Prognostic value of minimal residual disease detected by EuroFlow next-generation flow cytometry and nextgeneration sequencing in patients with multiple myeloma achieving complete response and receiving lenalidomide maintenance after autotransplant: a prospective comparison study

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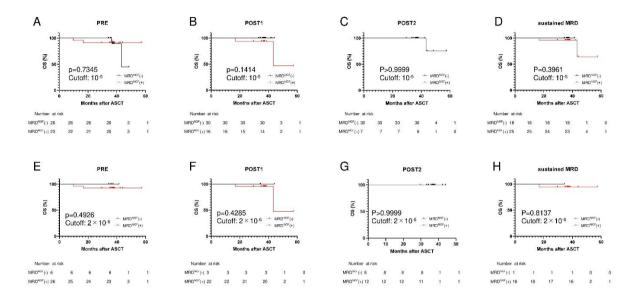
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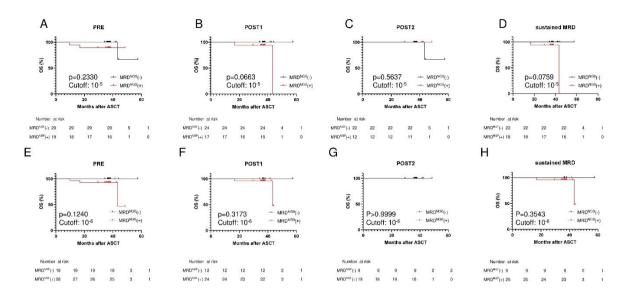
Supplemental Figure 1.

Overall Survival according to MRD negativity by NGF



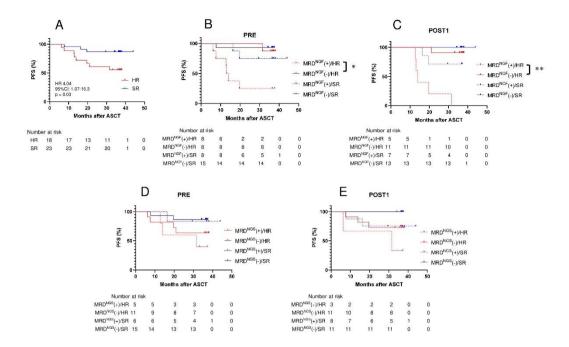
Supplemental Figure 1. Overall survival (OS) stratified by minimal residual disease (MRD) status by NGF (cutoff: 10⁻⁵ or 2 × 10⁻⁶). OS based on MRD negativity by NGF at PRE (cutoff: 10⁻⁵) (A), at POST1 (cutoff: 10⁻⁵) (B) and at POST2 (cutoff: 10⁻⁵) (C). OS based on sustained MRD negativity by NGF (cutoff: 10⁻⁵) (D). OS based on MRD negativity by NGF at PRE (cutoff: 2 × 10⁻⁶) (E), at POST1 (cutoff: 2 × 10⁻⁶) (F) and at POST2 (cutoff: 2 × 10⁻⁶) (G). (H) OS based on sustained MRD negativity by NGF (cutoff: 2 × 10⁻⁶). NGF: next-generation flow cytometry, NGS: next-generation sequencing, ASCT: autologous stem cell transplantation.

Supplemental Figure 2 Overall Survival according to MRD negativity by NGS



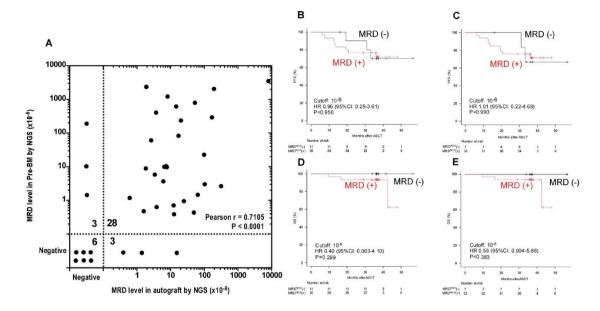
Supplemental Figure 2. Overall survival (OS) stratified by minimal residual disease (MRD) status by NGS (cutoff: 10⁻⁵ or 10⁻⁶). OS based on MRD negativity by NGS at PRE (cutoff: 10⁻⁵) (A), at POST1 (cutoff: 10⁻⁵) (B) and at POST2 (cutoff: 10⁻⁵) (C). OS based on sustained MRD negativity by NGS (cutoff: 10⁻⁵) (D). OS based on MRD negativity by NGS at PRE (cutoff: 10⁻⁶) (E), at POST1 (cutoff: 10⁻⁶) (F) and at POST2 (cutoff: 10⁻⁶) (G). OS based on sustained MRD negativity by NGS (cutoff: 10⁻⁶) (H). NGF: next-generation flow cytometry, NGS: next-generation sequencing, ASCT: autologous stem cell transplantation.

Supplemental Figure 3



Supplemental Figure 3. Progression free survival (PFS) stratified by minimal residual disease (MRD) status and cytogenetic risks. (A) PFS stratified by cytogenetic risks. (B) PFS stratified by MRD status using NGF and cytogenetic risks at PRE. (C) PFS stratified by MRD status using NGF and cytogenetic risks at POST1. (D) PFS stratified by MRD status using NGS and cytogenetic risks at PRE. (E) PFS stratified by MRD status using NGS and cytogenetic risks at PRE. (E) PFS stratified by MRD status using NGS and cytogenetic risks at POST1. SR: standard-risk, HR: high-risk, NGF: next-generation flow cytometry, NGS: next-generation sequencing, ASCT: autologous stem cell transplantation, *: p<0.05, **: p<0.01.

Supplemental Figure 4



Supplemental Figure 4. Correlations of minimal residual disease (MRD) levels between PRE-bone marrow (BM) and autograft by next-generation sequencing (NGS) and survival based on MRD levels. (A) Comparison of MRD levels between PRE-bone marrow and autograft determined by NGS. Progression-free survival (PFS) based on MRD negativity in autografts (cutoff: 10⁻⁶) (B) and sustained MRD negativity (autograft and Pre) (cutoff: 10⁻⁶) (C). Overall survival (OS) based on MRD negativity in autografts (cutoff: 10⁻⁶) (D) and sustained MRD negativity (autograft and Pre-BM) (cutoff: 10⁻⁶) (E). (-): negative, (+): positive.