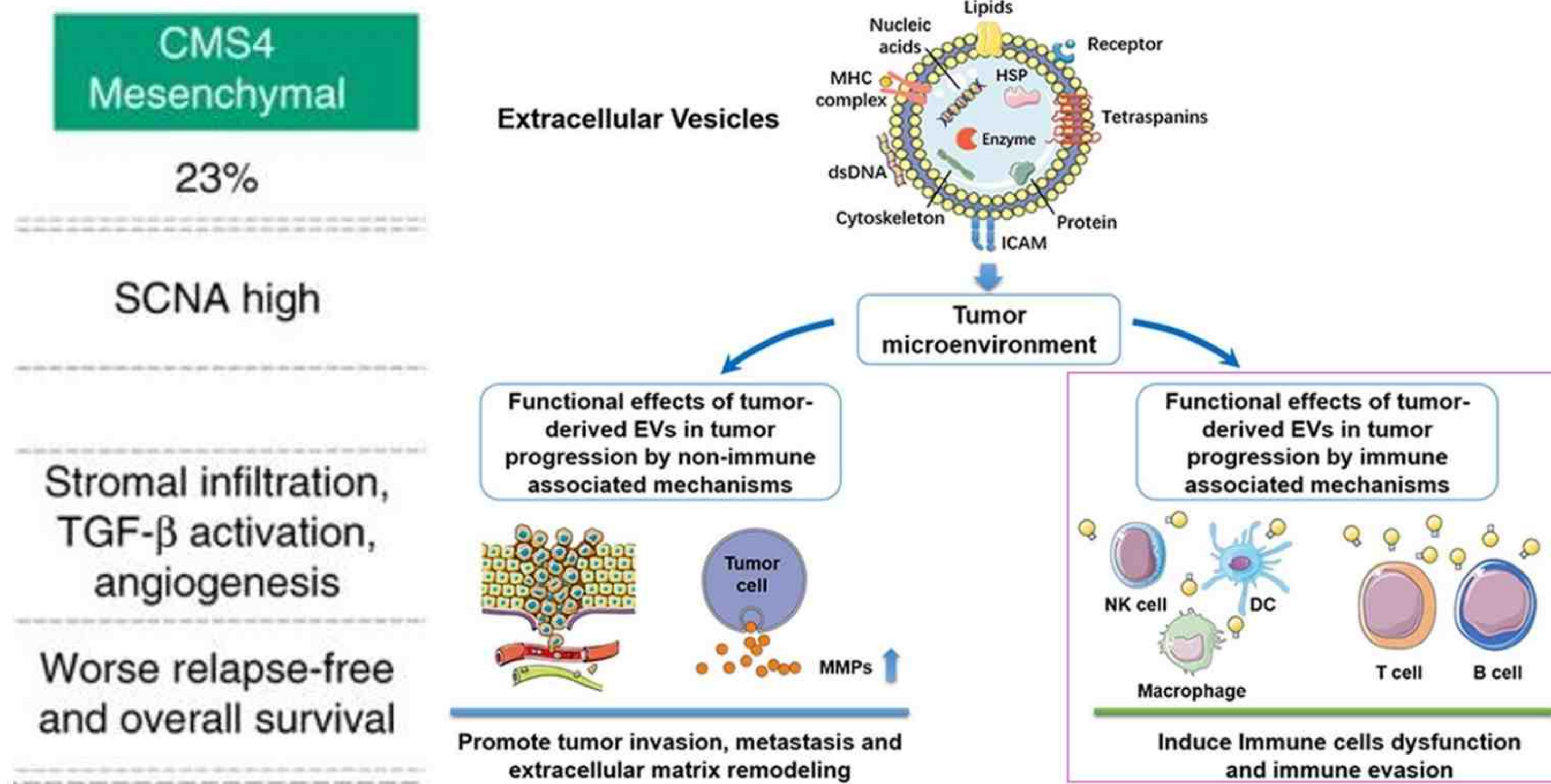
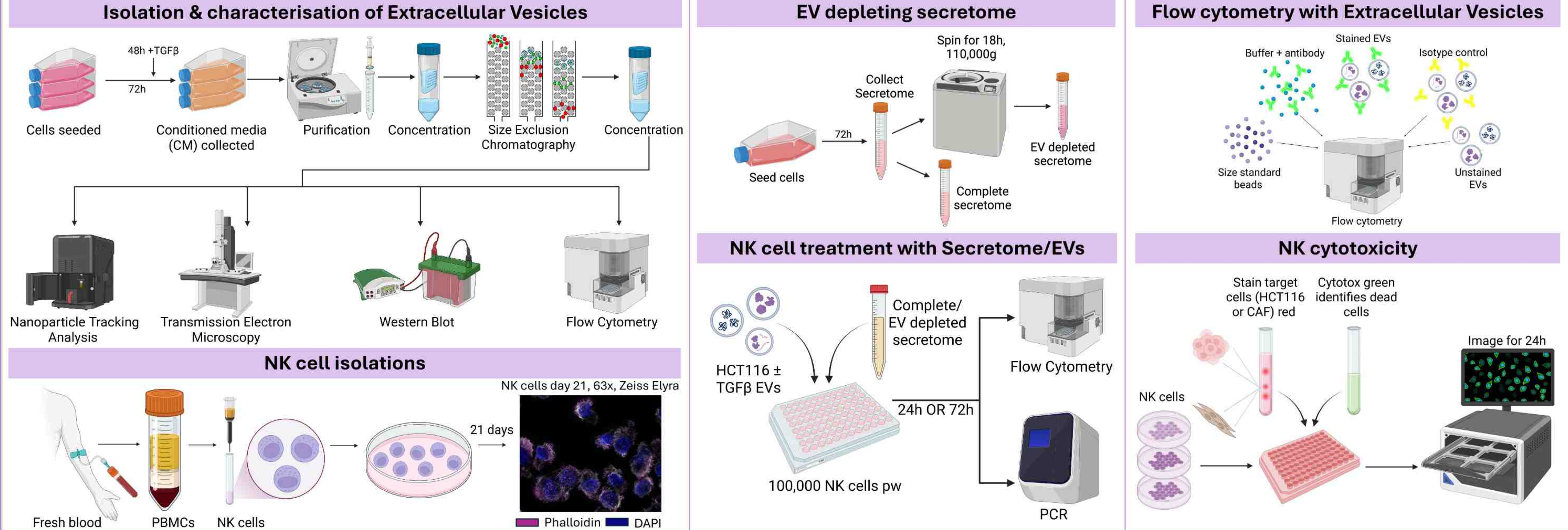


