

Figure S1

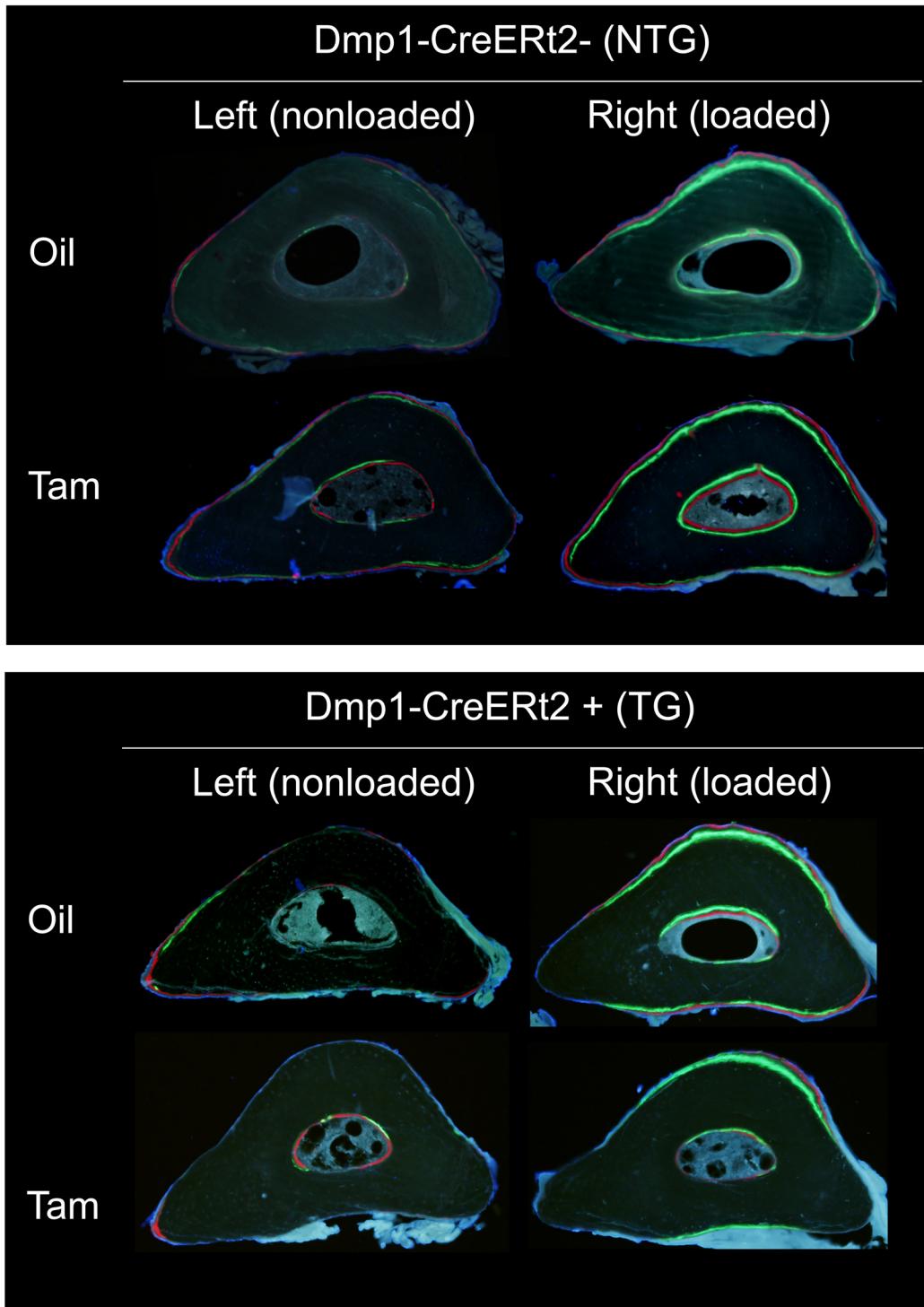


Figure S2

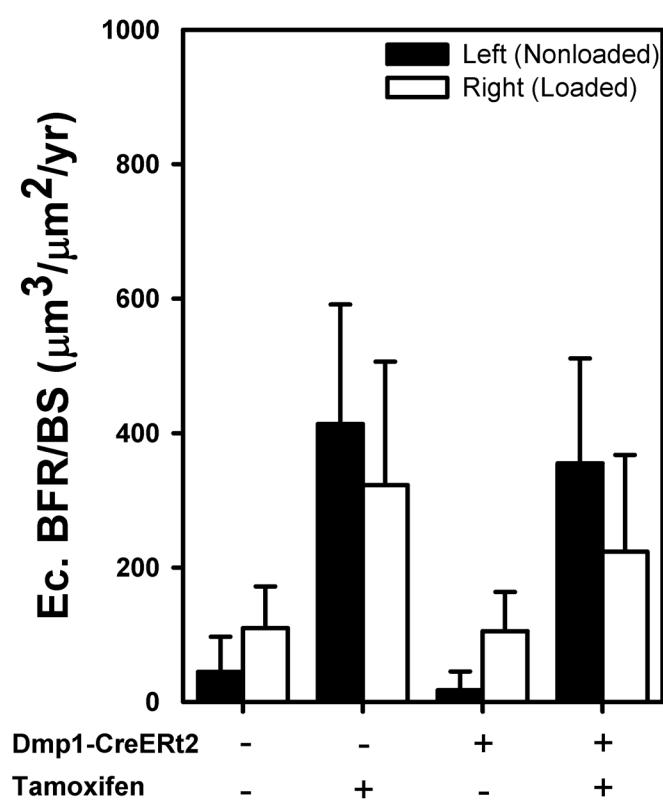


Figure S3

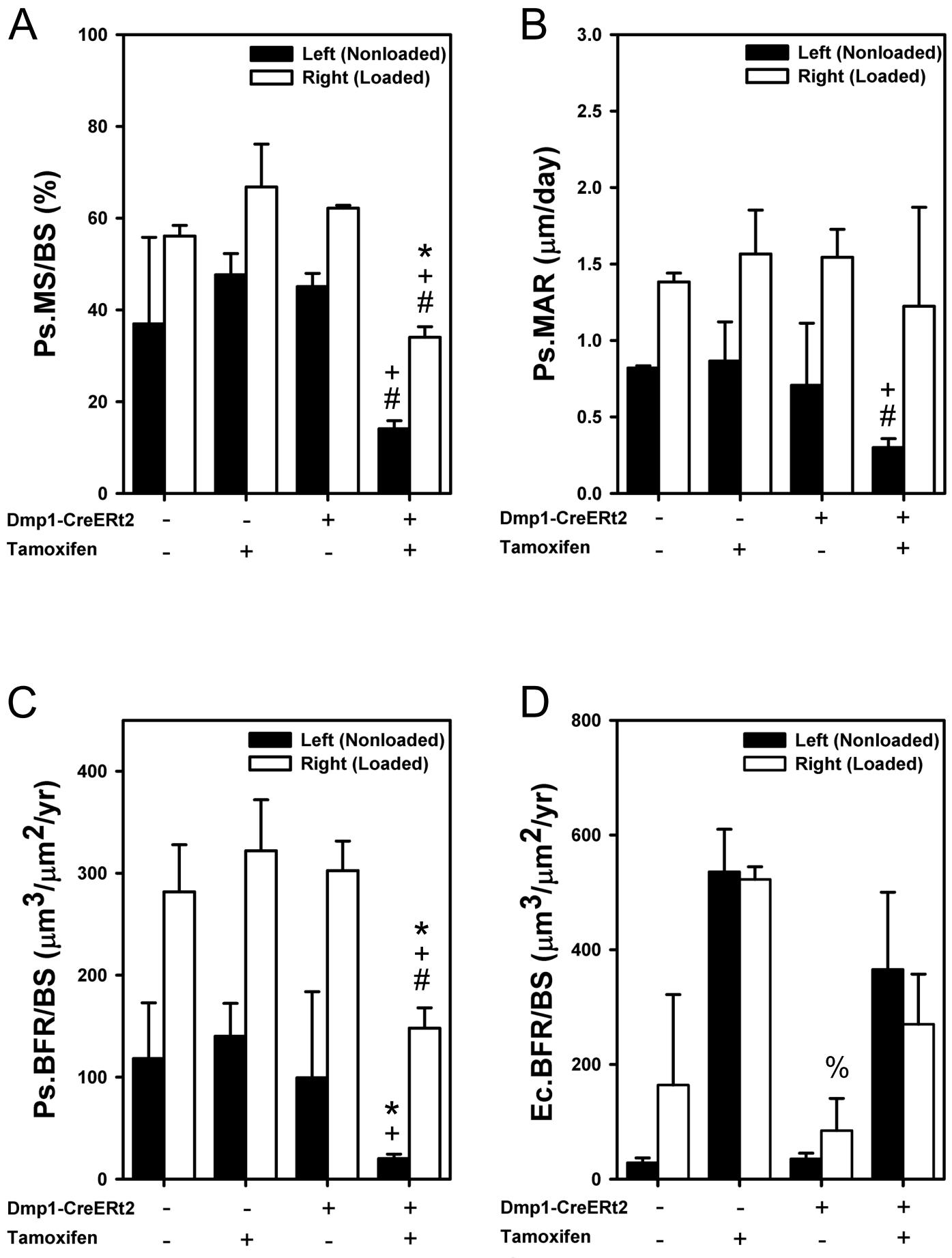


Figure S4

TABLE S1: Midshaft ulnar areal properties measured by ImageJ in the nonloaded (NL) and loaded (L) ulnae from mice with and without the Dmp1-CreERt2 transgene, treated with corn oil (Oil) or tamoxifen (Tam).

Dmp1-CreERt2:	CreERt2 -				CreERt2 +				
	Oil/Tamoxifen:	Oil		Tam		Oil		Tam	
		NL	L	NL	L	NL	L	NL	L
Tt.Ar (mm <sup>2</sup> )		1.078 ±0.028 (10)	1.125 ±0.029* (10)	1.084 ±0.022 (10)	1.139 ±0.023* (10)	1.011 ±0.038 (10)	1.071 ±0.038* (10)	1.009 ±0.033 (10)	1.039 ±0.032* (10)
B.Ar (mm <sup>2</sup> )		0.873 ±0.013 (10)	0.924 ±0.014* (10)	0.906 ±0.018 (10)	0.983 ±0.020* (10)	0.859 ±0.029 (10)	0.926 ±0.031* (10)	0.873 ±0.018 (10)	0.913 ±0.017* (10)
Ma.Ar (mm <sup>2</sup> )		0.205 ±0.020 (10)	0.201 ±0.020* (10)	0.178 ±0.011 (10)	0.156 ±0.011* (10)	0.152 ±0.014 (10)	0.145 ±0.014* (10)	0.136 ±0.019 (10)	0.126 ±0.018* (10)

<sup>A</sup>Values presented are mean ± SEM (n=).

\* represents  $p < 0.05$  compared to nonloaded values.

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