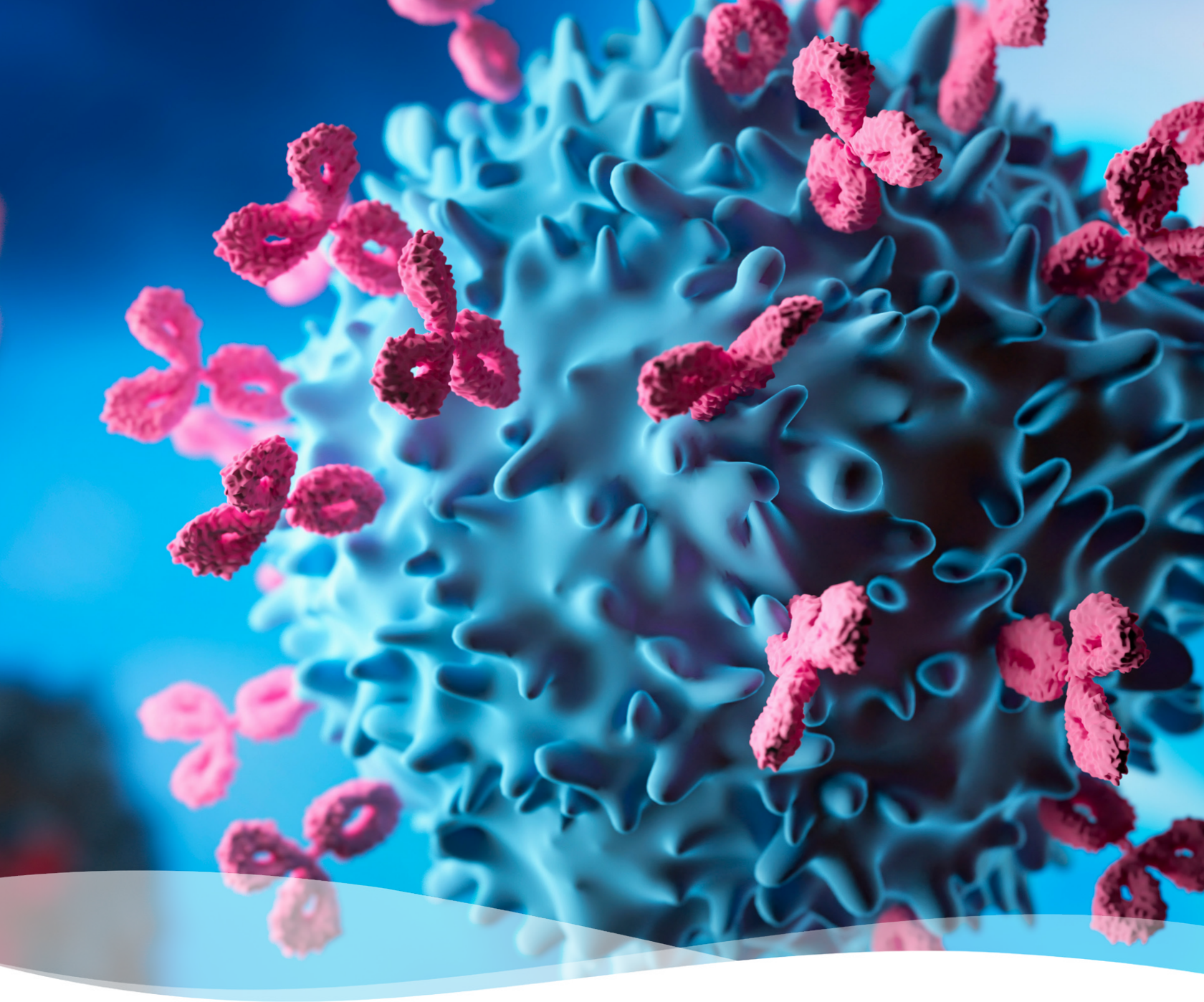


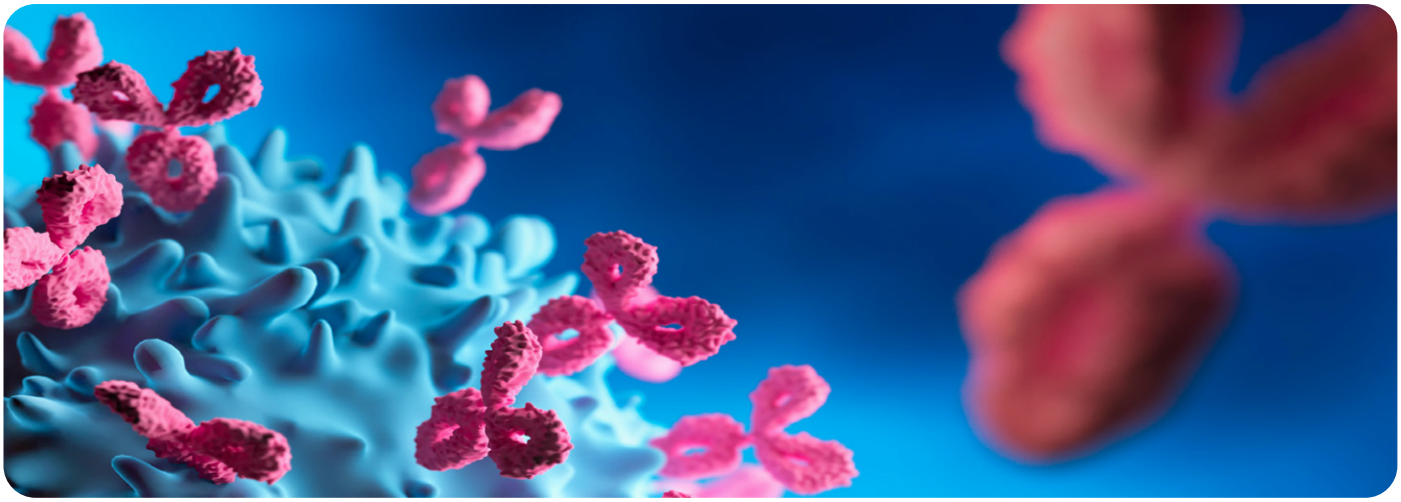
Daratumumab

Long-Term Therapy, Best Practices, and Future Directions

Discussion with the International Myeloma Foundation Nurse Leadership Board

INTERNATIONAL MYELOMA FOUNDATION

NURSE LEADERSHIP BOARD



OVERVIEW

Advances in monoclonal antibody (mAb) therapy have significantly reshaped the multiple myeloma treatment landscape over the past decade. In 2015, DARZALEX® (daratumumab) became the first CD38-directed monoclonal antibody approved by the U.S. Food and Drug Administration (FDA) for the treatment of multiple myeloma, marking a major advance in the treatment of relapsed and refractory disease.[1,2] CD38 emerged as a particularly valuable target because it is highly expressed on malignant plasma cells and can be targeted through multiple immune-mediated mechanisms, supporting potent antimyeloma activity.[3]