Introduction

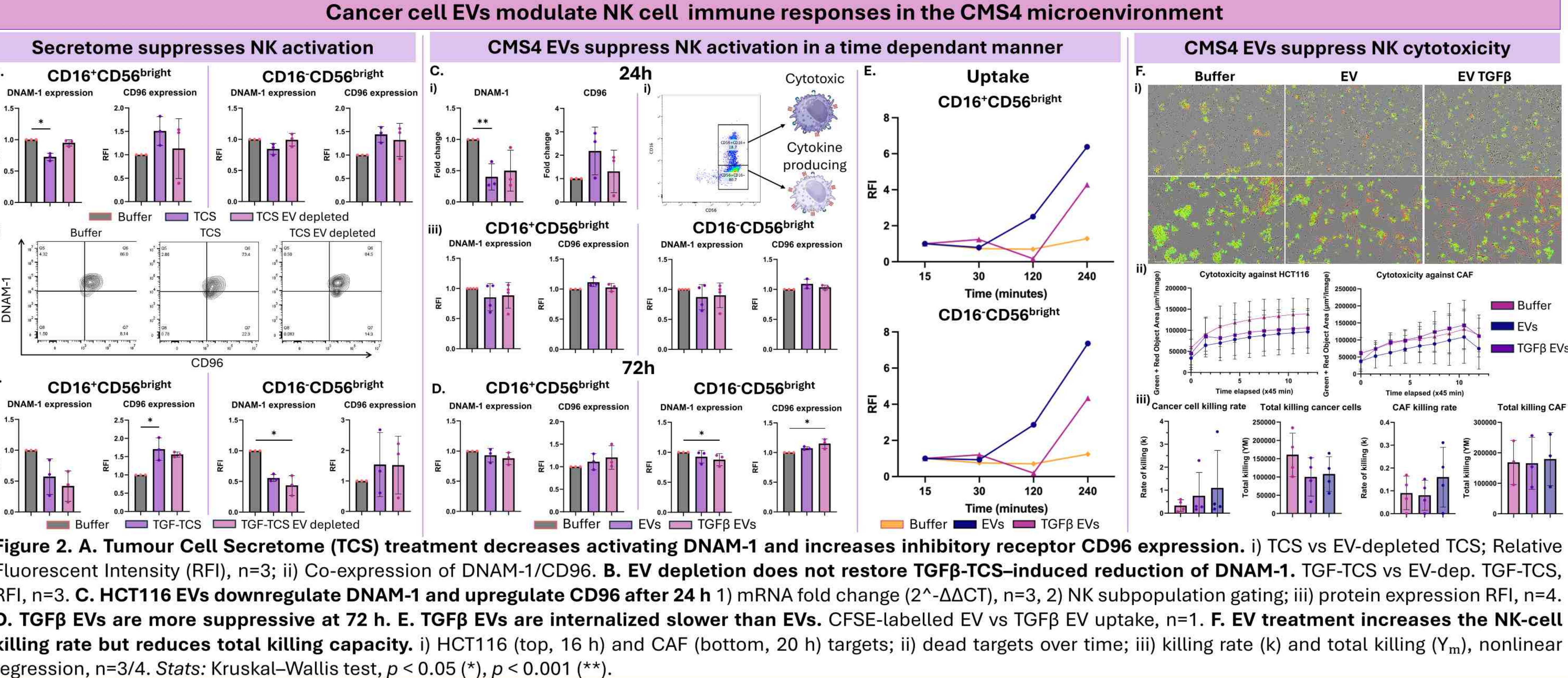
