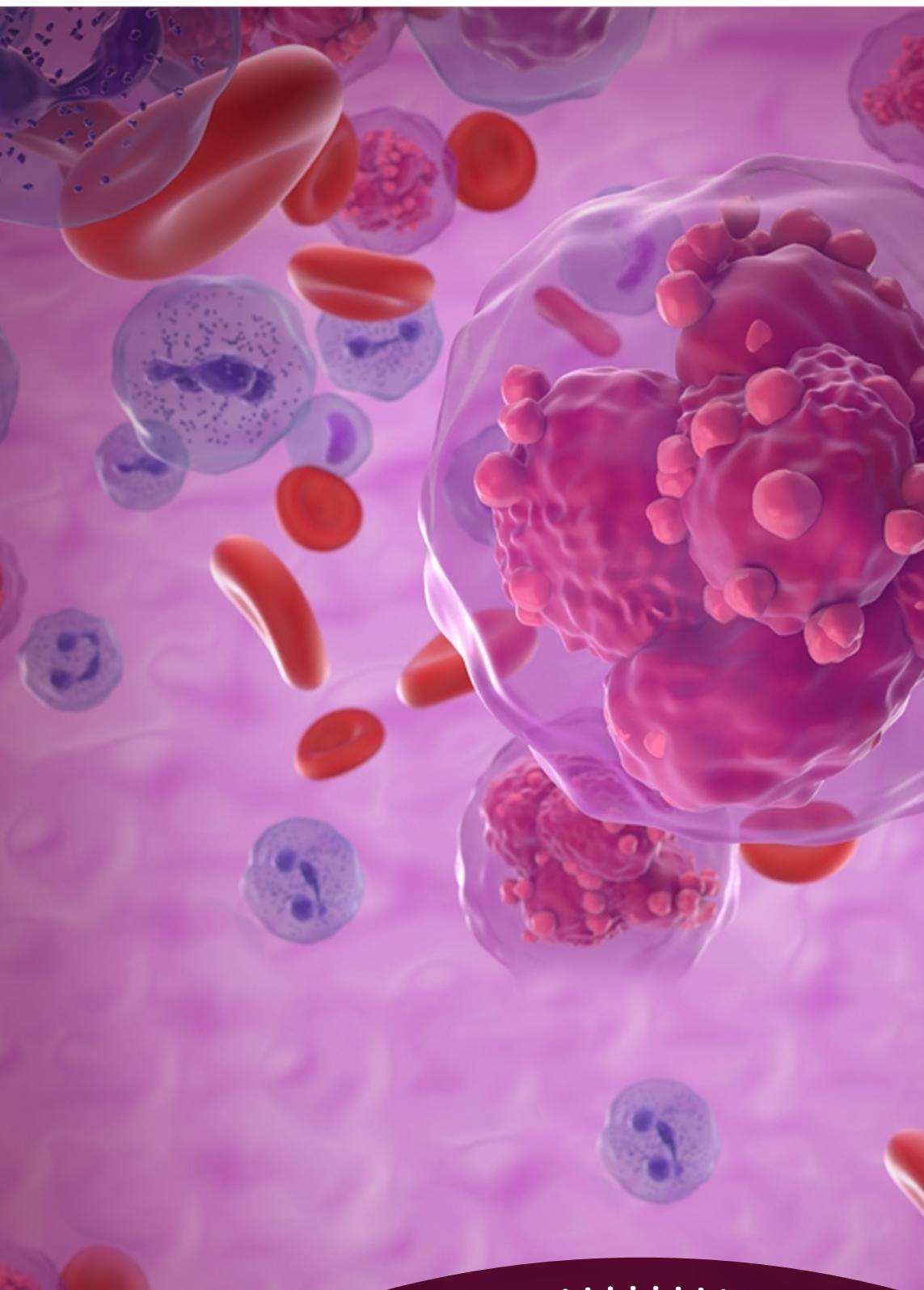


NEWSLETTER

Issue No-07 | Year-2025

An Indian Myeloma Academic Groupe Publication (IMAGe)



IMC 2026

**JOURNAL
CLUB**

**JOURNAL
SCAN**

QUIZ

**INDIAN
PUBLICATIONS**

**PATIENT
AWARENESS
PROGRAM**

**ACTIVITIES
& EVENTS**

**AWARDS &
ACCOLADES**

**RECENT
PARTNERSHIPS**



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*This newsletter was born out of sincere efforts of the **IMAGE Groupe** to serve a quarterly academic feast to all myeloma connoisseurs and novitiates with a platter of translational research work update, neuron tickling trivia, cherishable accomplishments of our members and highlights of past and upcoming academic events in the realm of myeloma. A blitzkrieg of brainstorming zoom sessions followed by pounding and grinding of intellect and prose by five geeks over weeks led to fruition of the first edition on new year eve and a greater hard work to bring forth this snippet on myeloma activities across country as second edition.*

- From Editorial Team

This bulletin will be a ready reckoner for those grappling to keep up with the progress on myeloma. As it summarizes journal clubs that paved the way for the holy grail of truth based on evidence, the eagle eye gives the synopsis of the critical thinking prowess shown by the myeloma prodigies. The rest of the sections gives us a glance at what is happening around us. The team has done a spectacular job in putting this together. Of course, not to mention the turbocharger, Dr. Uday.

- Newsletter Committee

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Message from President

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**Lt. Gen. (Dr.) Velu Nair (Retd.),
PVSM, AVSM, VSM****

President

Indian Myeloma Academic Groupe (IMAGe)

Dear Members of the IMAGe Family,

It is with immense pride & humility that I take on the role of President of the Indian Myeloma Academic Groupe (IMAGe). I am deeply honored to be entrusted with this responsibility and look forward to working closely with each of you to further our collective mission—advancing myeloma care and outcomes across India.

Over the years, IMAGe has grown into a vibrant, purpose-driven community of clinicians, researchers, and caregivers. Together, we have laid a strong foundation-building academic collaborations, supporting next-generation training, conducting impactful registries and trials, and advocating for improved standards of care. But our work is far from over.