Daratumumab rapidly moved from later-line treatment into combination regimens across the multiple myeloma treatment continuum.[4] The subsequent development of SARCLISA® (isatuximab-irfc), another CD38-directed mAb, further expanded therapeutic options within this class.[5] In 2020, the FDA approved SARCLISA for intravenous (IV) administration in combination with standard treatment regimens for patients with multiple myeloma.[6] In 2020, the FDA also approved DARZALEX FASPRO® (daratumumab and hyaluronidase-fihj) as the first subcutaneous (SC) formulation of daratumumab, offering an alternative to IV administration with substantially shorter treatment times.[7]

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[1] Lokhorst HM, Plesner T, Laubach JP, Nahi H, Gimsing P, Hansson M, et al. Targeting CD38 with daratumumab monotherapy in multiple myeloma. N Engl J Med. 2015;373(13):1207-1219. doi:10.1056/NEJMoa1506348.

[2] Janssen Biotech, Inc. DARZALEX FASPRO (daratumumab and hyaluronidase-fihj) injection, for subcutaneous use: US prescribing information. Updated February 2026. Horsham, PA: Janssen Biotech, Inc.

[3] Lokhorst HM, Plesner T, Laubach JP, Nahi H, Gimsing P, Hansson M, et al. Targeting CD38 with daratumumab

[4] Facon T, Kumar SK, Plesner T, Orlowski RZ, Moreau P, Bahlis NJ, et al. Daratumumab, lenalidomide, and dexamethasone versus lenalidomide and dexamethasone alone in newly diagnosed multiple myeloma (MAIA): overall survival results from a randomised, open-label, phase 3 trial. Lancet Oncol. 2021;22(11):1582-1596. doi:10.1016/S1470-2045(21)00466-6.

[5] van de Donk NW, Zweegman S. Monoclonal antibodies in the treatment of multiple myeloma. Hematology/Oncology Clinics. 2024 Apr 1;38(2):337-60.

[6] FDA approves isatuximab-irfc for multiple myeloma | FDA

[7] FDA approves daratumumab and hyaluronidase-fihj for multiple myeloma | FDA

Anti-CD38 mAbs have since become foundational components of multiple myeloma therapy, with daratumumab incorporated into treatment regimens spanning newly diagnosed through relapsed and refractory disease. [8, 9, 10, 11, 12, 13]

The role of daratumumab has continued to expand as evidence has supported its incorporation into frontline and maintenance therapy, including four-drug regimens for appropriate patients.[14] In January 2026, the FDA expanded the indication for DARZALEX FASPRO in combination with bortezomib, lenalidomide, and dexamethasone (D-VRd) to include adults with newly diagnosed multiple myeloma who are ineligible for autologous stem cell transplant (ASCT). [15, 16]

Daratumumab has also moved even earlier in the disease course, with the FDA approving DARZALEX FASPRO as monotherapy for adults with high-risk smoldering multiple myeloma (SMM) in November 2025 based on results from the phase 3 AQUILA trial.[17, 18] Together, these developments highlight the breadth of CD38-directed therapy across different stages of multiple myeloma, from high-risk SMM to relapsed refractory disease.

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[8] Facon T, Kumar SK, Plesner T, Orlowski RZ, Moreau P, Bahlis NJ, et al. Daratumumab, lenalidomide, and dexamethasone versus lenalidomide and dexamethasone alone in newly diagnosed multiple myeloma (MAIA): overall survival results from a randomised, open-label, phase 3 trial. Lancet Oncol. 2021;22(11):1582-1596. doi:10.1016/S1470-2045(21)00466-6.

[9] Bahlis NJ, Dimopoulos MA, White DJ, Benboubker L, Cook G, Leiba M, et al. Daratumumab plus lenalidomide and dexamethasone in relapsed/refractory multiple myeloma: extended follow-up of POLLUX, a randomized, open-label, phase 3 study. Leukemia. 2020;34(7):1875-1884. doi:10.1038/s41375-020-0711-6.

[10] Dimopoulos MA, Oriol A, Nahi H, San-Miguel J, Bahlis NJ, Usmani SZ, et al. Overall survival with daratumumab, lenalidomide, and dexamethasone in previously treated multiple myeloma (POLLUX): a randomized, open-label, phase 3 trial. J Clin Oncol. 2023;41(8):1590-1599. doi:10.1200/JCO.22.00980.

[11] Palumbo A, Chanan-Khan A, Weisel K, Nooka AK, Masszi T, Beksac M, et al. Daratumumab, bortezomib, and dexamethasone for multiple myeloma. N Engl J Med. 2016;375(8):754-766. doi:10.1056/NEJMoa1606038.

[12] Sonneveld P, Chanan-Khan A, Weisel K, Nooka AK, Masszi T, Beksac M, et al. Overall survival with daratumumab, bortezomib, and dexamethasone in previously treated multiple myeloma (CASTOR): a randomized, open-label, phase 3 trial. J Clin Oncol. 2023;41(8):1600-1609. doi:10.1200/JCO.21.02734.

[13] Dimopoulos MA, Terpos E, Boccadoro M, Delimpasi S, Beksac M, Katodritou E, et al. Daratumumab plus pomalidomide and dexamethasone versus pomalidomide and dexamethasone alone in previously treated multiple myeloma (APOLLO): an open-label, randomised, phase 3 trial. Lancet Oncol. 2021;22(6):801-812. doi:10.1016/S1470-2045(21)00128-5.

