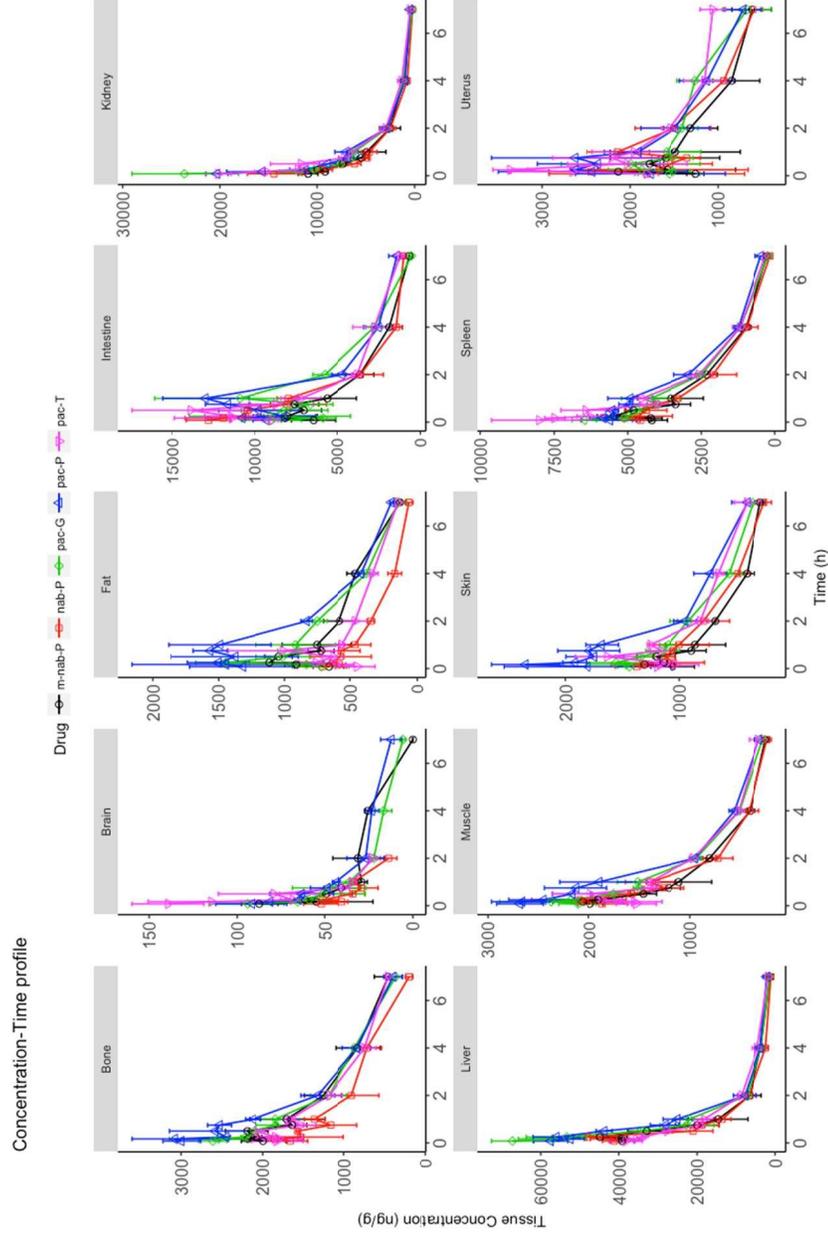


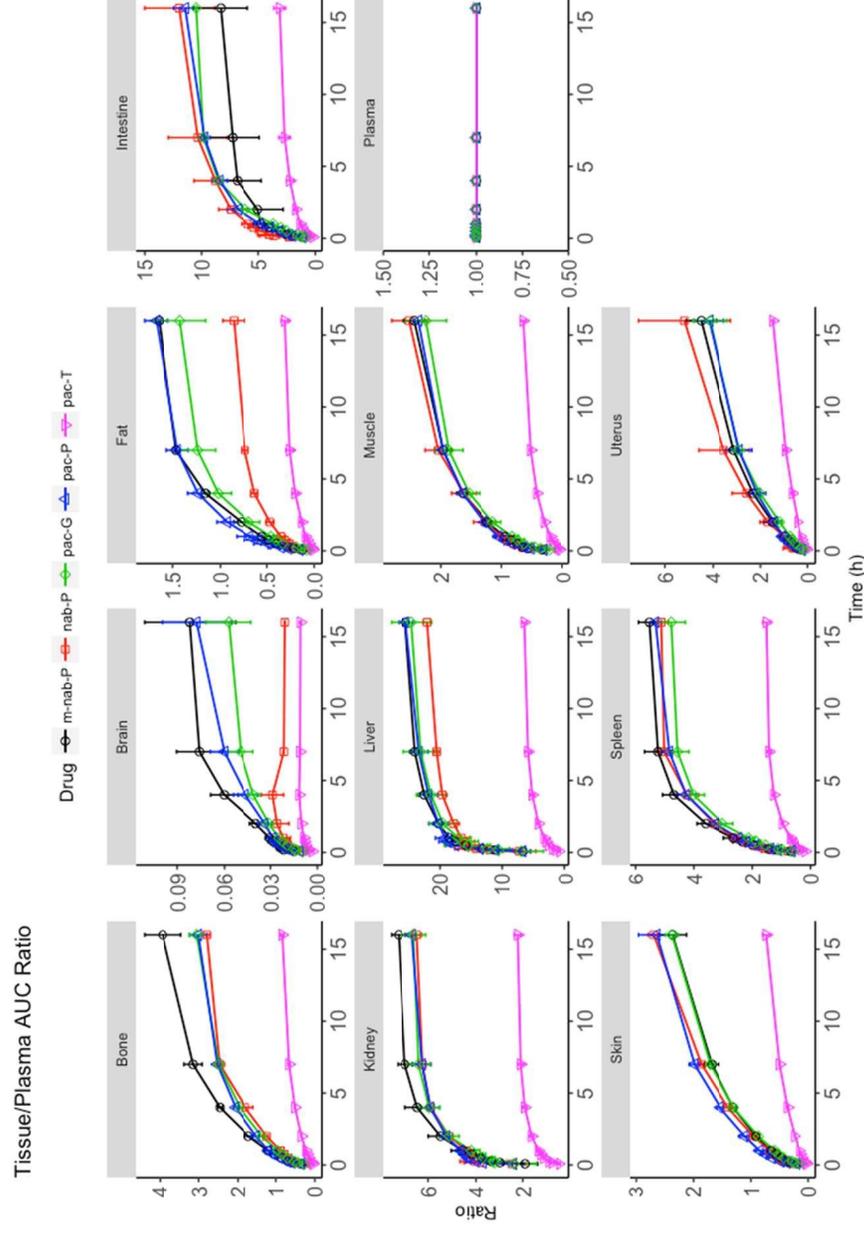
## Supplemental Figures

### Supplemental Figure 1



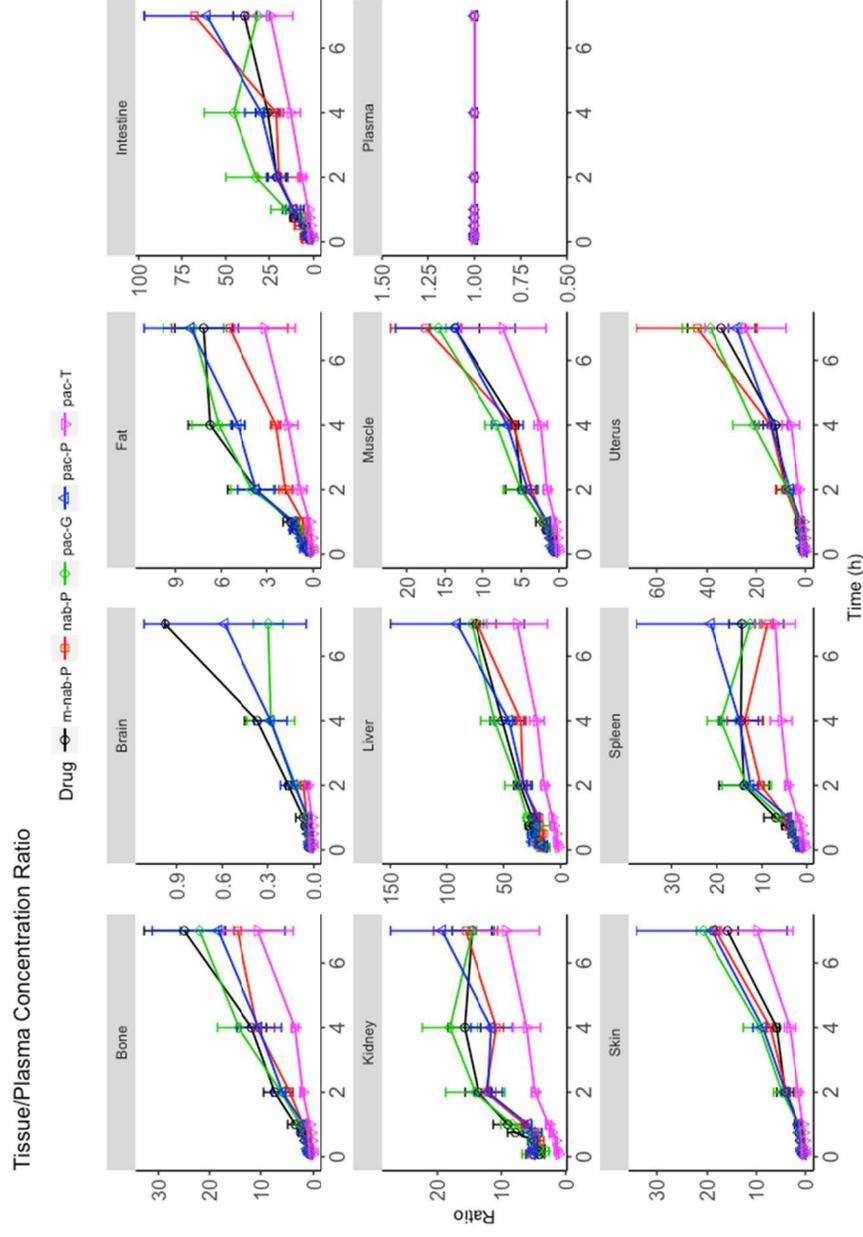
**Supplemental Fig. 1.** Total paclitaxel concentration-time profile in select tissues. Solvent-based paclitaxel (pac-T), *nab*-paclitaxel (*nab*-P), mouse albumin *nab*-paclitaxel (*m-nab*-P), micellar paclitaxel (pac-P), and polymeric nanoparticle paclitaxel (pac-G) have distinct tissue distributions.

## Supplemental Figure 2



**Supplemental Fig 2.** The ratio of area under the curve ( $AUC_{0-1}$ ) between select tissues and plasma. Ratio (y-axis) of accumulated AUC in tissues scaled to its corresponding accumulated AUC of plasma for solvent-based paclitaxel (pac-T), nab-paclitaxel (nab-P), mouse albumin nab-paclitaxel (m-nab-P), micellar paclitaxel (pac-P), and polymeric nanoparticle paclitaxel (pac-G).

### Supplemental Figure 3



**Supplemental Fig. 3.** Ratios of total paclitaxel concentrations in select tissues scaled to corresponding plasma paclitaxel concentration at each time point for solvent-based paclitaxel (pac-T), nab-paclitaxel (nab-P), mouse albumin nab-paclitaxel (m-nab-P), micellar paclitaxel (pac-P), and polymeric nanoparticle paclitaxel (pac-G).

