

Role of urine immunofixation in defining CR in MM

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Lahuerta J-J, Jiménez-Ubieto A, Paiva B, Martínez-López J, González-Medina J, López-Anglada L, Cedena M-T, Puig N, Oriol A, Blanchard M-J, Ríos R, Martín J, Martínez R, Sureda A, Hernández MT, de la Rubia J, Krsnik I, Cabañas V, Palomera L, Bargay J, Mateos M-V, Rosiñol L, San Miguel JF, Blade J. Role of urine immunofixation in the complete response assessment of MM patients other than light-chain-only disease. *Blood*. 2019;133(25):2664-2668.

1. You are advising a hematology practice that does not have urine immunofixation electrophoresis (uIFE) availability to help determine the response status (classification of complete response [CR]) in patients with multiple myeloma (MM). According to the PETHEMA GEM2012MENOS65 randomized phase 3 clinical trial by Lahuerta et al, which of the following statements about the value of uIFE⁻ status to define CR is correct?

- In patients with MM who became serum IFE (sIFE) negative, all patients with serum monoclonal protein (M-protein) at diagnosis only and 98.6% of patients with serum and urine M-protein were also uIFE⁻
- Among 384 patients without light chain-only disease, a majority had M-protein detected in serum at diagnosis only, and 8 patients had detectable M-protein in urine only
- Of 173 patients with M-protein in serum at diagnosis only, 57 achieved sIFE⁻ response status during treatment and had <5% bone marrow (BM) plasma cells (PCs) and available uIFE, with a uIFE⁺ rate of 5%
- Among patients with M-protein detectable in both serum and urine at diagnosis who achieved sIFE⁻ response status during treatment and had <5% BM PCs and uIFE⁺ status, uIFE remained consistently positive in sequential evaluations

2. According to the PETHEMA GEM2012MENOS65 randomized phase 3 clinical trial by Lahuerta et al, which of the following statements about comparison of progression-free survival (PFS) from the postinduction, post-autologous stem cell transplantation (ASCT), and postconsolidation landmarks according to response achieved at each landmark is correct?

- Patients meeting all criteria for CR but without uIFE testing had outcomes comparable to those of patients with very good partial response (VGPR)
- Among patients achieving CR vs uncertain CR, no significant differences were found in postconsolidation minimal residual disease (MRD)-negative status (<10⁻⁶; 76% vs 75%) or 2-year PFS (85% vs 88%)
- There were statistically significant numerical differences in 2-year PFS rates among groups at the post-ASCT and postconsolidation landmarks
- MRD status is not a particularly useful marker for other outcomes

3. According to the PETHEMA GEM2012MENOS65 randomized phase 3 clinical trial by Lahuerta et al, which of the following statements about clinical implications of the value of uIFE⁻ status to define CR would be correct?

- The findings suggested that uIFE is not necessary to define CR in patients with MM with light chain-only disease
- Twenty-four-hour urine collection is needed to define CR in patients who are sIFE⁻
- Patients meeting criteria for CR but with uIFE unavailable, except those with light chain-only disease, should be classified as achieving CR rather than VGPR
- The findings supported the latest International Myeloma Working Group criteria for CR