As we navigate this next phase, strengthening our membership and partnerships will be critical to sustaining momentum and scaling impact. Our vision is clear:

- To broaden access to cutting-edge therapies and clinical trials.
- To amplify India's voice in global myeloma consensus and guideline development.
- To nurture young specialists and equip them to lead with science and compassion.
- To that end, I urge each of you to become an ambassador for IMAGe—encouraging your colleagues, students & allied professionals to join us. A growing and engaged membership will allow us to:
 - Deepen our scientific collaborations
 - Accelerate clinical research participation
 - Strengthen our advocacy for equitable patient care

As part of this effort, our secretarial office will share a membership update in the quarterly newsletters, highlighting the progress driven by our Executive Committee. I am confident that with your continued support and leadership, we will expand the IMAGe family and elevate our mission to new heights.

Let us move forward with shared purpose—to bring hope, access & innovation to every myeloma patient in India.

Warm regards,

Lt. Gen. (Dr.) Velu Nair (Retd.)

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See You @ IMC 2026



Indian Myeloma
Academic Groupe
(IMAGe)



INDIAN MYELOMA CONGRESS 2026

08th
ANNUAL
CONFERENCE OF IMAGe

9th - 11th JAN 2026



Venue:
Amrita Institute of Medical Sciences, Kochi



Dr. Gopinathan

MD., DM
Consultant
Hematology & BMT
MGM Health Care
Chennai



Sustained bone marrow & imaging MRD negativity for 3 years drives discontinuation of lenalidomide maintenance post ASCT in myeloma.

Terpos E, Malandrakis P, Ntanasis-Stathopoulos I, Kostopoulos IV, Eleutherakakis-Papaikovou E, Kanellias N, et al. Sustained bone marrow and imaging MRD negativity for 3 years drives discontinuation of maintenance post ASCT in myeloma. *Blood*. 2025 Feb 26;blood.2024027686.

Summary:

Multiple myeloma is considered incurable where therapy is targeted towards getting a operational cure as defined by deeper control of disease. Serum electrophoresis, bone marrow-minimal residual disease (BM-MRD) by flow cytometry and imaging negativity should be aligned together to define remission. However, achievement and persistence of the above remains variable for each individual underscoring the disease heterogeneity. This prospective study helps to gauge the safety of discontinuing lenalidomide maintenance after a standard triplet induction followed by autologous stem cell transplant with persistent bone marrow MRD and imaging negativity for 3 years. At a median follow up of 3 years post lenalidomide discontinuation 12(23%) patients developed BM-MRD positivity. The median time to resurgence was 27.5 months, and half the MRD positives belonged to high risk cytogenetics. After lenalidomide reinitiation for MRD positivity, 8 of 12 continued to be in remission whereas only 1 had clinical progression with the rest 3 biochemical progression. The 3 year treatment free survival(TFS) and progression free survival(PFS) was 75.8%, 92.9% respectively. The 3 year PFS rate for MRD resurgence was 80%. The minimal adverse effects experienced during lenalidomide maintenance were aborted after discontinuation. Thus selecting the ideal subset of patients would be a add on to improved quality of life.

Critical Appraisal

Though the median follow up from the study initiation was 7.26 years, the follow up time after reinitiation of lenalidomide maintenance from MRD positivity was only 11.5 months. The sensitivity of MRD flow was 0.0002%, and all patients with BM-MRD positivity preceded the imaging progression. Late MRD converters fared better than the early MRD converters though the statistical significance wasn't achieved in the study. The logistics of performing bone marrows every 6 monthly, ensuring uniform quality control in sampling and processing, and PET imaging with added cost has to be individualized across centers. The low representation of high risk cytogenetics mandates the clinician to exercise caution in extrapolating it to real life practice.





**Dr. Stalin
Chowdary Bala**

Dexamethasone dose intensity does not impact outcomes in newly diagnosed multiple myeloma: a secondary SWOG analysis

Summary:

The impact of dexamethasone dose intensity on outcomes in newly diagnosed multiple myeloma (NDMM) was assessed in this secondary analysis of two pivotal SWOG trials (S0777 and S1211). 541 patients who finished induction therapy with Lenalidomide and dexamethasone, either with or without elotuzumab and Bortezomib, were included in the study. Patients were divided into arms that received either low-dose dexamethasone (LDDEX) or full-dose dexamethasone (FD-DEX). Strict trial protocols discouraged dexamethasone dose reductions, but surprisingly, 69% of patients needed them, frequently because of toxicity. The key finding was that dexamethasone dose reduction did not negatively affect progression-free survival (PFS) or overall survival (OS). Multivariate analyses confirmed that FD-DEX was not an independent predictor of better outcomes. The survival rate was lower for older patients and those with thrombocytopenia, but VRd therapy outperformed Rd. There were non-significant trends towards worse outcomes in a small subgroup (LD-DEXmajor) with $\geq 50\%$ dose reduction, which most likely reflected frailty rather than dose intensity alone. These findings support more individualised, toxicity-driven approaches and imply that aggressive dexamethasone dosing may not be necessary in contemporary regimens. In order to increase patient tolerance without sacrificing efficacy, the study recommends prospective trials looking into steroid-sparing regimens.

Critical Evaluation

Whether continuing full-dose dexamethasone affects survival in NDMM is a clinically significant question that this analysis attempts to answer. Strong multivariate analyses, two well-conducted trials, and a sizable sample size are among its advantages. Crucially, it contradicts established procedures by demonstrating that dose reductions, which are frequently required due to toxicity, have no negative effects on PFS or OS. However, several limitations exist. The retrospective design inherently introduces bias, and detailed reasons for dose reductions were missing in most cases, limiting interpretation. Patients requiring major reductions were older and potentially frailer, which may confound outcome differences. Additionally, exclusion of transplant-eligible patients limits generalizability. The study does not evaluate depth of response or quality of life-key endpoints in a toxicity focused analysis. Nonetheless, the results are practice-informing, especially as newer agents lessen reliance on corticosteroids. It provides strong rationale for future prospective studies to formally assess minimal or short-course steroid regimens in NDMM.



