

mSMART

- Multiple myeloma is increasingly recognized as a heterogenous disease, characterized by marked cytogenetic, molecular, and proliferative variability.
- Availability of novel agents are rapidly redefining the treatment paradigm for patients with myeloma and with multiple available treatment options.
- This is a consensus opinion that takes into account the various risk factors and the treatment strategies currently available.
- The general approach is presented below. However, clinical trials must be considered and are preferred at every level.
- Management decisions should take into account the age as well as other co-morbidities such as renal failure, diabetes and presence or absence of coexisting amyloidosis.

mSMART : Classification of Active MM

High-Risk (25%)

- Relapse <12 months from transplant or other first-line Rx or relapse on therapy**
- FISH
 - Del 17p
 - t(4;14)
 - t(14;16)
- Cytogenetic Deletion 13
- Cytogenetic hypodiploidy
- PCLI $\geq 3\%$

Standard-Risk (75%) *

- High risk by cytogenetics/FISH/CLI pts who relapse >24 months from Rx AND
- All others including:
 - Hyperdiploid
 - t(11;14)
 - t(6;14)

*Low risk with b-2 microglobulin > 5.5 (in absence of renal failure) or LDH >upper limit of normal may be at higher risk

**Additional high-risk category for patients with relapsed MM

First Relapse – Off-Study

Standard-Risk

Relapsed after Auto-transplant



**Bortezomib or IMiD containing regimen
to maximum response or 1 year;
Repeating auto transplant is an option,
if transplant candidate**

Relapsed after Chemotherapy



**Auto transplant
OR
Repeat previous regimen to maximum
response or 1 year**

First Relapse – Off-Study

High-Risk

**Relapsed
after
Auto-Transplant**

Bortezomib or IMiD
based Regimen;
prefer repeat of
pretransplant induction
regimen, if
previous good response*

**Relapsed after
IMiD-based
Initial Therapy**

Auto transplant; Post auto
either maintenance Thal
or in selected pts
allogeneic approaches.
If not transplant candidate,
bortezomib containing
regimen to maximum
response

**Relapsed after
bortezomib-based
Initial Therapy**

Auto transplant; Post auto
either maintenance Thal
or in selected pts
allogeneic approaches.
If not transplant candidate,
IMiD-based regimen
to maximum
response

*Consider auto followed by mini-allo or full-allo in selected patients

Relapsed Myeloma – Off-Study

Second or higher Relapse



- **Various combinations have been tested**
- **Selection should depend on prior therapy, current blood counts, pre-existing neuropathy, presence of renal failure, rapidity of relapse**
- **Incorporation of previous failed single agents into 2 or 3 drug combinations OK**

Options include:

**CTX Prednisone, Melphalan Dex, Thal-Dex, Rev-Dex, Velcade-Dex
Velcade-Thal-Dex, CTX-Thal-Dex, Velcade-Rev-Dex, Vel-Dox-Dex
Vel-Thal-Adr-Dex, Vel-Mel-Thal-Dex, Vel-MPT**