[14] Usmani SZ, Facon T, Hungria V, Bahlis NJ, Venner CP, Braunstein M, et al. Daratumumab plus bortezomib, lenalidomide, and dexamethasone in newly diagnosed multiple myeloma: transplant-ineligible subgroup analysis of CEPHEUS. J Clin Oncol. 2026 Sep 25. doi:10.1200/JCO-26-00401.

[15] Janssen Biotech, Inc. DARZALEX FASPRO (daratumumab and hyaluronidase-fihj) injection, for subcutaneous use: US prescribing information. Updated February 2026. Horsham, PA: Janssen Biotech, Inc.

[16] U.S. Food and Drug Administration. FDA approves daratumumab and hyaluronidase-fihj with bortezomib, lenalidomide, and dexamethasone for newly diagnosed multiple myeloma. January 27, 2026. Silver Spring, MD: U.S. Food and Drug Administration.

[17] U.S. Food and Drug Administration. FDA approves daratumumab and hyaluronidase-fihj for high-risk smoldering multiple myeloma. November 6, 2025. Silver Spring, MD: U.S. Food and Drug Administration.

[18] Dimopoulos MA, Voorhees PM, Schjesvold F, Cohen YC, Hungria V, Sandhu I, et al; AQUILA Investigators. Daratumumab or active monitoring for high-risk smoldering multiple myeloma. N Engl J Med. 2025;392(18):1777-1788. doi:10.1056/NEJMoa2409029.

The evolution of SC administration has introduced additional considerations for clinical practice. Compared with IV administration, SC daratumumab substantially reduces administration time, while newer approaches to treatment delivery may further influence where and how therapy is provided.[19] In July 2026, the FDA approved SARCLISA ESCENA™ (isatuximab-irfc) for SC administration, expanding SC delivery within the anti-CD38 class and further highlighting the importance of administration technique, workflow, patient comfort, and operational implementation.[20] The drive to study home-based administration also illustrates the continued evolution of treatment delivery and efforts to consider patient convenience and treatment burden alongside clinical outcomes.[21]

As daratumumab has become an integral component of multiple myeloma therapy, optimizing its use in clinical practice has become increasingly important. To examine current best practices and consider factors that may shape the future use of daratumumab, the International Myeloma Foundation convened a nurse roundtable on July 31, 2026. Eight members of the IMF Nurse Leadership Board, including two moderators, discussed real-world perspectives on long-term treatment, including treatment duration, de-escalation, MRD-guided decision making, and patient counseling.

The conversation also addressed best practices and challenges associated with subcutaneous daratumumab administration, opportunities to promote greater consistency across community practice, and emerging trends in administration technology and the competitive landscape.

The specific objectives were to:

1. Understand how nurses are supporting long-term daratumumab therapy, including duration of treatment, treatment de-escalation, MRD-guided decision making, and patient counseling.
2. Identify best practices and remaining challenges in subcutaneous daratumumab administration, including technique, workflow, patient comfort, and operational barriers.
3. Explore opportunities to improve consistency and adoption across community practice through education, practical resources, and standardized approaches.
4. Assess emerging trends that may influence future utilization of daratumumab, including evolving administration technologies and competitive landscape.

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[19] Janssen Biotech, Inc. DARZALEX FASPRO (daratumumab and hyaluronidase-fihj) injection, for subcutaneous use: US prescribing information. Updated February 2026. Horsham, PA: Janssen Biotech, Inc.

[20] https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-isatuximab-irfc-subcutaneous-injection-multiple-myeloma-indications

[21] Rosenberg T, Kirkegaard J, Gundesen MT, Rasmussen MK, Dieperink KB, Lund T. Home-based daratumumab in patients with multiple myeloma. Eur J Haematol. 2025;115(1):72-81.

INTRODUCTION

Multiple myeloma remains a complex hematologic malignancy characterized by diverse disease biology, variable risk of progression, and differences in patient characteristics and treatment needs.[22, 23] Over the past decade, advances in therapeutic development have expanded the number of effective treatment options and contributed to deeper and more durable responses.[24] At the same time, the increasing complexity of treatment has created new considerations for clinicians and nurses as they balance disease control, treatment burden, patient preferences, treatment tolerance, and the practical delivery of therapy.[25]

The clinical development of daratumumab has demonstrated the value of combining CD38-directed therapy with proteasome inhibitors, immunomodulatory drugs, and corticosteroids across multiple treatment settings. In newly diagnosed multiple myeloma, the phase 3 PERSEUS trial demonstrated that D-VRd, followed by daratumumab-containing maintenance, significantly improved progression-free survival (PFS) and increased rates of complete response and minimal residual disease (MRD) negativity compared with VRd alone in transplant-eligible patients.[26]

The phase 3 CEPHEUS trial subsequently extended this evidence to patients who were transplant-ineligible or had deferred transplantation, demonstrating improved MRD responses and PFS with D-VRd compared with VRd.[27] A subgroup analysis of transplant-ineligible patients further supported these findings, while subsequent CEPHEUS analyses demonstrated higher rates of deep and sustained MRD negativity with daratumumab-based therapy.[28, 29]

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[22] Brigle K, Rogers B. Pathobiology and diagnosis of multiple myeloma. Semin Oncol Nurs. 2017;33(3):225-236. doi:10.1016/j.soncn.2017.05.012.

[23] Steinbach M, Richards T, Faiman B. Strategies for selecting the optimal treatment in newly diagnosed multiple myeloma patients. Semin Oncol Nurs. 2017;33(3):254-264. doi:10.1016/j.soncn.2017.05.003.

[24] Devasia AJ, Lancman GS, Stewart AK. Management of newly diagnosed multiple myeloma today, and in the future. Hematol Oncol Clin North Am. 2024;38(2):441-459. doi:10.1016/j.hoc.2023.12.007.

[25] Toland S. Developments in the treatment of multiple myeloma: overview and nursing implications. Nurs Stand. 2025;40(6):54-59. doi:10.7748/ns.2025.e12403.

[26] Sonneveld P, Dimopoulos MA, Boccadoro M, Quach H, Ho PJ, Beksac M, et al. Daratumumab, bortezomib, lenalidomide, and dexamethasone for multiple myeloma. N Engl J Med. 2024;390(4):301-313. doi:10.1056/NEJMoa2312054.