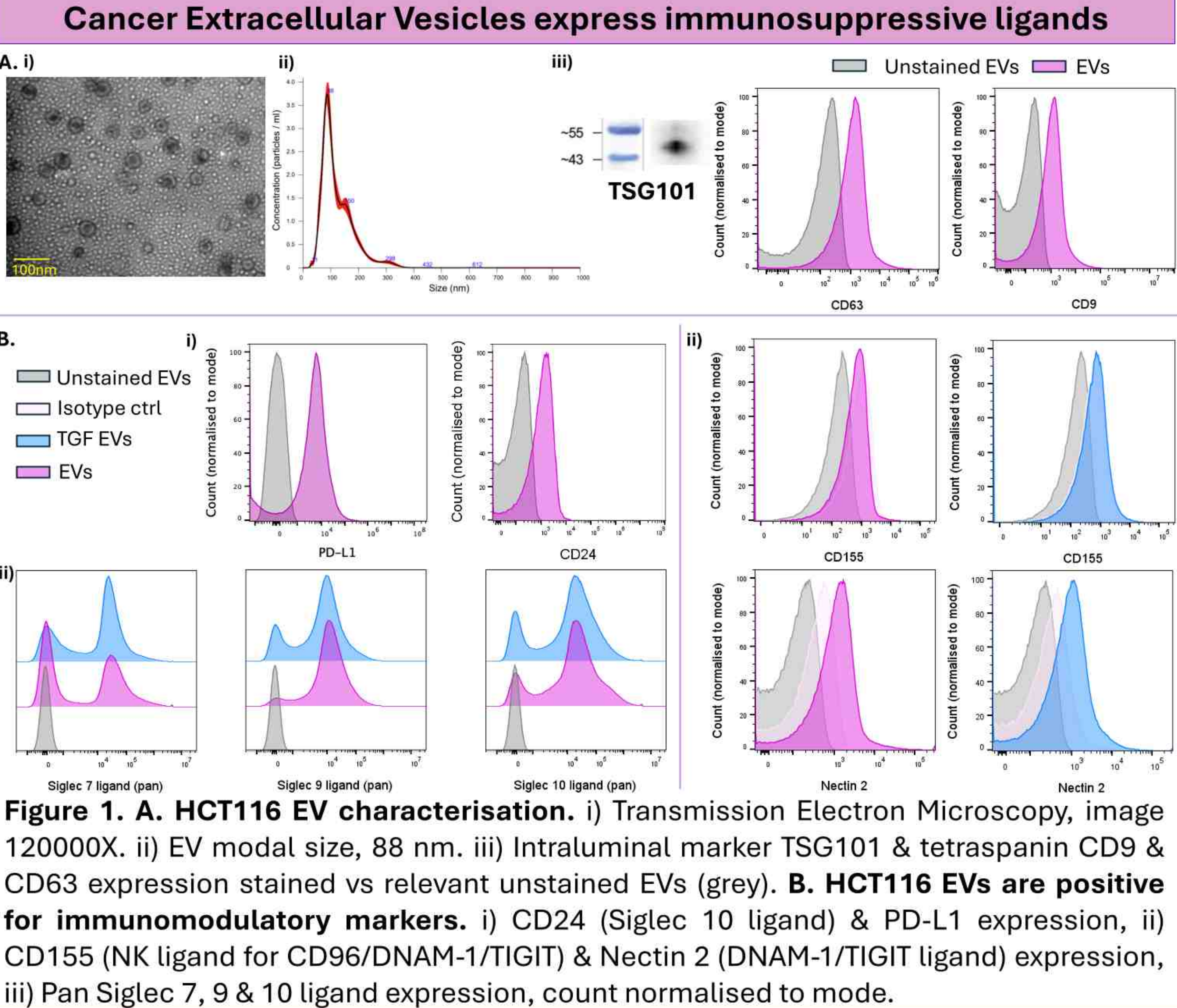


