Table S1: Characteristics of modeled datasets.

	HT	HT+EGTA	IPEC	IPEC+EGTA
Number of samples	331,794	167,379	913,521	536,057
Number of features per sample	84	84	84	84
Exact target values known	Yes	Yes	Yes	Yes
Target domain A	0.0	0.0	0.0	0.0
Range of target domain B	200.0 – 1299.5	2.7 – 274.3	500.8 – 9344.2	1.4 – 624.9

Datasets model four different experiment conditions (HT and IPEC cells before the application of EGTA and in the presence of EGTA). Target domain A refers to subepithelial resistance (R^{sub}), target domain B to epithelial resistance (R^{epi}).