[27] Usmani SZ, Facon T, Hungria V, Bahlis NJ, Venner CP, Braunstein M, et al. Daratumumab plus bortezomib, lenalidomide and dexamethasone for transplant-ineligible or transplant-deferred newly diagnosed multiple myeloma: the randomized phase 3 CEPHEUS trial. Nat Med. 2025;31(4):1195-1202. doi:10.1038/s41591-024-03485-7.

[28] Facon T, Zweegman S, Hungria V, Bahlis NJ, Venner CP, Braunstein MJ, et al. Daratumumab plus bortezomib, lenalidomide, and dexamethasone (D-VRd) in patients with newly diagnosed multiple myeloma (NDMM): subgroup analysis of transplant-ineligible (TIE) patients in the phase 3 CEPHEUS study. J Clin Oncol. 2025;43(16 Suppl):7516. doi:10.1200/JCO.2025.43.16_suppl.7516.

[29] Zweegman S, Facon T, Hungria V, Bahlis NJ, Venner CP, Braunstein M, et al. Daratumumab in transplant-ineligible or -deferred newly diagnosed multiple myeloma: minimal residual disease in CEPHEUS. Blood Adv. 2026;10(16):5594-5606. doi:10.1182/bloodadvances.2026019937.

These findings have contributed to the growing role of quadruplet therapy in newly diagnosed multiple myeloma. A 2026 systematic review and meta-analysis of randomized controlled trials found that daratumumab-based quadruplet therapy was associated with improved PFS and higher rates of MRD negativity compared with non-daratumumab-based triplet therapy, while also identifying higher rates of selected hematologic adverse events and infections.[30] These findings underscore the importance of considering both treatment efficacy and the practical management of treatment-related complications as quadruplet therapy becomes more widely incorporated into care.

The growing body of evidence has also increased attention to tailoring treatment to individual patients, particularly those with higher-risk disease. Long-term follow-up from the phase 3 CASSIOPEIA trial demonstrated that daratumumab maintenance after transplant significantly prolonged progression-free survival compared with observation and was associated with higher rates of sustained MRD negativity in transplant-eligible patients with newly diagnosed multiple myeloma.[31, 32] Five-year follow-up from the OPTIMUM/MUKnine phase 2 study showed that an intensified daratumumab-based treatment approach, including extended consolidation and maintenance, was associated with better progression-free and overall survival in patients with high-risk multiple myeloma.[33]

Although the externally controlled phase 2 design differs from that of randomized trials, the findings contribute to the evolving evidence regarding risk-adapted treatment intensity and longer-term daratumumab-based therapy. More broadly, treatment decisions increasingly consider disease risk, transplant eligibility, depth of response, MRD status, treatment tolerance, and patient preferences.[34, 35]

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[30] Osama M, Khan MH, Tahir A, Hussain A, Iftikhar A, Ali A, et al. Efficacy and safety of daratumumab-based quadruplet therapy vs non-daratumumab-based triplet therapy in newly diagnosed multiple myeloma patients: a GRADE assessed systematic review and meta-analysis of randomized controlled trials. Ther Adv Hematol. 2026;17:20406207261489040. doi:10.1177/20406207261489040.

[31] Moreau P, Hulin C, Perrot A, Arnulf B, Belhadj K, Benboubker L, et al. Bortezomib, thalidomide, and dexamethasone with or without daratumumab and followed by daratumumab maintenance or observation in transplant-eligible newly diagnosed multiple myeloma: long-term follow-up of the CASSIOPEIA randomised controlled phase 3 trial. Lancet Oncol. 2024;25(8):1003-1014. doi:10.1016/S1470-2045(24)00282-

[32] Corre J, Sonneveld P, Zweegman S, et al. 5-Year sustained minimal residual disease (MRD) negativity and survival with daratumumab maintenance in transplant-eligible newly diagnosed multiple myeloma: CASSIOPEIA Registry. Presented at: 23rd International Myeloma Society Annual Meeting; September 23-26, 2026; Glasgow, UK. Abstract OA-01.

[33] Kaiser MF, Phillip RH, Brown SR, Holroyd A, Ferris E, de Tute RM, et al. Induction and extended consolidation with daratumumab, cyclophosphamide, bortezomib, lenalidomide, and dexamethasone in patients with high-risk multiple myeloma (OPTIMUM/MUKnine): 5-year follow-up of a multicentre, externally controlled, phase 2 trial. Lancet Oncol. 2026. doi:10.1016/S1470-2045(26)00286-X.

[34] Hicks LK, Messersmith HJ, Al Hadidi S, Banerjee R, Derman BA, Kumar S, et al. Treatment of multiple myeloma: ASCO-Ontario Health (Cancer Care Ontario) Living Guideline. J Clin Oncol. 2026;44(10):914-941. doi:10.1200/JCO-25-02587.

[35] Kaiser MF, Phillip RH, Brown SR, Holroyd A, Ferris E, de Tute RM, et al. Induction and extended consolidation with daratumumab, cyclophosphamide, bortezomib, lenalidomide, and dexamethasone in patients with high-risk multiple myeloma (OPTIMUM/MUKnine): 5-year follow-up of a multicentre, externally controlled, phase 2 trial. Lancet Oncol. 2026. doi:10.1016/S1470-2045(26)00286-X.

As daratumumab has become established across an increasingly broad range of treatment settings, attention has expanded from establishing efficacy to optimizing its use in clinical practice. Key considerations include patient selection, regimen design and sequencing, duration of therapy, MRD assessment, management of adverse events and infections, administration approaches, and strategies to balance treatment intensity with patient preferences and treatment burden.[36] Patient reports have also provided insight into factors associated with outcomes and adverse events among patients receiving daratumumab-based therapy.[37]

The therapeutic landscape continues to evolve through the investigation of daratumumab in combination with newer treatment modalities. The phase 3 MajesTEC-3 trial, for example, evaluated teclistamab plus daratumumab in patients with relapsed or refractory multiple myeloma, illustrating continued investigation of daratumumab in combination with T-cell redirecting therapy.[38] These developments reinforce the need for ongoing education and practical approaches that allow nurses to translate an expanding evidence base into day-to-day patient care.

