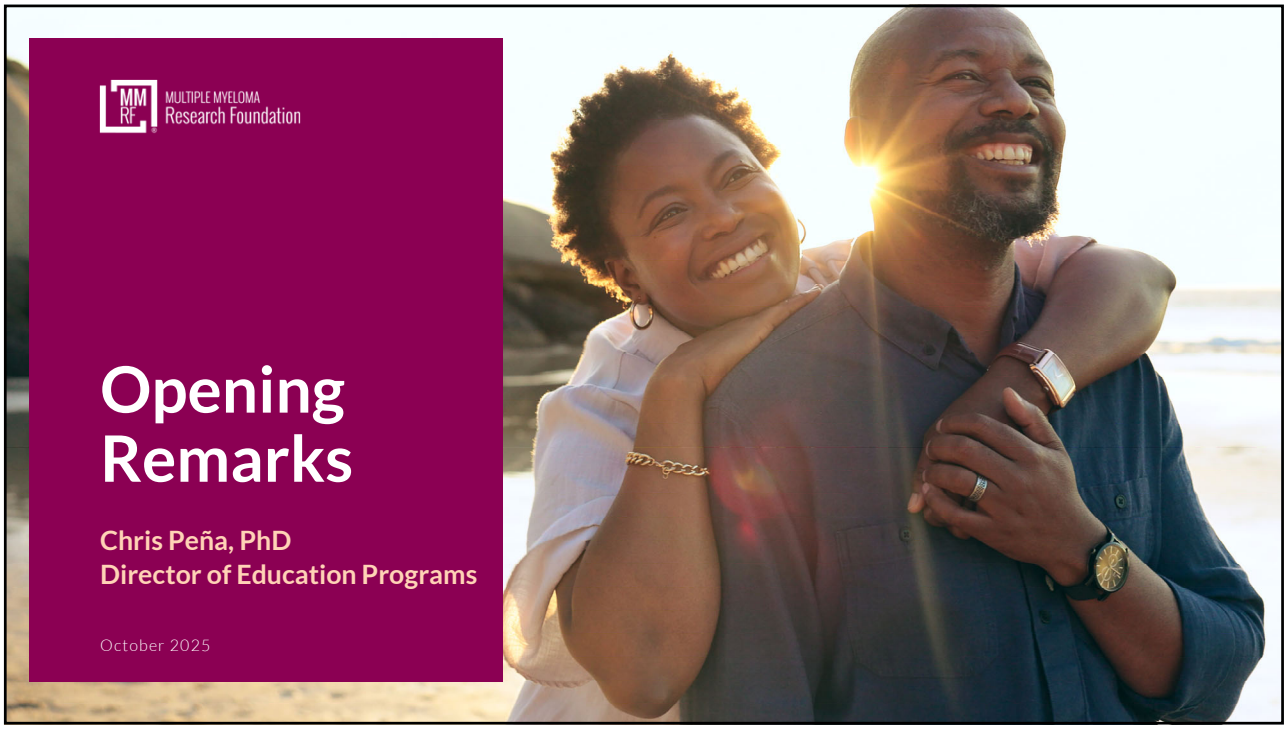
MULTIPLE MYELOMA
Research Foundation
Opening Remarks
Chris Peña, PhD
Director of Education Programs
October 2025


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- **View slides**
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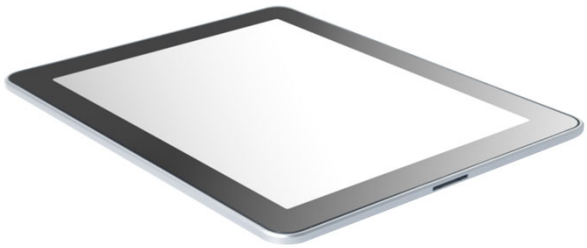
- **Take notes**
- **Submit questions to panel**
- **Program evaluation**



Submit your questions throughout the program!

Throughout the Summit, use the same e-mail address to log on to any iPad.

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Summit Objectives

- Know the standard of care options available for your stage of the myeloma journey
- Make more-informed treatment decisions to better manage your myeloma
- Discuss with your care team whether a clinical trial is a good option for you
- Be aware of and utilize resources provided by the MMRF and other reputable sources

Summit Agenda

Time (CT)	Topic	Speakers
9:00 – 9:15 AM	Introduction to MMRF	Chris Peña, PhD
9:15 – 9:30 AM	Welcome	Larry Anderson, MD, PhD
9:30 – 9:45 AM	From Precursor Disease to MM: Understanding the Basics and Knowing Your Risk	Adeel Khan, MD, MPH, MS
9:45 – 10:00 AM	Up-Front Therapy & Stem Cell Transplant	Sean Taasan, MD
10:00 – 10:20 AM	Q&A Session	All Faculty
10:20 – 10:35 AM	Break	
10:35 – 10:50 AM	Relapsed/Refractory Multiple Myeloma	Aimaz Afrough, MD
10:50 – 11:05 AM	Clinical Trials in Multiple Myeloma	Larry Anderson, MD, PhD, FACP
11:05 – 11:20 AM	Supportive Care Research Discussion	Pearl Abraham, Pharm D, BCPS, BCOP Gabriel Hinojosa, PharmD, BCOP Alexandra Huffman, LCSW, OSW-C
11:20 – 11:30 AM	Patient Journey	Alton Campbell, Patient Advocate
11:30 – 11:45 AM	Closing Remarks	Veronica Bohorquez-Medd, MA
11:45 – 12:15 PM	Boxed Lunch	

MMRF Introduction

Chris Peña, PhD
Director of Education Programs

The MMRF's Mission, Vision & Strategic Plan Objectives

We are not satisfied with current progress; our level of urgency and commitment to achieving cures has never been greater.

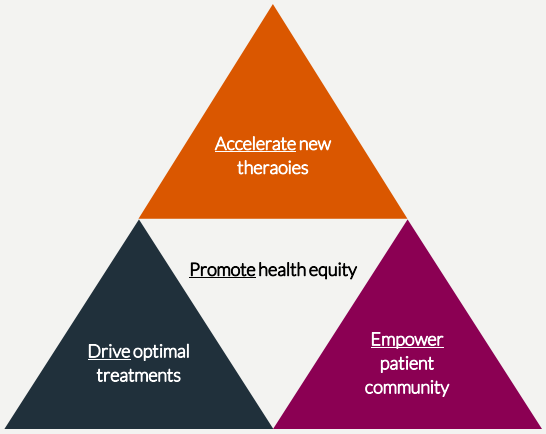
Our Mission

To accelerate a cure for each and every multiple myeloma patient.

Our Vision

A world free of multiple myeloma.

Our Strategic Objectives



Unprecedented results

15+

We've helped bring **15 different multiple myeloma drugs into the market.**

80+

We've opened over **80 clinical trials.**

10+

Our work and collaboration has helped **patient survival rates increase from 3 years to 10.**

90%

An extraordinary **90% of our budget goes into research** and related programming.

9

Delivering On Our Mission

The MMRF acts with urgency to ensure that patients have effective, more personalized treatments available and the resources necessary to increase their survival and improve their quality of life.

Accelerate the Development of Novel Therapies

- Venture philanthropy
- Clinical trials

Drive More Personalized, Optimal Treatment Approaches

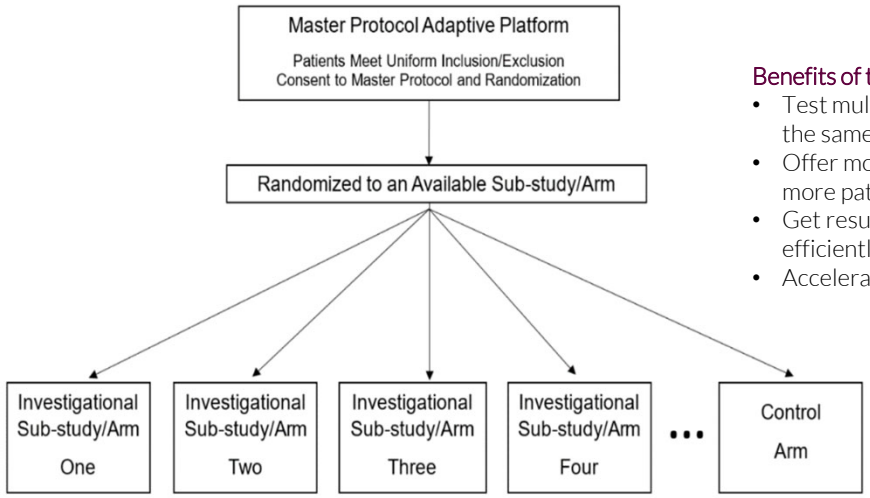
- Multi-institutional data generation initiatives
- Open data sharing platform

Empower Patients and the Entire Community

- Educational programming and patient navigation
- Grants to increase researcher and clinician diversity

10

MMRF Horizon Clinical Trials: Driving Optimized Treatment Approaches



Benefits of the Adaptive Platform:

- Test multiple treatments or doses in the same patient group
- Offer more treatment options to more patients
- Get results faster and more efficiently
- Accelerate progress toward a cure

Horizon Overview

Horizon 1

- **What's being tested?** New therapies and combinations in the relapsed/refractory population
- **What's the design?**
  - Control arm: Tecvayli therapy
  - Experimental arms: Lower and less frequent doses of Tecvayli
- **Additional support:** Family Reach provides monetary support for research participants who cannot afford costs of travel associated with study visits
- **Status:** 13 open sites across the US

Horizon 2

- **What's being tested?** Bispecific antibody treatment in the high risk, newly diagnosed population
- **What's the design?**
  - Control arm: Sarclisa
  - Experimental arms: Lynozyfic
- **Status:** Initial sites selected; FDA approval

Welcome!

Larry Anderson, MD, PhD

Question

Are you a...

A. Patient

B. Caregiver (family member or friend who helps a patient manage his or her myeloma)

C. Other

Question

At what stage is your myeloma? (If you are a caregiver, what is the stage of the patient's myeloma?)

A. Newly diagnosed
B. Active disease, on treatment
C. Relapsed/refractory
D. Remission: still on therapy
E. Remission: not on therapy
F. MGUS or smoldering myeloma not currently requiring treatment
G. I don't know.

Question

Is a Multiple Myeloma specialist part of your care team?