Dr. John Abraham

Article – Badros A, Foster L, Anderson LD Jr, et al. Daratumumab with lenalidomide as maintenance after transplant in newly diagnosed multiple myeloma: the AURIGA study. *Blood*. 2025;145(3):300-310. doi: 10.1182/blood.2024025746

Summary:

The AURIGA trial (MMY3021) is a phase 3, randomized, open label study evaluating daratumumab plus lenalidomide (DR) versus lenalidomide alone (R) as maintenance therapy in patients with newly diagnosed multiple myeloma (NDMM) who remained minimal residual disease (MRD) positive after autologous stem cell transplant (ASCT). A total of 200 patients with at least very good partial response (VGPR) post ASCT and MRD positivity (10^{-5} sensitivity by NGS) were randomized 1:1 to receive either D-R or R maintenance for up to 36 cycles.

The trial met its primary endpoint: MRD-negative conversion at 12 months occurred in 50.5% of patients in the DR arm versus 18.8% in the R arm ($P<0.0001$). D-R also led to significantly improved sustained MRD negativity and progression free survival (HR 0.53). Safety was manageable, with a modest increase in neutropenia and infections in the D-R arm.

AURIGA is the first trial to isolate the added value of daratumumab in maintenance, specifically in MRD+ patients post ASCT. It supports a shift toward MRD adapted post transplant maintenance, adding depth and durability of response beyond lenalidomide alone.

Critical Appraisal

The AURIGA trial is a phase 3 study that meaningfully advances the field of Myeloma by isolating the benefit of daratumumab in the maintenance setting, specifically in MRD-positive patients post-ASCT. By re-randomizing patients after transplant, the trial overcomes a major limitation of earlier studies like GRIFFIN and PERSEUS. The results demonstrate significant improvements in MRD negative conversion, sustained MRD negativity, and progression free survival, thereby validating an MRD-adapted, risk stratified approach to post transplant care. Safety was consistent with known profiles.

However, the trial's open-label design and immature OS data limit long term conclusions. From a low and middle income country (LMIC) perspective, broader adoption faces challenges due to drug cost, the need for frequent hospital visits for daratumumab SC, and the high burden of infections in resource constrained settings. Despite these issues, AURIGA sets a new standard for personalizing maintenance therapy in multiple myeloma and may guide selective intensification strategies especially post ASCT.

 BEST
COMMENTARY
WINNER

Dr. Karan Sood



Soluble B-cell maturation antigen levels for disease monitoring in oligosecretory and nonsecretory relapsed multiple myeloma

The current repertoire of biomarkers for assessing response in multiple myeloma (MM) is limited. Non-secretory MM (SPEP/SIFE-negative) accounts for ~1–5% of newly diagnosed cases, while oligosecretory MM (M-protein <1 g/dL or low free light chains) becomes more prevalent at relapse, affecting up to 20% of patients. Contributing factors include treatment-induced clonal evolution, selective pressure from targeted therapies, and bone-only or extramedullary relapse. Soluble BCMA (sBCMA), shed from malignant plasma cells via -secretase cleavage, reflects disease burden. While its prognostic value in secretory MM is established, its diagnostic utility remains underexplored. In their landmark study, Ikeda et al. correlated sBCMA levels with bone marrow plasma cells ($r = 0.65$), total diffusion volume on DW-MRI ($r = 0.55$), and circulating tumor cells, confirming sBCMA as a robust biomarker even in O-S/Non-S relapse. sBCMA ≥ 500 ng/mL independently predicted inferior PFS. Notably, rising sBCMA levels preceded clinical relapse by up to six months. sBCMA's integration into IMWG response criteria warrants serious discussion. This biomarker may redefine the paradigm of 'measurable disease' in myeloma.

**Eagle Eye
Competition**

June 2025

**BEST
COMMENTARY
WINNER**



Dr. Himani Gupta

Senior Resident,
Department of
Hematology & BMT,
RGCIRC New Delhi.

Lund T, Gundesen MT, Jull Vangstead et al -In multiple myeloma, monthly treatment with zolendronic acid beyond two years offers sustained protection against progressive bone disease.

The extended use of zolendronic acid as a targeted intervention to improve bony health was assessed systematically in Nordic myeloma study group's MAGNOLIA study. As a phase 04 prospective randomised open label stratified study design enrolling 193 participants divided into 02 groups to receive standard 02-year zolendronic acid vs a prolonged 04-year timeframe for assessment of time to progressive bone disease (PBD) evaluated by IMWG criteria with a WBLDCT study performed biannually. At a median follow up of 21.6 months post randomisation a statistically significant difference was noted, supporting the use of prolonged use of zolendronic acid especially in the high risk bony disease burden subset with a NNT of 7.5 and a hazard ratio of 0.4. The authors did not observe a PFS/OS benefit in either of the groups. Grade 02 Jaw osteonecrosis was observed in 02 subjects, Grade 03 renal dysfunction necessitated drug discontinuation in 03 subjects. A rising patient-reported pain scores preceded the objective PBD on WBLDCT scans. A finding spiking further interest was noted to be PBD progression despite an IMWG VGPR Or greater response in study individuals, which further merits study in the factors responsible for the same. The patient centred pain scores with an objective WBLDCT assessment and long follow up coupled with potential low cost intervention further lend credence to the study and possibly make it for value for incorporating into LMIC practice, further paving the way-for integration with bone turnover marker guided therapy for disease burden specific subgroups for treatment individualisation.

MYELOMA QUIZ : April 2025 - June 2025

Q1.

Imaging-plus-MRD negative as per IMWG criteria is: "MRD negativity as defined by NGF or NGS along with....."

- A) Disappearance of every area of increased tracer uptake found at baseline or a preceding PET/CT
- B) Decrease to less than mediastinal blood pool SUV
- C) Decrease to less than that of surrounding normal tissue
- D) All of the above

Q2.

Which of the following is incorrect regarding the "MRD negativity" as per the IMWG criteria?

- A) Should meet the criteria for
- B) Absence of aberrant clonal plasma cells by next-generation flow cytometry
- C) Minimum sensitivity of 1 in 10^5 nucleated cells or higher (irrespective of NGF/ NGS)
- D) Can be done on peripheral blood or bone marrow

Q3.

