WELCOME & INTRODUCTIONS

Understanding Myeloma

Welcome to LLS Community

We are a community of blood cancer patients, survivors, and caregivers. We're here to support you, give you trusted information and resources, and help you feel connected. No one should have to face a blood cancer diagnosis alone.

To join LLS Community, visit www.LLS.org/community.

Program will begin shortly

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LEUKEMIA & LYMPHOMA SOCIETY®

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DISCLOSURES

Understanding Myeloma

Tomer M. Mark, MD, MSc

- **Consultant:** Janssen, Sanofi, Takeda, Karyopharm, Amgen, Genzyme, Adaptive Inc.
- **Research funding:** Janssen, Bristol Myers Squibb
- **Research supplies:** Sanofi, Karyopharm, Oncopeptides

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Understanding Myeloma

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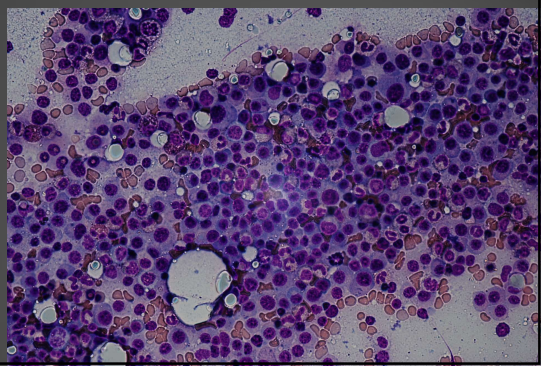

University of Colorado
Anschutz Medical Campus

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Outline

- What is Multiple Myeloma?
  - Common Presenting Features
  - Epidemiology and Risk Factors for Multiple Myeloma
  - Diagnosis of Multiple Myeloma
- Disease Course in Multiple Myeloma
  - How to interpret lab results
  - When is imaging ordered? What type?
  - When do I need a bone marrow biopsy?
- Common patient and caregiver questions

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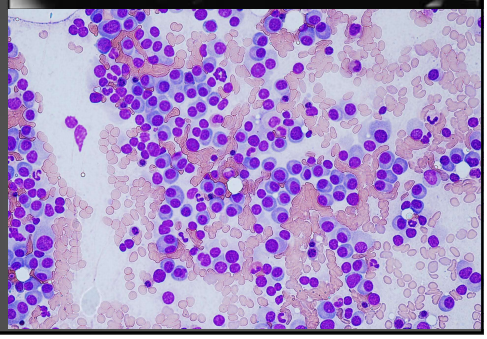
Multiple Myeloma:

- Malignancy of plasma cells
- Hallmarks:
  - Monoclonal Ig – M-spike
  - Anemia
  - Renal failure
  - Destructive bone lesions
  - High blood calcium
  - Increased risk of infection



Munshi, N., et al. (2001). Plasma cell neoplasms. Principles and Practice of Oncology. J. DeVita, VT., S. Hellman and S. Rosenberg. Philadelphia, PA, Lippincott Williams & Wilkons: 2465-2499.
* Images are from Tomer Mark's personal collection

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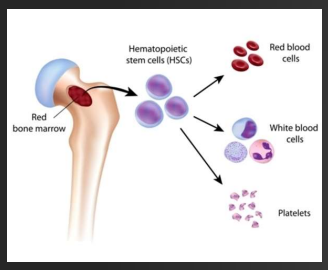
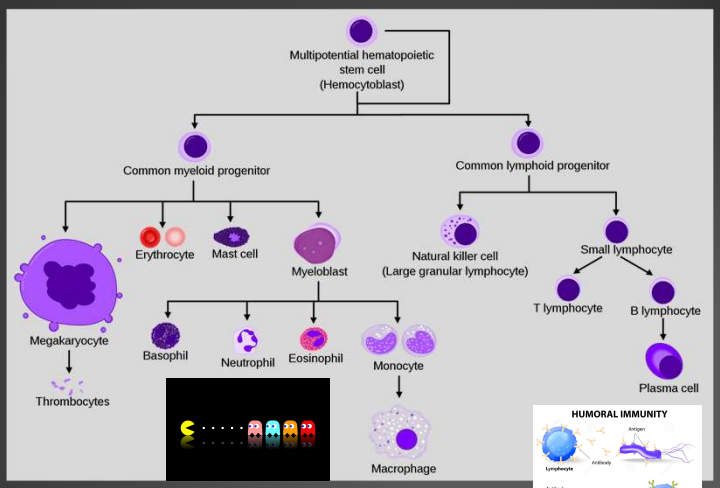
What are plasma cells?





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Myeloma is Part of a Group of Plasma Cell Disorders

- Multiple Myeloma
- Other Disorders
  - Monoclonal gammopathy of undetermined significance (MGUS)
  - Smoldering multiple myeloma (SMM)
  - Solitary Plasmacytoma
    - Bone
    - Extramedullary
  - Waldenström's Macroglobulinemia
  - Primary Amyloidosis (AL)
  - Heavy chain disease
  - POEMS syndrome
  - Type I and II cryoglobulinemia

Munshi, N., et al. (2001). Plasma cell neoplasms. Principles and Practice of Oncology. J. DeVita, VT., S. Hellman and S. Rosenberg. Philadelphia, PA, Lippincott Williams & Wilkons: 2465-2499.

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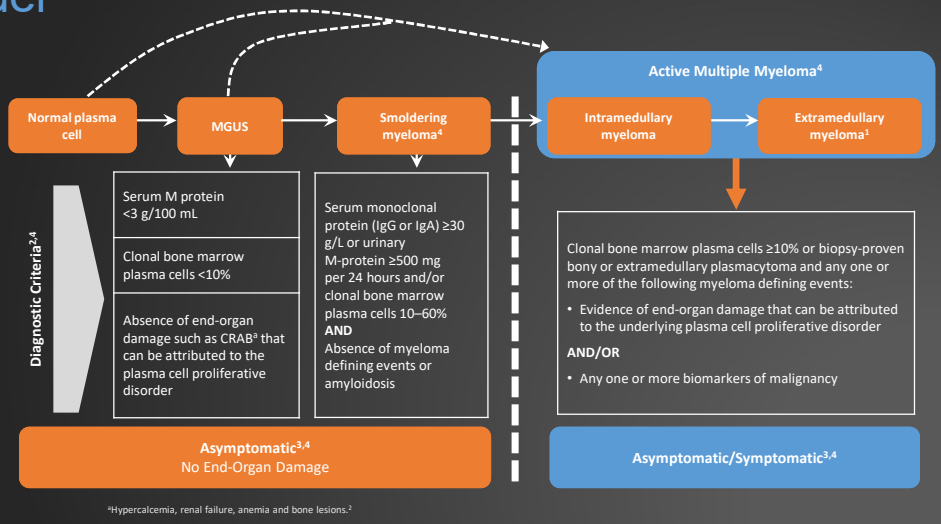
Diagnostic Criteria Can Determine Specific Plasma Cell Disorder