A. Yes, one here at UT Southwestern (Simmons Cancer Center or other sites)
B. Yes, elsewhere
C. No

Question

What has your most recent treatment been?

A. Quadruplet/triplet therapy
B. CAR T-cell therapy
C. Bispecific antibody therapy
D. Stem cell transplant
E. Traditional chemotherapy
F. Other
G. I don't know.
H. Not applicable

From Precursor Disease to MM: Understanding the Basics and Knowing Your Risk

Adeel Khan, MD, MPH, MS

Learning Objectives

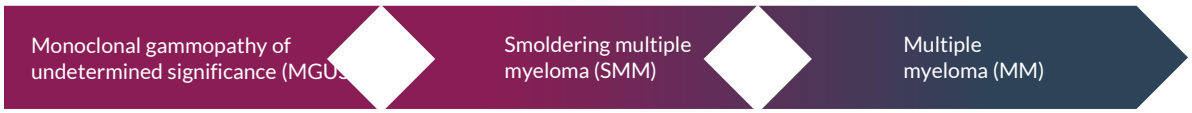
This presentation aims to help you:

- Understand the difference between MGUS, SMM, MM
- Understand low-risk vs. high-risk SMM
- Learn how SMM is monitored
- Learn about clinical trials for high-risk SMM
- Gain resources for coping with your SMM diagnosis

What is smoldering multiple myeloma (SMM)?

SMM is a precursor blood and bone marrow disease that starts off as MGUS and can sometimes progress to the blood cancer multiple myeloma.

The multiple myeloma disease spectrum:



Not every patient with MGUS progresses, and not every patient with SMM progresses. It is not yet known what triggers the progression of SMM to MM in some patients but not in others.

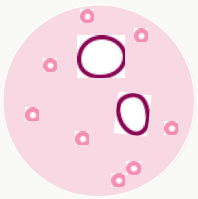
Multiple myeloma and its precursors involve plasma cell growth

- Plasma cells are cells in the bone marrow that make antibodies
- Abnormal plasma cells (aka myeloma cells) make abnormal antibodies called monoclonal (M) proteins
- Myeloma cells and M proteins can impact bone, kidney, and overall health

What is the difference between MGUS, SMM, and active MM?

Monoclonal gammopathy of undetermined significance

MGUS

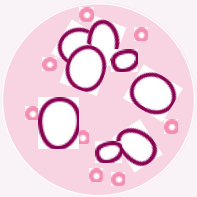


M protein: <3 g/dL in blood

Plasma cells in bone marrow: <10%

Smoldering multiple myeloma

SMM

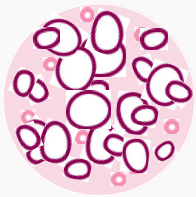


M protein: ≥3 g/dL in blood

Plasma cells in bone marrow: ≥10%-59%

Multiple myeloma

MM



M protein: ≥3 g/dL in blood

Plasma cells in bone marrow: ≥60%

M protein Plasma cells

What is the criteria for having SMM?

You have SMM if:

Your blood test shows an M protein that is > 3g/dl (3 grams per deciliter of blood)

OR

Your bone marrow biopsy shows plasma cells make up between 10% and 59% of blood cells in your bone marrow

AND

You have no signs of abnormal bone lesions or kidney damage and your blood tests are normal

What are the chances of SMM progressing to active MM?

The risk of developing MM is highest in the first five years following an SMM diagnosis:

Within 5 years of diagnosis	50% of people who have SMM develop MM (10% risk per year)
Between 5-10 years of diagnosis	15% of people who have SMM develop MM (3% risk per year)
10 years after diagnosis	1% risk per year of SMM developing into MM

Not all people who have SMM will develop MM.

How is risk determined?

If you have SMM, you will have additional tests to see if you have high-risk or low-risk SMM, including a bone marrow biopsy and blood work.

The 20/2/20 criteria are used to determine your risk:

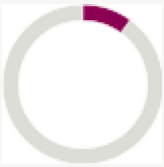
- 20 > Plasma cells in the bone marrow over 20%
- 2 > M protein in the blood over 2 g/dL
- 20 > A free light-chain ratio of more than 20

Based on these criteria, SMM is divided into risk groups:

Low-risk
None of the 20/2/20 criteria are met

High-risk
2 or 3 of the 20/2/20 criteria are met

What's the difference between low-risk SMM and high-risk SMM?



Low-risk SMM

- Less likely to develop MM
- Fewer than 10% of people with low-risk SMM develop MM within 2 years

High-risk SMM

- More likely to develop MM
- About half of all people with high-risk SMM develop MM within 2 years

People who develop MM

How is SMM monitored?

Because SMM could turn into the blood cancer multiple myeloma, active monitoring is crucial:

If you have MGUS:

- Monitoring 6 months after diagnosis
- Monitoring every 1-3 years

If you have SMM:

- First 5 years: monitoring every 3-4 months
- After 5 years: monitoring 2x per year

How is SMM monitored?

Tests to monitor SMM include:

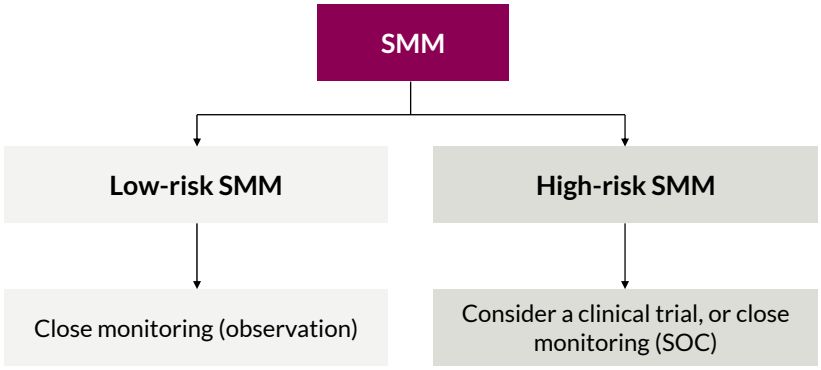
- Serum M-protein
- Serum FLC levels
- Complete blood count
- Serum calcium
- Serum creatinine
- Skeletal imaging
  - Bone marrow or whole-body MRI or low-dose CT Scan

Your provider or care team will share test results with you and walk you through next steps.

A change in any of these test results may mean a change in your monitoring schedule.

Should SMM patients get treatment?

Your treatment options depend on whether you have low-risk SMM or high-risk SMM.



If you have high-risk SMM, a clinical trial may be a treatment option

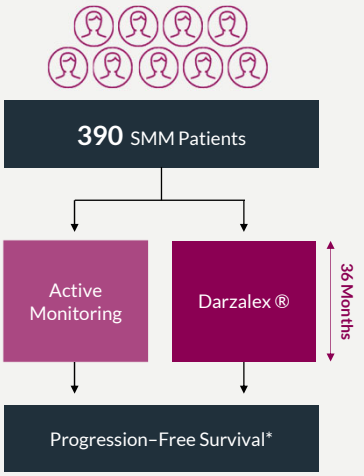
- Some people with high-risk SMM may receive treatment for SMM through a clinical trial or observational study
- Studies have shown that treating people with high-risk SMM may delay the development of MM
- Talk to your doctor about whether enrolling in a clinical trial is right for you

Findings from AQUILA study show potential for early intervention in high-risk SMM patients

New data presented at the 2024 ASH annual meeting showed that people with high-risk SMM who were treated with Darzalex® (a monoclonal antibody therapy used to treat MM) had a much lower risk of developing MM than people who received only active monitoring.

- **Note:** since the start of this study, our understanding of how to characterize risk has evolved. It is important to note that the patient population in this study doesn't necessarily reflect how high-risk patients are defined today.

Talk to your doctor to see if these data could apply to you.



*Progression-free survival=the length of time during and after the treatment of a disease, such as cancer, that a patient lives with the disease, but it does not get worse.

Is a clinical trial right for you?

If you're considering joining a clinical trial, here are some important questions to ask your care team:

- ❑ How long is the trial?
- ❑ What kind of clinical trial is this?
- ❑ What does monitoring look like?
- ❑ How long is the treatment?
- ❑ Will I need to take off work?
- ❑ Do I have transportation?
- ❑ Will I have help managing care at home?
- ❑ Are there any related costs?

Help improve how we understand and treat SMM

Research is underway to prevent SMM from becoming active MM.

Observational studies are research studies in which researchers collect information from participants or look at data that was already collected. In observational studies, researchers follow groups of people over a period of time.

PCROWD

For People with SMM:

Who can join:
People with MGUS and SMM or other precursor conditions

What is the goal?
To develop new therapies that prevent precursor conditions like MGUS and SMM from turning into MM

To learn more:
precursor@partners.org
617-582-8664

THE PROMISE STUDY

For close family relatives of people with SMM:

Who can join:
- Black men and women
- Parents, siblings, children of people with SMM, another precursor condition, or a blood cancer

What is the goal?
To prevent MM in people who may be at increased risk of the disease

To learn more:
www.enroll.promisestudy.org

If you have questions or concerns about SMM, your care team can help

When preparing for a conversation with your doctor, it is helpful to write down your questions. You may want to ask:

- Do I have low- or high-risk SMM?
- How will SMM affect my daily life?
- What are my treatment options?
- Are there symptoms I should watch out for?
- What do we do if SMM becomes active MM?

You might want to ask someone to come with you to your appointment for support and to help take notes.