In the article discussed today, the TFR at 36 months post lenalidomide maintenance discontinuation was:

- A) 75%
- B) 50%
- C) 60%
- D) 90%

Q4.

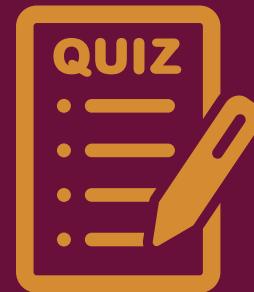
Sustained MRD negativity is defined as two MRD assessments with a minimal gap of:

- A) 3 months
- B) 6 months
- C) 9 months
- D) 1 year

Q5.

What is the best imaging technique to monitor MRD in patients while on maintenance?

- A) fMRI
- B) PET-CT
- C) PET-MRI
- D) WB-LDCT



MYELOMA QUIZ

April 2025

WINNER



Dr. Abinash Hota
Nizam's Institute of
Hyderabad



Celine Raphael
UG Student
Conducted Quiz



MYELOMA QUIZ : April 2025 - June 2025

Q6.

Assays for sBCMA can be performed using techniques like:

- A) ELISA
- B) Electrochemiluminescence
- C) Fluorescence
- D) Mass spectrometry

Q7.

BCMA stands for:

- A) B cell maturation antigen
- B) Bone marrow cell marker antigen
- C) B cell myeloma antigen
- D) Bone cell membrane antigen

Q8.

Anti BCMA therapies are all except:

- A) Idecabtagene vicleucel (ABECMA)
- B) ciltacabtagene autoleucel (CARVYKTI)
- C) Talquetamab
- D) Teclistamab

Q9.

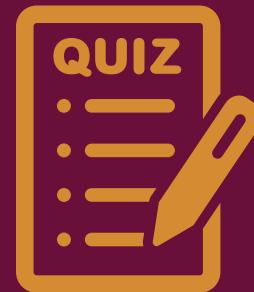
sBCMA can be used in clinical practice for

- A) Monitoring disease activity: sBCMA levels can indicate the extent of disease and track how well a patient is responding to treatment.
- B) Predicting relapse: Changes in sBCMA levels can signal potential disease recurrence, allowing for earlier intervention.
- C) Assessing treatment efficacy: sBCMA levels can be used to evaluate the effectiveness of anti-BCMA therapies, such as CAR T-cell therapy and bispecific antibodies.
- D) Predictive marker: sBCMA levels can be used to predict which patients are likely to respond to anti-BCMA therapies and to identify those who may be more likely to develop resistance.
- E) All the above

Q10.

Baseline BCMA values more than _____ is associated with significantly inferior prognosis

- A) >250ng/mL
- B) >500 ng/mL
- C) >1000 ng/mL
- D) >1500ng/mL



MYELOMA QUIZ

April 2025

WINNER



Dr. Abinash Hota
Nizam's Institute of
Hyderabad



Celine Raphael
UG Student
Conducted Quiz



MYELOMA QUIZ : April 2025 - June 2025

Which of the following is the metabolic side effect of dexamethasone in patients with newly diagnosed multiple myeloma (NDMM)?

- A) Hyperkalemia
- B) Hypoglycemia
- C) Hyperglycemia
- D) Bradycardia

What was the criteria for allowing dexamethasone dose reduction or discontinuation in the trials?

- A) Patient preference
- B) Grade 1 toxicities
- C) Grade 2 toxicities
- D) Grade 3 or higher toxicities

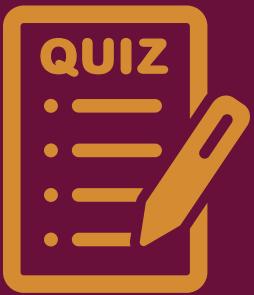
The benefits of dexamethasone in Myeloma are primarily due to

- A) Increased apoptosis of MM cells
- B) Decreased proliferation of MM cells
- C) Anti miR-125b synergism
- D) All of the above

The collateral benefits of Dexamethasone are

- A) Chemotherapy induced Nausea
- B) Decrease Bortezomib induced Neuropathy
- C) Decreases Vasogenic Edema
- D) All of the above

Oral Dexamethasone is not available in the Indian market in the following dosage



MYELOMA QUIZ

May 2025

WINNER



Dr. Abinash Hota

Nizam's Institute of Hyderabad



Celine Raphael

UG Student
Conducted Quiz



MYELOMA QUIZ : April 2025 - June 2025

Q16.

In a 75y old male with MM on chemoregimen of Lenalidomide with Bortezomib with dexamethasone 20mg weekly the abbreviation ideally used should be

A) RVd

B) RVD

Q17.

In a 55y old male with MM on chemoregimen of Lenalidomide with Bortezomib with dexamethasone 40mg weekly the abbreviation ideally used should be

A) RVd

B) RVD

Q18.

An individual was on High Dose Intermittent Dexamethasone 40mg D1-4, 9-12, 17-20. After 3 cycles of therapy the physician decided to change the regimen to RVd. Does the patient require a tapering of chemotherapy?

A) Yes

B) No

Q19.

What conclusion did the authors draw about the full-dose dexamethasone (FD-DEX) compared to the lowered-dose (LD-DEX)?

A) FD-DEX significantly improved PFS and OS

B) LD-DEX resulted in worse outcomes

C) No significant difference in PFS and OS between FD-DEX and LD-DEX

D) FD-DEX improved tolerability but not efficacy

Q20.

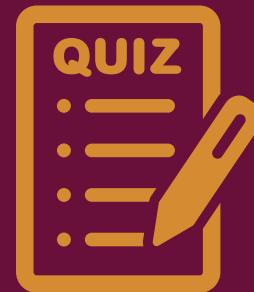
After how many days of continuous high/ intermediate Dexamethasone therapy should we taper the steroids rather than abrupt stopping

A) 2 weeks

B) 3 weeks

C) 4 weeks

D) 6 weeks



QUIZ



MYELOMA QUIZ

May 2025

WINNER



Dr. Abinash Hota
Nizam's Institute of
Hyderabad



Celine Raphael
UG Student
Conducted Quiz



MYELOMA QUIZ : April 2025 - June 2025

Q21.

Which of the following is not an FDA- approved regimen for using Daratumumab?

