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Liposomal formulation of docetaxel: biodistribution and immunomodulatory benefit in HER2 breast cancer treatment

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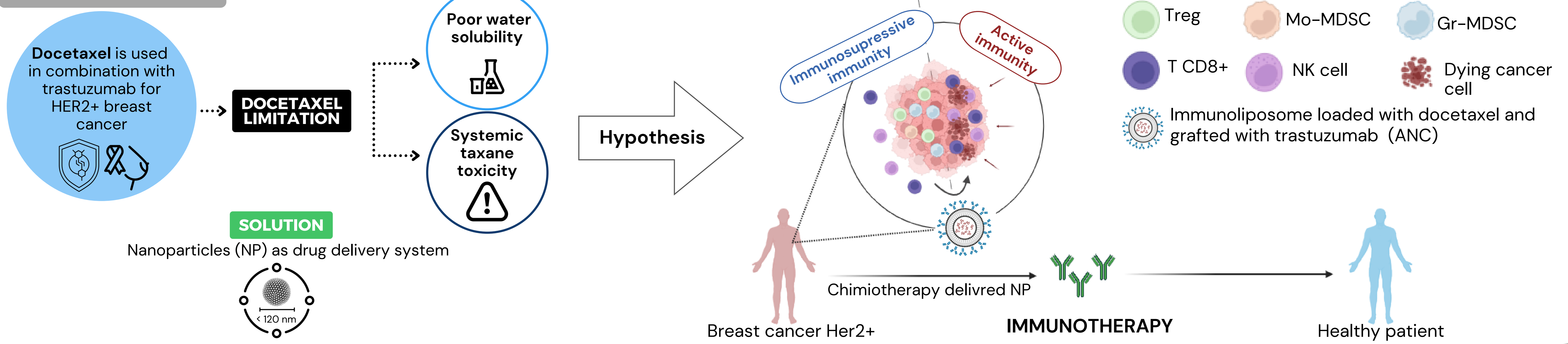
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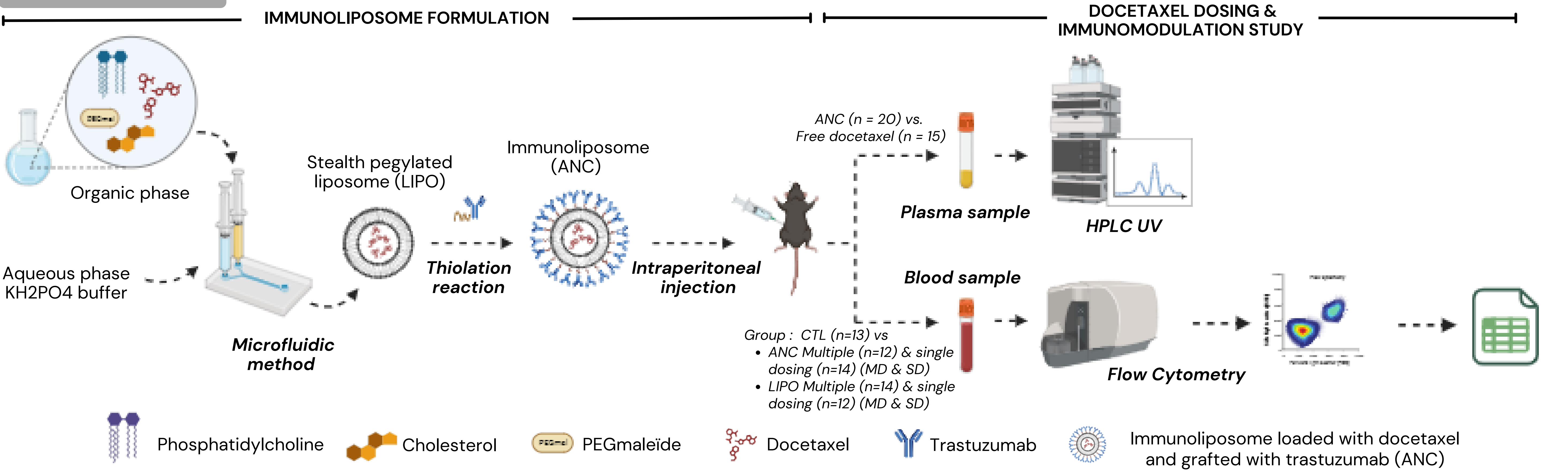
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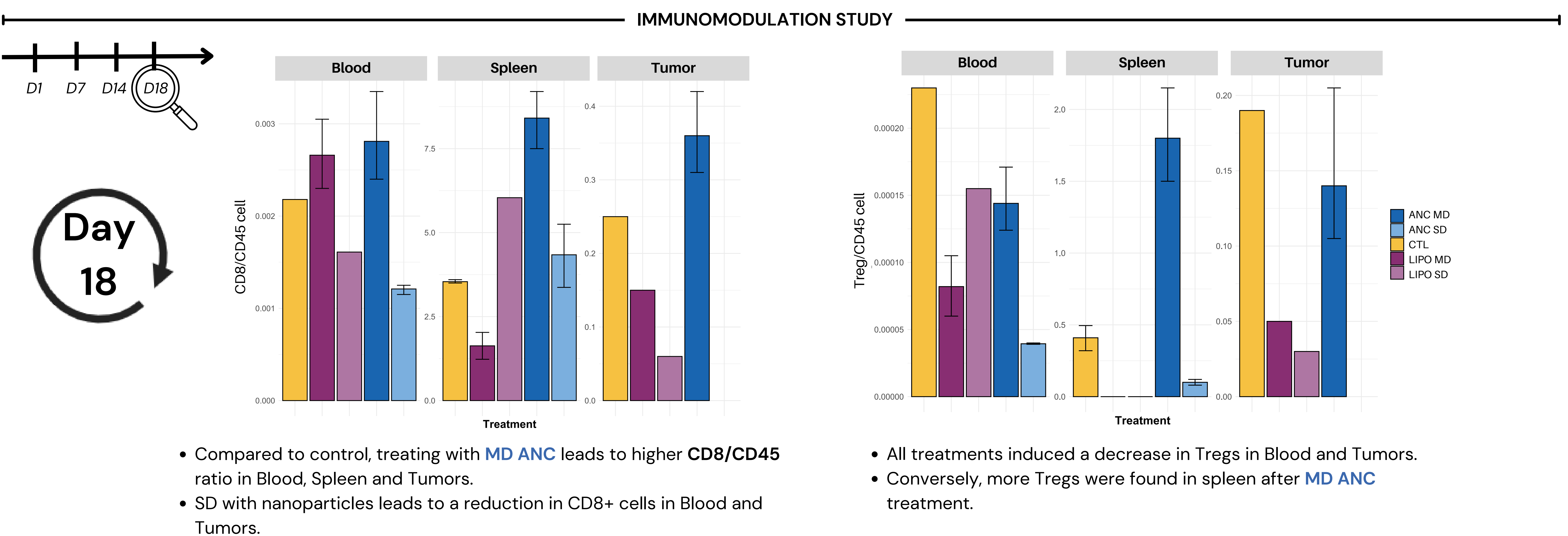
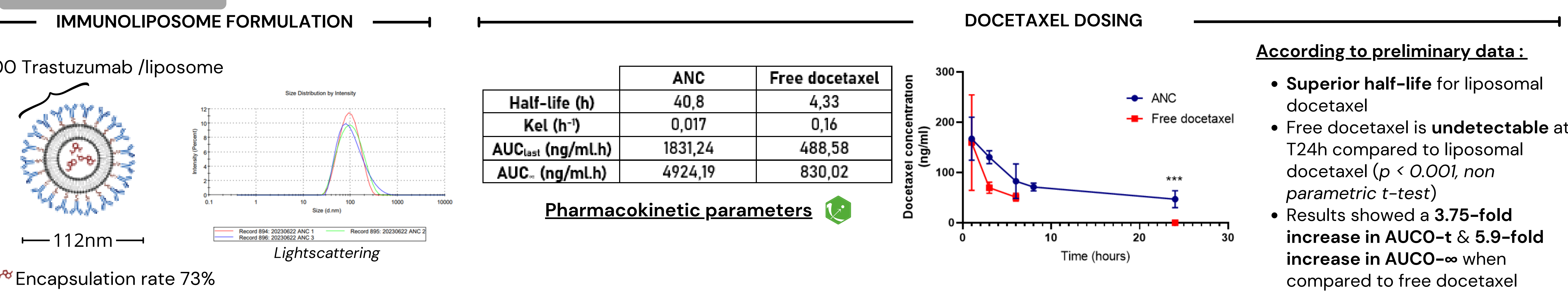
Background



Material & Method



Results



Conclusion

- Liposomal docetaxel showed higher values of AUC compared to non-liposomal docetaxel due to the liposomal encapsulation
- These preliminary results suggest the development of a promising immunoliposome for :
 - Systemic administration of docetaxel in HER2+ breast cancer with optimal pharmacokinetics.
 - Reshaping tumor immunity

Discussion

- Small size of the groups prevented statistical tests to be ran
- After two-weeks of treatment, MD ANC showed immunomodulating optimal features (i.e., higher CD8+ cells and reduction in Tregs).
- Single Dosing is not sufficient to trigger increase in CD8+ cells in tumors
- Sequencing treatments with immunotherapy (i.e., 2-week delay after nanoparticles) could be the best strategy to achieve synergism.