Next generation trials for MRD

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1. MRD as a prognostic marker
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- MRD+
- MRD-
1. MRD as a prognostic marker

- Early/late MRD
- MRD in relation to tumor biology
- MRD in relation to given therapy
2. MRD as a regulatory surrogate endpoint
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- White paper
- Meta analysis
- Prospective trials
3. MRD-driven clinical trials
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MRD+
3. MRD-driven clinical trials

- Duration of combination therapy
- Determine use of delayed vs upfront HDM-ASCT
- Pre-biochemical relapse (MRD conversion)
Our next generation studies
Proposed MRD-driven treatment paradigm for newly dx myeloma pts

Footnote: Modern combination therapy: e.g., carfilzomib, lenalidomide, and dexamethasone (reference: (8)); maintenance therapy: e.g., lenalidomide

Landgren and Giralt. Bone Marrow Transplantation 2016
Longitudinal MRD testing

- Combination therapy
- Extended dosing/maintenance

MRD $10^{-6}$

- Ensure maintained MRD $10^{-6}$ negativity
- Dissect mechanisms of MRD positivity, develop targets
- Develop strategies when MRD $10^{-6}$ negativity $\rightarrow$ positivity

Landgren et al. *unpublished data*
Modern combination therapy → rapid, deep and sustained MRD-
Quality of life
Thank you for your attention!

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