- A) In combination with VRD in NDMM patients ineligible for ASCT
- B) In combination with VMP in NDMM patients ineligible for ASCT
- C) In combination with Kd in RRMM patients who have received one to three lines of prior therapy
- D) In combination with Pd in patients who have received at least two lines of prior therapy

Q22.

Which of the following is an FDA- approved monotherapy for Daratumumab?

- A) Monotherapy maintenance post-transplant in high-risk cytogenetic MM
- B) Smoldering multiple myeloma for delaying progression to active disease
- C) Patients who are double-refractory to a proteasome inhibitor and an immunomodulatory agent
- D) Isolated extramedullary relapse after CAR T-cell therapy

Q23.

How does Daratumumab induced 'trogocytosis' cause resistance to the drug?

- A) By increasing CD38 expression on residual tumor cells
- B) By reducing target antigen density on myeloma cells
- C) By enhancing complement-mediated lysis
- D) By upregulating PD-1 on T cells

Q24.

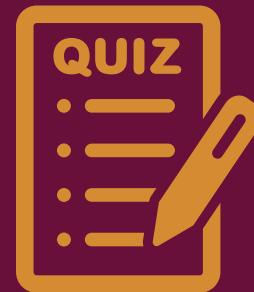
A patient relapses on daratumumab + lenalidomide after 18 months. Flow cytometry shows CD38-negative myeloma cells. Which regimen is LEAST likely to work?

- A) Carfilzomib + dexamethasone
- B) Isatuximab + pomalidomide
- C) BCMA-directed CAR-T therapy
- D) Selinexor + dexamethasone

Q25.

A patient with eGFR 20 mL/min starts daratumumab. Which adjustment is needed?

- A) Reduce daratumumab dose by 50%
- B) Avoid subcutaneous formulation
- C) Reduce daratumumab by 25%
- D) No dose adjustment required



MYELOMA QUIZ

June 2025



Dr. Sumeet Mirgh

Associate Professor,
Adult Hematolymphoid & BMT, Tata Memorial Centre, ACTREC, Mumbai



Roopika Pele
UG Student
Conducted Quiz



MYELOMA QUIZ : April 2025 - June 2025

Q26.

A patient on daratumumab develops recurrent CMV viremia. Which immune parameter would you assess?

- A) CD4+ T-cell count
- B) CD56+ NK cell function

- C) CD19+ B-cell levels
- D) Serum complement levels

Q27.

A 65-year-old patient develops rigors, bronchospasm, and hypotension during the first daratumumab infusion. Premedication include acetaminophen, diphenhydramine, and methylprednisolone. What is the NEXT BEST step?

- A) Discontinue daratumumab permanently
- B) Administer IV epinephrine and halt the infusion

- C) Slow the infusion rate and give additional IV corticosteroids
- D) Switch to subcutaneous daratumumab immediately

Q28.

A 58-year-old patient with t(11;14) multiple myeloma progresses on Dara-Rd after 14 months. The hematologist considers adding venetoclax. What is the STRONGEST rationale for this combination in this specific genetic context?

- A) Dara upregulates BCL-XL expression, creating synthetic lethality with venetoclax
- B) The t(11;14) translocation leads to CCND1 overexpression which directly activates

- BCL-2 dependency
- C) Venetoclax counteracts dara-induced mitochondrial apoptosis resistance
- D) CD38 signaling through the B-cell

Q29.

Why is daratumumab less effective in extramedullary disease (EMD)?

- A) EMD cells lack CD38 expression
- B) Poor antibody penetration into soft tissue lesions

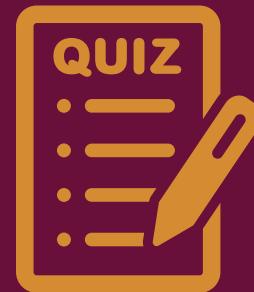
- C) EMD upregulates complement inhibitors
- D) Tumor microenvironment shields EMD from ADCC

Q30.

A patient's myeloma progresses rapidly within 2 months of starting daratumumab. Which biomarker predicts this?

- A) High CD38 expression
- B) TP53 mutation

- C) BCMA positivity
- D) Low NK cell counts



MYELOMA QUIZ

June 2025



Dr. Sumeet Mirgh

Associate Professor,
Adult Hematolymphoid & BMT, Tata Memorial Centre, ACTREC, Mumbai



Roopika Pele
UG Student
Conducted Quiz



MYELOMA QUIZ : April 2025 - June 2025

Q31.

Which of the following best explains why anti-CD38 naïvety was a key inclusion criterion in the AURIGA study using daratumumab?

- A) Prior anti-CD38 exposure leads to hypersensitivity reactions upon rechallenge
- B) Previous anti-CD38 therapy reduces CD38 expression, limiting daratumumab efficacy
- C) Daratumumab efficacy is independent of prior CD38 exposure, but safety profile changes
- D) Anti-CD38-naïve patients are at increased risk of immune-related adverse events

Q32.

Daratumumab treatment is known to interfere with which of the following laboratory tests due to its mechanism of action?

- A) Serum β2-microglobulin levels
- B) Serum protein electrophoresis (SPEP) and immunofixation electrophoresis (IFE)
- C) Cytogenetic fluorescence in situ hybridization (FISH)
- D) Bone marrow aspirate cellularity estimates

Q33.

What is the vial strength of Daratumumab available in India

- A) 400mg/20ml
- B) 400mg/50ml
- C) 600mg/20ml
- D) 600mg/50ml

Q34.

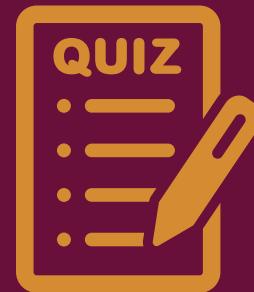
Daratumumab and hyaluronidase (Subcutaneous preparation) require renal dose modification, unlike the Intravenous preparation

- A) True
- B) False

Q35.

