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Regulation of BMP and TGF β signaling pathway in cancer progression

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Stellingen

behorende bij het proefschrift

Regulation of BMP and TGF β Signaling Pathway in Cancer Progression

1. Microinjection of breast cancer cells into perivitelline space or duct of cuvier of transgenic zebrafish embryos enables assessment of intravasation and extravasation potential, respectively. (This thesis)
2. Gremlin1 promotes breast cancer progression by mediating reciprocal interactions between breast cancer cells and cancer-associated fibroblasts. (This thesis)
3. The activation of BMP signaling by a combination of two small molecules at their individually suboptimal dose results in a more robust decrease in breast cancer metastasis (This thesis)
4. WNT7B plays an effector role in a JUNB mediated TGF β signaling feed-forward network and thereby promotes breast cancer invasion. (This thesis)
5. Additive anti-tumor response of dual targeting PD-L1 and TGF β depends on the tumor model used. (This thesis)
6. From physiology to pathology: it's all in the BMP/TGF β family.
7. Zebrafish ‘avatars’ can be used as a preclinical screening platform for antitumoral drugs and may guide treatment plans for cancer patients. (inspired by Cagan RL, Zon LI and White RM. Dev Cell 2019, 49(3):317-24)
8. Targeting cancer-associated fibroblasts will improve cancer treatment strategies on the basis of accumulating functional analyses in preclinical models and supporting correlative analyses of patient materials. (inspired by Sahai E, Astsurov I, Cukierman E *et al.* Nat Rev Cancer 2020, 20(3):174-186)
9. Defining tumor immunoscore as ‘hot’, ‘altered’ and ‘cold’ is a new approach for the classification of cancer. (inspired by Galon J, Bruni D. Nat Rev Drug Discov 2019, 18(3):197-218.)
10. Stay hungry, stay foolish (Steve Jobs, 2005). To be foolish to try what you are hungry for.