Coping with a SMM diagnosis

- Patients with SMM may feel worried or unsure about their disease progressing
- These feelings may intensify when waiting for test results or a doctor's visit
- For many people with SMM, it is difficult to accept that they have a condition that is not being treated

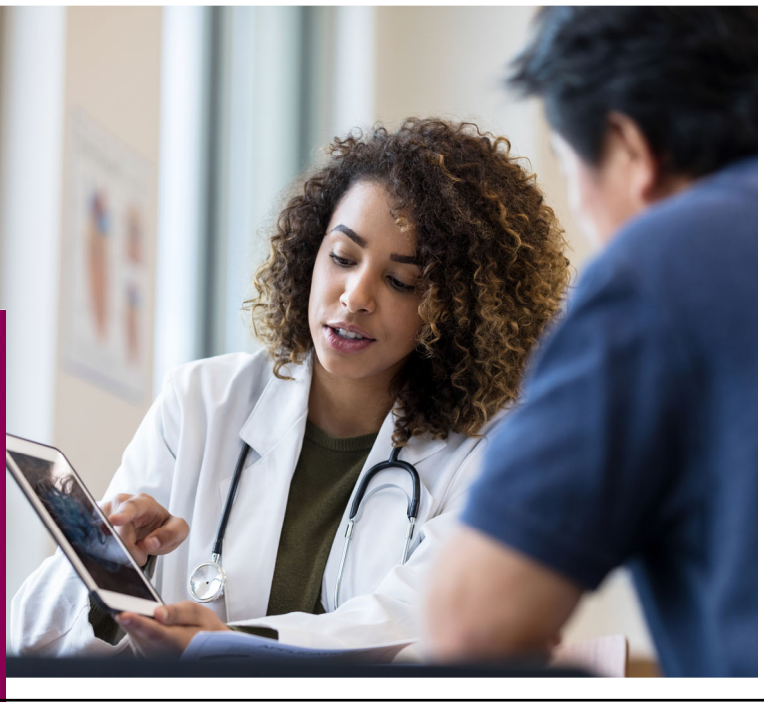
Remember it is completely normal to feel this way, and there are resources that can help you work through these feelings.

There's no "right way" to cope, but many people have found it helpful to:

Try relaxation strategies:
Meditation, yoga, tai chi, and breathing exercises may help you cope with feelings around SMM

Connect with others with SMM:
The MMRF Myeloma Mentors Program connects patients and caregivers with trained patient mentors

Please take a moment to answer two questions about this presentation.



Upfront Therapy & Stem Cell Transplant

Sean Taasan, MD

Question

Have you had a stem cell transplant?

A. No, but I will soon.

B. No, but I am considering one (or my doctor is discussing with me).

C. No, my doctor tells me I am not a candidate.

D. Yes

E. Not applicable

Objectives

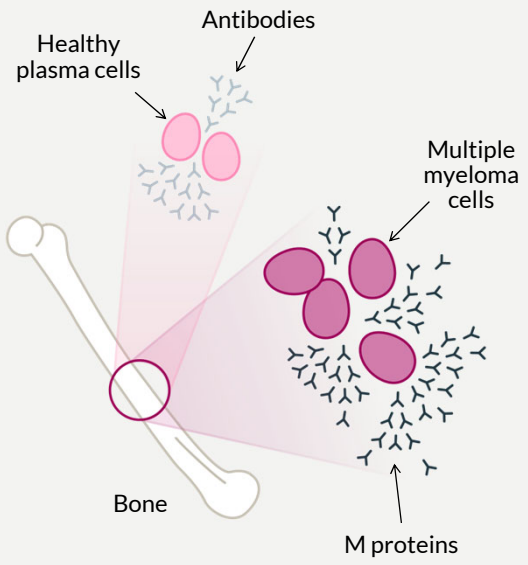
At the conclusion of this presentation, you should be better able to:

- Understand myeloma as a disease and the steps to take after diagnosis
- Know the standard of care treatments for newly diagnosed multiple myeloma
- Work with your provider team to make an informed decision about treatment selection

Multiple myeloma and its precursor conditions involve plasma cell growth

Plasma cells are cells in the bone marrow that make antibodies.

- Healthy plasma cells help your body fight infections
- Abnormal plasma cells (myeloma cells) make antibodies called monoclonal proteins (M proteins)
- Myeloma cells crowd out normal cells in the bone marrow, overproducing M proteins which affects bone, kidney, and overall health and can cause:
  - Anemia
  - Infections
  - Bone damage
  - Kidney issues



Steps After Diagnosis: Get on the Right Track

Key steps for the best possible care for myeloma patients

THE RIGHT TRACK

Right Team

Access experts and centers that have extensive experience treating multiple myeloma

Right Tests

Get the information, tests and precise diagnoses to make the right treatment decisions

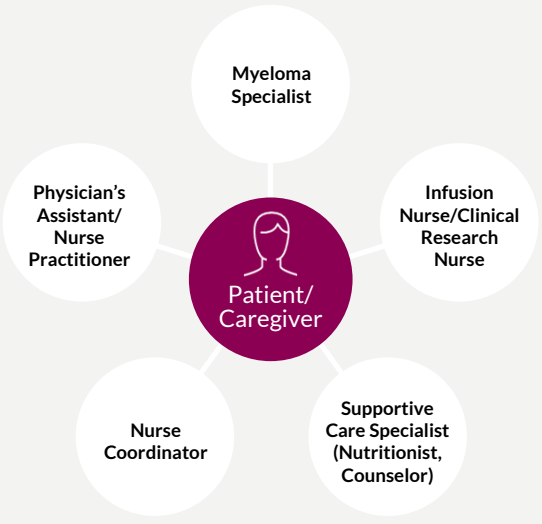
Right Treatment

Work with your team to decide on the best treatment plan and identify clinical trials that are right for you

Share at every step

You can help yourself while helping others.

The Right Team: Focused on Setting Goals, Managing Treatment, and Supporting Wellness



The Right Tests: Common Tests Conducted in Myeloma Patients

Test	Purpose
Blood and urine	Blood and urine tests can confirm multiple myeloma, monitor the effects of treatment, and detect how myeloma affects the blood and kidneys
Bone marrow biopsy	A bone marrow sample might show multiple myeloma cells, helping to diagnose and monitor the disease
Imaging	X-rays, MRIs, CT scans, and PET scans can show damage to bones caused by multiple myeloma and potential spread
Genetic testing	Genetic testing is conducted on myeloma cells from a biopsy and can gives insights into risks and disease progression

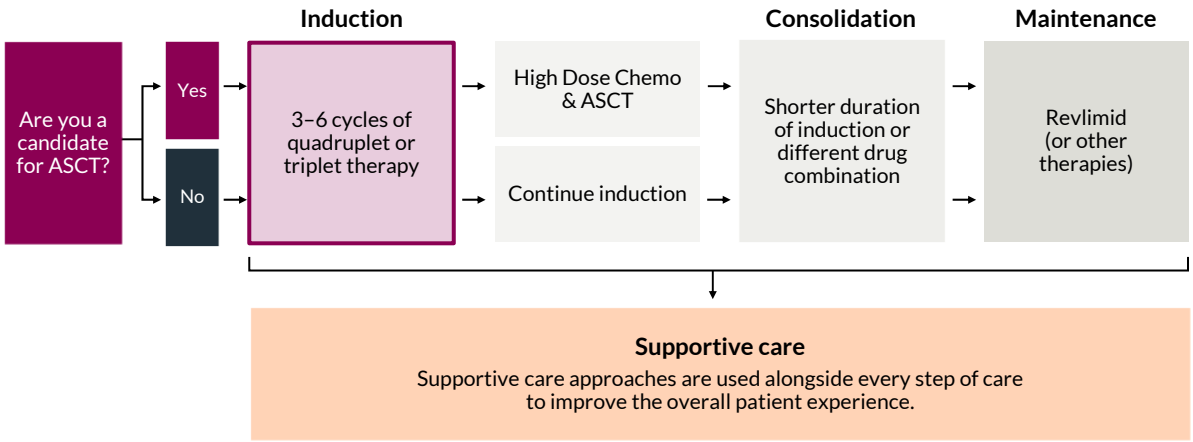
The Right Treatment: Goals of Multiple Myeloma Therapy

- Reduce disease burden as low as possible with the aim of reducing the number of myeloma cells to undetectable levels.
- Improve quality of life with as few treatment side effects as possible.
- Provide the longest possible period of response before relapse.
- Prolong overall survival.

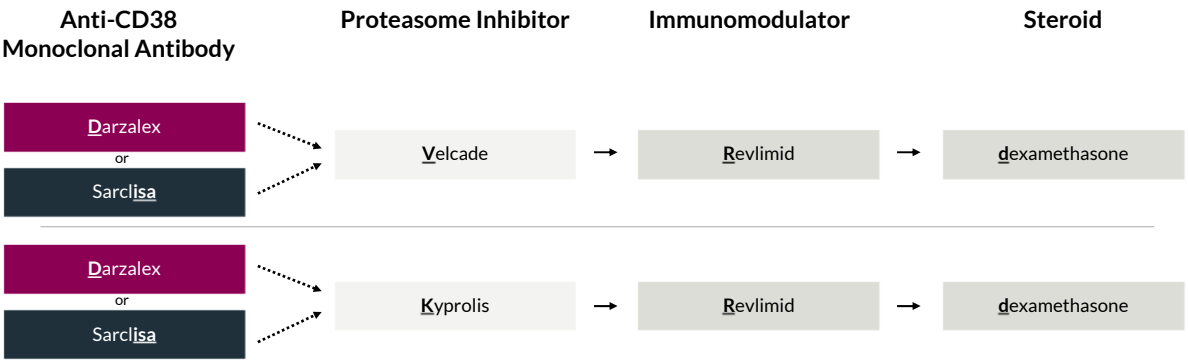
Overview of Treatment Stages for Newly Diagnosed Multiple Myeloma

Therapy	Purpose
Induction	Decrease the number of myeloma cells
Consolidation	Target remaining cancer cells after induction therapy
Maintenance	Prevent disease from returning for as long as possible

