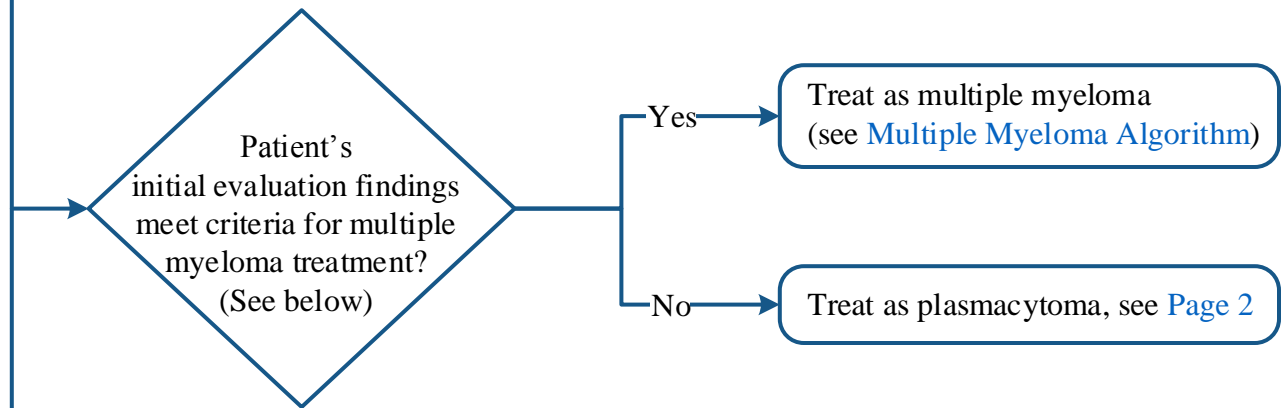


This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson's specific patient population; MD Anderson's services and structure; and MD Anderson's clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.

Note: Consider Clinical Trials as treatment options for eligible patients.

INITIAL EVALUATION

- History and physical
- CBC with differential, BUN, creatinine, electrolytes, albumin, LDH, calcium, beta-2-microglobulin, serum quantitative immunoglobulins, serum protein electrophoresis (SPEP), serum immunofixation (SIFE), and serum free light chains (sFLC) including involved:uninvolved sFLC ratio
- 24 hour urine protein electrophoresis (UPEP) and urine immunofixation (UIFE)
- Bone marrow biopsy and aspirate with flow cytometry
- PET/CT of whole body or MRI of whole body
- If PET/CT of whole body or MRI of whole body is unavailable, then perform skeletal survey and MRI of the cervical, thoracic, lumbar and sacral spine. Consider CT or MRI of the affected area.
- In select settings, other imaging studies may be considered, such as ultrasound for superficial masses
- Lifestyle risk assessment¹



TREATMENT

Criteria for multiple myeloma treatment:

- Anemia, hypercalcemia, renal failure due to multiple myeloma **and/or**
- Bony lytic lesions due to multiple myeloma in a skeletal survey **and/or** MRI of whole body **and/or** PET/CT of whole body **and/or**
- sFLC involved:uninvolved ratio greater than or equal to 100 **and/or**
- Greater than one focal lesions on MRI (each focal lesion must be 5 mm or more in size) **and/or**
- Percentage of clonal plasma cells is greater than or equal to 60% in the core biopsy by CD138 immunohistochemistry

Note: Treatment may be considered if percentage of clonal plasma cells is greater than or equal to 10% in the core biopsy by CD138 immunohistochemistry

¹ See [Physical Activity](#), [Nutrition](#), and [Tobacco Cessation](#) algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

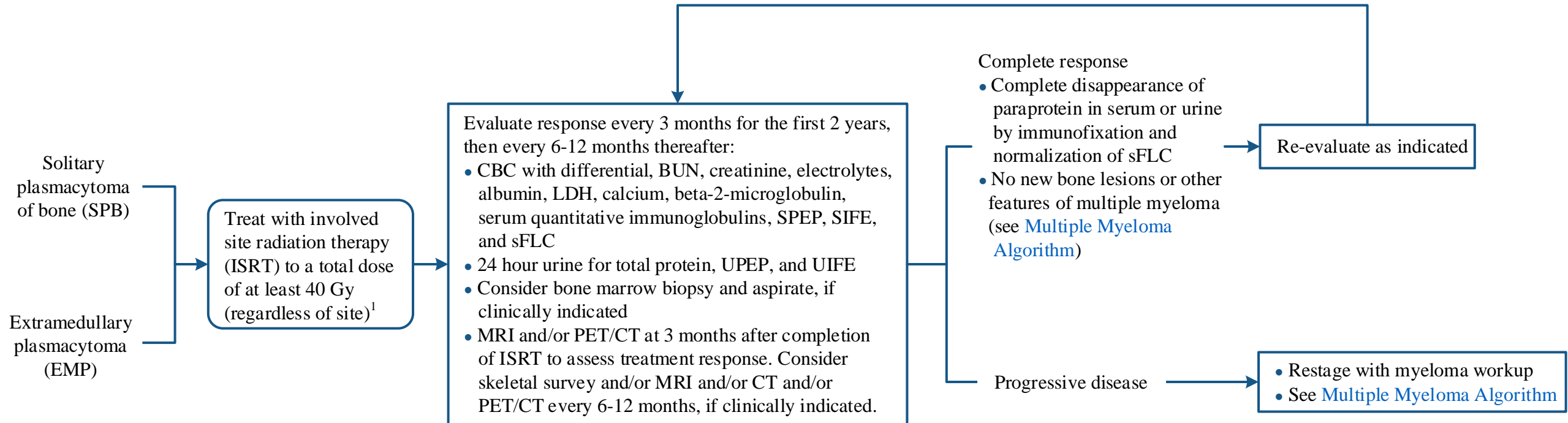
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CLINICAL PRESENTATION

PRIMARY TREATMENT

FOLLOW-UP SURVEILLANCE



¹ Historically, the recommended dose has been at least 40 Gy. More recent data suggests that lower doses may be sufficient. Refer to suggested readings for data regarding ISRT dose.

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SUGGESTED READINGS

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DEVELOPMENT CREDITS

This practice algorithm is based on majority expert opinion of the Myeloma Center Faculty at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

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