58.7 [14.3] years; male: 58.0%), most had moderate-to-good performance status based on Eastern Cooperative Oncology Group scores (Grade 1: 70.0%; Grade 2: 21.0%) and reported Stage 2 (38.9%) and Stage 3 (51.9%) disease based on the International Staging System. Anemia (60.0%) was reported as the most common MM-related comorbidity. Bortezomib (BOR) and LEN-based regimens were the most used first-line (1L) treatment options irrespective of stem-cell transplant (SCT) status (SCT induction: BOR+cyclophosphamide+dexamethasone [VCd, 33.3%], BOR [22.2%]; SCT maintenance: BOR [66.7%], LEN [11.1%], BOR+thalidomide [VT, 11.1%]; non-SCT: VCd [14.3%], BOR [9.9%], LEN [9.9%]). LEN-based regimens were commonly used in second-line (2L) pts (LEN+d [Rd, 32.3%], LEN [17.7%]), and daratumumab (DARA)- and carfilzomib (CARF)-based regimens (DARA [25.3%], DARA+BOR+d [DVd, 11.6%], CARF+d [Kd, 7.4%]) were commonly used in 3L pts. Among pts with private health insurance, 37.0% were LEN-refractory. Median (interquartile range [IQR]) duration of treatment for 1L (SCT induction), 2L and 3L were 5.0 (3.7–6.2), 11.0 (4.6–14.3) and 5.7 (3.0–10.0) m, respectively. After the initiation of 2L and 3L, 75.0% and 18.8% of pts, respectively, experienced disease progression. The majority of pts who initiated 3L (72.0%) were alive at the time of the study; among pts who had died after initiating 3L (25.0%; *n* /*N* =24/96), the median OS was 12.9 m. **Discussion:** Treatment patterns observed were consistent with previous RW studies, with significant use of BOR- and LEN-based regimens noted in 1L and 2L, whereas newer therapies (DARA- and CARF-based regimens) were utilized in 3L. The generalizability of study findings may be limited due to the small sample size. **Conclusion:** A high proportion of patients with lenalidomide refractoriness and short duration of treatment underscore the need for improved access to more effective treatments for patients with RRMM in Brazil.

https://doi.org/10.1016/j.htct.2023.09.756

LONG-TERM OUTCOMES WITH ISATUXIMAB-CARFILZOMIB-DEXAMETHASONE IN RELAPSED MULTIPLE MYELOMA PATIENTS WITH 1Q21+ STATUS: UPDATED RESULTS FROM THE PHASE 3 IKEMA STUDY

E Crusoe [a], T Facon [b], P Moreau [c], I Spicka [d], K Suzuki [e], K Yong [f], J Mikhael [g], T Fukao [h], N Armstrong [i], T Martin [j]

[a] *Hospital Universitario Professor Edgar Santos (HUPES), Salvador, Brazil; Rede D'or Oncologia, Salvador, Brazil*
[b] *Lille University Hospital, Lille, France*
[c] *University Hospital Hôtel-Dieu, Nantes, France*
[d] *1st Faculty of Medicine, Charles University and General Hospital, Prague, Czech Republic*
[e] *Japanese Red Cross Medical Center, Tokyo, Japan*
[f] *University College Hospital, London, United Kingdom*
[g] *Translational Genomics Research Institute (TGen), City of Hope Cancer Center, Phoenix, United States*
[h] *Sanofi, Global Oncology, Cambridge, United States*
[i] *Sanofi, Global Medical Affairs, Cambridge, United States*
[j] *University of California San Francisco Medical Center, San Francisco, United States*

Objectives: Gain or amplification of 1q21 (1q21+, ≥3 copies), a chromosomal abnormality frequently observed in multiple myeloma (MM), has a negative impact on prognosis due to its potential involvement in resistance to MM therapy and disease progression. In this subgroup analysis of IKEMA, we evaluated efficacy of isatuximab-carfilzomib-dexamethasone (Isa-Kd) in patients (pts) with 1q21+ status (with or without high-risk chromosomal abnormalities [HRCA]) and related subgroups – isolated 1q21+ (≥ 3 copies without HRCA), gain(1q21), amp(1q21) – at long-term follow-up (44.2 months). **Methods:** Pts with 1–3 prior lines of therapy were randomized to Isa-Kd (n = 179) or Kd (n = 123). Assessment was prespecified (at 30% cutoff by FISH) for 1q21 + status as ≥3 copies, gain(1q21) as 3 copies, and amp(1q21) as ≥4 copies. **Results:** In the Isa-Kd and Kd arms, 41.9% and 42.3% of pts had 1q21+ status, 26.3% and 25.2% isolated 1q21 +, 24.0% and 30.1% gain(1q21), 17.9% and 12.2% amp(1q21) respectively. Greater progression-free survival (PFS) benefit was achieved with Isa-Kd vs Kd in pts with 1q21+ status (hazard ratio [HR] 0.58, 95% CI 0.37–0.92) and in pts with isolated 1q21+, gain(1q21), or amp(1q21). Responses deepened by adding Isa to Kd, with increased rates of very good partial response or better (≥VGPR), complete response or better (≥CR), minimal residual disease negativity (MRD-), and MRD- ≥CR. **Discussion:** In the prespecified, long-term analysis of the Phase 3 IKEMA trial in relapsed MM pts, treatment with Isa-Kd showed continued, significant improvement in PFS compared to Kd (HR 0.58; 95.4% CI 0.42–0.79). There was a meaningful increase in the depth of response (≥CR 44.1% vs 28.5%; MRD- 33.5% vs 15.4%, MRD- ≥CR 26.3% vs 12.2%), and a manageable safety profile. The present study demonstrated that Isa-Kd led to deeper responses, with higher ≥VGPR rates, MRD-, and MRD- ≥CR rates in 1q21+ patients (with or without HRCA), isolated 1q21+, gain(1q21), or amp (1q21) compared to Kd. These long-term findings support Isa-Kd as an effective treatment option for patients with relapsed MM, including 1q21+ abnormalities and a higher risk of progression. **Conclusions:** 1q21 abnormalities may affect PFS in MM pts. Our results at long-term follow-up of pts with 1q21+ status (with or without HRCA) in the IKEMA study continue to show greater PFS benefit and deeper responses with Isa-Kd than Kd, consistent with the overall population and earlier 1q21+ subgroup interim analyses. Thus, they support Isa-Kd as an effective treatment option also for difficult-to-treat, 1q21+ pts with relapsed MM.

https://doi.org/10.1016/j.htct.2023.09.757