LONG-TERM TREATMENT DECISIONS

The nurse participants reported that, in their clinical experience, daratumumab is generally continued for an extended period, consistent with treatment approaches used in many clinical studies. They described continuing daratumumab as long as patients respond to and tolerate treatment, while noting that treatment decisions may become more individualized over time. Sustained response, MRD status, treatment burden, tolerability, and patient preferences may all influence whether treatment is continued at the same intensity, given for longer intervals, or discontinued.

In their experience, the nurses said that treatment with daratumumab generally continues until disease progression, however they reported growing interest in treatment de-escalation for some patients. Studies such as MAIA and CEPHEUS used treatment until disease progression or unacceptable toxicity, whereas the PERSEUS approach incorporated an MRD-informed strategy for discontinuing daratumumab in selected patients with sustained deep responses.[39, 40, 41] This distinction has increased interest in whether sustained MRD negativity could eventually provide a more consistent basis for modifying treatment duration, particularly as MRD assessment becomes more integrated into myeloma care.

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[36] Chen W, Cai Z, Chim JS, Chng WJ, Du J, Fu C, et al. Consensus guidelines and recommendations for the CD38 monoclonal antibody-based quadruplet therapy and management in clinical practice for newly diagnosed multiple myeloma: from the Pan-Pacific Multiple Myeloma Working Group. Clin Hematol Int. 2025;7(2):1-19. doi:10.46989/001c.133682.

[37] Abuhelwa AY, et al. Predictive and prognostic significance of patient-reported outcomes for survival and adverse events in daratumumab-treated multiple myeloma. Eur J Haematol. 2025;114(6):1020-1031.

[38] Costa LJ, Bahlis NJ, Perrot A, Nooka AK, Lu J, Pawlyn C, et al. Teclistamab plus daratumumab in relapsed or refractory multiple myeloma. N Engl J Med. 2026;394(8):739-752. doi:10.1056/NEJMoa2514663.

[39] Facon T, Kumar S, Plesner T, Orlowski RZ, Moreau P, Bahlis N, et al. Daratumumab plus lenalidomide and dexamethasone for untreated myeloma. N Engl J Med. 2019;380(22):2104-2115. doi:10.1056/NEJMoa1817249.

[40] Usmani SZ, Facon T, Hungria V, Bahlis NJ, Venner CP, Braunstein M, et al. Daratumumab plus bortezomib, lenalidomide and dexamethasone for transplant-ineligible or transplant-deferred newly diagnosed multiple myeloma: the randomized phase 3 CEPHEUS trial. Nat Med. 2025;31(4):1195-1202. doi:10.1038/s41591-024-03485-7.

[41] Moreau P, Sonneveld P, Einsele H, Quach H, Bahlis NJ, Richardson PG, et al. Subcutaneous daratumumab plus bortezomib/lenalidomide/dexamethasone with daratumumab plus lenalidomide maintenance in transplant-eligible patients with newly diagnosed multiple myeloma: analysis of sustained minimal residual disease negativity in the phase 3 PERSEUS trial. J Clin Oncol. 2025;43(16 Suppl):7501. doi:10.1200/JCO.2025.43.16_suppl.7501.

Participants emphasized, however, that MRD status is only one factor in these decisions. Some patients may not undergo bone marrow-based MRD testing because of procedural discomfort, difficulty obtaining an adequate sample, or a preference to avoid additional testing. Access may also be a barrier, as patients who live far from a center or practice equipped to collect and submit samples for MRD testing may choose not to travel for a bone marrow aspiration and biopsy (BMA/BMBx). In these situations, clinicians may rely more heavily on conventional measures of response, including sustained serologic response, when considering whether treatment intensity or frequency can be modified. Participants also described greater caution about de-escalating treatment in patients with higher-risk disease, even when they have achieved a deep response.

Patient preference and treatment burden were also important considerations. Some patients become comfortable with an established treatment routine and may be reluctant to discontinue therapy despite a sustained response. For others, travel, side effects, age, or other personal circumstances may create an opportunity to extend treatment intervals while maintaining therapy. As one participant noted, *"Patients get very comfortable with what they're doing, and sometimes it's hard to stop something when they're doing well."* These factors require nurses and clinicians to balance the reassurance of continued disease control with the practical and emotional burden of long-term treatment.

The feasibility of MRD-guided treatment strategies also depends on practical considerations beyond the availability of the technology. including identifying an appropriate baseline clone in patients with long-standing disease, obtaining adequate bone marrow specimens, coordinating pathology and laboratory requirements, placing appropriate orders, integrating testing into electronic health records, and dedicating staff time to the process. Participants also noted that a bone marrow specimen may ultimately be inadequate for establishing MRD status, creating additional burden for patients who have already undergone the procedure. Cost was not identified as the primary barrier.

Education was identified as an important opportunity as MRD becomes more closely linked to treatment decisions. Participants emphasized the need for nurses, physicians, and patients to understand how MRD testing is performed, how results should be interpreted, and when findings may warrant a change in treatment. As one participant summarized, *"Education is needed for nurses, physicians, and patients: how to do the test, how to interpret the test, and when you should act on the test."*

The nurse experts noted that, as MRD becomes increasingly relevant to treatment duration, improving access to testing and establishing practical workflows may be as important as generating additional evidence. They viewed sustained MRD status as having the potential to play a greater role in determining the intensity and duration of daratumumab therapy, while recognizing that implementation will need to account for differences in resources, practice settings, and patient preferences.

MONITORING LONG-TERM USE

As daratumumab therapy extends over months and years, ongoing monitoring becomes an important component of maintaining treatment while identifying changes that may warrant a different approach. The roundtable discussion emphasized the value of consistent laboratory monitoring, including complete blood counts, comprehensive metabolic panels, serum free light chains, and M-spike, with the recognition that the pattern of measurable disease can change over time. Monitoring immunoglobulin levels was also identified as an important consideration, particularly for patients receiving prolonged anti-CD38 therapy.

Laboratory monitoring may not always provide a complete picture of disease status. The nurses noted that some patients can develop non-secretory myeloma, a rare form of myeloma in which malignant plasma cells do not release detectable antibodies into the blood or urine. In these circumstances, bone marrow evaluation and imaging become particularly important for assessing disease. New or persistent symptoms, including pain or other changes reported by the patient, may also prompt additional evaluation.

