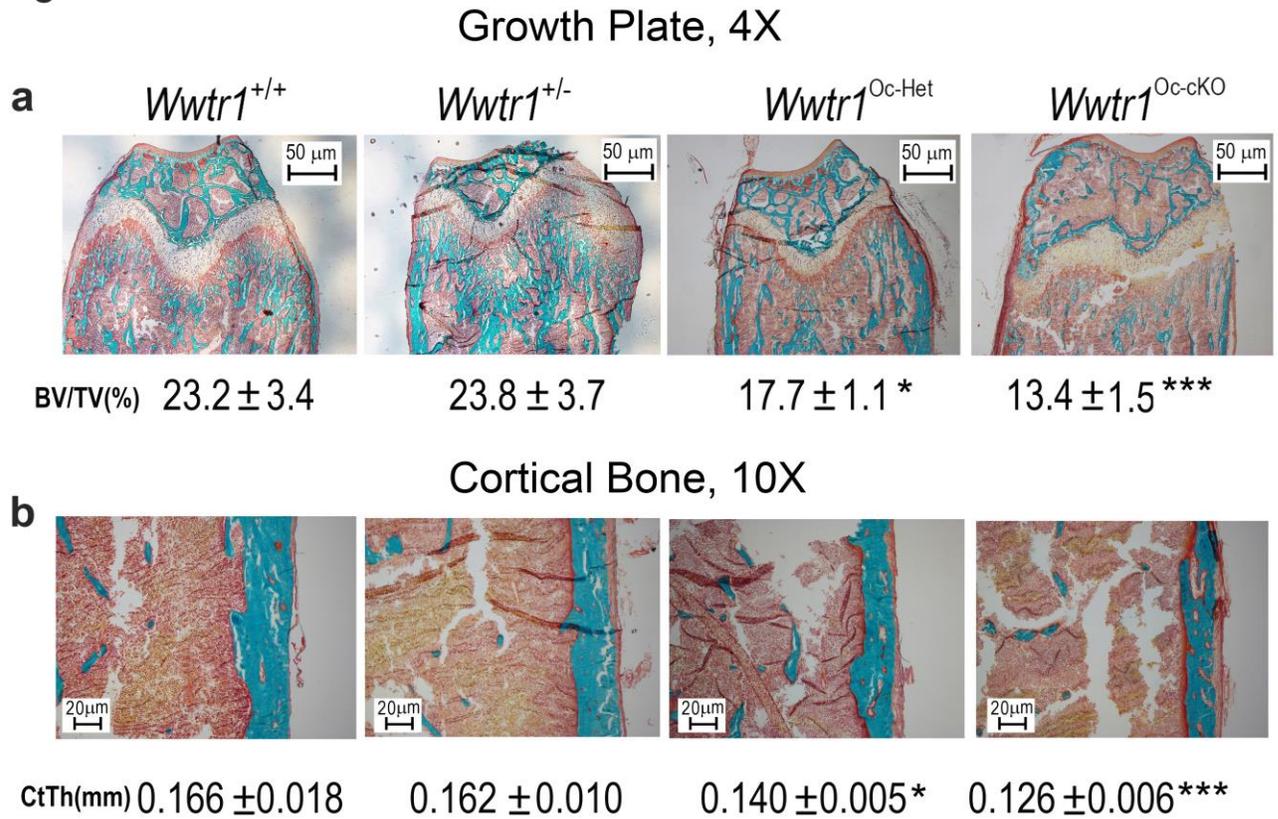


1 **Supplementary Information**

Figure S1

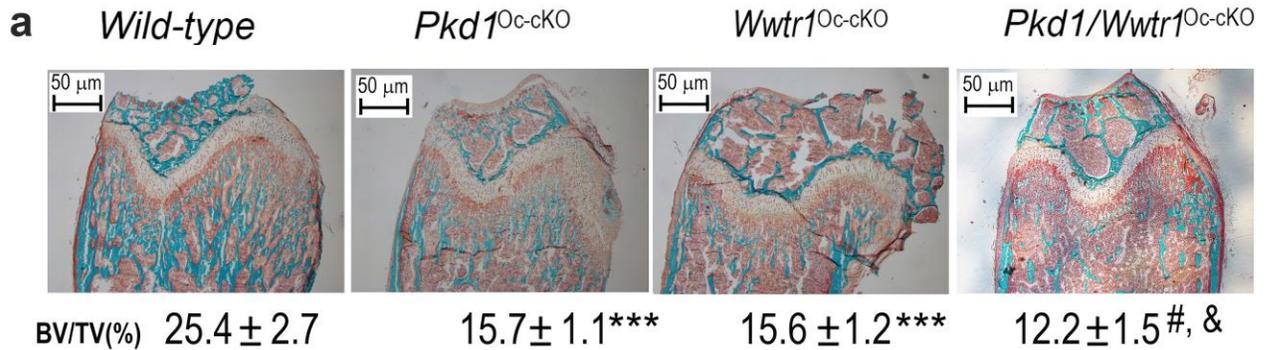


2 **Supplementary Figure S1. Histological analysis of conditional *Wwtr1* deletion in bone. (a & b)**

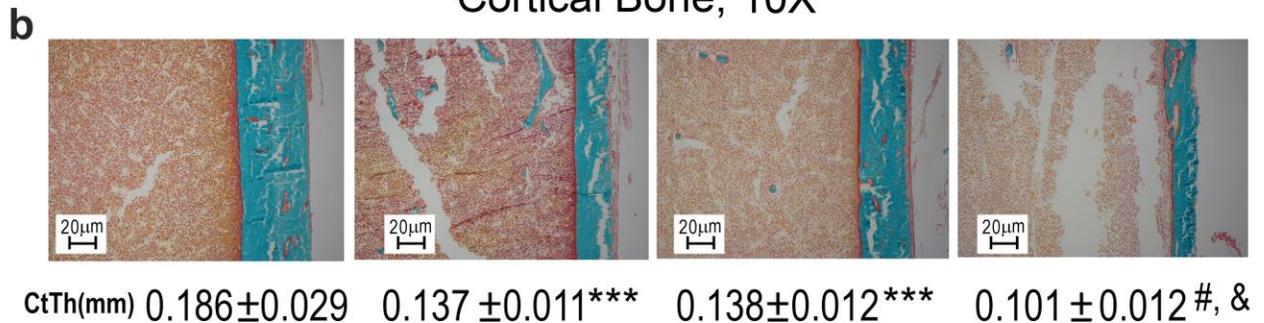
3 Goldner staining of non-decalcified bone. Representative images of distal femur sections displayed a
4 gene-dosage dependent reduction in trabecular bone volume under growth plate **(a)** and cortical
5 thickness in diaphyseal area **(b)** from 8-week-old conditional *Wwtr1* deleted mice compared with age-
6 matched control mice. Data are expressed as the mean ± S.D. from 6 individual mice (n=6). **P* < 0.05,
7 ***P* < 0.01, ****P* < 0.001 compared with *wild-type* control mice. *P* values were determined by 1-way
8 ANOVA with Tukey's multiple-comparisons test.

Figure S2

Growth Plate, 4X



Cortical Bone, 10X



10
11 **Supplementary Figure S2. Histological analysis of conditional *Pkd1* and/or *Wwtr1* deletion in**
12 **bone. (a & b) Goldner staining of non-decalcified bone. Representative images of distal femur sections**
13 **displayed significant reductions in trabecular bone volume under growth plate (a) and cortical thickness**
14 **in diaphyseal area (b) from 8-week-old conditional *Pkd1* and/or *Wwtr1* deleted mice compared with**
15 **age-matched control mice. Data are expressed as the mean \pm S.D. from serum samples of individual**
16 **mice (n=6). * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$ compared with *wild-type* mice, # $P < 0.05$, ## $P < 0.01$,**
17 **### $P < 0.001$ compared with *Wwtr1*^{Oc-cKO} mice, and & $P < 0.05$, && $P < 0.01$, &&& $P < 0.001$ compared with**
18 ***Pkd1*^{Oc-cKO} mice, respectively. P values were determined by 1-way ANOVA with Tukey's multiple-**
19 **comparisons test.**

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