[a]Hypercalcemia, renal failure, anemia and bone lesions.[2]

1. Kuehl MW, et al. *Nat Rev Cancer.* 2002;2(3):175-187. **2.** Kyle RA, et al. *Leukemia.* 2009;23(1):3-9. **3.** McGuire TR. Multiple myeloma. In: DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, eds. *Pharmacotherapy: A Pathophysiologic Approach.* 7th ed. New York, NY: McGraw-Hill; 2008:2295-2307. **4.** Rajkumar SV, et al. *Lancet Oncol.* 2014;15(12):e538-548.

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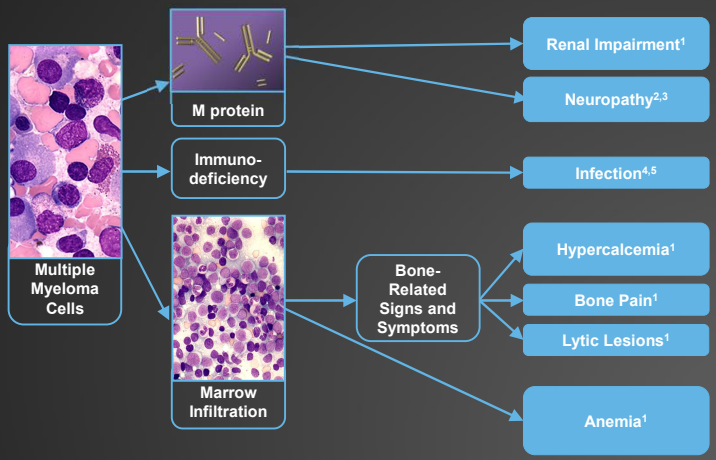
Spectrum of Clinical Manifestations of Multiple Myeloma



1. Kyle RA, et al. *Mayo Clin Proc.* 2003;78(1):21-33. **2.** Ropper AH, et al. *N Engl J Med.* 1998;338(22):1601-1607. **3.** Kissel JT, et al. *Neuromuscul Disord.* 1996;6:3-18. **4.** Bladé J, et al. *Hematol Oncol Clin N Am.* 2007;21(6):1231-1246. **5.** McGuire TR. Multiple myeloma. In: DiPiro JT, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM, eds. *Pharmacotherapy: A Pathophysiologic Approach.* 7th ed. New York, NY: McGraw-Hill; 2008:2295-2307.

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Myeloma Epidemiology and Risk Factors

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Epidemiology of Multiple Myeloma[a]

Prevalence

~90,000 people with myeloma in the United States estimated in 2012

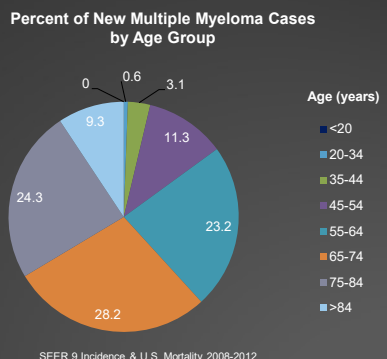
Demographics

69 years is the median age at diagnosis

3.7% of multiple myeloma patients are **younger than 45 years**

~2X incidence of multiple myeloma in **African Americans** as in Caucasians

More frequent in men than women



SEER 9 Incidence & U.S. Mortality 2008-2012, All Races, Both Sexes. Rates are Age-Adjusted.

[a]Based on SEER data and estimates published in 2015.

National Cancer Institute. Surveillance Epidemiology and End Results (SEER) stat fact sheets. Available at: http://seer.cancer.gov/statfacts/html/mulmy.html. Accessed January 12, 2016.

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Multiple Myeloma Risk Factors

Age

Median age at diagnosis is 69 years[1]

Male gender

Higher incidence in males than in females[1]

Race

Incidence almost twice as high in African Americans as in Caucasians[1]

Other risk factors include:

- Environmental and occupational exposure, eg, radiation, chemicals[2]
- Potential familial predisposition[2]

1. National Cancer Institute. Surveillance Epidemiology and End Results (SEER) stat fact sheets. Available at: http://seer.cancer.gov/statfacts/html/mulmy.html. Accessed December 12, 2015. **2.** Multiple Myeloma Research Foundation. Multiple Myeloma Causes. Available at: http://www.themmrf.org/multiple-myeloma/multiple-myeloma-causes/. Accessed December 12, 2015.

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Myeloma Diagnosis

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"Old" Diagnostic Criteria for MM

- Presence of M protein in serum or urine
- Identification of >10% monoclonal plasma cells in bone marrow and/or plasmacytoma
- Evidence of end-organ damage: CRAB(I) criteria
  - **C**alcium Elevation: $Ca^{++} \geq 11$ mg/dL
  - **R**enal Failure: SCr ≥ 2 mg/dL
  - **A**nemia: Hb < 12 g/dL
  - **B**one: lytic lesions, pathologic fracture
  - **I**nfections: Recurrent, due to hypogammaglobulinemia

Image Source: wikimedia commons

Kyle RA, Rajkumar SV. Criteria for diagnosis, staging, risk stratification and response assessment of multiple myeloma. Leukemia 2009; 23: 3–9.

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Revised International Myeloma Working Group Myeloma Diagnostic Criteria

DEFINITION OF MM

Clonal bone marrow plasma cells ≥10% OR biopsy-proven bony or extramedullary plasmacytoma

The above, plus any 1 or more of the following myeloma-defining events

Biomarkers of malignancy

- Clonal bone marrow plasma cell percentage ≥60%
- Involved:uninvolved serum free light chain ratio ≥100
- >1 focal lesion on MRI studies

Evidence of end organ damage

- Calcium elevation (>1 mg/dL higher than the upper limit of normal or >11 mg/dL)
- Renal insufficiency (creatinine clearance <40 mL/min or serum creatinine >2 mg/dL)
- Anemia (Hb <10 g/dL or >2 g/dL below the lower limit of normal)
- Bone lesions (1 or more osteolytic lesions on skeletal radiography, CT, or PET-CT)

The presence or absence of monoclonal protein is used to divide MM into secretory and nonsecretory types

Rajkumar SV et al. *Lancet Oncol.* 2014;15(12):e538-e548.

