PCR141

Smoldering Multiple Myeloma: A Multi-Country Mixed-Methods Study on Disease Perceptions and Patient Treatment Preferences

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Key Takeaway

Participants highlighted the physical, mental, and functional burden imposed by potential progression to MM and, overall, were willing to receive SMM treatment administration and side effects if balanced by a delay in disease progression

Conclusions

- The psychological impact associated with HR SMM was the most commonly cited factor that affected quality of life, even for participants who were asymptomatic; fatigue and pain were among the most frequently reported symptoms
- Treatment awareness was low, and participants relied on clinician recommendations to monitor their health until indications of progression
- Delaying disease progression to MM as an outcome of treatment was important to participants
- The median minimum acceptable PFS benefit in exchange for treatment burden and adverse events was 60 months

Background

- Smoldering multiple myeloma (SMM) is a clonal plasma cell disorder and is an asymptomatic precursor state of multiple myeloma (MM)[1]; a subset of patients with high-risk (HR) SMM has a significantly higher risk of progressing to active MM
- With no approved therapies for SMM, treatment strategies vary and are tailored based on risk of progression to MM[1]; observation until progression is the standard of care, while enrollment in clinical trials or lenalidomide for certain patients are other recommended treatment approaches[2,3]
- Characterization of SMM patient experience and treatment preference is currently lacking in the scientific literature
- Prospective research exploring patient mental and physical burden of illness given the lack of approved treatments will help inform patient-centered unmet needs in this population
- The purpose of this study was to understand disease perceptions and treatment preferences of participants with current or previous HR SMM and to estimate the minimum progression-free survival (PFS) required to accept treatment burden

Methods

- This non-interventional, observational, mixed-methods study recruited participants diagnosed with HR SMM (HR SMM group) and participants with MM who recently progressed from HR SMM (MM group) with no history of non-MM malignancy or amyloidosis within 1 year of screening or current enrollment in a clinical trial of an SMM or MM treatment
- A targeted literature review identified 274 publications, of which 4 guided the key concepts to explore in the interview and the attributes to include in the thresholding experience
- An individual 1:1 qualitative, double-blinded, semi-structured interview explored symptoms, impacts, and experiences with and perceptions of treatment
- Recorded interview transcripts were anonymized and then coded using ATLAS.ti software with an expectation of >70% coder agreement
- Quantitative data were summarized using descriptive statistics
- At the end of the interview, a quantitative thresholding exercise presented hypothetical treatment and no-treatment alternatives to elicit the PFS threshold that participants would require to accept a treatment with 42% any-grade side-effect risk (a conservative approach based on data from the phase 2 CENTAURUS trial primary analysis showing that fatigue [41.5% frequency] was the most reported adverse event with daratumumab 16 mg/kg weekly cycle 1, every 2 weeks in cycles 2 and 3, every 4 weeks in cycles 4–6, and every 8 weeks in cycles 8–20,[4] and 3 years of varying frequency of subcutaneous injections)
  - The thresholding exercise established the minimum acceptable PFS for the treatment option from 40–100 months within a 2-month precision
  - Clinical values used in this survey were estimates based on the CENTAURUS study and should not be used to project outcomes of any ongoing phase 3 studies given differences in dosing, study design, and patient population

Results

Key sociodemographic characteristics

- The study interviewed 50 participants (HR SMM group, n=25; recently progressed from HR SMM to MM [MM group], n=25) from the US (n=14), France (n=12), Italy (n=12), and Spain (n=12) between October 2022 and June 2023
- Average age was 58 years (range, 37–79) and 56% were females

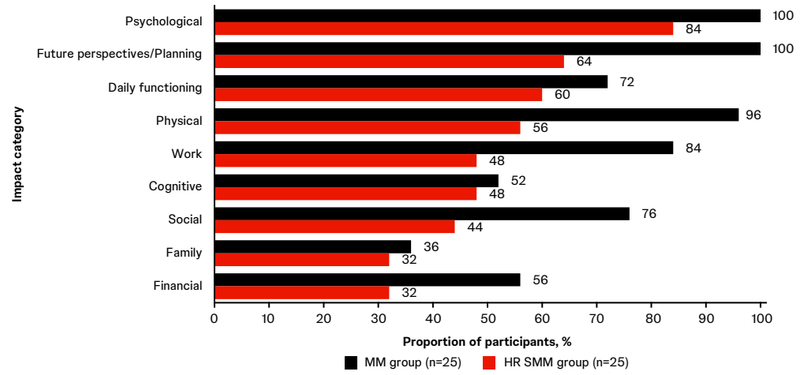
SMM experience: Impact on life

- 92% (n=46) of participants reported a psychological impact of their diagnosis, and it was scored by 42% (n=21) of participants as the most important impact on their lives
- Anxiety, worry, and fear were the most common descriptors used when describing psychological impact:

"I do experience anxiety and worry, of course. You know, when your mind gets to wander and think, of course I have fear. What could this turn into? What could happen next? You never know."