The intensity of surveillance may also be influenced by disease risk and the patient's clinical course. Patients with stable, standard-risk disease may require less intensive monitoring over time, whereas those with higher-risk disease may continue to receive closer follow-up. This individualized approach recognizes that long-term management involves assessing not only laboratory results but also changes in symptoms, disease characteristics, and overall clinical status.

INFECTION PREVENTION

Prolonged daratumumab treatment also requires attention to immune function and infection risk. The nurses highlighted the importance of monitoring quantitative immunoglobulins, noting that some patients may have substantially reduced IgG levels while remaining clinically well and without recurrent infections. This suggests that laboratory findings should be interpreted in the context of the individual patient's infection history and clinical condition rather than viewed in isolation.

Infection prevention remains an ongoing component of patient education. The roundtable addressed practical strategies such as hand hygiene, vaccination, and consideration of exposure risks, while recognizing that recommendations may vary according to the patient's circumstances and the policies of individual treatment centers. The experience of the COVID-19 and RSV eras has also prompted continued attention to questions around masking and other precautions, particularly for patients receiving cellular therapy or otherwise considered at greater risk for infection.

IVIG may be considered for patients with low immunoglobulin levels, particularly when clinically significant or recurrent infections are present. Rather than relying on an IgG threshold alone, clinical considerations may include whether the patient has recurrent or serious infections and whether replacement therapy is likely to provide meaningful benefit. This distinction is particularly relevant in long-term daratumumab therapy, where low immunoglobulin levels may persist without necessarily resulting in clinically significant infections.

INDIVIDUALIZING THERAPY

Long-term treatment strategies may need to evolve as patients age or develop treatment-related concerns. Nurse experts described how clinicians may remove other agents from a regimen when toxicity or treatment burden becomes more significant, particularly in older patients, while continuing daratumumab when it remains well tolerated and disease control is maintained. This approach allows treatment to be adjusted without necessarily discontinuing an agent that remains an important component of disease management.

Disease risk can also influence decisions about maintenance intensity. For patients with higher-risk disease, participants described a tendency to continue treatment as long as it is well tolerated, even when patients achieve a deep response. Although MRD negativity may be considered when deciding whether to reduce or discontinue treatment in selected patients, participants expressed greater caution about de-escalating therapy in those with higher-risk disease.

Maintenance strategies following frontline therapy and transplant likewise vary across practices. Nurse experts described differences in the use of daratumumab-containing maintenance and other approaches, with treatment decisions influenced by physician judgment, clinical trial evidence, disease risk, and individual patient characteristics. The nurses highlighted the importance of interpreting emerging evidence within the context of the patient and the treatment setting rather than applying a single maintenance strategy to all patients.

QUALITY OF LIFE

The practical burden of long-term therapy may be less apparent when treatment has become routine, making proactive assessment of quality of life particularly important. Nurse experts emphasized the importance of asking patients directly about how they feel following daratumumab administration, whether injection-site reactions are bothersome, and whether treatment affects their ability to participate in everyday activities. These conversations can help distinguish minor effects that patients readily accept from symptoms that meaningfully affect daily functioning.

Patients may also become accustomed to treatment-related symptoms and therefore may not initially identify them as concerns. Asking about specific aspects of daily life, including fatigue and the ability to maintain normal activities, can help uncover changes that may otherwise go unrecognized. In this setting, quality-of-life assessment is not limited to a formal questionnaire but can be incorporated into routine interactions throughout long-term treatment.

Care partners can provide an additional perspective on changes in a patient's health and functioning. The nurses noted that a care partner may identify a side effect or other change that the patient has not mentioned during the clinical encounter. Their observations can therefore complement the patient's own report and help nurses identify gradual changes that may warrant further assessment.

LONG-TERM CARE REMAINS CHALLENGING

Long-term myeloma treatment can create practical burdens for patients, particularly those who must travel to treatment centers and manage transportation, parking, and the time required for repeated visits. Parking assistance, rideshare services, and satellite infusion centers can help reduce these burdens, although access to such resources varies by setting.

Satellite centers may be particularly helpful when supported by standardized orders and experienced infusion nurses who are familiar with the treatment and patient population. Satellite care can also make ongoing treatment more manageable without requiring patients to repeatedly travel to a primary treatment center. Familiarity with patients, standardized orders, and communication between satellite infusion nurses and the treating team were described as important components of this approach.

"The infusion nurses are our eyes and ears."

Long-term treatment was not generally described as prompting difficult conversations with patients, although participants identified several issues that warrant ongoing monitoring. In addition to infection prevention, participants considered other potential risks of long-term therapy, including secondary malignancies and diarrhea. These concerns may factor into decisions about continuing treatment over time. Despite these considerations, participants did not perceive a clear unmet need for additional educational resources focused specifically on conversations about long-term treatment.

ADMINISTRATION PRACTICES

Administration techniques for subcutaneous daratumumab vary across institutions, with use of different needle approaches and devices. Some centers use a winged infusion set, while others administer the medication with a needle alone; the choice appears to be influenced in part by institutional practice, perceived ease of administration, and cost. Participants also described differences in needle gauge, noting that larger-gauge needles may reduce resistance and make administration easier for nurses, although the specific technique varies by site.

The availability and cost of administration supplies can also influence practice. Participants noted that infusion sets were previously bundled with the medication but are no longer routinely included, leading some community practices and institutions to use the medication with a standard needle rather than separately obtaining an infusion set. This has contributed to changes in administration practices over time and may account for some of the variation observed across sites.

Administration remains centered on the abdomen, consistent with the labeled approach, although patient preference can lead clinicians to consider alternative sites. Participants reported that some patients request administration in the arm or another location because they already receive frequent injections in the abdomen, including for diabetes. Local injection-site reactions were also recognized as a potential source of discomfort, with participants describing use of topical treatments and nursing interventions to manage symptoms.

Air-Lock Technique

Nurses also identified the air-lock, or "air sandwich," technique as a practical nursing best practice.[42] Described as a technique that has become less routinely discussed or used, it was viewed by the nurse participants as a useful approach that can support administration and patient comfort when administering Darzalex Faspro by manual push. The technique involves placing a small air bubble behind the medication in the syringe and injecting it after the medication to help seal the needle track and reduce medication leakage.[43] Nurses noted that this approach may help minimize discomfort and local reactions associated with subcutaneous administration when using a manual push technique.

