

**Patient case 1:
69 year-old lady with newly-diagnosed MM,
no comorbidities or additional risk factors**

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no comorbidities or additional risk factors

- Presented with back pain, radiculopathy and skin plasmacytomas
 - Hb 11.2 g/dL
 - Red blood cells $4.4 \times 10^{12}/L$; platelets 340×10^9 cells/L; absolute neutrophil count 1.4×10^9 cells/L
 - Total protein 7.2 g/dL
 - Creatinine 1.1 mg/dL; creatinine clearance 100 mL/min
 - Calcium 11.7 mg/dL
 - beta-2-microglobulin 4.0 mg/L

59 year-old woman

- sM-Component: 4.63 g/dl; sFLC kappa 25 mg/dL; Lamda 1470 mg/dL
- M 20% plasma cells
- FISH: No cytogenetic abnormalities
- Multiple lytic lesions

→ Diagnosis of multiple myeloma ISS stage II

69 year-old woman

- Which treatment would you choose?
 1. Induction followed by ASCT
 2. Lenalidomide/dexamethasone until progression (no transplant)
 3. VCD or VTD, 8 cycles (no transplant)
 4. MPT, 9 to 12 cycles (no transplant)
 5. VMP, 9 to 12 cycles (no transplant)
 6. Other

69 year-old lady, now in VGPR after VCD induction + ASCT

Is further treatment required?

1. No, observation only
2. Consolidation therapy
3. Maintenance therapy
4. Both consolidation and maintenance
5. Second ASCT

**Patient case 2:
67 year-old lady with newly-diagnosed MM and t(4;14)**

Patient case 2:

67 year-old lady with newly-diagnosed MM and t(4;14)

- Presented with weakness and fatigue, lower extremity pain and cramping, constipation, diffuse abdominal pain, retrosternal burning sensation, nausea, and daily non-bloody, non-bilious vomiting
 - Hb 9.4 g/dL (5.83 mmol/L)
 - Platelets 235×10^9 cells/L, absolute neutrophil count 4.672×10^9 cells/L
 - Total protein 7 g/dL, albumin 3.1 g/dL
 - Creatinine clearance 40 mL/min
 - Calcium 11 mg/dL (2.75 mmol/L)
 - beta-2-microglobulin 12.30 mg/L

67 year-old woman with t(4;14)

- Serum protein electrophoresis (immunofixation): monoclonal spike: IgG kappa
- Bone marrow: 41% plasma cells
- FISH: t(4;14)
- Skeletal survey: multiple small lytic lesions, scattered throughout the pelvis, femur, vertebral bodies
- CT of abdomen and pelvis: low-density lesion within the midpole of the kidney, innumerable scattered lytic lucencies throughout the ribs, thoracic and lumbar spine, pelvis

- → Diagnosis of multiple myeloma ISS stage III

What would be your approach to the management of this patient?

67 year-old woman

- Which treatment would you choose?
 1. Induction followed by ASCT
 2. Lenalidomide/dexamethasone until progression (no transplant)
 3. VCD or VTD, 8 cycles (no transplant)
 4. MPT, 9 to 12 cycles (no transplant)
 5. VMP, 9 to 12 cycles (no transplant)
 6. Other

67 year-old woman with t(4;14)

- Would your management approach have been any different if the patient had presented with del 17p rather than t(4;14)?

**Patient case 3:
73 year-old man with newly-diagnosed MM
and renal impairment**

Patient case 3: 73 year-old man with newly-diagnosed MM and renal impairment

- Past history of hypertension
- Heavy smoker
- 6-month history of weakness and fatigue
- No weight loss or anorexia
- X-rays after recent visit:
 - Small lytic bone lesions throughout skeleton

73-year old man: Current presentation

- White blood cell count $3 \times 10^9/L$
- Hemoglobin 9 g/dL
- Platelets $90 \times 10^3/\mu L$
- Serum creatinine 3.5 mg/dL
- Blood urea nitrogen 35 mg/dL
- Serum albumin 3 g/dL
- Serum calcium 9.8 mg/dL
- Lactate dehydrogenase 250 U/L
- Serum beta-2-microglobulin 5.6 mg/dL
- Bone marrow biopsy:
50% plasma cells
- Serum protein electrophoresis: IgG kappa paraprotein 6.5 g/dL
- 24-hour urine collection:
1200 mg of kappa light chain proteinuria