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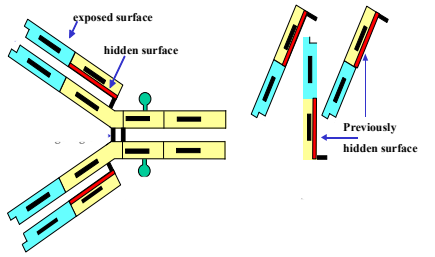
Understanding Lab Tests in Multiple Myeloma: SPEP, UPEP, and free light assay



Intact Immunoglobulin Free Light Chain

Bradwell, Serum free light chain assay

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Normal Serum Protein Electrophoresis

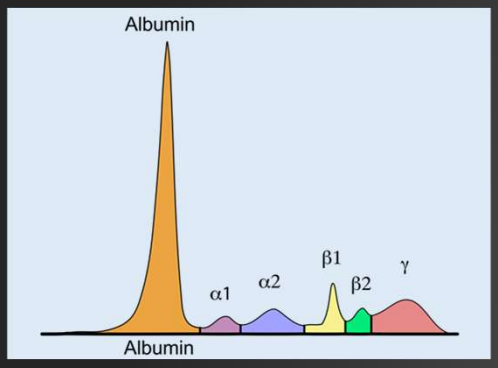

Image source: Wikimedia commons

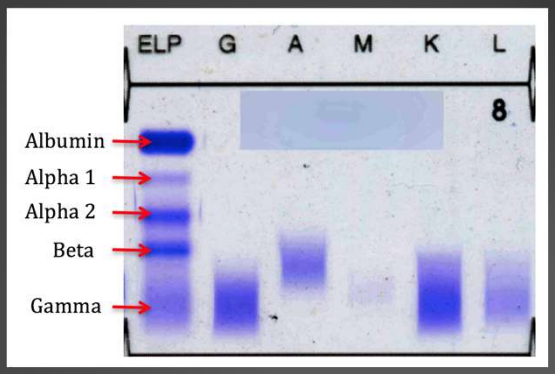

Image source: Tomer Mark

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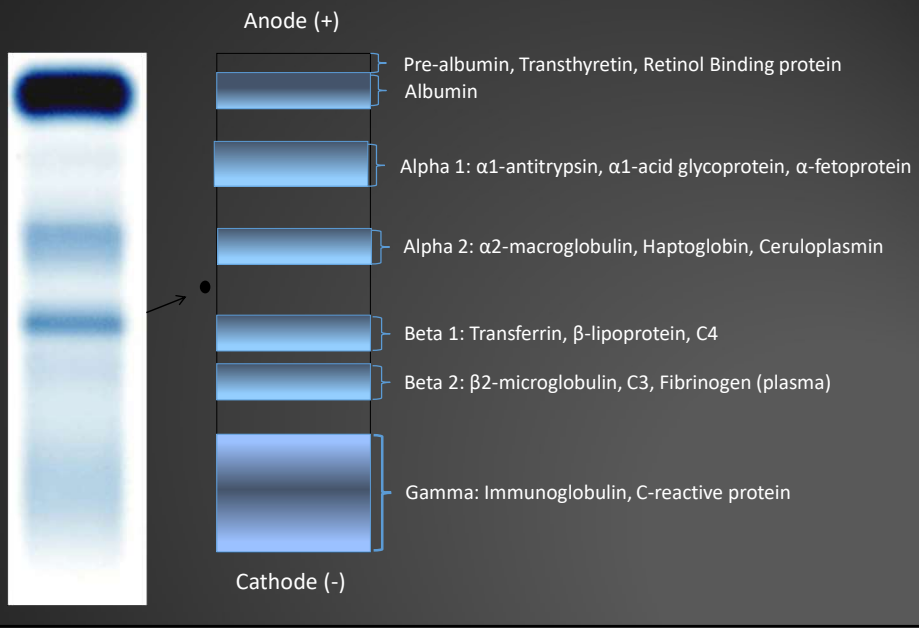
Components on Serum Protein Electrophoresis



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Serum Protein Electrophoresis with a M-spike

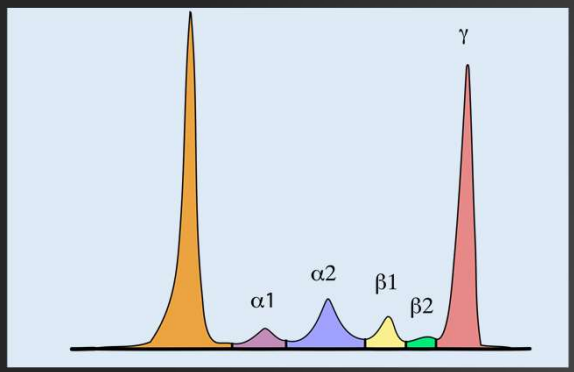

Image source: Wikimedia commons

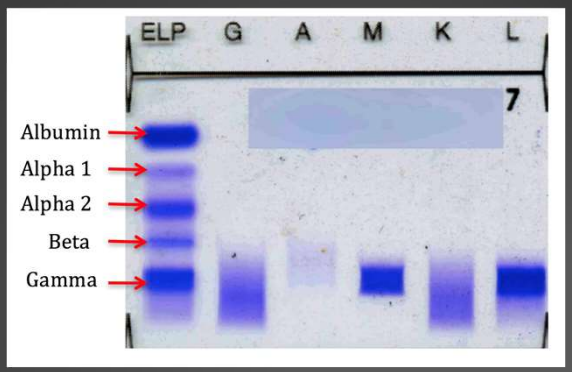

Image source: Tomer Mark

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How often to do testing?

