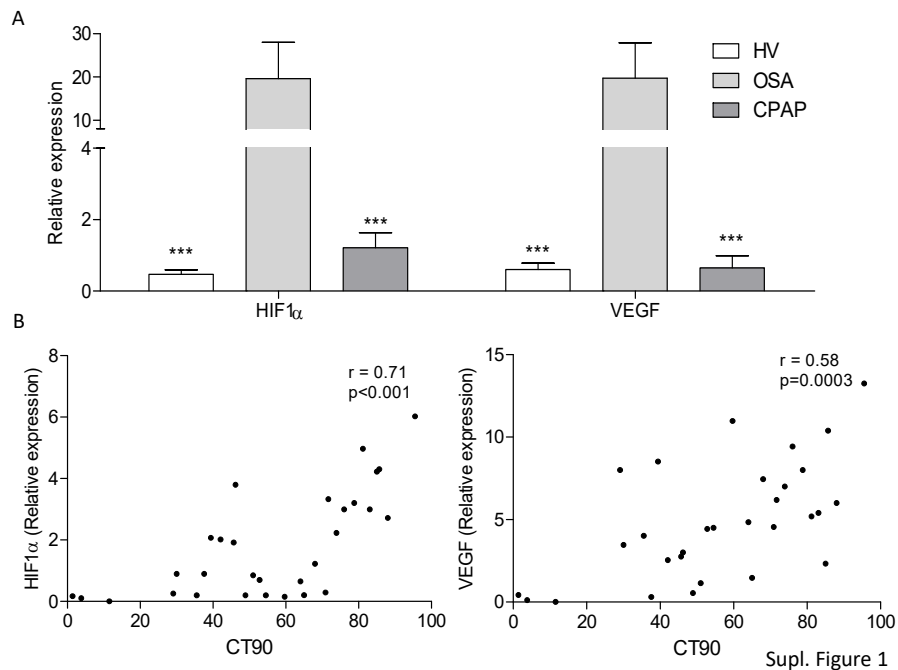
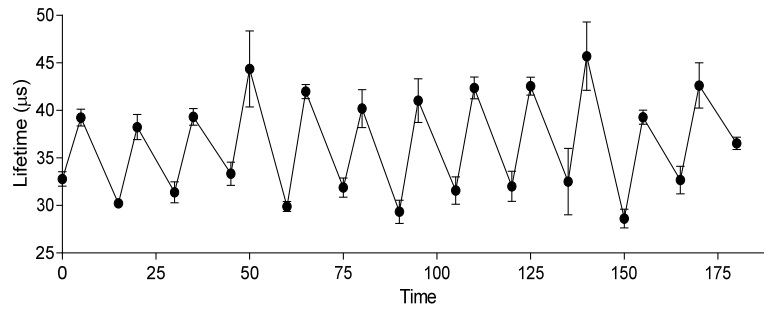


## Supplementary Data



**Supplementary Figure 1. Obstructive sleep apnea monocytes enhance HIF1 $\alpha$  and vascular endothelial growth factor mRNA expression.**

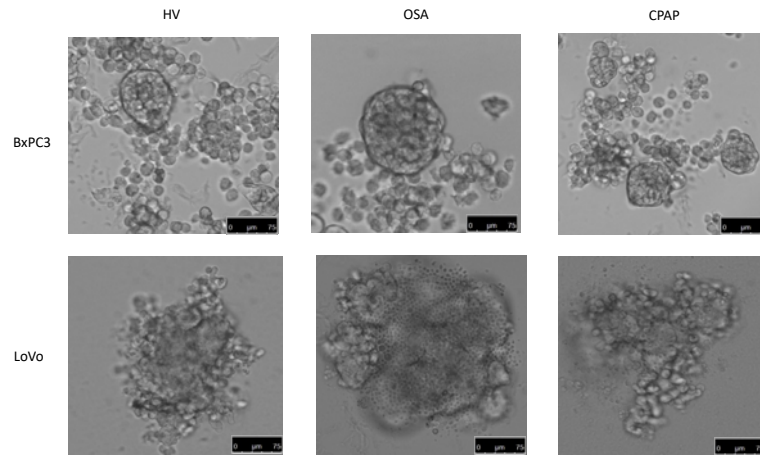
(A) CD14<sup>+</sup> monocytes were isolated from HV (open bars, n=20 randomly selected), OSA (light gray bars, n=20 randomly selected) and CPAP (dark gray bars, n=20 randomly selected). HIF1 $\alpha$  and VEGF mRNA expression by qPCR; \*\*\* $p < 0.001$ , using the Mann-Whitney test. (B) The effect of intermittent hypoxia on intracellular oxygen concentration in CD14<sup>+</sup> monocytes. Lifetimes of phosphorescent probe are shown. The intracellular oxygen levels were analyzed by the ability of oxygen to quench the excited state of an oxygen-sensitive probe from intracellular oxygen concentration assay (Abcam, ab197245).



Supl. Figure 2

**Supplementary Figure 2. The intracellular oxygen concentration in the intermittent hypoxia model.**

The effect of intermittent hypoxia on intracellular oxygen concentration in CD14<sup>+</sup> monocytes. Lifetimes of phosphorescent probe are shown.



Supl. Figure 3

**Supplementary Figure 3. Images of obstructive sleep apnea monocytes exhibiting tumor-promoting activity.**

CD14<sup>+</sup> monocytes were isolated from HV (n=20 randomly selected), OSA (n=20 randomly selected) and CPAP (n= 20 randomly selected). They were then cocultured in a tumor 3D *in vitro* model using human pancreas (BxPC3) or colon (LoVo) tumor cell lines (3 replicates for each participant). 3D tumor images are shown.