Treatment for relapsed and/or refractory myeloma

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This talk will cover:

- What are relapsed and refractory myeloma
- Treatment options at relapse
- Treatment options for refractory disease

Take home messages

- Myeloma is a very complex individual cancer
- Most patients who get remission will relapse
- Many patients who relapse can be successfully treated and will have a second remission

Some definitions

Remission: Absence of paraprotein in blood and myeloma cells in bone marrow following treatment
Plateau: Stable disease following good response to treatment, reduced but detectable paraprotein levels
Relapse: Disease progression following a previously successful course of treatment
Refractory: No response to treatment whether initial treatment or treatment at relapse

Natural course of myeloma
MGUS: Monoclonal gammopathy of undetermined significance

**Natural course of myeloma**

- Asymptomatic
- MGUS or considering myeloma
- Active myeloma
- Remission
- Relapse
- Refractory remission

**First relapse options**

- Same as first line treatment
- Different treatment – may depend on NICE approval or Cancer Drug Fund
- Clinical study (trial)
  - May provide options not otherwise available
  - Not all patients will be eligible
- Supportive treatment as necessary

**First Relapse**

**Currently**

- Velcade and dexamethasone
- Second Autologous Stem cell Transplant (< 65yrs)

**Velcade (bortezomib)**
- Proteasome inhibitor
- Myeloma cell death
- Alters the myeloma cell environment - 'seed in soil'

**Side effects**
- Neuropathy
- Low blood counts
- Bowel upset

**Administration**
- Subcutaneous injection

**Second Autologous Peripheral Stem Cell Transplant**
- Age < 65
- If stem cells stored
- Myeloma X trial - improved duration of response in those who had 2nd transplant

**First Relapse**

**Allogeneic Transplant (Donor Transplant)**
- Only potential cure for myeloma, but high risk
- High Transplant Related Mortality
- Consider if < 50 years especially if predicted poor response to therapy
Maintenance

**Pros**
- Longer remission
- Survival advantage
- Peace of mind

**Cons**
- No time off therapy
- On-going frequent hospital visits
- Side effects

Lenalidomide is currently the only approved/funded maintenance therapy.

Supportive Therapy

- **Bone disease** - bisphosphonates, vertebroplasty, kyphoplasty
- **Pain** - analgesia, radiotherapy
- **Anaemia** - transfusion, Epo
- **Thrombosis** - prophylactic anticoagulants

Second relapse options

- Same as previous treatments
- Revlimid® (lenalidomide)
  - Similar to thalidomide but less toxic
  - NICE approved with
- Non-approved drugs – access schemes
- Clinical studies – if eligible

Revlimid (lenalidomide) IMID

- **Mechanism of action**

Refractory options

- Try different treatment
- Sequence of treatments similar to relapse
  - Pomalidomide - cancer drugs fund
  - Bendamustine - cancer drugs fund
- Clinical trial – good option as newer drugs can still be effective
Future strategies
covered in more detail this afternoon

- Bendamustine
  - Not licensed for relapse/refractory myeloma
  - Cancer Drugs Fund (England)

- Clinical studies – novel drugs
  - Imnovid® (pomalidomide)
  - Kyprolis™ (carfilzomib)
  - Ixazomib (MLN 9708)
  - Elotuzumab
  - Daratumumab
  - Panobinostat

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MUK resources signpost

- Myeloma – your essential guide
- Revlimid Infoguide
- Bendamustine Horizons Infosheet
- Clinical Studies Infoguide
- Myeloma TV
- Infoline

** please visit the Myeloma UK Patient Information stand in the foyer area for further information