



The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

652.Multiple Myeloma: Clinical and Epidemiological

Health-Related Quality of Life (HRQoL) in Patients with Genetic Standard and High-Risk Disease at Trial Entry: A Cross-Sectional Analysis of RADAR (UK-MRA Myeloma XV)

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Introduction

Clinical outcomes in newly diagnosed multiple myeloma (MM) are independently influenced by genetic risk as determined by FISH and molecular profiling. However, little is known about the impact of these characteristics on HRQoL of MM patients at diagnosis, and if this is independent of other diagnostic criteria such as International Staging System (ISS) and CRAB. Similarly, there is little quantitative information on HRQoL of MM patients in contrast to other cancer patients and healthy individuals.

We examined patient-reported outcomes from participants enrolling in the RADAR study to understand the HRQoL of MM patients in different subgroups prior to treatment.

Methods

The RADAR study (Eudract: 2019-001258-25) is a national, multi-centre, risk-adapted, response-guided multi-arm, multi-stage phase II/III trial for newly diagnosed MM eligible for ASCT. RADAR treats patients with induction, consolidation and maintenance options using combinations of lenalidomide, cyclophosphamide, bortezomib, dexamethasone and isatuximab.

Genetic risk was defined using centrally reviewed standard-of-care NHS testing and participants enter the standard or high-risk pathway based on the presence of at least two of the markers: t(4;14), t(14;16), t(14;20), del(17p), gain(1q) and del(1p). CRAB diagnostic criteria at baseline were defined as hypercalcaemia (>2.6 mmol/l), renal impairment as indicated by eGFR by MDRD (30-60, >60 mL/min/1.73m²), anaemia (Hb <100 g/L) and the number of lytic lesions at trial entry (0, ≥ 1).

HRQoL was measured by EORTC QLQ-C30 and MY20 completed at trial entry. We used one-way ANOVA and two-sample unequal variance t-tests to compare subscales in standard and high-risk groups and CRAB criteria groups. We sought minimally important differences that were at least medium by accepted definitions, and adjusted p-values using the Bonferroni correction for the 19 subscales (adjusted $P = 0.05/19 = 0.0026$). We undertook similar comparisons with normative scores (NORM) for cancer patients and UK healthy controls.

Results

Baseline HR-QoL was available for 301 participants enrolled in RADAR. Median age at trial entry was 61 (range, 34-74), 165 (57.5%) were male and 249 (88.3%) ECOG PS0-1.

235 (78.1%) patients were classified as standard risk and 52 (21.9%) as high-risk. 111 (38.7%) patients were ISS1, 116 (40.4%) were ISS2 and 50 (17.4%) were ISS3. 24 (8.6%) patients had hypercalcaemia, 48 (16.7%) patients had eGFR < 60 mL/min/1.73m², 67 patients (23.8%) had anaemia and 287 (65.9%) patients had at least one bone lesion.

Comparing standard and high-risk genetics patients, there were no significant differences in any C30 or MY20 subscales (Figure A). Increasing ISS was significantly associated with worse Physical and Role Functioning, increased Fatigue and Dyspnoea. Renal impairment (eGFR < 60 mL/min/1.73m²) was not associated with differences in any C30 or MY20 subscales.

Anaemia was significantly associated with worse Global health status/QoL, Physical Functioning and Role Functioning, and Fatigue was significantly associated. The presence of bone lesions was significantly associated with worse Global health status/QoL, Physical Functioning, Role Functioning and Social Functioning, and Fatigue, Pain, Disease Symptoms, Side Effects and Body Image worries were significantly increased (Figure B).

Comparing RADAR to the C30 Cancer NORM, 7 of 15 subscales were significantly worse. Small negative differences were observed for Physical and Role Functioning, Fatigue, Insomnia and Constipation and medium negative differences were observed for Social Functioning and Pain. Similarly, in contrast to UK C30 Healthy NORM, 8 of 15 subscales were significantly different. There were small detrimental differences observed for Physical Functioning, Role Functioning, Appetite Loss, Constipation and Financial Problems, medium differences for Fatigue and Pain and large differences for Social Functioning.

Conclusion

Prior to commencing treatment, patients with genetic high-risk MM did not have significantly different HRQoL to standard risk MM whereas ISS, an established measure of disease burden, did impact HRQoL. Similarly, CRAB criteria of anaemia and bone disease significantly impact several HRQoL domains.

Compared to the general Cancer and UK healthy population HRQoL in patients entering RADAR was significantly worse in some subscales, notably Pain and Fatigue.

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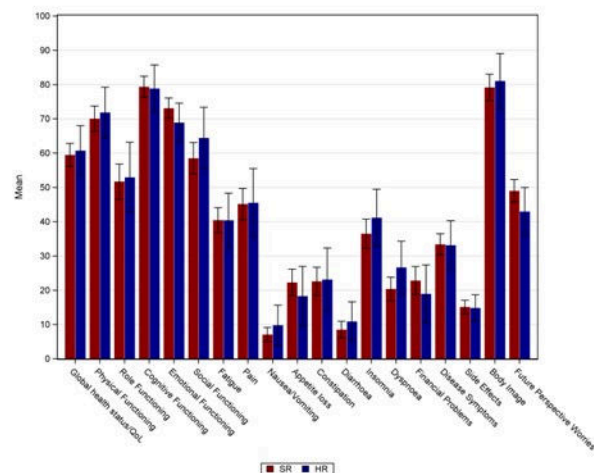
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EORTC-QLQ-C30 and MY20 subscale score means with associated 95% confidence intervals by group.

(A) Standard risk vs High-risk genetic disease

(B) Presence of bone lesions: (No = 0 lesions vs Yes = at least one lesion)

(A)



(B)

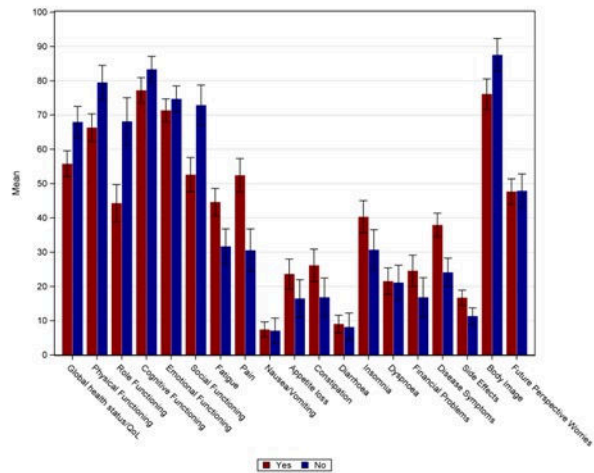


Figure 1

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