The dose for the Dara (Intravenous) & Dara(Subcutaneous) is the same

- A) True
- B) False



MYELOMA QUIZ

June 2025



Dr. Sumeet Mirgh

Associate Professor,
Adult Hematolymphoid & BMT, Tata Memorial Centre, ACTREC, Mumbai



Roopika Pele
UG Student
Conducted Quiz

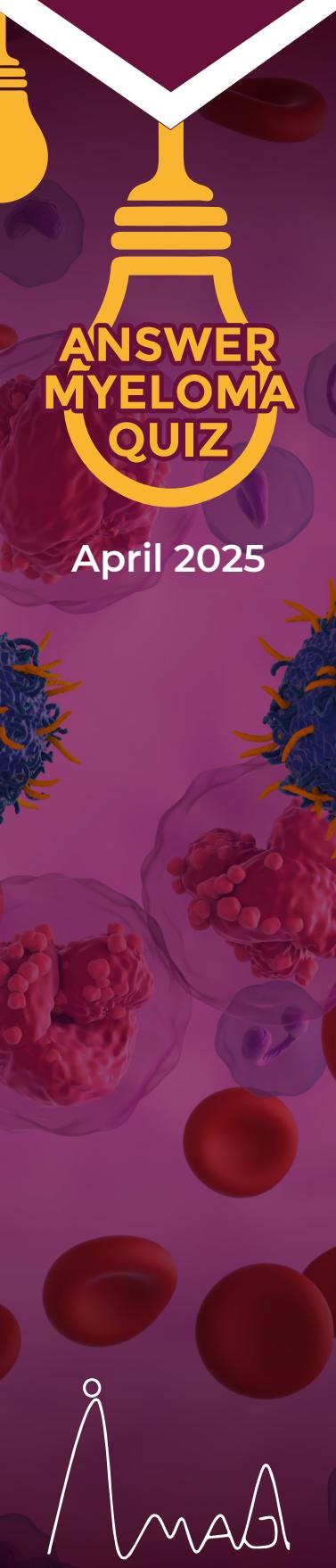


ANSWER MYELOMA QUIZ : April 2025 - June 2025



ANSWER MYELOMA QUIZ

April 2025



Q1 & Answer

Imaging-plus-MRD negative as per IMWG criteria is: "MRD negativity as defined by NGF or NGS along with....."

- D) All of the above

Q2 & Answer

Which of the following is incorrect regarding the "MRD negativity" as per the IMWG criteria?

- D) Can be done on peripheral blood or bone marrow

Q3 & Answer

In the article discussed today, the TFR at 36 months post lenalidomide maintenance discontinuation was:

- A) 75%

Q4 & Answer

Sustained MRD negativity is defined as two MRD assessments with a minimal gap of:

- D) 1 year

Q5 & Answer

What is the best imaging technique to monitor MRD in patients while on maintenance?

- B) PET-CT

ANSWER MYELOMA QUIZ : April 2025 - June 2025

Q6 & Answer

Assays for sBCMA can be performed using techniques like:

- E) All of the above

Q7 & Answer

BCMA stands for:

- A) B cell maturation antigen

Q8 & Answer

Anti BCMA therapies are all except:

- C) Talquetamab

Q9 & Answer

sBCMA can be used in clinical practice for

- E) All of the above

Q10 & Answer

Baseline BCMA values more than _____ is associated with significantly inferior prognosis

- B) >500 ng/mL

ANSWER
MYELOMA
QUIZ

April 2025

ANSWER MYELOMA QUIZ : April 2025 - June 2025

Q11 & Answer

Which of the following is the metabolic side effect of dexamethasone in patients with newly diagnosed multiple myeloma (NDMM)?

C) Hyperglycemia

Q12 & Answer

What was the criteria for allowing dexamethasone dose reduction or discontinuation in the trials?

D) Grade 3 or higher toxicities

Q13 & Answer

The benefits of dexamethasone in Myeloma are primarily due to

D) All of the above

Q14 & Answer

The collateral benefits of Dexamethasone are

D) All of the above

Q15 & Answer

Oral Dexamethasone is not available in the Indian market in the following dosage

D) 40 mg

ANSWER
MYELOMA
QUIZ

May 2025

ANSWER MYELOMA QUIZ : April 2025 - June 2025

Q16 & Answer

In a 75y old male with MM on chemoregimen of Lenalidomide with Bortezomib with dexamethasone 20mg weekly the abbreviation ideally used should be

- A) RVd

Q17 & Answer

In a 55y old male with MM on chemoregimen of Lenalidomide with Bortezomib with dexamethasone 40mg weekly the abbreviation

- A) RVd

Q18 & Answer

An individual was on High Dose Intermittent Dexamethasone 40mg D1-4, 9-12, 17-20. After 3 cycles of therapy the physician decided to change the regimen to RVd. Does the patient require a tapering of chemotherapy?

- B) No

Q19 & Answer

What conclusion did the authors draw about the full-dose dexamethasone (FD-DEX) compared to the lowered-dose (LD-DEX)?

- C) No significant difference in PFS and OS between FD-DEX and LD-DEX

Q20 & Answer

After how many days of continuous high/ intermediate Dexamethasone therapy should we taper the steroids rather than abrupt stopping

- A) 2 weeks

ANSWER
MYELOMA
QUIZ

May 2025



ANSWER MYELOMA QUIZ : April 2025 - June 2025

Q21 & Answer

Which of the following is not an FDA- approved regimen for using Daratumumab?

A) In combination with VRD in NDMM patients ineligible for ASCT

Q22 & Answer

Which of the following is an FDA- approved monotherapy for Daratumumab?

C) Patients who are double-refractory to a proteasome inhibitor and an immunomodulatory agent

Q23 & Answer

How does Daratumumab induced 'trogocytosis' cause resistance to the drug?

B) By reducing target antigen density on myeloma cells

Q24 & Answer

A patient relapses on daratumumab + lenalidomide after 18 months. Flow cytometry shows CD38-negative myeloma cells. Which regimen is LEAST likely to work?

B) Isatuximab + pomalidomide

Q25 & Answer

A patient with eGFR 20 mL/min starts daratumumab. Which adjustment is needed?

