Abstract 849 Figure 1  ReSTORE platform molecules are bivalent and trispecific. The core function of each molecule targets MDSC (M) while activating and expanding T cells (T). By adding unique VHH domains, these molecules gain the ability to target specific tumor antigens (R) and direct specific tumor cell killing.

Abstract 849 Figure 2  Cytotoxicity assay using primary T cells demonstrates ‘core’ potency of platform molecules on the CD33-expressing KG-1 cell line. Core potency can be engineered to allow appropriate dosing for TME saturation while maintaining selectivity (2A). T cell proliferation exceeds positive control (CD3/CD28) across expected clinical dose range while maintaining selectivity and T cell viability (2B).

Abstract 849 Figure 3  Bivalent VHH affinity can be engineered to increase or decrease potency depending on the specific target while maintaining selectivity. AMV-MSLN lead demonstrates potent cytotoxic effects on MSLN-high HeLa cells (3A). The same AMV-MSLN molecule does not target MSLN-low HT-29 cells. AMV-X binds a non-MSLN surface antigen on HT-29, demonstrating the potency and specificity of ReSTORE molecules (3B).

Conclusions  The clinically validated MDSC-depleting core of the ReSTORE platform molecules allow targeting of specific antigens associated with a variety of solid and hematologic tumor indications. This antigen-specific cytotoxicity of cancer cells occurs in parallel with control of the immunosuppressive MDSC.

REFERENCES

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