Overview of Treatment Approach for Active Multiple Myeloma

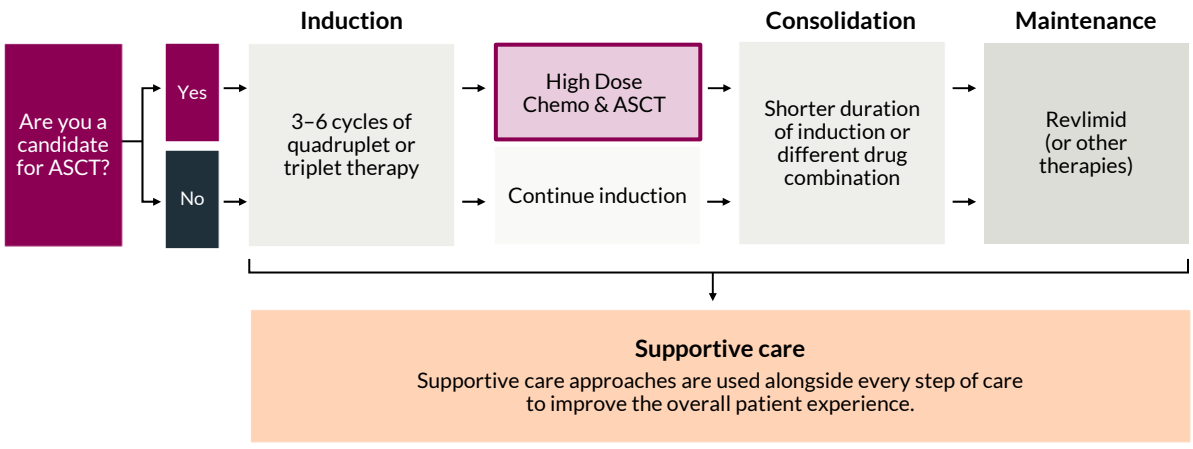


Induction Therapy Regimens: Main Triplets and Quadruplets

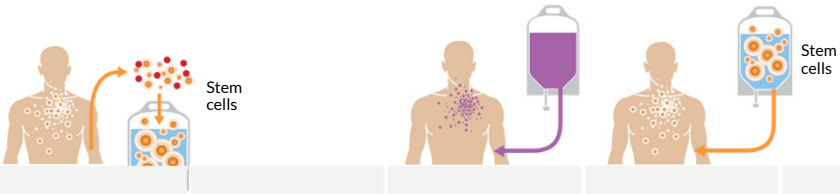


Disease risk, tolerability, and prior treatment history help determine which treatment a patient receives and how many others are added in combination

Overview of Treatment Approach for Active Multiple Myeloma



Autologous Stem Cell Transplantation (ASCT)



1. Induction therapy	2. Stem cell mobilization and collection of stem cells from the bloodstream	3. Freezing of stem cells	4. High-dose chemotherapy (melphalan)	5. Thawing and infusion of stem cells	6. Bone marrow recovery

2 to 3 weeks leading up to the transplant — Day 0 — Days 1 to 100 after the transplant

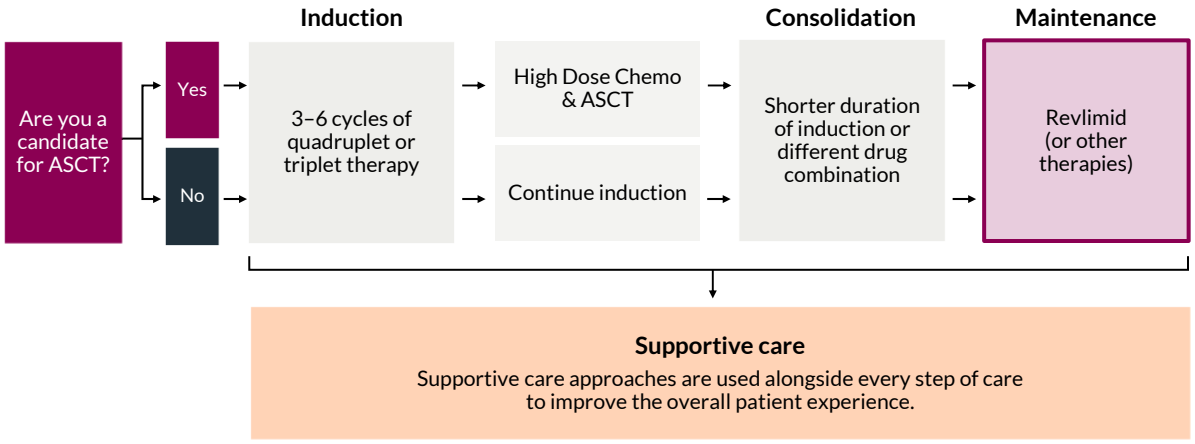
Autologous Stem Cell Transplantation (ASCT) Considerations

Suitability for ASCT is based on overall health

You will need a caregiver after ASCT

Recovery takes several months

Overview of Treatment Approach for Active Multiple Myeloma



Maintenance Therapy Following a Stem Cell Transplant

A prolonged and often less-intensive treatment after achieving a response to initial therapy

To prevent disease progression for as long as possible while maintaining favorable quality of life

To deepen responses by reducing minimal residual disease (MRD), the remaining number of myeloma cells after treatment

Standard Options

- Revlimid alone or with:
  - Darzalex
  - Velcade
- Ninlaro
- Clinical trial

Measuring Response to Therapy

Change in # of myeloma cells	Responses range from stable disease (no change in the number of myeloma cells) to stringent complete response (no myeloma cells)
Degree (or depth) of response is usually associated with better prognosis	Some patients do well despite never achieving a complete response

Requires blood tests and bone marrow biopsy

Questions to Ask Your Care Team About Treatment

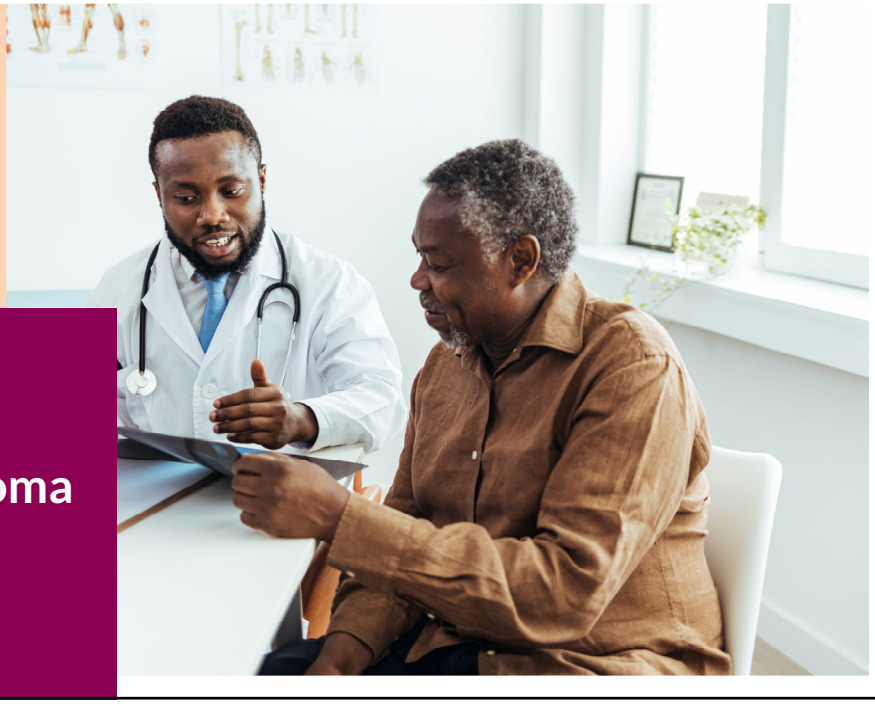
- What tests do I need before we can decide on treatment?
- What are my treatment options?
- If my myeloma is considered high risk, what is my next course of action?
- Will I experience any side effects from my treatment?
- How are the treatments administered (infusion, injection, or pill)?
- How long should I expect to be on this treatment
- Is there a clinical trial that might be appropriate for me?
- Am I eligible for a stem cell transplant? If so, should I get one?

Summary

- To get the best myeloma care, patients should find a care team, understand necessary tests, and work with their team on a treatment plan.
- Blood tests and bone marrow biopsies help determine how well patients respond to treatment.
- The standard of care for newly diagnosed multiple myeloma involves induction, consolidation, and maintenance therapy.
- Overall health, risk of disease returning, and how well a treatment is tolerated can help guide treatment decisions with your care team.

Questions & Answers Session

All faculty



Relapsed/ Refractory Multiple Myeloma

Aimaz Afrough, MD

Question

Have you discussed CAR T-cell therapy as a treatment option for your multiple myeloma with your care team?

A. Yes, I have already received CAR T therapy.

B. Yes, I am planning to receive CAR T therapy.

C. Yes, we've discussed it, but I'm not planning to receive it.

D. No, it hasn't been discussed.

E. I'm not sure / I don't remember.

F. Not applicable

Objectives

At the conclusion of this presentation, you should be better able to:

1. Know what is considered early and late relapsed/refractory multiple myeloma
2. Know the options available to treat relapsed/refractory multiple myeloma patients
3. Know what to expect on CAR T-cell or bispecific antibody therapy for relapsed/refractory multiple myeloma

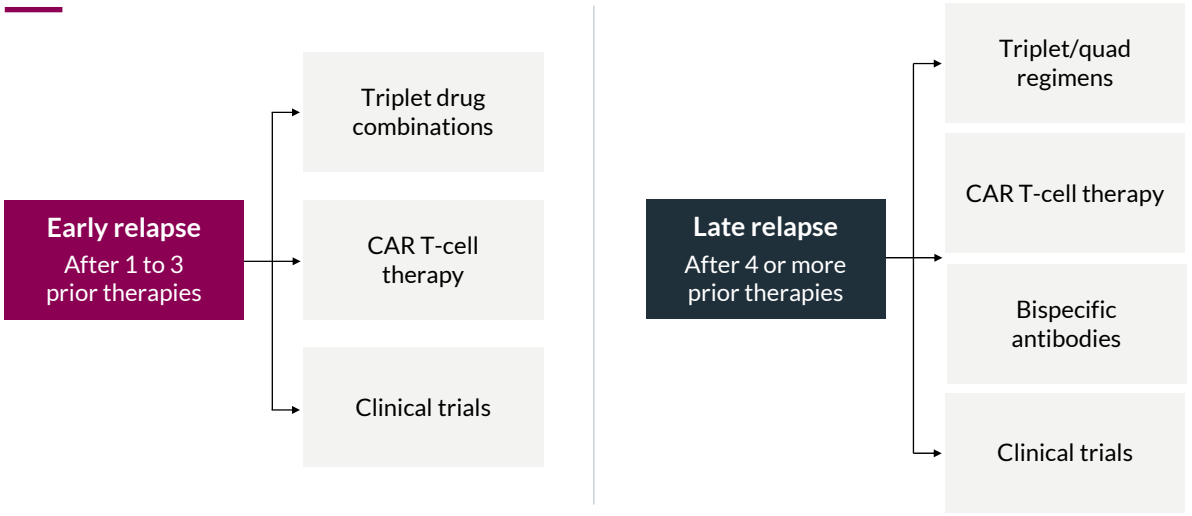
Important terms to know if your myeloma comes back

- **Relapsed:** recurrence (reappearance of disease)
- **Refractory:** treatment no longer works
- **Progression:** increase in M protein/light chain values
- **Line of therapy:** change in treatment that is not working or has unmanageable side effects