**Supplemental Table 1. P-Values for Tissue/Plasma AUC Ratio Comparisons**

	<i>P-Values for Comparisons vs Pac-T</i>				<i>P-Values for Comparisons vs nab-P</i>			
	<i>nab-P vs Pac-T</i>		<i>m-nab-P vs Pac-T</i>		<i>Pac-G vs Pac-T</i>		<i>nab-P vs m-nab-P</i>	
	<i>nab-P vs Pac-T</i>	<i>m-nab-P vs Pac-T</i>	<i>Pac-P vs Pac-T</i>	<i>Pac-T</i>	<i>Pac-G vs Pac-T</i>	<i>nab-P vs m-nab-P</i>	<i>nab-P vs Pac-P</i>	<i>nab-P vs pac-G</i>
Plasma	< .0001	< .0001	< .0001	< .0001	< .0001	.8393	.0209	.0454
Blood	.0001	< .0001	< .0001	< .0001	< .0001	.0909	.2101	.7892
Liver	.0549	.0997	.0039	.4657	.4657	.3029	.0039	.0810
Stomach	.0114	.2005	.1407	.0785	.0785	.0801	.0157	.1540
Muscle	.0091	.0035	.0834	.3203	.3203	.6211	.0183	.0497
Skin	.0867	.0009	.2187	.0058	.0058	.2349	.0598	.8263
Fat	.0006	.2339	.0070	.0166	.0166	.0148	.0017	.0014
Spleen	.0178	.0048	.2464	.0793	.0793	.4276	.0327	.1379
Lung	.0360	.0006	.0167	.0068	.0068	.7132	.1713	.4941
Brain	.0544	.0364	.1431	.2005	.2005	.0149	.0683	.0455
Uterus	.0001	.0319	.2978	.0451	.0451	.6011	.4724	.8343
Intestine	.0625	.0069	.0280	.8335	.8335	.1302	.0140	.3726

Pancreas	.0015	.0003	< .0001	.0002	.3250	.0248	.0331
Kidney	.0005	.0007	.9361	.0387	.0687	.0085	.0140
Fat pad	.0039	.2627	.0014	.7759	.1474	.0006	.0635
Heart	.0077	< .0001	.0277	.0809	.8184	.0049	.0210
Bone	.0185	.1968	.1631	.4400	.0147	.0170	.0240

AUC, area under the curve; m-*nab*-P, nanoparticle mouse albumin-bound paclitaxel; *nab*-P, nanoparticle albumin-bound paclitaxel; pac-G, polymeric nanoparticle paclitaxel; pac-P, micellar paclitaxel; pac-T, solvent-based paclitaxel.

**Supplemental Table 2.** *P*-Values for Tissue/Plasma  $C_{\max}$  Ratio Comparisons

	<i>P</i> -Values for Comparisons vs Pac-T			<i>P</i> -Values for Comparisons vs <i>nab</i> -P			
	<i>nab</i> -P vs Pac-T	m- <i>nab</i> -P vs Pac-T	Pac-P vs Pac-T	Pac-G vs Pac-T	<i>nab</i> -P vs m- <i>nab</i> -P	<i>nab</i> -P vs Pac-P	<i>nab</i> -P vs pac-G
Plasma	< .0001	< .0001	< .0001	< .0001	.7876	.2114	.0151
Blood	< .0001	< .0001	.0001	< .0001	.0758	.4540	.1584
Liver	.0309	.3059	< .0001	.0046	.6743	.0257	.0277
Stomach	.6923	.0935	.0013	.0056	.3878	.0096	.0175
Muscle	.7182	.6867	.0159	.1431	.9482	.1486	.4706
Skin	.5413	.3599	.0264	.5704	.8208	.0469	.4375

Fat	.4388	.3850	.0905	.2208	.2684	.0765	.1673
Spleen	.0013	.0003	.0012	.0016	.9047	.2309	.0761
Lung	.0030	.0004	.0981	.1263	.7437	.0025	.0728
Brain	<.0001	.0063	.0483	.0768	.0452	.0691	.1181
Uterus	.0043	.0138	.3054	.0176	.0716	.7362	.0881
Intestine	.3294	.0001	.0215	.4388	.0413	.9224	.9528
Pancreas	.4147	.1355	<.0001	.1254	.9368	.2107	.9098
Kidney	.0380	<.0001	.8710	.3778	.0942	.0655	.0915
Fat pad	.8441	.0843	<.0001	.2439	.2629	.0356	.3300
Heart	.0052	.0009	.0317	.1063	.4317	.0085	.0146
Bone	.0252	.3585	.0123	.0083	.0782	.0069	.0042

$C_{\max}$ , maximum concentration; m-*nab*-P, nanoparticle mouse albumin-bound paclitaxel; *nab*-P, nanoparticle albumin-bound paclitaxel; pac-G, polymeric nanoparticle paclitaxel; pac-P, micellar paclitaxel; pac-T, solvent-based paclitaxel.