- Serum protein electrophoresis and immunofixation, Immunoglobulins, CBC, CMP, Free light chains: monthly
- Urine protein electrophoresis and immunofixation : At diagnosis and then varies per patient
- Radiology Imaging: At diagnosis, when clinically indicated, to confirm complete remission.
- Bone marrow biopsy:
  - At diagnosis
  - At relapse
  - To confirm complete remission

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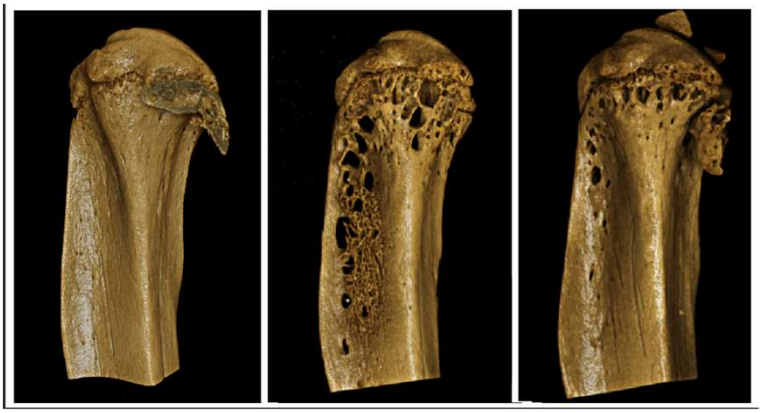
Understanding Imaging in Myeloma: x-rays, MRI, PET-CT scan



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Example Myeloma Imaging: X-Ray

Moth-eaten appearance of right humerus

Image source: Tomer Mark

- Skeletal survey: x-rays of all long bones, pelvis, spine, and skull.
- Quick, easy, but low sensitivity.
- Not very useful to follow disease course

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Example Myeloma Imaging: MRI

Coronal T2-weighted MRI with plasmacytoma in the L3 vertebral body (large arrowhead)
And also a compression fracture of L5 with epidural extension of tumor (small arrow)

Image source: Tomer Mark

- MRI: very sensitive to detect marrow changes; can detect lesions before fractures occur
- Uncomfortable, claustrophobia
- No one has a normal spine

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Example Myeloma imaging: PET-CT

Image source: Tomer Mark

- PET/CT: most sensitivity, quick, results correlate with tumor activity
- Radiation: equal to about 30 x-rays
- TOO sensitive

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Prognostic Biomarkers

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Multiple Myeloma Is a Classification and Prognostic Challenge

Tumor biology factors[1]	Tumor burden factors[1,2]	Patient-related factors[1,3]
• Chromosomal abnormalities (eg, ploidy status, deletion 13 on conventional cytogenetic testing) • Lactate dehydrogenase • Plasma cell proliferative rate • Presentation as plasma cell leukemia	• Durie-Salmon stage • International Staging System stage (ISS) • Revised-ISS stage • Extramedullary disease	• Age • Performance status/frailty • Renal function

1. Mikhael JR, et al. *Mayo Clin Proc*. 2013;88(4):360-376. **2.** Palumbo A, et al. *J Clin Oncol*. 2015;33(26):2863-2896.
3. Palumbo A, et al. *Blood*. 2015;125(13):2068-2077.

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Several Prognostic Factors Have Been Identified in MM

Select Negative Prognostic Factors

Prognostic Factors	Findings
β_2-microglobulin[1]	↑ levels associated with decreased survival
Albumin[2]	↓ levels correlate with decreased survival
Lactate dehydrogenase (LDH)[1]	↑ levels associated with decreased survival
Ig isotype[3]	IgA associated with decreased survival
Plasma cell labeling index (PCLI)[1]	↑ levels associated with decreased survival
Bone marrow plasmacytosis[4]	↑ level (>20%) associated with decreased survival
Chromosome abnormalities[5]	High-risk abnormalities associated with decreased survival

1. Kyle RA. *Stem Cells*. 1995;13(suppl 2):56-63. **2.** Greipp PR, et al. *J Clin Oncol*. 2005;23(15):3412-3420. **3.** Munshi NC, et al. Plasma cell neoplasms. In: DeVita VT, et al, eds. *Cancer: Principles & Practice of Oncology*. 7th ed. 2005:2155-2188. **4.** Smadja NV, et al. *Blood*. 2001;98(7):2229-2238. **5.** Fonseca R, et al. *Cancer Res*. 2004;64(4):1546-1558.

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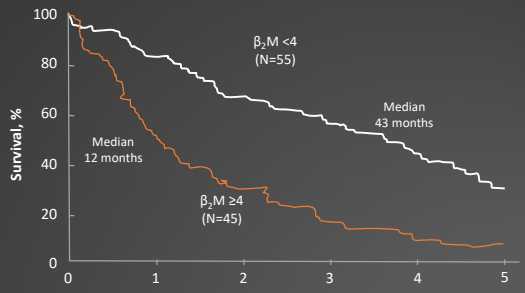
Correlation of β_2-Microglobulin (β_2M) Levels With Survival

- β_2M levels[1-3]
  - Correlate with myeloma stage, disease status, and survival[1-3]
  - May be a product of myeloma cells and can be used as a tumor marker to predict disease course[2,3]
- β_2M levels are valuable at diagnosis[1-4]
  - Component of the International Staging System (ISS) and revised International Staging System (R-ISS)[1,2]
    - Stage I: β_2M <3.5 mg/L
    - Stage III: β_2M ≥5.5 mg/L
  - Patients with β_2M ≥4 mg/L had shorter survival than those with β_2M <4 mg/L (see figure)[3]
  - Elevated β_2M levels have prognostic value in patients with renal failure, even with increased β_2M levels due to renal insufficiency[4]

Survival of MM patients according to serum β_2M levels during chemotherapy[3]



100 patients with MM were studied just prior to initial chemotherapy and were followed for at least 3.5 years. Serum samples were retrieved retrospectively from a serum bank.

Reproduced with permission from the American Society of Hematology.

β_2M, β_2-microglobulin.

1. Palumbo A, et al. *J Clin Oncol*. 2015;33(26):2863-2869. **2.** Greipp P, et al. *J Clin Oncol*. 2005;23(15):3412-3420. **3.** Greipp PR, et al. *Blood*. 1988;72(1):219-223. **4.** Dimopoulos MA, et al. *Ann Oncol*. 2012;23(3):722-729.