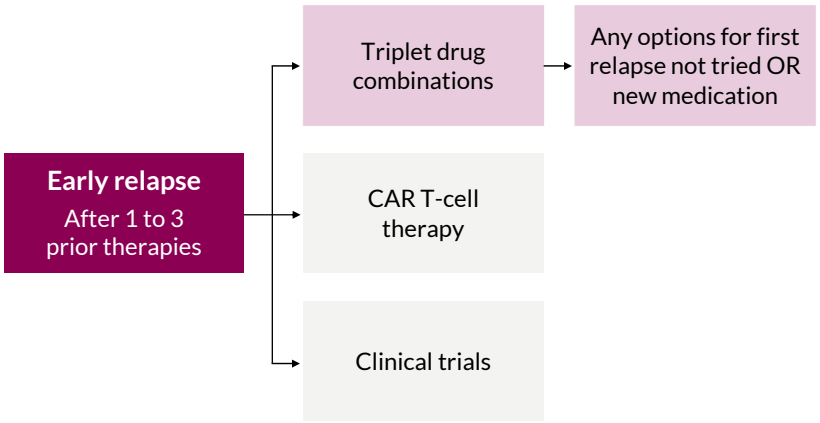
Early relapse	Late relapse
Myeloma returns after 1 to 3 prior lines of therapy	Myeloma returns after 4 or more prior lines of therapy

- **Note:** induction therapy + stem cell transplant + consolidation/maintenance therapy = 1 line of therapy

Increasing Options for Patients With Relapsed/Refractory Multiple Myeloma



Increasing Options for Patients With Relapsed/Refractory Multiple Myeloma



Factors to consider

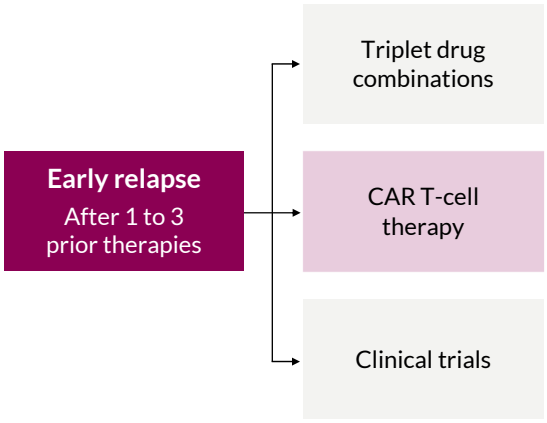
- Disease biology
- Prior therapies
- Aggressiveness of relapse
- Comorbidities
- Presence of caregiver
- Time away from work, family, or hobbies
- Access to treatment center

Triplet combinations in early relapsed patients

If you are refractory to…	Your specialist might recommend…
Darzalex or Sarclisa	Kyprolis (Carfilzomib) + Revlimid (Lenalidomide) + Dexamethasone
Velcade (Bortezomib)	Sarclisa (Isatuximab) + Kyprolis (Carfilzomib) + Dexamethasone
Revlimid (Lenalidomide)	Darzalex (Daratumumab) + Velcade (Bortezomib) + Dexamethasone

Other less commonly used triplets include:
Selinexor (Xpovio) + Velcade (Bortezomib) + Dexamethasone

Treatment Choices for Relapse After 1 to 3 Prior Therapies



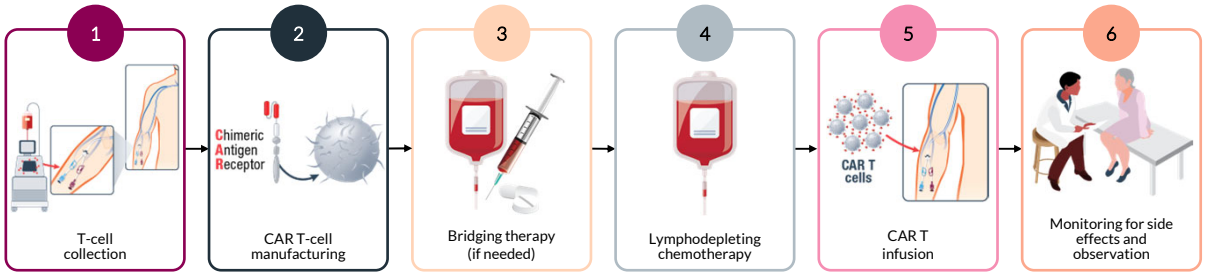
Factors to consider

- Disease biology
- Prior therapies
- Aggressiveness of relapse
- Comorbidities
- Presence of caregiver
- Time away from work, family, or hobbies
- Access to treatment center

CAR T-Cell Therapy

- Your body's own T cells are modified to find and destroy myeloma cells
- Targets BCMA on myeloma cells
- Approved CAR T-cell therapies include Abecma and Carvykti

Steps Involved With CAR T-Cell Therapy and What to Expect



One time only	Entire process takes several weeks	Hospitalization times vary	Caregiving necessary for at least 4 weeks after treatment

CAR T: Expected Toxicities and Management

Side Effect	Symptoms		Onset After CAR T-Cell Infusion	Duration	Treatments
 **Cytokine release syndrome (CRS)**	• Fever • Difficulty breathing • Dizziness • Nausea • Headache	• Rapid heartbeat • Low blood pressure	1–9 days	5–11 days	• Actemra (tocilizumab) • Corticosteroids • Supportive care
 **Neurotoxicity (ICANS)**	• Headache • Confusion • Language disturbance	• Seizures • Delirium • Brain swelling	2–9 days	3–17 days	• Antiseizure medications • Corticosteroids

CAR T: Stopping Infections

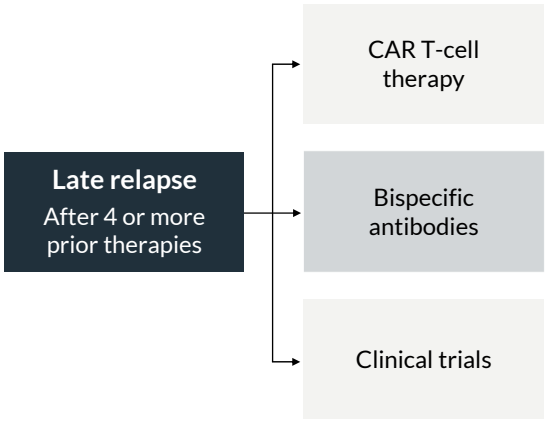
CAR T-cell therapy can lower white blood cells needed to fight off infection

Hygiene and environment

Vaccinations

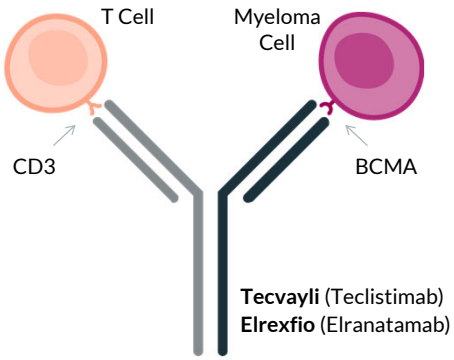
Preventive medicines, such as monthly intravenous immunoglobulin (IVIG) treatment or growth factor injections

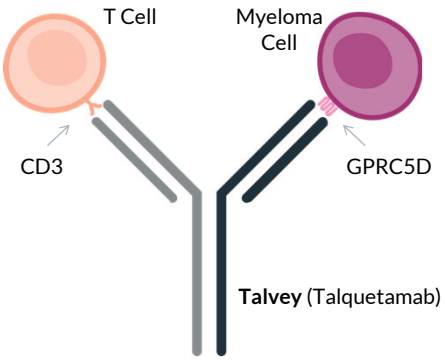
Treatment Choices for Relapse After 4 or More Prior Therapies



Bispecific Antibody Therapy

Monoclonal antibody that can simultaneously bind to two different cell surface markers: one on the myeloma cell and one on a patient's T cells





Bispecific Antibodies

What to Expect?

- Available off the shelf, allowing for immediate treatment
- Does not require lymphodepletion or other preparation
- Administered by subcutaneous (under the skin) injection
- To minimize side effects and allow for close monitoring, the first three to four doses are administered using a step-up dosing schedule, with gradual dose escalation
- Requires ongoing administration until disease progression or unacceptable side effects

BCMA Bispecific Antibodies: Side Effects

Common Side Effects for BCMA Antibodies (Tecvayli, Elrexfio)

Cytokine release syndrome (CRS)

Neurotoxicity (ICANS)

Low blood counts

Infections

Non-BCMA Bispecific Antibodies: Side Effects and How to Manage

Talvey-Associated Side Effects

Affected area	Symptoms and effects	Management
Skin	Rash, skin peeling	Not painful; self-limiting, and manageable with emollients
Nails	Nail thinning and loss	Takes time to resolve
Oral	Difficulty swallowing, dry mouth, taste changes	Can lead to weight loss; have longer duration and can affect quality of life. Most successfully managed with dose modification. Supportive measures may be used (eg, NaCl mouth rinse, artificial saliva spray, diet modification)

Considerations with CAR T and Bispecifics

CAR T Cell Therapy

- Single infusion (one and done)
- Potentially persistent
- Hospitalization requirements vary by institution and provider practice
- Dependent on T-cell health (manufacturing failures)
- Bridging therapy often needed to fill time gap (reword)
- Caregiver needed

Bispecific Antibody Therapy

- Off the shelf (immediately available)
- Continuous administration
- Initial hospitalization may be required, depending on institutional protocols and clinical factors
- Dependent on T-cell health (T-cell exhaustion)

Summary

- Relapsed or refractory MM occurs when myeloma progresses or no longer is responsive to treatment
- Therapy choices will depend on teamwork between physician, patient, and caregivers and are based on many decision points.
- CAR T and bispecific antibodies result in high response rates even in patients who have received several prior therapies.
- CAR T can be used in earlier lines of therapy whereas bispecifics are used for later relapse based on current FDA approval

Clinical Trials and Multiple Myeloma

Larry Anderson, MD, PhD

Question

Have you and your care team ever discussed the possibility of you joining a clinical trial? (If you are a caregiver, do you know if joining a clinical trial has ever been discussed?)

