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TGF- β family signaling in endothelial cells and angiogenesis

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Stellingen

behorende bij het proefschrift

TGF- β family signaling in endothelial cells and angiogenesis

1. While Endothelial to Mesenchymal Transition (EndMT) contributes to fibrosis, the same process may be explored for tissue regeneration and engineering applications. (This thesis)
2. CRISPR/Cas9 system is an elegant gene editing tool to interrogate the function of proteins/genes during EndMT. (This thesis)
3. BMP9 controls EndMT via regulating SNAIL and IDs expression. (This thesis)
4. Xenograft assays in embryonic zebrafish facilitate the investigation of tumor angiogenesis and also mechanisms underlying cancer cell invasion. (This thesis)
5. Macrocyclization of small molecule kinase inhibitors can improve their specificity and selectivity. (This thesis)
6. Inhibitors targeting BMP type I receptor kinase antagonize tumor cells-induced angiogenesis in a zebrafish xenograft model. (This thesis)
7. The combined total length of blood vessels in human body is over 60000 miles. That's long enough to go around the earth more than twice!
8. EndMT is involved in numerous cardiovascular diseases. Therefore, pharmacological manipulation of EndMT has great therapeutic potential. (Inspired by Kovacic et al. *Journal of the American College of Cardiology* 73.2 (2019): 190-209.)
9. Blocking both angiogenesis and cancer cell escape pathways is now an attainable step in the evolution of using combination drugs for cancer therapy. (Inspired by Sennino and Donald, *Nature Reviews Cancer* 12.10 (2012): 699-709.)
10. If at first the idea is not absurd, then there is no hope for it. So be optimistic if a project looks absurd. (Inspired by Albert Einstein)
11. There are no accidents for success, it is always the result of intelligent effort. (Inspired by *Kung Fu Panda* and John Ruskin)