High-Risk Smoldering Myeloma

Speakers: Drs. Anderson, Joseph, Kaufman, Lonial, Mina, Nooka

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74 year-old male with HTN presenting for abnormal SPEP.

Diagnostic test	Result
PET CT	No lytic lesions
Free Light Chains	K= 159.4 mg/L, L=13.2 mg/L, ratio=12.08
SPEP	M spike 0.4 g/dL
IF	IgG K monoclonal band
Immunoglobulins	IgA=529, IgG=689, IgM 25
Bone marrow biopsy	Normocellular marrow with involvement by IgG K plasma cell neoplasm. PC comprise 10-15% of marrow nucleated cells.
Karyotype	Normal
FISH	Negative for tp53/IGHr

He was placed on active surveillance for low-risk SMM.

2 years later…

Diagnostic test	Result t=0	Result t=2 years
PET CT	No lytic lesions	No lytic lesions
Free Light Chains	K= 159.4 mg/L, L=13.2 mg/L, ratio=12.08	K=403.5 mg/L; L=12.2 mg/L; Ratio=33.05
SPEP	M spike 0.4 g/dL	M spike=3.5 g/dL
IF	IgG K monoclonal band	IgG K monoclonal band
Bone marrow biopsy	Normocellular marrow with involvement by IgG K plasma cell neoplasm. PC comprise **10-15%** of marrow nucleated cells.	hypercellular marrow with IgG K plasma cell neoplasm. PC cells comprise **25-30%** of the nucleated cells.
Karyotype	Normal	Normal
FISH	Negative for tp53/IGHr	Negative for tp53/IGHr

You now identify his smoldering myeloma as high-risk.

“To treat or not to treat. That is the question”

Based on the AQUILA trial, QuiRedex trial, and more recently CAR-PRISM phase 2 trial, what is your management approach to high-risk smoldering MM?

A 60 y.o. male with hypothyroidism presented for shoulder pain.

Diagnostic test	Result
PET CT	numerous lytic lesions in the R humerus, pelvis and ribs.
Free Light Chains	K= 120.1 mg/L; L=5.9 mg/L; ratio=20.36
SPEP	M spike 3.2 g/dL
IF	IgG K monoclonal band
Immunoglobulins	IgA=529, IgG=689, IgM 25
Bone marrow biopsy	normocellular marrow with involvement by IgG K plasma cell neoplasm. PC comprise 65% of marrow nucleated cells.
Karyotype	Normal
FISH	Negative for tp53/IGHr

	Treatment	Response
First Line	RVd (lenalidomide, bortezomib, and dexamethasone)	PR (20-30% PC on bone marrow)
Second Line	Dara-Pd followed by ASCT with dara-dex maintenance	Day 60 restaging marrow: VGPR

1.5 years later, he presented with worsening shoulder pain, found to have relapsed disease.

What is your treatment modality of choice for standard-risk myeloma with PR to first-line treatment?

What is your treatment modality of choice for early relapsed standard-risk myeloma with previous daratumumab exposure?

He was placed on KPd followed by Cilta-cel therapy.

Q&A