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652.MULTIPLE MYELOMA: CLINICAL AND EPIDEMIOLOGICAL

Static and Dynamic Assessment to Identify Ultra-High Risk Multiple Myeloma:Analysis for Patients with Overall Survival No More Than Three Years

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Background: The median overall survival (OS) in multiple myeloma (MM) is rapidly approaching 10 years. However, the prognosis of ultra-high risk MM (UHR-MM) remains very poor, the median overall survival (OS) is no more than 3 years. There is no consensus to define this population till now. Several prognostic factors with significant impact on survival have been discovered over time, with cytogenetic factors as the most potent. Nevertheless, there is little study to investigate the features of these UHR-MM, especially in Asian UHR-MM patients.
Patients and Methods: To understand the characteristic of UHR-MM and help identify these patients as early as possible, we retrospectively analyzed the data of patients whose OS is <3 years from a single Chinese center with static and dynamic assessment. Baseline characteristic and response dynamic were collected.
Results: From 2013.1 to 2019.12, 1270 patients with newly diagnosed MM (NDMM) were enrolled in a single Chinese center. In which, 265 (20.79%) patients deceased in 36 months. 271 survival patients with no more than 3 years follow-up were excluded. Compared with 734 patients survived more than 36 months, median OS were 18.48±10.05 months and 92.70±3.99 months, median progression survival (PFS) were 12.14±4.00 months and 53.66±2.43 months, respectively. These patients are older (median age: 56 vs. 61 years, $p<0.0001$), with higher percentage of genetic ultra-high risk (including del(17p)≥60%; or ≥2 high-risk cytogenetic abnormalities including TP53 mutation, del(17p)/P53 deletion, t(4;14), t(14;16), t(14;20), 1q21 gain/amplification), more patients with ISS-III, R-ISS-III, R2-ISS-IV, more patients with primary refractory (including <MR after 2 cycles or <PR after 4 cycles standard first-line therapy) or early relapse (including lost best response within 6 months from the standard first-line therapy), and more patients with primary PCL history. With multivariate analysis, genetic ultra-high risk, primary refractory, early relapse and primary PCL history are independent factors for poorer PFS and OS.
Conclusion: With static and dynamic assessment, we can identify a group of UHR-MM with survival no more than 3 years as early as possible. For these patients, we need more potent therapy model to improve their survival.

Disclosures No relevant conflicts of interest to declare.

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