73 year-old man



- Which treatment would you choose?
 1. Induction followed by ASCT
 2. Lenalidomide/dexamethasone until progression (no transplant)
 3. VCD or VTD, 8 cycles (no transplant)
 4. MPT, 9 to 12 cycles (no transplant)
 5. VMP, 9 to 12 cycles (no transplant)
 6. Other (e.g. VRD)

Case 4:
82 year-old, frail man with newly-diagnosed MM and altered renal function

Case 4: 82 year-old, frail man with newly-diagnosed MM, and altered renal function

- Presented with tingling / numbness of fingers, fatigue and shortness of breath, nausea and abdominal pain, extreme thirst and frequent urination. Prior history of treatment with NSAIDs because of osteoarthritis and lower back pain. Lives in care home and requires assistance with mobility
 - Hb 9.2 g/dL (5.71 mmol/L)
 - Platelets 280×10^9 cells/L;
Neutrophil count 5.5×10^9 cells/L
 - Total protein 7 g/dL, albumin 3.1 g/dL
 - Creatinine 2.4 mg/dL (212 μ mol/L); creatinine clearance 25 mL/min
 - Calcium 11.7 mg/dL (2.92 mmol/L)
 - beta-2-microglobulin 5.1 mg/L

82 year-old male patient

- M protein IgG-lambda: 3.6 g/dL
 - 50% PCBM infiltration
 - FISH: Not done
 - ISS 2
 - CRAB +++++
 - ECOG-2
- Diagnosis of symptomatic multiple myeloma IgG-kappa

82 year-old male patient

- Would you start treatment immediately?
 1. Yes
 2. No

82 year-old male patient

- Do you ask for a geriatric assessment?
 1. Yes, prior to treatment
 2. No, you start treatment without assessment
 3. No, only if during treatment Karnofsky/ECOG performance is worsening

82 year-old male patient

- Patient received supportive therapy before planning treatment of MM:
 - Hydration
 - Dexamethasone at low doses
 - Opioid analgesics to control pain

82 year-old male patient

- Symptomatic Multiple Myeloma IgG-lambda
 - MC: 3.6 g/dL, 28% of PCBM infiltration
- - ISS 2
 - anemia, hypercalcemia → **normal calcium**
 - bone lesions in spine, humerus, skull
- - renal impairment: ~~2.4 mg/dL of creatinine~~
→ **creatinine 1.1 mg/dL; creatinine clearance 75 mL/min**
- ECOG-3

Supportive care led to both calcium and creatinine levels returning to normal

You decide to start treatment

- Do you aim for CR?

1. Yes

2. No

3. Palliative care

82 year-old male patient

- What are the treatment options for this patient?
 1. MPT
 2. VMP
 3. Bortezomib-dexamethasone
 4. Lenalidomide-dexamethasone
 5. Other

Should we treat based on positive PET CT?


- A 70 y. old woman presented with right mandibular tumor.
- Biopsy: atypical proliferation of monotypic Lambda plasma cells.
- Blood test:
 - Monoclonal component of IgA Lambda isotype at 20g/l
 - Serum free light chain Lambda at 107mg/l
 - Bence Jones proteinuria: absent
 - Blood count, calcemia and renal function: normal.
- Bone marrow aspiration: 4% plasma cells.
- Bone marrow biopsy: 20% monotypic lambda plasma cells.
- Cytogenetic analysis: no t(4;14), no del17p.
- ISS 3
- Skeletal X ray and MRI: normal
- **PET CT multiple hypermetabolic signals spread over the skeleton +mandibular plasmocytoma**

Should we treat based on positive PET CT?

- A. Yes
- B. No
- C. May be
- D. Time will tell
- E. I prefer to use MRI
- F. I leave it to the patient choice



One last case if you are not tired?

- 
- 78 years old man, relatively fit
 - Del 17p+ **AND** t(4;14) +
 - ISS 2
 - Stage III Durie Salmon staging system; Bone lesion (T9)

→ What is your treatment approach?

- A. Induction, auto and allo transplant if a donor is available**
- B. CAR T cells**
- C. Induction, auto and maintenance**
- D. I do not know**
- E. It does not matter**
- F. I leave it to the patient choice**