A. Yes

B. No

C. I don't know.

Objectives

At the conclusion of this presentation, you should be better able to:

1. Understand what a clinical trial is and why clinical trials are important
2. Follow the steps of enrolling in a clinical trial
3. Clear up any questions about clinical trials
4. Identify clinical trials in your area

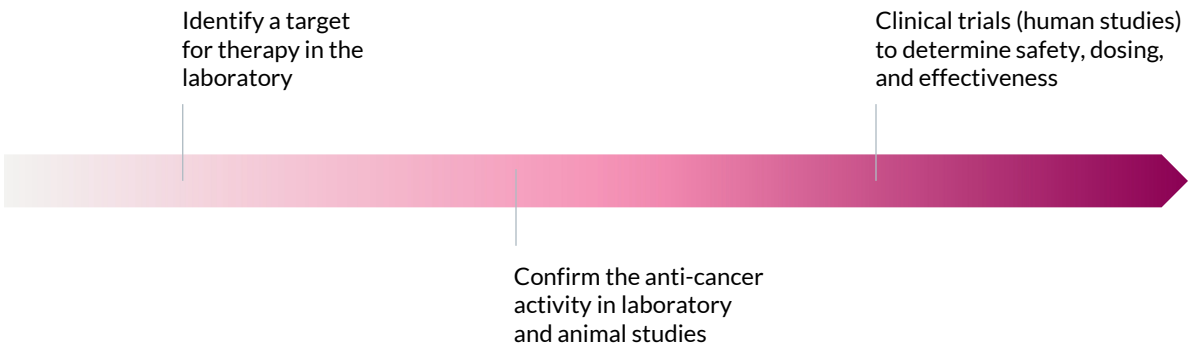
Clinical Trials Help Make Progress Against Myeloma

- Develop safe and effective treatments to potentially lengthen lives
- Optimize treatment regimens so that every patient can achieve the best possible outcome

15+

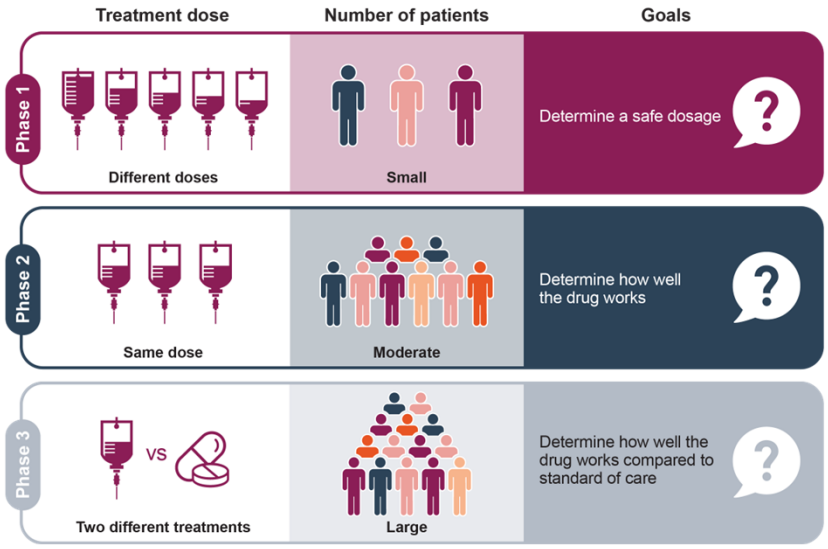
New treatment options that have improved myeloma survival rates the past two decades

Clinical Trials Stem From Many Years of Laboratory Research



The whole process costs millions of dollars and years of effort!

Traditional Clinical Study Types



Important Terms to Know in Myeloma Trials

Open Label

You and your health care team know what type of treating you're getting.

Randomized

Your health care team does not have a choice on which treatment group you will belong to.

Longitudinal

You will be part of a study that looks at how well a treatment worked and how safe it was over a long period of time.

If the current standard of care is no treatment or action, patients may be randomized to receive a placebo*
This should be clearly stated to you in advance!

*A medically inactive compound; also known as sugar pill

How do clinical trials measure if a treatment is working?

The main measure is response rate—how well the treatment works compared to standard care.

- **Overall response:** % of patients with fewer cancer cells after treatment
  - **Partial response**: ≥50% drop in myeloma protein (not gone completely)
  - **Very good partial response**: ≥90% of myeloma protein gone
  - **Complete response**: standard blood and urine tests show no signs of myeloma protein, indicating the disease appears to be gone (*this is not the same as a cure*)
  - **Minimal residual disease (MRD) negative:** the number of remaining cancer cells is so low that it cannot be detected even with the most sensitive tests.

Other measures:

- **Progression free survival:** how long patients go without disease worsening
- **Side effects**: type, severity, and impact on quality of life
- **Treatment continuation:** who stays on the treatment versus who stops treatment (type and stage of disease, age, etc.)

Progression of Clinical Trials: Building on Results

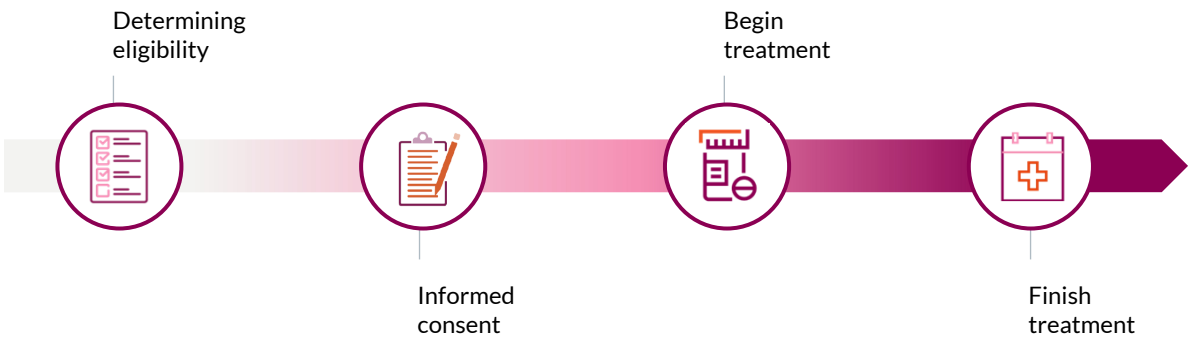
Name	Phase	Research Question	Important Results
CARTITUDE-1	I/II	Is Carvykti safe and effective for relapsed/refractory multiple myeloma patients?	• Carvykti was safe for patients. • Nearly one third of 97 patients in the study were progression free for at least 5 years.
CARTITUDE-4	III	How effective is Carvykti compared to standard of care treatments (eg. Darzalex+Pomalyst+Dexamethasone) for relapsed patients?	• In patients who had received 1-3 prior lines of therapy, 3x as many patients on Cilta-cel had a complete response or better compared to SOC.
CARTITUDE-6	III	How well do *newly diagnosed* patients do on Caryvkti versus stem cell translant if both are given Darzalex, Revlimid, Velcade, and dexamethasone?	• Results not published yet

Successful trials lay the foundation for the next phase, asking more complex and important questions

Addressing Common Questions/Misperceptions

Q. Will I get a placebo?	**A.** The majority of studies do not include a placebo. For some studies they are required. This would be clearly stated in the informed consent.
Q. Are clinical trials only for patients who have run out of options?	**A.** No. Patients are all stages of their disease can take part in clinical trials.
Q. Can I ever leave a clinical trial?	**A.** Yes. If you change your mind or you feel you are not benefitting from the clinical trial you can leave the trial. This will not affect your relationship with your medical team.

Important Steps for Patients in a Clinical Trial



When treatment is finished, patients will be followed up and monitored to evaluate long-term effects and see how well the treatment is doing

Qualifying for a Clinical Trial

Eligibility (inclusion criteria)

- Each study has specific requirements for patients to be eligible
- Patients at all stages of disease can be eligible for a clinical trial

Challenges to Eligibility* (exclusion criteria)

- Kidney failure
- Low blood counts
- Recent diagnosis with another type of cancer
- Myeloma that is hard to measure (for example, nonsecretory myeloma)

*Exclusion criteria are specific to every study, so don't count yourself out!

If you are eligible for a clinical trial, you must provide informed consent

- Details of the clinical trial are provided to the patient by their doctor, including:
  - Goals of the trial
  - Risks and benefits
  - Drugs, tests, and procedures used
- Patient has the right to raise any questions or concerns or withdraw consent at any time

Participating in a Clinical Trial

- The information collected on you will be anonymized.
- In addition to treatments, you may be asked to complete questionnaires or keep a diary (to document side effects, for example).

Questions to Ask Your Care Team

- How does the study work? How often will I need to see my doctor or visit the cancer center?
- Will I need to undergo additional tests?
- What is currently known about the new drug or combination?
- What benefits can I expect?
- What side effects should I expect? Who should I notify if I have side effects?
- Can I take my vitamins or other medications?
- Can I get the treatment with my local doctor?
- Do I incur any costs?

The Finances of Participating in a Clinical Trial

- You may have appointments and/or receive medications at no cost to you.
- Other standard-of-care treatment will be billed to your insurance as usual.
- You may be able to receive money for transportation, lodging, and food.
- Ask your study coordinator for details on who is responsible for what costs.