CMS4 colorectal cancer (CRC) is highly immunosuppressive and characterized by high levels of TGF- β signalling and stromal invasion, leading to a poor prognosis. Extracellular Vesicles (EVs) promote immunosuppression in the Tumour Microenvironment by influencing surrounding immune cells [1] [2]. I aim to elucidate their immunosuppressive mechanisms in CMS4 CRC.

Methods

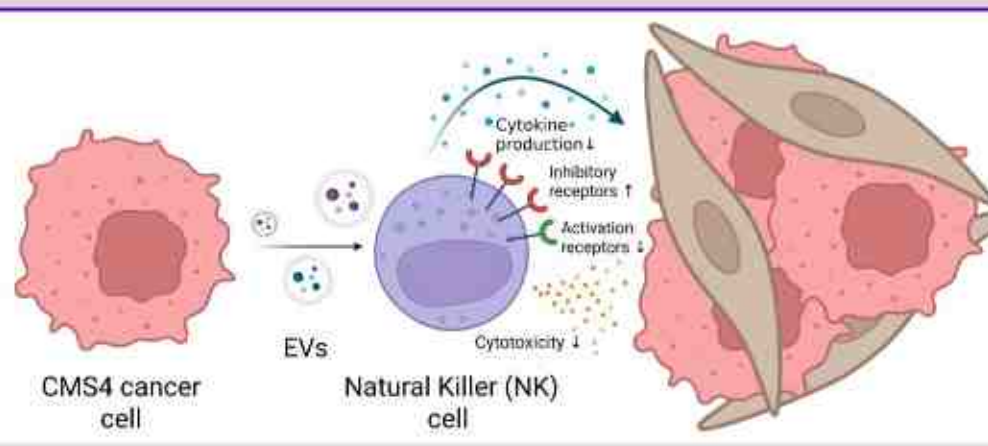


Results



Conclusion

- CMS4 cancer cell (HCT116) EVs express immunosuppressive ligands.
- Immunomodulatory effect of CMS4 TCS partially depends on the presence of EVs. TGF β changes Secretome dynamics.
- CMS4 tumour cell EV treatment suppresses NK cell activation & cytotoxicity in a time sensitive manner



References

[1] Yang, S., Wei, S. & Wei, F. Extracellular vesicles mediated gastric cancer immune response: tumor cell death or immune escape? *Cell Death Dis* 15, 377 (2024). <https://doi.org/10.1038/s41419-024-06758-8>
[2] Ghoshal, B., Jhunjhunwala, S. A game of hide-and-seek: how extracellular vesicles evade the immune system. *Drug Deliv. and Transl. Res.* (2025). <https://doi.org/10.1007/s13346-025-01789-w>