***Reviewer 3***

***In this study, the authors investigated the process of osteoblastic-endothelial transition in glucocorticoid-induced bone loss using two types of mice from the osteoblastic lineage: Col1a1cre/ERT2 Rosa tdTomato mice and OSX-Gfptg mice. Additionally, they identified two key regulators, Foxc2 and Osterix, that drive this transition. The authors present a new and comprehensive perspective on glucocorticoid-induced bone Loss. However, there are a few concerns that should be addressed before considering it for publication.***

***1. "Figure 2 only includes a high-magnification image of anti-OSX. It would be beneficial to provide more data in this figure."***

In revised Figure 2, we added time-course FACS analysis of demarrowed femurs of dexamethasone-treated mice using anti-CD31, anti-VE-cadherin, anti-Flk1 or anti-Osteocalcin antibodies (Figure 2c). We performed real-time PCR and showed the decreased expression of osteoblast lineage markers (Figure 2e), which were identified to be down-regulated in osteocalcin-positive cells after dexamethasone-treatment (Figure 2d). We also showed images of the co-expression of Osteocalcin with CD31, VE-cadherin and vWF in the femurs of dexamethasone-treated mice (Figure 2b).

***2. "In Figure 6a, the population of tdTomato-positive cells appears to be similar between the control and dexamethasone treatment groups. However, the expression of Col1a1 is decreased with dexamethasone treatment. It is important to explain this data discrepancy in order to provide a better understanding of the results."***

We added the following to the text. We added "Since the tdTomato expression was induced prior to the dexamethasone treatments, the results showed the similar tdTomato levels between treated group and non-treated control, suggesting similar efficiency of tdTomato labelling in osteoblast-lineage cells in these groups."

***3. "It would be valuable to include additional assays, such as histology and immunohistochemistry, to confirm the claim that "Glucocorticoid-Treated Osteoblasts Lose Osteogenic Capacity in Ectopic Bone Formation but Improve Vascular Repair" (Figure 6)."***

We performed immunostaining using anti-CD31 antibodies to quantitate CD31+ cells in the implants of tdTomato-labelled osteoblasts. The results showed more CD31+ cells in the implants of the dexamethasone-treated group that the non-treated control (Figure 6d). We also examined the vascularization at the sites of transplantation of tdTomato-labelled cells using latex dye with tissue clearing, which showed stronger vascular growth in the dexamethasone-treated group than that of the non-treated control (Figure 6g).

***4. "The discussion section should be reorganized. By integrating the findings with existing literature, the discussion section would become more coherent and provide a clearer analysis of the research."***

We have revised the discussion.