

Top Line

Diagnosis of Myeloma

The diagnosis of myeloma requiring treatment has expanded to include:

- More than 1 focal lesion on MRI
- Clonal bone marrow cells $\geq 60\%$
- Involved/uninvolved serum free light chain ratio ≥ 100
- Creatinine clearance < 40 mL/min

For more details and justification, see panel and article:

[http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045\(14\)70442-5.pdf](http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045(14)70442-5.pdf)

Role of Imaging

Newer imaging techniques can be used to enhance diagnosis and monitoring.

Whole-body low-dose CT is much more sensitive than conventional skeletal survey.

Read more:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5596388/pdf/bcj201778a.pdf>

Whole body FDGPET/CT is ideal for whole-body screening and assessment of residual disease and/or potential early relapse.

Read more:

[http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045\(17\)30189-4.pdf](http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045(17)30189-4.pdf)

MRI is broadly important at both diagnosis and for monitoring, especially if PET/CT is not feasible or available.

Read more: <http://ascopubs.org/doi/pdf/10.1200/JCO.2014.57.9961>

Treatment for the Newly Diagnosed

The treatment for newly diagnosed myeloma has really changed over the past 10 years. The mSMART algorithms give an accessible snapshot of the current recommendations for transplant-eligible and -ineligible patients with standard, intermediate, or high-risk disease.

Read more:

<https://nebula.wsimg.com/e1520dd2009dae7c8ea5ca513775b8fa?AccessKeyId=A0994494BBBCE4A0363&disposition=0&alloworigin=1>

Bone Therapies

Use of bone therapies (bone-modifying agents, or BMAs) remains part of the standard of care for myeloma patients. New guidelines include discussion of the role of the monoclonal antibody denusomab (XGEVA®).

Read more: <http://ascopubs.org/doi/pdf/10.1200/JCO.2017.76.6402>

Impact of Age

It is very important to be proactive about treatment selections and adjustments of dose and/or schedule for age and/or any significant comorbidities. Details of how to do this are well summarized in this “Geriatric Assessment” manuscript:

<http://www.bloodjournal.org/content/bloodjournal/early/2015/01/27/blood-2014-12-615187.full.pdf>

Assessing Response

The response criteria have evolved since 2006. It is important to be aware of the 2016 update, which incorporates minimal residual disease assessment.

Read more: [http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045\(16\)30206-6.pdf](http://www.thelancet.com/pdfs/journals/lanonc/PIIS1470-2045(16)30206-6.pdf)

Managing Relapsed Disease

With approval of many new agents, it has become much more difficult to make the best choices for therapy in the relapse setting.

Read more: [http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(16\)30206-6/fulltext](http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(16)30206-6/fulltext)

The mSMART consensus guidelines provide an excellent overview:

<https://nebula.wsimg.com/db49ebc0dd82bc455d506b88d42a1dc9?AccessKeyId=A0994494BBB CBE4A0363&disposition=0&alloworigin=1>

The IMWG publication provides more detailed discussion of the options:

<https://www.nature.com/articles/leu2015356>