D) No dose adjustment required

ANSWER
MYELOMA
QUIZ

June 2025

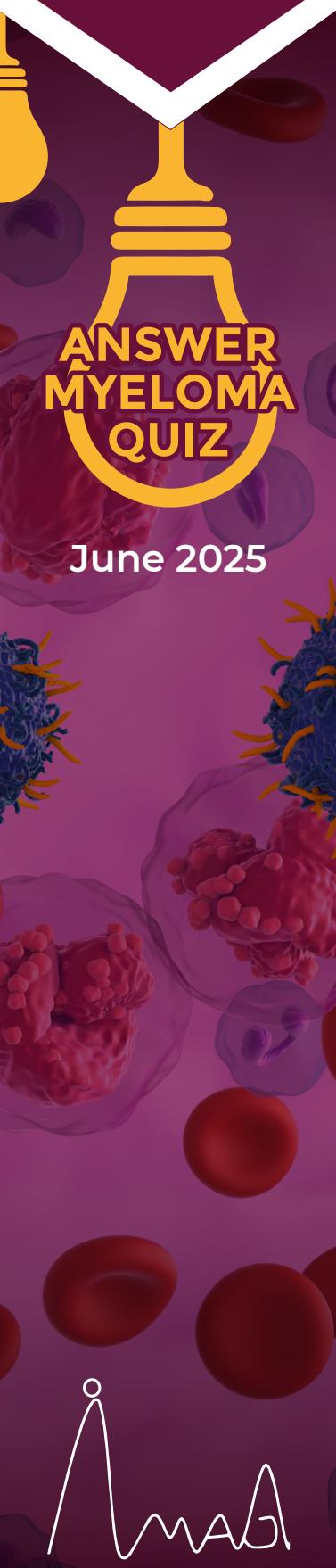


ANSWER MYELOMA QUIZ : April 2025 - June 2025



ANSWER MYELOMA QUIZ

June 2025



Q26 & Answer

A patient on daratumumab develops recurrent CMV viremia. Which immune parameter would you assess?

- A) CD4+ T-cell count

Q27 & Answer

A 65-year-old patient develops rigors, bronchospasm, and hypotension during the first daratumumab infusion. Premedication included acetaminophen, diphenhydramine, and methylprednisolone. What is the NEXT BEST step?

- C) Slow the infusion rate and give additional IV corticosteroids

Q28 & Answer

A 58-year-old patient with t(11;14) multiple myeloma progresses on Dara-Rd after 14 months. The hematologist considers adding venetoclax. What is the STRONGEST rationale for this combination in this specific genetic context?

- B) The t(11;14) translocation leads to CCND1 overexpression which directly activates BCL-2 dependency

Q29 & Answer

Why is daratumumab less effective in extramedullary disease (EMD)?

- B) Poor antibody penetration into soft tissue lesions

Q30 & Answer

A patient's myeloma progresses rapidly within 2 months of starting daratumumab. Which biomarker predicts this?

- B) TP53 mutation



ANSWER MYELOMA QUIZ : April 2025 - June 2025

Q31 & Answer

Which of the following best explains why anti-CD38 naïvety was a key inclusion criterion in the AURIGA study using daratumumab?

B) Previous anti-CD38 therapy reduces CD38 expression, limiting daratumumab efficacy

Q32 & Answer

Daratumumab treatment is known to interfere with which of the following laboratory tests due to its mechanism of action?

B) Serum protein electrophoresis (SPEP) and immunofixation electrophoresis (IFE)

Q33 & Answer

What is the vial strength of Daratumumab available in India

A) 400mg/20ml

Q34 & Answer

Daratumumab and hyaluronidase (Subcutaneous preparation) require renal dose modification, unlike the Intravenous preparation

B) False

Q34 & Answer

The dose for the Dara (Intravenous) & Dara (Subcutaneous) is the same

B) False

ANSWER
MYELOMA
QUIZ

June 2025



“Original research publications from India”

- > Vig M, Kumar L, Dubey S, Gupta R. Altered dynamics of T cell subsets in peripheral blood impacts disease progression in newly diagnosed multiple myeloma. *Biochem Biophys Rep.* 2025 Jun 23;43:102104. doi: 10.1016/j.bbrep.2025.102104. PMID: 40641743; PMCID: PMC12242439.
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- > Kar S, Gupta H, Shaikh N, Lele VR. 68Ga-PENTIXAFOR PET/CT Captures Superscan in Refractory Multiple Myeloma. *Mol Imaging Radionucl Ther.* 2025 Jun 3;34(2):162-164. doi: 10.4274/mirt.galenos.2025.94557. PMID: 40459226; PMCID: PMC12134946.
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- > Lekshmon KS, Reddy GP, Mallik M, Jandial A, Jain A, Lad D, Prakash G, Malhotra P, Khadwal A. Sun Ray Appearance in Skull Plasmacytoma. *Indian J Hematol Blood Transfus.* 2025 Apr;41(2):451-452. doi: 10.1007/s12288-024-01833-8. Epub 2024 Aug 13. PMID: 40224718; PMCID: PMC11992265.
- > Singh S, Joshi K, Sharma R, Singh J, Jain K, Garg N, Maini N, Bansal E. Clinical and Renal Outcomes in Multiple Myeloma with Involved Free Light Chains Exceeding 1000 mg/L at Diagnosis: Insights from an Indian Cohort. *Indian J Hematol Blood Transfus.* 2025 Apr;41(2):340-348. doi: 10.1007/s12288-024-01858-z. Epub 2024 Sep 5. PMID: 40224714; PMCID: PMC11992323.
- > Gauthaman DK, Muthukrishnan I, Acharya KA, Simon S. Ga-68 Pentixafor PET/CT in multiple myeloma and its correlation with clinical parameters: institutional pilot study. *Ann Nucl Med.* 2025 Jun;39(6):588-599. doi: 10.1007/s12149-025-02036-5. Epub 2025 Mar 7. PMID: 40053177.

