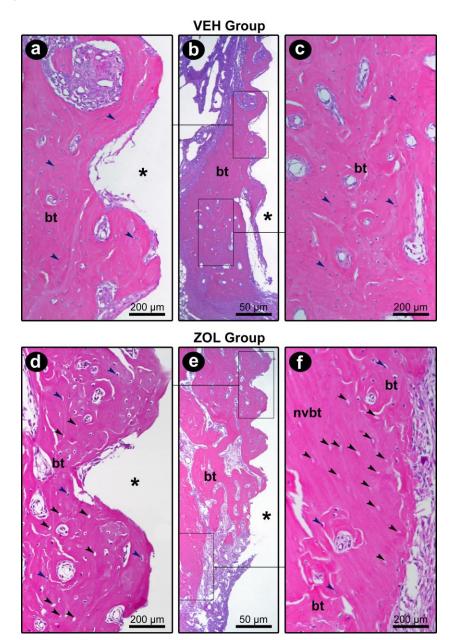
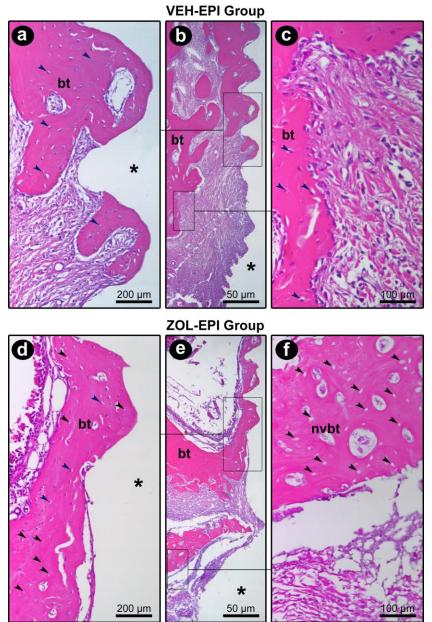
## SUPPLEMENTARY MATERIAL



**Supplementary material 1.** Histological appearance of the peri-implant tissues in the VEH ( $\bf a - \bf c$ ) and ZOL ( $\bf d - \bf f$ ) groups. In ( $\bf b$ ) and ( $\bf e$ ) photomicrographs at lower magnification in which it is possible to observe the site previously occupied by the dental implant (asterisks) and the tissues located around it. In ( $\bf a$ ) and ( $\bf d$ ) it can be see the bone tissue filling the dental implant threads and in ( $\bf c$ ) and ( $\bf f$ ) the appearance of the bone tissue located adjacent to it. Note the large amount of non-vital bone tissue in the ZOL group. Abbreviations and Symbols: asterisks, site previously occupied by the dental implant; bt, bone tissue; nvbt, non-vital bone tissue; blue arrows, osteocytes; black arrows, empty lacuna. Original magnification:  $\bf a$ ,  $\bf c$ ,  $\bf d$ ,  $\bf f$ : 200x;  $\bf b$ ,  $\bf e$ : 50x. Scale bars:  $\bf a$ ,  $\bf c$ ,  $\bf d$ ,  $\bf f$ : 200µm;  $\bf b$ ,  $\bf e$ : 50µm.



Supplementary material 2. Histological appearance of the peri-implant tissues in the VEH-EPI  $(\mathbf{a} - \mathbf{c})$  and ZOL-EPI  $(\mathbf{d} - \mathbf{f})$  groups. In  $(\mathbf{b})$  and  $(\mathbf{e})$  photomicrographs at lower magnification in which it is possible to observe the site previously occupied by the dental implant (asterisks) and the tissues located around it. In  $(\mathbf{a})$  and  $(\mathbf{d})$  it can be see the bone tissue filling the dental implant threads and in  $(\mathbf{c})$  and  $(\mathbf{f})$  the appearance of the bone tissue located adjacent to it. Note the bone loss in VEI-EPI group  $(\mathbf{b})$  and ZOL-EPI group  $(\mathbf{e})$ , which is more pronounced in this last. Note in VEI-EPI group  $(\mathbf{b})$  and ZOL-EPI group  $(\mathbf{e})$  the intense inflammatory infiltrate in the peri-implant soft tissues, and in this last there is a severe disruption of such tissues. Note the large amount of non-vital bone tissue in ZOL-EPI group  $(\mathbf{e}, \mathbf{f})$ . Abbreviations and Symbols: asterisks, site previously occupied by the dental implant; bt, bone tissue; nvbt, non-vital bone tissue; blue arrows, osteocytes; black arrows, empty lacuna. Original magnification:  $\mathbf{a}$ ,  $\mathbf{d}$ : 100x;  $\mathbf{b}$ ,  $\mathbf{e}$ : 50x;  $\mathbf{b}$ ,  $\mathbf{e}$ : 200x. Scale bars:  $\mathbf{a}$ ,  $\mathbf{d}$ : 200µm;  $\mathbf{b}$ ,  $\mathbf{e}$ : 50µm;  $\mathbf{c}$ ,  $\mathbf{f}$ : 100µm.