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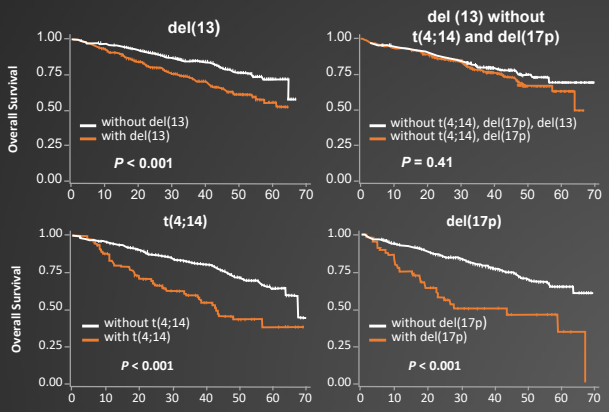
Chromosomal Abnormalities Are Prognostic of Survival

Impact of Chromosomal Abnormalities on Overall Survival (OS)[1]



- The prognostic value of del(13) as detected by FISH is almost entirely dependent on the frequent association with t(4;14) and del(17p).

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- If del(13) is not associated with t(4;14) and del(17p), it has little or no prognostic value
- Del(13) was frequently associated with t(4;14) and del(17p), occurring in 85% (P<0.001) of t(4;14)-positive and 78% (P<0.001) of del(17p)-positive patients

FISH, fluorescence in situ hybridization.

Avet-Loiseau H, et al. *Blood*. 2007;10(9)9:3489-3495.

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Revised International Staging System for Multiple Myeloma Incorporated Additional Prognostic Factors

Revised Staging System

Stage	Revised International Staging System (R-ISS)	Median Survival
I	ISS stage I and standard-risk CA by iFISH and normal LDH	Not reached
II	Not R-ISS stage I or III	83 months
III	ISS stage III and either high-risk CA by iFISH or high LDH	43 months

Previous Staging System and Risk Stratification

Stage	International Staging System (ISS)
I	Serum β_2-microglobulin <3.5 mg/L Serum albumin ≥3.5 g/dL
II	Neither stage I nor stage III
III	Serum β_2-microglobulin ≥5.5 mg/L

Risk	CA by iFISH
Standard risk	No high-risk CA
High risk	Presence of del(17p) and/or translocation t(4;14) and/or translocation t(14;16)

Level	LDH
Normal	Serum LDH < the upper limit of normal
High	Serum LDH > the upper limit of normal

CA = chromosomal abnormalities; iFISH = interphase fluorescent in situ hybridization; LDH = lactate dehydrogenase.

Palumbo A, et al. *J Clin Oncol*. 2015;33(26):2863-2869.

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Disease Course in Multiple Myeloma

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Multiple Myeloma Is Characterized by Periods of Relapse and Remission

Natural History of Multiple Myeloma[1]

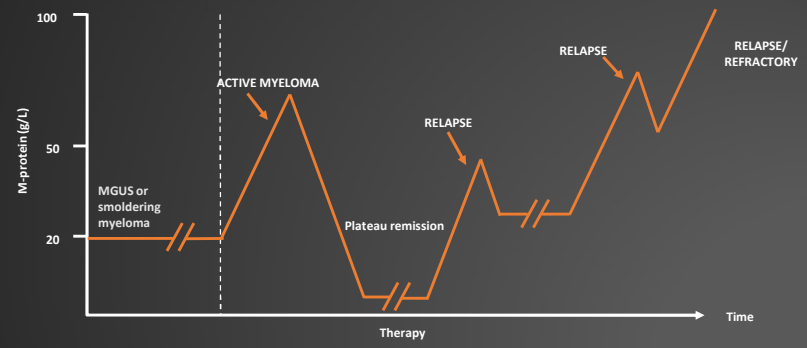

Image adapted from: Hajek R. *Multiple myeloma – a quick reflection on the fast progress.* ed. InTech; 2013.

MGUS = monoclonal gammopathy of undetermined significance.

Hajek R. *Strategies for the Treatment of Multiple Myeloma in 2013: Moving Toward the Cure.* InTech; 2013.

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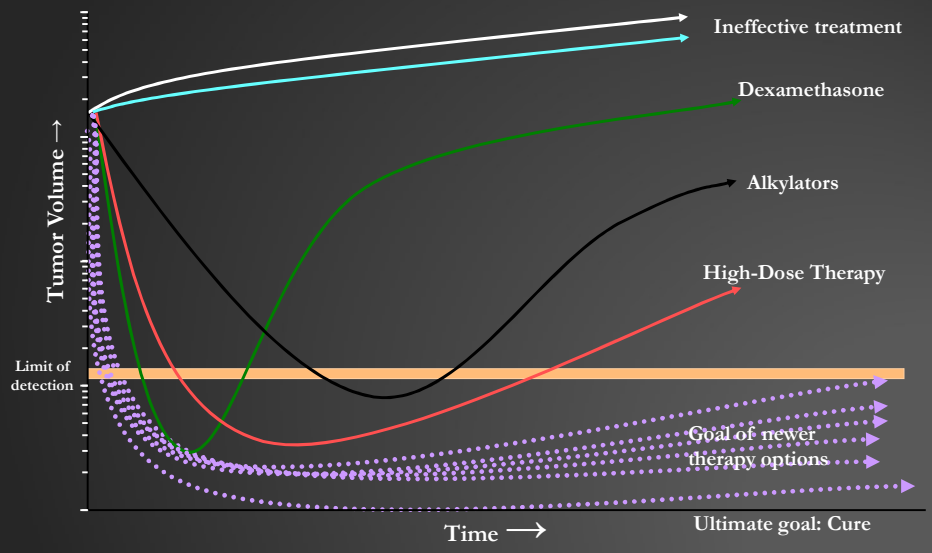
Pathway to cure – one hypothesis