As you begin treatment, you may encounter…

More frequent doctor visits, evaluations, and lab-work

Larger team of providers

If you experience side effects, it is important to reach out to your provider

Concluding Treatment on a Clinical Trial

Participation in a clinical trial will end:

- When the trial meets its predefined timeframe
- If a drug is not working
- If side effects are intolerable
- At any time if the patient no longer wishes to participate

Enrolling Clinical Trials at Simmons Cancer Center for R/R & NDMM Patients

Name	What is Being Tested	Clinical Trial ID #
QUINTESSENTIAL	**New CAR T-therapy in R/R patients:** Effectiveness and safety of Arlocabtagene (Arlocel)	NCT06297226
MonumenTAL-6	**Testing New Combinations of Bispecifics in Relapsed/Refractory Disease:** Determine which combinations of bispecifics (Talvey+Pomalyst, Talvey+Tecvayli, Elrexfio+Pomalyst+Dex, or Pomalyst,Velcade,Dex) are most safe and effective	NCT06208150
EXCALIBER Maintenance	**How Well CELMODs Perform in Maintenance Therapy:** Iberdomide maintance or Revlimid Maintenance in NDMM	NCT05827016
MajesTEC-7	**A Study to Compare Teclistamab in Combination With Daratumumab and Lenalidomide:** Combinations of bispecifics (Tec-DR or Tal-DR) in NDMM	NCT05552222
Master-2	**MRD Status and Treatment Decisions for Newly Diagnosed Patients:** Evaluate how to get to and stay MRD negative through stem cell transplant and different maintenance treatment options	NCT05231629
FasTCAR	**New CAR T Development Process in R/R Patients:** Evaluate if rapid, next-day manufacturing platform for CAR T cell therapy is safe and effective for patients	NCT05850234
ECOG DETER-SMM	**Treatment for High Risk Smoldering Myeloma:** Evaluate if Revlimid and Dexamethasone +/- Darzalex stops progression of smoldering myeloma	NCT03937635

Finding Clinical Trials

- **Contact** the MMRF Patient Navigator Center at 1-888-841-6673
- **Visit** themmrf.org/resources/clinical-trial-finder/
- **Ask** your treating hematologist-oncologist about any available trials
- **Check** with any academic medical centers close to your home

Treating and Supportive Care for Side Effects and Symptoms

Pearl Abraham, PharmD
Gabriel Hinojosa, PharmD
Alexandra Huffman, LCSW

Objectives

At the conclusion of this presentation, you should be better able to:

1. Recognize the main symptoms of multiple myeloma and how they are managed
2. Recognize common side effects of multiple myeloma treatments and how they are managed
3. Talk to your care team about symptoms or side effects that interfere with day-to-day activities

Symptom or Side Effect?

Symptom	Something a person experiences that may indicate a disease or condition
Side effect	An unfavorable and unintended secondary development that is related to a medical treatment or procedure

Multiple myeloma and its precursor conditions involve plasma cell growth

Plasma cells are cells in the bone marrow that make antibodies.

Myeloma cells crowd out normal cells in the bone marrow, overproducing M proteins which affects bone, kidney, and overall health and can cause:

Low blood counts, which can lead to anemia and infections

Bone damage

Kidney issues

Treating Bone Disease in Myeloma

Symptom	Treatment
Spinal fractures	• Surgery (vertebroplasty or kyphoplasty) in specific cases where the nervous system may be affected
Bone loss	• Radiation to destroy myeloma cells • Medications to prevent bone breakdown [Xgeva (denosumab), Zometa, (zoledronic acid)] • Supplements to support bones (Vitamin D, Calcium)

Pain	• Pain management medications, including:
	  • Acetaminophen (Tylenol)
	  • Corticosteroids (dexamethasone, prednisone)
	  • NSAIDs (nonsteroidal anti-inflammatory drugs)*

Discuss the right option with your health care team. Please let your care team know if you are experiencing any pain.

*Prefer to avoid with multiple myeloma due to increased risk of kidney injury

Treating Low Blood Cell Counts in Myeloma

Symptom	Treatment
Low Red Blood Cell Count (Anemia), most common	• Dietary supplements (iron, folate, or vitamin B12) to improve fatigue • Hormones to increase number of red blood cells : erythropoietin (EPO, Procrit, Epogen) or colony-stimulating factors
Low Platelet Count (Thrombocytopenia)	• Transfusion to replenish platelets • Holding blood thinners to prevent prolonged bleeding
Low White Blood Cell Count (Leukopenia)	• Colony-stimulating factors (Neupogen, Neulasta, Leukine) to increase number of white blood cells • Antibiotics or antifungals medications to prevent infection • Vaccines to prevent viral infections

Treating Kidney Damage in Myeloma

Symptom	Treatment
Decreased amount of urine, Increase in creatinine and other proteins	• Fluids • Avoid substances that are toxic to kidneys such as Nonsteroidal anti-inflammatory drugs (NSAIDs) Aleve, Advil/Motrin • Plasmapheresis (plasma exchange) • Treat other causes • Dialysis (severe)

Side Effects and Management of Multiple Myeloma Therapies

Pearl Abraham, PharmD

Symptom or Side Effect?

Symptom	Something a person experiences that may indicate a disease or condition
Side effect	An unfavorable and unintended secondary development that is related to a medical treatment or procedure

Preventing Infections is Important for Many Myeloma Treatments

- Avoid crowds
- Ensure handwashing, hygiene
- Growth factors
- Intravenous immunoglobulin (IVIG) for hypo-gammaglobulinemia
- Immunizations: Pneumonia vaccines
- COVID-19 prevention
- Zoster prophylaxis

Managing Side Effects of Steroids

Insomnia

- Take early in the morning
- Split dosing

Fluid retention

- Monitor for swelling or "puffy" face
- Monitor weight changes

Mood changes

- Practice self care-
- Do relaxing or fun hobbies
- Talk to friends, family, or support groups
- Seek professional help

Dyspepsia (heartburn)

- Avoid spicy or acidic foods
- Avoid NSAIDs
- Take acid-blocking medications
- Take steroid with food

Elevation in glucose

- Monitor glucose and treat if needed

Managing side effects while on myeloma treatments: Blood & Cardiovascular

Common Side Effects	Medication(s)	Treatments
Blood clots	• **IMIDs:** Revlimid, Pomalyst • **PIs:** Velcade	• Blood thinners (Lovenox; Eliquis; Xarelto) • Aspirin
Low blood counts	• **Monoclonals:** Darzalex, Sarclisa • **IMIDs:** Revlimid/Pomalyst • **CAR T:** Abecma, Carvykti • **Bispecifics:** Tecvayli, Elrexfio, Talvey	• Monitoring • Dose adjustment

Managing side effects while on myeloma treatments: Blood & Cardiovascular

Common Side Effects	Medication(s)	Treatments
Shortness of breath	• **IMIDs:** Pomalyst • **PIs:** Kyprolis • **Other:** Xpovio	• Rule out blood clot • Dose adjustment
Hypertension	• **PIs:** Kyprolis	• Monitoring • Dose adjustment

Managing side effects while on myeloma treatments: Peripheral Neuropathy

Common Side Effects	Medication(s)	Treatments
Peripheral Neuropathy (impaired sensation OR burning/tingling in the hands and feet)	• **PIs:** Velcade, Kyprolis, Ninlaro • **Monoclonals:** Empliciti	• GABA analogues (Gabapentin or Lyrica) • Opioids • Acupuncture • Dose adjustment

Managing side effects while on myeloma treatments: Gastrointestinal

Common Side Effects	Medication(s)	Treatments
Constipation	• **IMIDs:** Revlimid, Pomalyst • **PIs:** Ninlaro • **Monoclonals:** Empliciti • **Other:** Xpovio	• Stool softeners or Laxatives • Fiber • Fluids • Exercise
Diarrhea	• **IMIDs:** Revlimid, Pomalyst • **PIs:** Velcade, Kyprolis, Ninlaro • **Monoclonals:** Sarclisa, Empliciti • **CAR T:** Abecma • **Other:** Xpovio	• Dose adjustment • Imodium • Cholestyramine*
Nausea	• **IMIDs**: Pomalyst • **PIs:** Velcade, Kyprolis, Ninlaro • **Monoclonals:** Darzalex, • **Other:** Xpovio	• Anti-nausea medications • Dose adjustment

*Specific to Revlimid

Managing side effects while on myeloma treatments: Infections

Common Side Effects	Medication(s)	Treatments
Infections • Upper respiration infections (most common) • Urinary Tract Infection	• **IMIDs:** Pomalyst • **Monoclonals:** Darzalex, Sarclisa, Empliciti • **CAR-T Therapy:** Abecma, Carvykti • **Bispecifics:** Tecvayli, Elrexfio • **Other:** Xpovio	• Antibiotics • Antivirals • Supportive care • IVIG – Immunoglobulin

Managing side effects while on myeloma treatments: Skin

Common Side Effects	Medication(s)	Treatments
• **Rash** • **Dry Skin**	• **IMIDs:** Revlimid/Pomalyst • **Bispecifics:** Talvey	• Topical treatments • Moisturize • OTC Benadryl and Claritin • Dose adjustment

Managing side effects while on myeloma treatments: Other

Common Side Effects	Medication(s)	Treatments
• Fatigue	• **IMIDs:** Revlimid, Pomalyst • **PIs:** Velcade, Kyprolis • **Monoclonals:** Darzalex, Empliciti • **Bispecifics**: Tecvayli, Elrexfio, Talvey, • **CAR T:** Abecma, Carvykti • **Other:** Xpovio	• Sleep hygiene • Regular exercise • Conserve energy • Dose adjustment
• Infusion reactions	• **Monoclonals**: Sarclisa, Empliciti, Darzalex	• Oral or IV antihistamine • Steroid • Monitoring • Dose adjustment

Tools and Resources for Coping with MM

Alexandra Huffman, LCSW

Beyond Myeloma Treatment: Taking Care of Yourself

Proper nutrition

- Eating a healthy and high fiber diet
- Your team may recommend a nutritionist

Mental health and emotional support

- Support groups are available
- Stress-reducing activities like yoga and meditation can help reduce anxiety

Exercise

- Getting regular exercise can improve your physical and mental health

Sleep

- Practice good sleep hygiene (routines, no TV or phone screen close to bedtime)

Communicating With Your Care Team: Side Effects and Support Services

Talk to your provider about side effects and how to make treatment more tolerable

- What support services are available to me?
- What financial resources are available to me?
- Are there any myeloma patient support groups available to me? Are any in my area?
- What is the best way for me to contact you in case of an emergency?
- Should I tell my other doctors/my dentist about my diagnosis?

Please take a moment to answer
two questions about this presentation.

Resources at UTSW Simmons Cancer Center

Supportive Care for Our Patients

Supportive care at Simmons Cancer Center is designed to help patients and their families navigate the physical, emotional, and daily challenges of cancer. This care is integrated from the start of the patients' journey to enhance their quality of life and overall well-being. See the services we offer below.

- Caregiver Support
- Music Therapy
- Oncology Nutrition
- Oncology Skin and Hair
- Oncology Social Work
- Spiritual Support
- Support Group and Classes
- Transitional Care Coordination
- Young Adult Cancer Support

Scan the QR coded to learn more about each of these services.

Supportive Care Support Group: DFW Blood Cancer with Blood Cancer United

Who: Patients and caregivers affected by blood cancer

When: Third Saturday of every month *No Dec meeting

Time: 10 a.m. to 11 a.m.

