

SUPPLEMENTAL TABLE 1

| <b>PROPERTY</b>                     | <b>Units</b>         | <b>Cre<sup>-/-</sup> (n=18)</b> | <b>Cre<sup>+/-</sup> (n=9)</b> | <b>p-value</b> |
|-------------------------------------|----------------------|---------------------------------|--------------------------------|----------------|
| Body weight                         | grams                | 24.36 ± 2.61                    | 23.83 ± 2.09                   | 0.60           |
| <b>Metaphysis (Trabecular bone)</b> |                      |                                 |                                |                |
| BV/TV                               | %                    | 16.5 ± 4.4                      | 14.9 ± 4.0                     | 0.40           |
| Tb.N                                | mm <sup>-1</sup>     | 5.6 ± 0.61                      | 5.67 ± 0.65                    | 0.80           |
| Tb.Th                               | mm                   | 0.046 ± 0.006                   | 0.044 ± 0.007                  | 0.36           |
| Tb.Sp                               | mm                   | 0.179 ± 0.023                   | 0.177 ± 0.02                   | 0.83           |
| SMIa                                | --                   | 2.032 ± 0.373                   | 2.218 ± 0.299                  | 0.21           |
| Tb.TMD                              | mgHA/cm <sup>3</sup> | 893 ± 10.6                      | 880 ± 19.5                     | <b>0.02</b>    |
| <b>Diaphysis (Cortical bone)</b>    |                      |                                 |                                |                |
| Ma.V                                | mm <sup>3</sup>      | 1.27 ± 0.158                    | 1.36 ± 0.209                   | 0.22           |
| Ct.Th                               | mm                   | 0.165 ± 0.017                   | 0.156 ± 0.013                  | 0.18           |
| Imin                                | mm <sup>4</sup>      | 0.115 ± 0.027                   | 0.118 ± 0.028                  | 0.79           |
| Ct.Ar                               | mm <sup>2</sup>      | 0.717 ± 0.098                   | 0.693 ± 0.084                  | 0.53           |
| Length                              | mm                   | 13.742 ± 0.622                  | 13.71 ± 0.655                  | 0.90           |
| Slendernessb                        | mm/mm <sup>2</sup>   | 19.457 ± 2.47                   | 19.999 ± 2.08                  | 0.58           |
| Ct.TMD                              | mgHA/cm <sup>3</sup> | 1153.6 ± 25.7                   | 1133.6 ± 23.7                  | 0.06           |
| Stiffness                           | N/mm                 | 75.75 ± 16.1                    | 70.59 ± 17.23                  | 0.45           |
| Modulus                             | GPa                  | 7.21 ± 1.71                     | 6.5 ± 1.3                      | 0.28           |
| Bending strength                    | MPa                  | 165.15 ± 19.36                  | 167.7 ± 16.23                  | 0.74           |
| Peak Force                          | N                    | 14.76 ± 2.5                     | 14.93 ± 2.91                   | 0.88           |