Pharmacy Workflow Matters

Preparation and dispensing workflows can vary across community and institutional settings, particularly where pharmacists are not consistently onsite. In some community practices, pharmacists may rotate among locations, creating differences in how medication preparation and dispensing are organized. The nurses pointed to scheduling and order-management processes as potential sources of operational burden.

For newer administration workflows, nurses may assume a greater role in preparing the medication under established safety and verification processes. One described approach involves pharmacy dispensing the vial, followed by nursing verification and a two-person check before administration. This type of workflow may help support a more streamlined patient experience while maintaining required safeguards.

Alternative Delivery Evolves

Alternative delivery technologies, including on-body injectors (OBIs), were viewed as an emerging consideration for subcutaneous administration. The nurses recognized that patients may already be familiar with other self-administered or wearable delivery technologies, which could influence their comfort with newer approaches.

At the same time, implementation would require attention to institutional workflow, nursing education, space, and the practical steps involved in integrating a new delivery method into existing processes. The transition to a new delivery technology was not viewed as straightforward. Nurse educators and infusion nurses may need to work together to establish new procedures and ensure that staff understand the workflow, while pharmacy and nursing responsibilities may need to be reconsidered depending on the technology.

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[42] Eisenberg S. Subcutaneous administration: evolution, challenges, and the role of hyaluronidase. Clin J Oncol Nurs. 2021;25(6):663-671. doi:10.1188/21.CJON.663-671.

[43] Martin JR, Beegle NL, Zhu Y, Hanisch EM. Subcutaneous administration of bortezomib: a pilot survey of oncology nurses. J Adv Pract Oncol. 2015;6(4):308-318. doi:10.6004/jadpro.2015.6.4.2.

Recent regulatory developments illustrate how administration models are evolving. In March 2026, the European Medicines Agency's Committee for Medicinal Products for Human Use approved a Type II variation to the DARZALEX® subcutaneous formulation labeling, allowing patients with multiple myeloma or their caregivers to administer treatment beginning with the fifth dose when deemed appropriate by their healthcare professional and following appropriate training.[44]

The nurses also noted the potential for OBI technology to further expand treatment beyond the clinic. In June 2026, the European Commission approved subcutaneous Sarclisa administered through the CirCLIQ® OBI, including for administration in either the home or outpatient setting.[45] These developments illustrate the potential for greater flexibility in how and where some subcutaneous myeloma therapies are administered.

However, in U.S. practice, the nurses did not view home administration as immediately feasible, although some expressed that it would be highly desirable. Any adoption of these approaches in U.S. practice would first require appropriate U.S. regulatory approval. The nurses identified insurance reimbursement and the availability of appropriately trained oncology nurses to administer treatment in the home as important barriers. Thus, while patient or care-partner administration and home-based OBI delivery may offer greater flexibility in the future, reimbursement, training, workforce, and other implementation considerations will need to be addressed before these approaches can be broadly implemented in the United States.

Practice Change Takes Time

Existing experience with subcutaneous daratumumab may make changes to administration practice difficult to implement, particularly when clinicians have established workflows and years of familiarity with the current approach. The nurses suggested that introducing alternative methods requires more than demonstrating potential benefits. Changes to established workflows, institutional processes, staff familiarity, and the existing experience with subcutaneous daratumumab can all influence willingness to adopt a new approach.

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[44] Johnson & Johnson. Johnson & Johnson's DARZALEX® (daratumumab) becomes the first oncology injectable approved for administration by patients or caregivers [Internet]. Beerse (Belgium): Johnson & Johnson; 2026 Mar 27 [cited 2026 Sep 28]. Available from: Johnson & Johnson press release

[45] Sanofi. Sanofi's Sarclisa subcutaneous approved in the EU as the first anticancer treatment administered via an on-body injector [Internet]. Paris: Sanofi; 2026 Jun 8 [cited 2026 Sep 28]. Available from: Sanofi press release

COMMUNITY PRACTICE

Treatment duration and scheduling appear to be areas of variability in community practice. Although the general treatment schedule was described as relatively consistent, the nurses noted that some patients continue every-other-week daratumumab longer than recommended, sometimes without a clear understanding of why the more frequent schedule is being maintained. In some cases, a slower response or other clinical concerns may lead clinicians to continue more frequent dosing, while in others, the treatment plan established earlier in the patient's course may simply continue without being modified.

The nurses suggested that differences may arise not only from clinical judgment but also from how treatment schedules are incorporated into institutional systems. Treatment plans may be built forward in the electronic medical record (EMR) for extended periods, requiring clinicians to actively modify or discontinue orders when the intended duration or frequency changes.

Because community providers often administer treatment according to the plan they receive, an out-dated schedule may continue unless the change is clearly communicated and reflected in the treatment plan. This can create a disconnect between the treatment approach intended by the treating team and how it is operationalized in practice.

Premedication

Premedication practices may be particularly variable when patients transition to community care. The nurses described variances in when premedications are discontinued, with some practices stopping them after the first one or two doses while others continue them for weeks, months, or substantially longer. Some nurses reported encountering patients who had continued premedications for more than a year, suggesting that practices may vary considerably between treatment settings.

The nurses suggested that community providers may be reluctant to discontinue premedications such as dexamethasone or diphenhydramine because of concerns about patient safety and their ability to manage potential reactions in settings with fewer immediate resources. However, the expert nurses emphasized that infusion reactions are extremely uncommon after the first two cycles. The nurses also highlighted the burden of unnecessary premedication, particularly the risk of drowsiness from diphenhydramine when patients need to drive home after treatment.

Limited familiarity with DARZALEX FASPRO may also contribute to variation in administration practices, particularly among community nurses who infrequently care for patients with myeloma. Participants described asking community providers when premedications are discontinued and sometimes being told that they are not discontinued, suggesting an opportunity for additional nursing education and clearer communication around established administration practices.

Transitions Need Clarity

Variation in community practice underscores the importance of communication when treatment is transferred between care settings. The nurses noted that community providers often receive a treatment plan, but simply transferring orders may not provide sufficient context when treatment schedules or premedications change. Clear documentation of the intended treatment schedule, administration approach, and rationale for modifying or discontinuing premedications may help reduce uncertainty during transitions.