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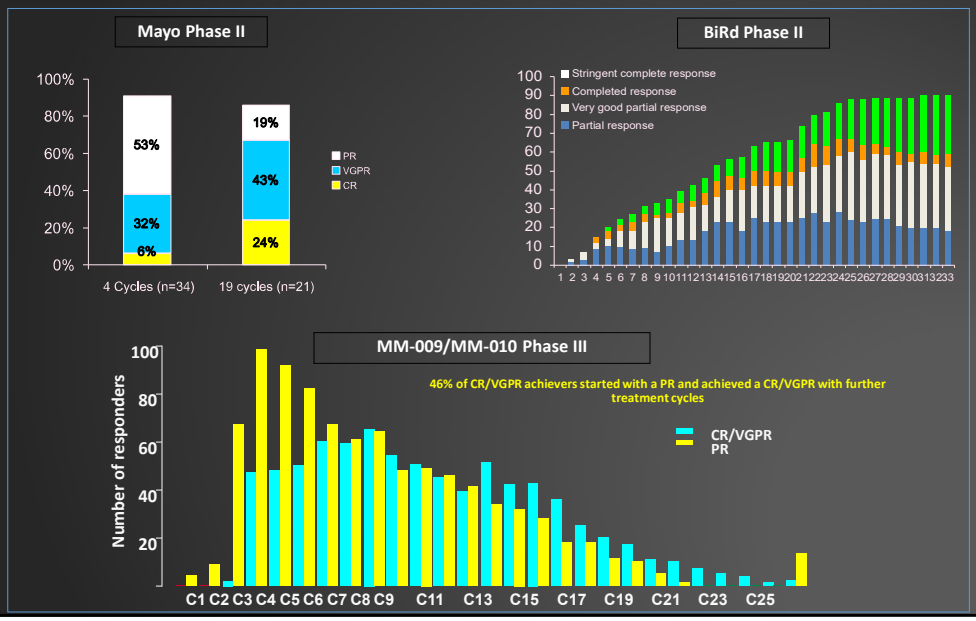
Responses Deepen with Length of Therapy



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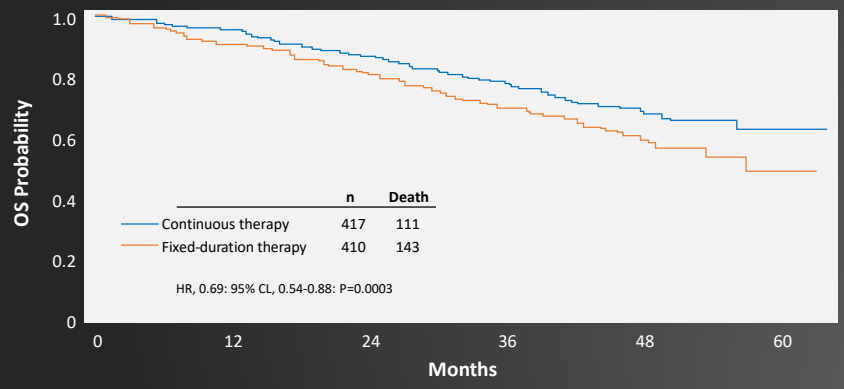
The Importance of Continuous Therapy[1]

Continuous therapy may be associated with significant improvement in patient outcomes[1]



Pooled analysis of 3 phase 3 trials analyzing continuous therapy vs fixed-duration therapy in 1218 patients with newly diagnosed multiple myeloma. Primary endpoints were PFS1, PFS2, and OS. Median follow-up was 52 months.

OS=overall survival.

Reference: 1. Palumbo, A. et al. *J Clin Oncol*. 2015; 33:3459-3466.

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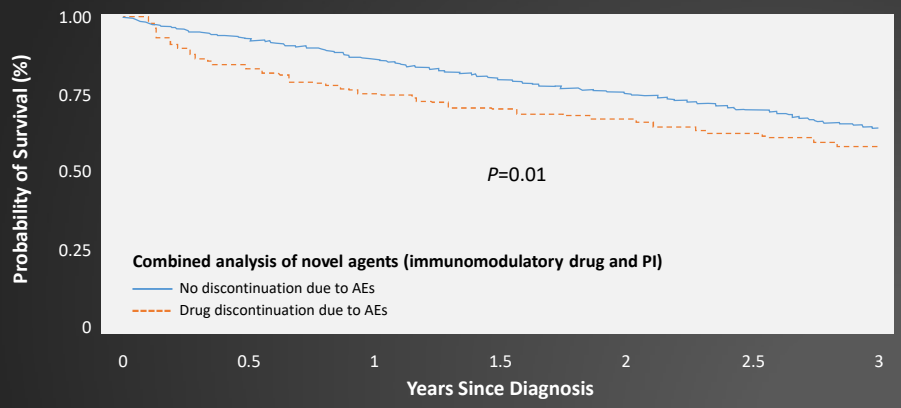
Treatment Discontinuation Can Adversely Impact Outcomes[1]



- Drug discontinuation due to AEs was correlated with increased risk of death within the first 6 months (HR: 1.67; 95% CI, 1.12-2.51; *P*=0.01)

AE = adverse event; CI = confidence interval; HR = hazard ratio.
Reference: 1. Bringhen S et al. *Haematologica.* 2013;98(6):980-987.

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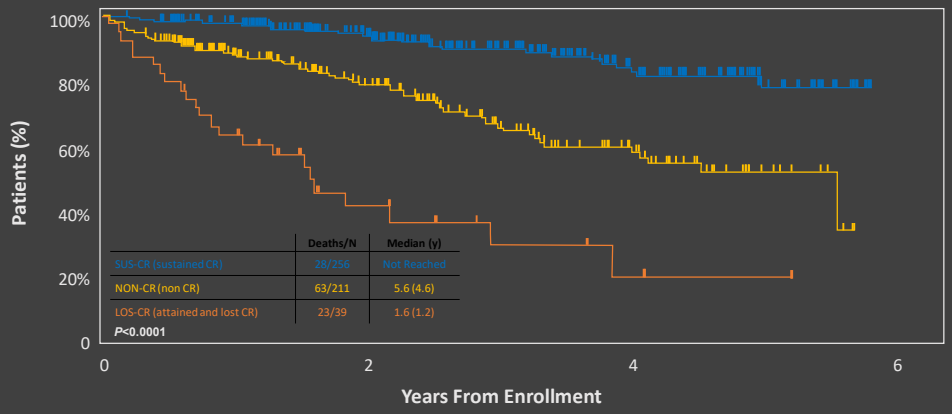
The importance of maintaining a deep response[1]

Durable responses are associated with improved outcomes[1]



CR=complete remission; SUS-CR = sustained CR; NON-CR = did not achieve CR; LOS-CR = attained and lost CR status.

Reference: 1. Barlogie et al. *Cancer*. 2008;113:355-359.

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How do I know how I am doing?