Where: Cancer Care Outpatient Building, Second floor - NM 2.704B

Supportive Care Support Group:
Life after Transplant

Who: Autologous, allogenic, and CAR-T transplant patients
When: Third Friday of every month
Time: 10 a.m. to 11 a.m.
Where: Cancer Care Outpatient Building, Second floor - NM 2.704B

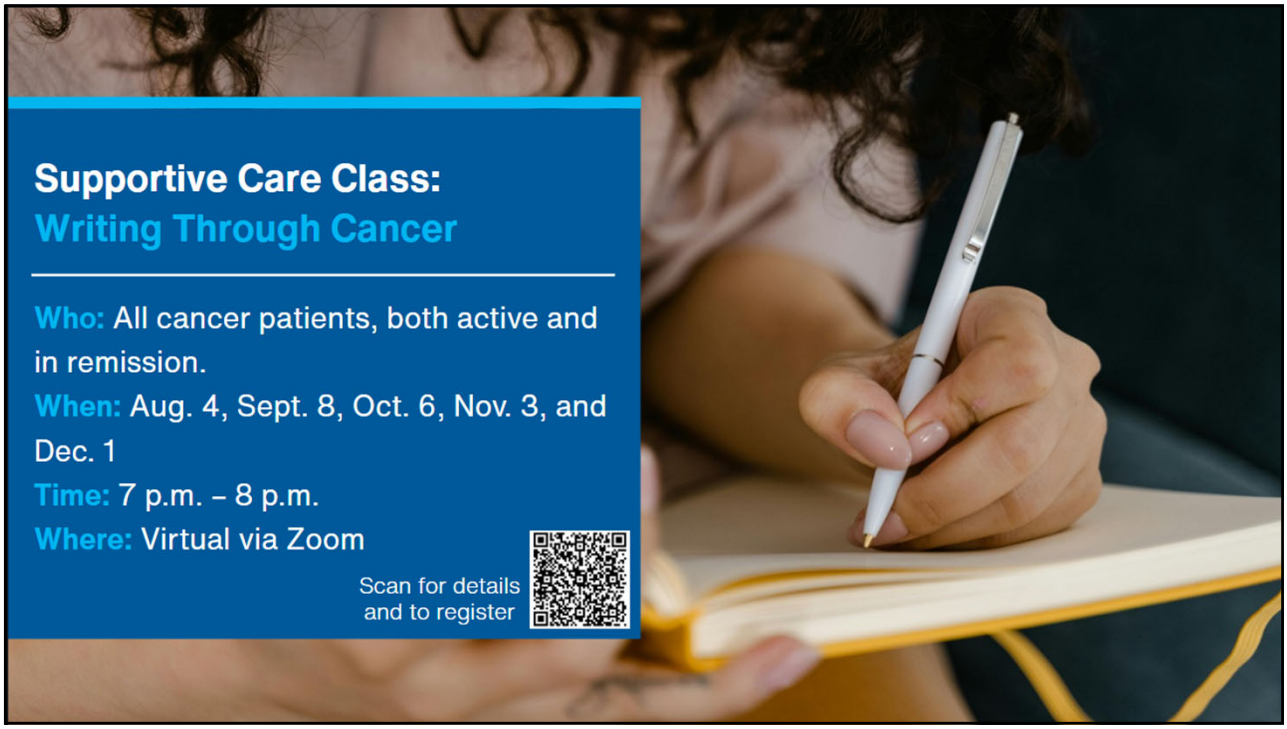
Supportive Care Class:
Healthy Eating for Cancer Survivorship

Who: Patients. This class has an emphasis on long-term survivorship and weight maintenance.
When: Wednesdays October 8 to October 29
Time: 12 p.m. – 1:15 p.m.
Where: Virtual via Zoom

• Scan for details and to register


Supportive Care Class:
Mindful Movement: Yoga
Who: Patients and Caregivers
When: Tuesdays October 7 to October 28
Time: 12 p.m. – 1:00 p.m.
Where: Cancer Care Outpatient Building
• Scan for details and to register


Supportive Care Class:
Surviving to Thriving: Healing and Art
Who: Patients and caregivers
When: Every Tuesday and Wednesday, September 16 to December 10
Time: 10 a.m. – 12 p.m.
Where: Cancer Care Outpatient Building, 2nd floor - Room NM2.966
• Scan for details and to register



Young Adult Cancer Support Group

- Dallas YACS is a community of young adults, ages 18 to 39, who have or have had cancer, and they strive to support, strengthen, and empower each other.

- **Who:** Young adult (ages 18-39) cancer survivors
- **When:** Last Tuesday of every month
- **Time:** 7 p.m. – 8:30 p.m.
- **Where:** Cancer Care Outpatient Building,
- 3rd floor - Thompson Family Conference Center

DALLAS YACS
Young Adult Cancer Support

- Scan for details
- and to register

Foot Massages Now Available During Infusion

Susie Haces

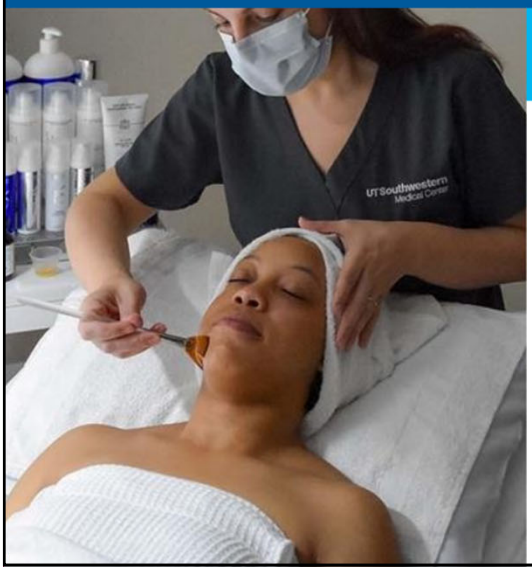
Beth Nystrom

As part of our integrative oncology services, we are now offering foot massages during your infusion for relaxation and stress reduction. This service is available on Mondays and Tuesdays, as the massage therapists' schedules allow.

Please ask your care team or email SCCCSupport@UTSouthwestern.edu if you have any questions.

UTSouthwestern
Simmons Cancer Center

Free Skin and Hair Care Services



From the Ricardo Fisas Natura Bissé Foundation

The Ricardo Fisas Natura Bissé Foundation is a nonprofit that provides those navigating cancer with free skin and hair care services by an oncology-trained aesthetician.

To request an appointment, scan the QR code and click UT Southwestern and DFW locations.

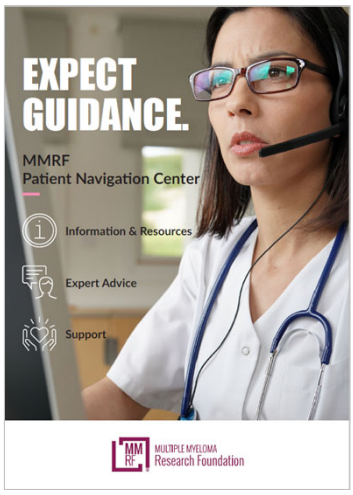
Patient Journey

Alton Campbell,
Patient Advocate

Closing Remarks

Veronica Bohorquez-Medd, MA
Senior Manager, Community Engagement & Education

MMRF Patient Navigation Center



Get support through every step of your multiple myeloma journey.

Give the Patient Navigation Center a call Monday—Friday, 9 AM-7 PM ET

1-888-841-6673 to learn more.

Scan me!

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Patient Education Programs 2025

Multi-channel offerings

- Patient Summits
- Patient Webinars
- Myeloma Matters Podcasts
- FB Livestreams
- Conference Highlights
- Nursing Fireside Chats
- The MMRF Patient Toolkit
- High Impact Topic Videos
- Fast Facts in Myeloma Infographics

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Save the Date For Upcoming Patient Education Events

Program	Date and Time
Livestream: IMS Conference Highlights	Wednesday, October 15
Webinar: Clinical Trials	Wednesday, November 19
Livestream: Navigating Clinical Trials	Wednesday, December 3
Webinar: Highlights from the 2025 American Society of Hematology Meeting	Wednesday, December 17

For more information or to register,
visit **themmrf.org/educational-resources**

Participate in MMRF's Walk/Run!
Participation is free & open to all ages!

Philadelphia – 10/18
Atlanta – 10/25
Houston – 11/01
Los Angeles – 11/15
Scottsdale – 11/22

Raise awareness.
Fundraise critical funds to accelerate treatments and a cure.
Build community and camaraderie with your local multiple myeloma community.

Visit our website for more information:
https://themmrf.org/get-involved

Join *Team for Cures*

Events-based fundraising in communities nationwide that help to support the mission of the MMRF

With a variety of events available, **choose how you'd like to get involved in making an impact.**

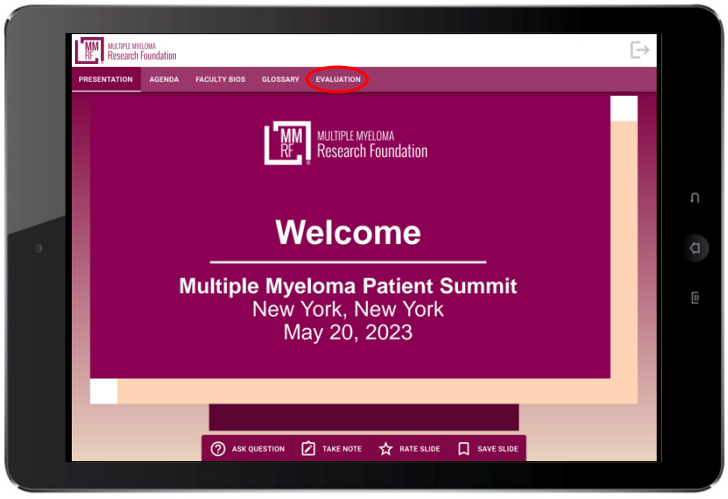
Our Team for Cures staff looks forward to working alongside you to achieve your goals—while raising critical funds for the MMRF.

- Walk/Run
- Moving Mountains for Multiple Myeloma
- Bike/Road to Victories
- Half and Full Marathons
- Create Your Own Fundraiser

Scan me!

Don't Forget!

Complete your evaluation
Leave the iPad at your seat



MULTIPLE MYELOMA Research Foundation

Thank you