Participants also described involving patients directly in communication about changes to premedication. Patients may be told that a medication such as dexamethasone is no longer needed at the next treatment visit, providing another opportunity to reinforce changes that should also be reflected in the treatment plan and clinical documentation. The nurses recommended direct communication when questions or discrepancies arise between treatment plans and how therapy is being administered in the community.

Site-of-Care and Reimbursement Challenges

Site of care and reimbursement were also identified as operational considerations in community practice. The nurses described situations in which insurers direct patients to a particular treatment setting, sometimes requiring patients to receive care in a community setting rather than at a nearby hospital or institution.

These requirements may be particularly challenging when daratumumab is given subcutaneously in combination with another therapy that requires IV administration, as the different administration routes may require different sites of care and may be subject to different coverage requirements. Similar challenges may arise with supportive treatments such as IVIG.

Insurance-related processes can also affect access to ongoing daratumumab therapy. Prior authorization is a routine part of the process, but coverage decisions may vary by payer and treatment context. The nurses described situations in which ongoing daratumumab after transplant was considered maintenance by some payers and therefore not covered, creating additional challenges for patients receiving long-term therapy.

The nurses noted that navigating reimbursement, coverage requirements, and appropriate treatment locations may require substantial experience with payer requirements and institutional processes. These requirements can add complexity and burden to long-term treatment, particularly when payer policies differ from the treatment approach considered appropriate by the clinical team.

EDUCATIONAL NEEDS

Myeloma-specific education for community nurses emerged as an important consideration, particularly because community nurses may have fewer opportunities to care for patients with myeloma regularly. The nurses suggested that concise, practical resources, including simple tip sheets and quick-reference materials on treatment administration, could help support nurses who need to incorporate myeloma education into a busy workday.

Video-based education was also raised as a potentially useful format, reflecting the reality that nurses often learn while working and may need education that can be accessed when and where it is needed. Regional educational resources, online materials, and support from knowledgeable nurse educators were also identified as valuable sources of information.

The need for education extends beyond daratumumab itself because patients often receive daratumumab as part of a combination regimen. Differences in the administration and scheduling of other therapies can make treatment more complex, reinforcing the need for education that addresses the full treatment regimen rather than daratumumab in isolation. As treatment options continue to evolve, community nurses may also encounter patients receiving other therapies, including bispecific antibodies, creating a need for education on the distinct requirements of these treatments and for nurses who may have limited exposure to myeloma.

Patient Education

Patient education was also considered important, particularly for helping patients understand what to expect from treatment over time. Participants agreed that treatment calendars outlining the expected schedule during the first six months could be particularly helpful in showing patients what their treatment routine will look like. Calendars can include the frequency of visits, laboratory monitoring, treatment administration, provider appointments, and premedications, giving patients a practical reference that can also support communication when care transitions between practices. International Myeloma Foundation resources and support groups were also identified as potential sources of ongoing patient education and support.

The nurses emphasized the value of education that is practical, concise, and readily applicable to day-to-day care. Accessible resources for both nurses and patients may help reinforce understanding of treatment schedules, administration practices, and the different requirements of combination regimens while supporting greater consistency as patients receive care across different settings.

EVOLVING PRACTICE

The participants anticipate that the treatment landscape will continue evolving as newer regimens, administration methods, and treatment approaches become incorporated into practice. Patient preferences, cost, and existing institutional workflows may all shape how these approaches are incorporated into care. Extensive experience with established therapies, including familiarity with their administration, may remain an important practical consideration as treatment approaches evolve.

KEY TAKEAWAYS

Asked for their key takeaways, the nurse experts highlighted the importance of clear guidance around treatment duration and adherence. Variations in how long patients remain on therapy can create uncertainty for both patients and clinicians, particularly when treatment is discontinued earlier than expected. The participants emphasized the importance of considering the financial, physical, and psychosocial factors that may surround these decisions while ensuring that patients understand the rationale for continuing therapy when it remains appropriate.

Patient-centered conversations were viewed as an important component of decisions about treatment duration. Nurses noted that patients may raise questions or concerns about ongoing therapy and emphasized the value of ensuring that patients understand what to expect and why treatment is being continued. Infusion nurses were seen as particularly important in this process because patients often trust them to address treatment-related questions and concerns and may look to them for practical guidance during therapy.

Concise, accessible education was identified as an opportunity to support nurses, particularly in practice settings where myeloma treatments may be administered less frequently. Short, focused resources addressing treatment duration and adherence, including videos and other materials that can be incorporated into the workday, could help nurses respond to patient questions and reinforce key information without requiring extensive time away from patient care. The nurses also identified an opportunity for greater collaboration with advanced practice providers and other members of the care team who write treatment orders, facilitate therapy, and manage treatment-related side effects.

As daratumumab therapy continues to evolve, the nurse experts emphasized that effective long-term treatment requires more than selecting an appropriate regimen. Treatment duration, monitoring, administration, infection prevention, quality of life, site of care, and practical treatment burden all require ongoing assessment and coordination.

Emerging approaches, including MRD-informed treatment strategies and new administration methods, may further change how therapy is delivered, while differences in practice settings, resources, workflows, and patient circumstances will continue to influence implementation. Clear communication across the care team, practical education for nurses and patients, and individualized treatment decisions were viewed as important to supporting consistent, patient-centered care as the treatment landscape continues to evolve.

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The attendees of the IMF NLB Roundtable on July 31, 2026, were as follows:

Co-Chair: Beth Faiman, PhD, MSN, APN-BC, AOCN®, TCTCN®, FAAN, FAPO
Cleveland Clinic Taussig Cancer Institute

Co-Chair: Carrie Bellerive, BS, RN, TCTCN®
Memorial Sloan Kettering Cancer Center

Kevin Brigle, PhD, NP
Massey Comprehensive Cancer Center

Donna Catamero, ANP-BC, OCN®, CCRC
The Mount Sinai Health System

Patricia Mangan, RN, MSN, APRN-BC
University of Pennsylvania

Tiffany Richards, PhD, ANP-BC, AOCNP®
MD Anderson

Samantha Shenoy, RN, MSN, NP
University of California San Francisco Health

Mary Steinbach, DNP, APRN
Huntsman Cancer Institute



International Myeloma Foundation
4400 Coldwater Canyon Avenue Suite 300, Studio City, CA 91604
818.487.7455 | myeloma.org