- Physical impact, impacts on work, future perspectives and planning, and social interactions had higher prevalence in participants who recently progressed from HR SMM to MM (MM group) compared with the HR SMM group (**Figure 1**)

Figure 1: Proportion of participants reporting SMM impact on life per disease group



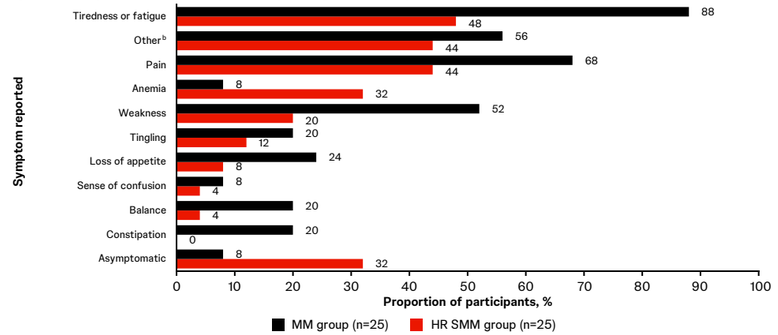
SMM experience: Signs and symptoms

- Fatigue (68%) and pain (56%) were the symptoms most frequently reported by participants; 20% of participants reported no symptoms
- Participant descriptions of their symptoms focused on severity:

"so for the moment the disease remains indolent, apart from a few symptoms, such as chronic tiredness. Because of this I've had to change my habits a bit, for example sometimes I work from home. I also have had a lot of bone and muscle pain, that made me not sleep well at night, that's why I went deeper to find out what it was about."

- Fatigue, weakness, loss of appetite, loss of balance, and constipation were more common in participants who recently progressed from HR SMM to MM (MM group) vs the HR SMM group (**Figure 2**)

Figure 2: Proportion of participants reporting SMM symptoms per disease group[a]



[a]Symptoms listed were experienced while at the SMM stage of the condition. [b]Other symptoms reported included headaches or migraines, skin reactions, weight loss, coughing and shortness of breath, sleep disturbances and insomnia, numbness in hands and fingers or neuropathy, confusion, renal insufficiency, localized weakness, bone lesions, visual impairment or strabismus, and nausea.

Treatment experience and expectations

- 12% (n=6) of all participants received treatment during their SMM phase, including 4 participants from the MM group
- Of those naive to treatment, 70% were not treated due to physician recommendation that treatment was not needed, burdensome, or not available
- Most participants relied on recommendations or discussions with their healthcare practitioner:

"They told me that it is monitoring. I had two physicians over the six years. They both told me the same thing: 'You should get proper follow-up, especially since you are a young patient. So, your health status may deteriorate very fast.'"

- Delaying disease progression from SMM to MM was most commonly ranked as the most important outcome expected from a treatment by 30% (n=14 of 46) of participants who provided a ranking
- 22% (n=11) of all participants spontaneously mentioned that they would expect to be fully "cured" if treated:

"The total remission of it. I mean, when I had the autologous transplant done…That in the following tests, they would say: 'hey, look, your condition has completely subsided'…That would be the greatest victory. Of course."

Thresholding exercise: Minimum acceptable PFS benefit

- Overall, the median minimum acceptable PFS benefit required to accept a treatment with 42% any-grade side-effect risk and 3 years of varying frequency of subcutaneous injections was 60 months (interquartile range [IQR], 42–99), and was similar for participants who recently progressed from HR SMM to MM (MM group) and HR SMM (**Table**)
- Participants who were more open to starting a treatment before progression to MM reported a lower minimum acceptable PFS than those who preferred to wait (n=23, 45 months vs n=12, >100 months)

Table: Minimum acceptable PFS benefit (months)

	Overall (N=50)	MM (n=25)	HR SMM (n=25)
Median (IQR)	60 (42–99)	59 (41–87)	61 (45–100)
Min-max	39–100	39–100	39–100

max, maximum; min, minimum.

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Disclosures
MQ and **CJ-M** were employees of Evidera at the time the research was performed. **BG-O, AA,** and **M-KL** are employees of Janssen-Cilag. **NG-W** is an employee of Janssen Scientific Affairs. **KSG, RC, RD, JH,** and **BL** are employees of Janssen Research & Development. **KM** and **SB** are employees of Janssen Global Services.

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