“Original research publications from India”

- Kaur H, Kumar S, Watts A, Singh C, Sachdeva MUS, Sreedharanunni S, Kumar R, Malhotra P, Singh B. 68 Ga-Pentixafor PET/CT-Based Response Evaluation and its Prognostic Value in Multiple Myeloma: Comparison With IMWG and 18 F-FDG-Based Response. *Clin Nucl Med.* 2025 Jun 1;50(6):e331-e339. doi: 10.1097/RLU.0000000000005731. Epub 2025 Mar 7. PMID: 40051087.
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- Rai P, Soni N, Bathla G, Raj K, Desai A, Gupta V, Agarwal A. Light-Chain Deposition Diseases of the CNS: Review of Pathogenesis, Imaging Features, and Radiographic Mimics. *AJNR Am J Neuroradiol.* 2025 Apr 2;46(4):659-665. doi: 10.3174/ajnr.A8390. PMID: 38914431; PMCID: PMC11979851.
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68 Ga-Pentixafor PET/CT : A new paradigm in response evaluation and prognostication in myeloma

Kaur H, Kumar S, Watts A, Singh C, Sachdeva MUS, Sreedharanunni S, Kumar R, Malhotra P, Singh B. 68 Ga-Pentixafor PET/CT-Based Response Evaluation and its Prognostic Value in Multiple Myeloma: Comparison With IMWG and 18 F-FDG-Based Response. *Clin Nucl Med.* 2025 Jun 1;50(6):e331-e339. doi: 10.1097/RLU.0000000000005731. Epub 2025 Mar 7. PMID: 40051087.

68 Ga-Pentixafor PET/CT targets CXCR4 receptors and provides superior diagnostic accuracy in multiple myeloma (MM) compared with 18 F-FDG PET/CT. However, its role in response evaluation remains unexplored. In this prospective single-center study, 40 treatment-naïve myeloma patients were recruited between February 2021 and April 2023. Response to treatment was evaluated using the proposed 68 Ga-Pentixafor PET/CT criteria and compared with responses assessed by IMWG and 18 F-FDG PET/CT. Among the 40 newly diagnosed MM patients, 68 Ga-Pentixafor PET/CT was positive in a greater proportion of patients than 18 F-FDG PET/CT [90% (36/40) vs. 67.5% (27/40); $P =0.02$] thus, adequately evaluated response in additional 27.5% (11/40) of cases. Using the proposed criteria for 68 Ga-Pentixafor PET/CT, significant differences in PFS were observed across response categories [complete response (CR)-not reached, partial response (PR)-26.2 mo, progressive disease (PD)-15.3 mo; $P =0.001$]. Among patients achieving \geq very good partial response (VGPR) as per IMWG, those with positive 68 Ga-Pentixafor PET/CT had shorter PFS compared with those with negative findings (median PFS: 34.2 mo vs. not reached; $P =0.056$), whereas no significant difference was noted with 18 F-FDG PET/CT ($P =0.68$). In addition, on follow-up of patients with negative 18 F-FDG at the response, those with discordant 68 Ga-Pentixafor findings had significantly shorter PFS (17.73 mo vs. not reached; $P =0.010$) compared with those with concordant negative findings. To conclude, 68 Ga-Pentixafor PET/CT offers a more accurate assessment of treatment response and prognosis in MM patients, adding valuable information beyond the IMWG and 18 F-FDG PET/CT-based criteria.



Light at the end of MRD dream tunnel for Myeloma care

Gajendra S, Dwivedi T, Bommannan K, Sahoo RK, Das N, Tembhare P, Rahman K, Gogia A, Pramanik R, Dayal N, Kar R, Kotwal J, Sanjeev, Rath A, Dev D, Viswanathan GK, Sachdeva MUS, Aggarwal M, Panda D, Mehta P, Sreedharanunni S, Yanamandra U, Arunachalam AK, Bagal B, Malik PS, Handoo A, Gupta SK, Bakhshi S, Sharma A, Mishra DK, Malhotra P, Kumar L, Gupta R. Delphi Survey on Measurable Residual Disease in Multiple Myeloma: Prevailing Practices and the Way Forward in India. *Clin Lymphoma Myeloma Leuk.* 2025 May 21:S2152-2650(25)00180-6. doi: 10.1016/j.clml.2025.05.016. Epub ahead of print. PMID: 40514308

Measurable residual disease (MRD) is becoming a cornerstone in the multiple myeloma (MM) management; however, its implementation in India faces several challenges. This Delphi survey gathered expert consensus on the current practices and barriers in MRD monitoring in MM in India. Twenty-five experts including hematologists, pathologists, and oncologists participated in the survey. The members reached a consensus on key protocols: processing first-pull bone marrow aspirates within 24 hours, using a single tube with at least a 10-color panel and acquiring at least 3 million events for 10^{-5} sensitivity under proper environmental control. At least 4 monoclonal antibodies for gating of plasma cells and at least 3 parameters among mast cells, myeloid precursors, hematogones, normal plasma cells, was recommended to be used to assess hemodilution. Guidance on modulation of treatment decisions, including maintenance therapy based on MRD status remained inconclusive. Challenges identified included protocol variability, interpretation issues, and lack of an external quality assessment program. The findings of this survey will guide clinical adoption and future research, particularly for high-risk MM patients and novel therapies



ACTIVITIES & EVENTS

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Dr. Aditi Raghav
Delhi

Recent Partnerships

Formal collaboration between **IMAGe & EMN**



Indian Myeloma
Academic Groupe
(IMAGe)

with **EMN**

The meeting was held in Delhi between Dr. Maria Mateos, & IMAGe office bearers (President, Past president and Secretray) - Proposal for Strategic Collaboration Between EMN and Indian Myeloma Academic Groupe (IMAGe)



06th July 2025 - Date of Meeting

Recent Partnerships

Formal collaboration between **IMAGe & EMN**



*Indian Myeloma
Academic Groupe
(IMAGe)*

with **EMN**



Summary

- Secretarial Office IMAGe proposed a strategic collaboration between the Indian Myeloma Academic Groupe (IMAGe) and the European Myeloma Network (EMN).
- MARÍA VICTORIA MATEOS MANTECA introduced IMAGe to EMN's President and Vice President and suggested an initial meeting in Toronto.
- You will suggest some slots for organizing the meeting in Toronto.
- Mario Boccadoro stated they will not attend the meeting in Toronto.

The Geeks - Editorial Team



Dr. Uday Yanamandra



Dr. Sumeet Mirgh



Dr. Gurleen Oberoi



Dr. Arun V A

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