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Multifaceted approaches to tumor microenvironment modulation and immune checkpoint targeting

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PROPOSITIONS

‘Multifaceted Approaches to Tumor Microenvironment Modulation and Immune Checkpoint Targeting’

- DSP502, a novel bispecific fusion protein blocking PVR and PD-L1 pathways, reactivates T and NK cells, offering therapeutic potential for NSCLC. (this thesis)
- The dual targeting mechanism of DSP502 enhances immune activation when PD-L1 and PVR are co-expressed on tumor cells, highlighting its potential for selective and efficient immune engagement. (this thesis)
- Tumor-targeted TNSFR immunomodulators like CD27xEGFR locally stimulate anti-tumor T cell responses, enhancing immune activation in the tumor microenvironment. (this thesis)
- Antagonistic mAbs targeting CD300a, an innate checkpoint that inhibits phagocytosis, can promote anticancer immunity in non-GCB DLBCL, MCL, and UM cancers. (this thesis)
- “Your vision will become clear only when you can look into your own heart. Who looks outside, dreams; who looks inside, awakes” — Carl Jung
- “What do you mean, ‘If I can’?” Jesus asked. “Anything is possible if a person believes.” — Mark 9:23

Vinicio Alejandro Melo Gallegos, Groningen 2025