- We can measure the myeloma directly through bone marrow biopsy….
- We can use the protein secreted by the malignant plasma cell to follow disease activity. Paraprotein ≈ tumor burden.
- Different paraproteins:
  - M-spike: i.e. IgG-lambda, IgA-kappa. Most common. Follow by SPEP.
  - Free light chains: present in serum or urine. When in urine, called Bence Jones Protein.
  - Plasmacytomas: size of masses, used when the myeloma is NONsecretory.
- Achievement of deeper response generally leads to improved remission time and overall survival.

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MM Response Criteria are complicated

Stringent Complete Response (sCR) requires all of the following:
☐ All of the criteria of complete response plus ☐ Normal serum free light chain ratio ☐ Absence of monoclonal cells on bone marrow aspirate by IHC of IF
Complete Response (CR) requires all of the following:
☐ Absence of M-protein in the serum and urine by IFE. The presence of oligoclonal bands consistent with oligoclonal immune reconstitution does not exclude CR. (* post-transplant) ☐ <5% plasma cells in bone marrow aspirate
Very Good Partial Response (VGPR) requires all of the following:
☐ All of the criteria of complete response plus ☐ Normal serum free light chain ratio ☐ Absence of monoclonal cells on bone marrow aspirate by IHC of IF
Partial Response (PR) requires all of the following:
☐ >50% reduction in the level of the serum monoclonal paraprotein ☐ Reduction in 24 hour urine light chain excretion by >90% or to < 200mg ☐ > 50% reduction in size of soft tissue plasmacytoma (by radiography or physical examination)
Stable Disease (SD) requires all of the following:
☐ Not meeting the above criteria nor the criteria for progression of disease

Durie et al. *Leukemia.* 2006. 20,1467-1473

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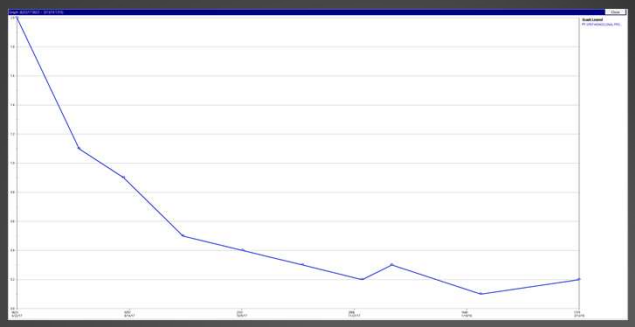
Examples of Follow Labs for Response: M-spike (M-protein)

Flowsheet

	SPEP MONOCLONAL PROTEIN
Ref. Range	Latest Ref Range: None Detected g/dL
6/22/2017 0623	2.0 ▲
7/21/2017 1136	1.1 ▲
8/11/2017 0857	0.9 ▲
9/8/2017 0834	0.5 ▲
10/6/2017 0857	0.4 ▲
11/3/2017 1318	0.3 ▲
12/1/2017 1258	0.2 ▲
12/15/2017 1144	0.3 ▲
1/26/2018 0808	0.1 ▲
3/13/2018 1315	0.2 ▲



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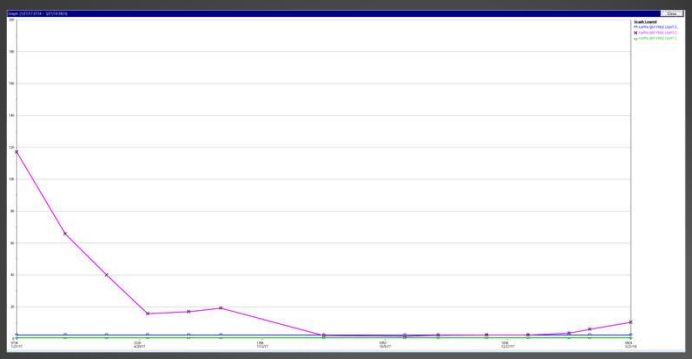
Examples of Follow Labs for Response: serum free light chains

Flowsheet

	KAPPA QNT FREE LIGHT CHAINS
Ref. Range	Latest Ref Range: 0.69 - 2.34 mg/dL
1/27/2017 0734	117.00 ▲
3/1/2017 0842	65.80 ▲
3/29/2017 1111	39.90 ▲
4/26/2017 1114	15.70 ▲
5/24/2017 1051	17.00 ▲
6/15/2017 0933	19.20 ▲
8/24/2017 0838	1.87
10/18/2017 1323	1.57
11/10/2017 0738	2.06
12/13/2017 0944	2.26
1/10/2018 1011	2.24
2/7/2018 1050	3.57 ▲
2/21/2018 0934	5.98 ▲
3/21/2018 0924	10.30 ▲



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Examples of Follow Labs for Response: Bence Jones Protein: urine free light chains

Flowsheet

	UPEP MONOCLONAL PROTEIN
Ref. Range	Latest Ref Range: None Detected mg/Day
8/4/2017 1041	1,926 ▲
12/12/2017 0600	812 ▲
12/19/2017 0826	854 ▲
2/12/2018 0800	667 ▲
3/10/2018 0900	485 * ▲

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Responses now are deeper than we can find in blood and urine:

IMWG Criteria for Minimal Residual Disease (MRD)			
Sustained MRD-negative	**Flow MRD-negative**	**Sequencing MRD-negative**	**Imaging Plus MRD-negative**
MRD negativity in the marrow NGF, NGS, or both, and by imaging as defined below, confirmed minimum of 1 year apart. Subsequent evaluations can be used to further specify the duration of negativity (eg, MRD-negative at 5 years.	Absence of phenotypically aberrant clonal plasma cells by NGF on bone marrow aspirates using the EuroFlow standard operation procedure for MRD detection in multiple myeloma (or validated equivalent method) with a minimum sensitivity of 1 in 10^5 nucleated cells or higher.	Absence of clonal plasma cells by NGS on bone marrow aspirate in which presence of a clone is defined as less than two identical sequencing reads obtained after DNA sequencing of bone marrow aspirates using a validated equivalent method with a minimum sensitivity of 1 in 10^5 nucleated cells or higher.	MRD negativity as defined by NGF or NGS plus disappearance of every area of increased tracer uptake found at baseline or preceding PET/CT or decrease to less mediastinal blood pool SUV or decrease to less than that of surrounding normal tissue.

