0.829	0.862
MSE	1.050	0.708	0.742	0.638	0.679	0.687	1.055	0.692	0.737	1.062	0.704	0.744	0.759	0.687	0.700	1.078	0.689	0.743
CI coverage	88.4%	92.4%	94.4%	95.1%	93%	95.6%	89.4%	92.5%	95%	88.9%	92.4%	94.5%	94.1%	93%	94.3%	89.6%	92.6%	94.9%
CI width	3.192	2.951	3.263	3.131	2.949	3.216	3.252	2.909	3.267	3.226	2.956	3.263	3.208	2.953	3.198	3.298	2.912	3.274
n=2000																		
Bias	-0.568	0.039	0.042	0.025	0.080	0.075	-0.545	0.059	0.072	-0.570	0.035	0.046	0.142	0.054	0.073	-0.546	0.048	0.070
SD	0.564	0.573	0.574	0.554	0.570	0.566	0.579	0.569	0.578	0.566	0.572	0.578	0.624	0.569	0.570	0.583	0.567	0.581
MSE	0.641	0.329	0.331	0.308	0.330	0.325	0.632	0.327	0.339	0.644	0.328	0.336	0.409	0.327	0.330	0.637	0.323	0.343
CI coverage	85.9%	92.9%	94.6%	94.6%	93.3%	94.5%	87.1%	92.4%	93.6%	86.1%	92.9%	94.7%	92%	93.1%	94%	87.2%	92.7%	94.1%
CI width	2.268	2.117	2.280	2.185	2.099	2.224	2.324	2.089	2.284	2.285	2.123	2.288	2.241	2.107	2.232	2.346	2.094	2.293