CT, computed tomography; IMWG, International Myeloma Working Group; NGF, next-generation flow; NGS, next-generation sequencing; PET, positron emission tomography; SUV, standard uptake value

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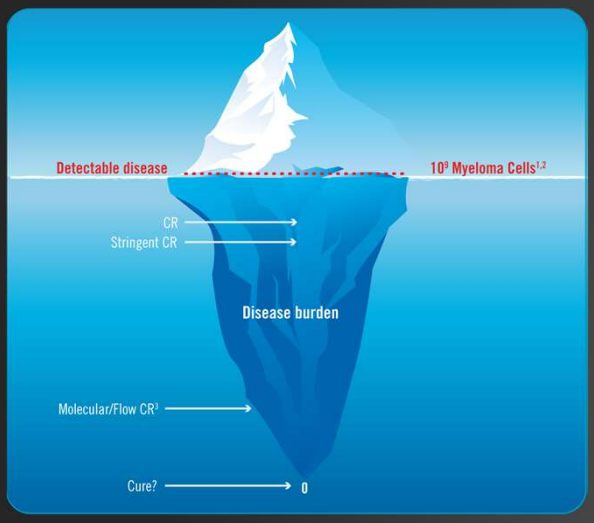
Achievement of Complete Response Does Not Eliminate All Myeloma Clones



Median OS increases by ~1 year for each log reduction in MRD[3]:
MRD > 10%: 1 yr
MRD 1-10%: 4 yr
MRD 0.1-1%: 5.9 yr
MRD: 0.01 – 0.1%: 6.8 yr
MRD < 0.01%: > 7.5 yrs

References: 1. Dingli D et al. *Cancer Sci.* 2007;98(7):1035-1040. **2.** Dingli D et al. *J Clin Oncol.* 2007;25(31):4933-4937. **3.** Munshi NC et al. *J Clin Oncol.* 2013;31(20):2523-2526. 3. Andy C. Rawstron et al. Blood 2015;125:1932-1935

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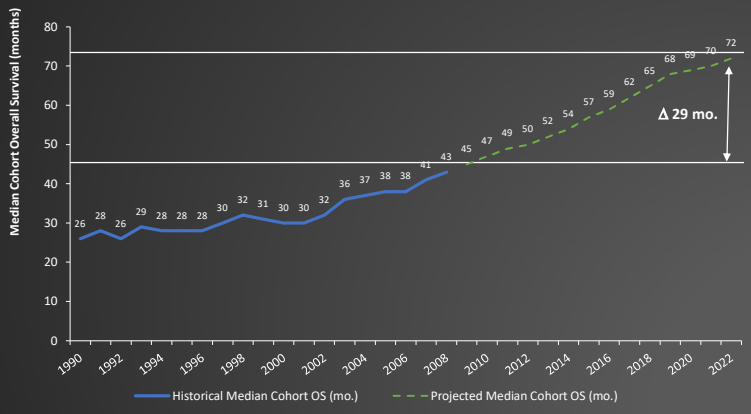
Advances in Myeloma Have Had a Positive Impact on Overall Survival



Drawid A, et al. Presentation at: 15th International Myeloma Workshop; Rome, Italy; September 23-26, 2015. Abstract BP-030.

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Common patient and caregiver questions

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Should I take any supplements?

- OK to take calcium 500-1500mg/day + vitamin D 1000-2000 i.u./d
- OK to take a centrum silver (or similar multivitamin) daily
- AVOID:
  - Antioxidants: Green tea, acai berries, etc.
  - Excess vitamin C (extra supplements; vit C in food is ok).
- Best supplement is water:
  - Adequate hydration flushes chemotherapy and excess light chains through the kidneys

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Are there any medications to avoid?

- Never take NSAIDS:
  - Ibuprofen, alleve, motrin, advil, naproxen, etc… → can lead to kidney damage
- Avoid IV contrast (iodine) for CT scan:
  - Can also cause kidney damage
  - Includes CT angiograms
  - MRI / PET-CT generally ok
- Ask your myeloma doctor about safety before starting IV antibiotics:
  - Certain antibiotics that are IV (like gentamycin) can also lead to renal failure in multiple myeloma

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Are there any lifestyle changes that I should make?

- Try to get 20 minutes of cardiovascular exercise most days of the week
  - Reduces inflammation in the body
  - Better control of blood sugar
  - Get rid of excess weight
  - Tolerate chemo better
- Take care of your teeth!
  - See the dentist regularly to avoid osteonecrosis of the jaw

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Things to ask your doctor:

- Define: What type of myeloma do I have?
- Action Plan: What treatment is best for me? How are we going to follow my response to treatment? How are we going to maintain my response?
- Review Progress: What is my response now? i.e. What is my M-spike and free light chain level?

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Thank you!

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QUESTION & ANSWER

Understanding Myeloma

PAGE 53

Ask a question by phone:

Press star (*) then the number 1 on your keypad.

Ask a question by web:

Click "Ask a question"
Type your question
Click "Submit"

Due to time constraints, we can only take one question per person. Once you've asked your question, the operator will transfer you back into the audience line.

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LLS EDUCATION & SUPPORT RESOURCES

PAGE 54

- **Information Specialists**

  Master's level oncology professionals, available to help cancer survivors navigate the best route from diagnosis through treatment, clinical trials and survivorship.

  - **EMAIL:** infocenter@LLS.org
  - **TOLL-FREE PHONE:** 1-800-955-4572
- **Caregiver Support:** www.LLS.org/caregiver
- **Free Education Booklets:** www.LLS.org/booklets
- **Free Telephone/Web Programs:** www.LLS.org/programs
- **Live, weekly Online Chats:** www.LLS.org/chat
- **LLS Community:** www.LLS.org/community

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LLS EDUCATION & SUPPORT RESOURCES

PAGE 55

- **LLS Podcast, *The Bloodline with LLS***

  Listen in as experts and patients guide listeners in understanding diagnosis, treatment, and resources available to blood cancer patients: www.thebloodline.org

- **Education Videos**

  Free education videos about survivorship, treatment, disease updates and other topics: www.LLS.org/educationvideos

- **Patti Robinson Kaufmann First Connection Program**

  Peer-to-peer program that matches newly diagnosed patients and their families: www.LLS.org/firstconnection

- **Free Nutrition Consults**

  Telephone and email consultations with a Registered Dietitian: www.LLS.org/nutrition

- **What to Ask**

  Questions to ask the treatment team: www.LLS.org/whattoask

- **Other Support Resources**

  LLS Community, discussion boards, blogs, support groups, financial assistance and more: www.LLS.org/support

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