IMF PATIENT AND FAMILY WEBINAR

Multiple Myeloma Patient Safety and Updates

Saturday August 15, 2020

1:00 pm Pacific/2:00 pm Mountain/ 3:00 pm Central/4:00 pm Eastern

Introduction by:
Susie Durie
IMF President & CEO
Thank you to our sponsors!

Today’s Speakers

Joseph Mikhael, MD
Chief Medical Officer
International Myeloma Foundation

Brian G. M. Durie, MD
Board Chairman
International Myeloma Foundation

Thomas Martin, MD
Helen Diller Family Comprehensive Cancer Center
University of California, San Francisco, CA

Jack Aiello
Patient Advocate
Structure of Webinar

➢ Session One: Ongoing myeloma care

SHORT STRETCH BREAK

➢ Session Two: COVID-19 Guidance
SESSION ONE
Frontline Therapy
Managing Myeloma: The Components

Transplant Eligible Patients

Transplant Ineligible patients

Initial Therapy

Consolidation/ Maintenance/ Continued therapy

Supportive Care

Transplant

Maintenance

Treatment Combinations: Now and Then

NEW
- VD
- Rev/Dex
- CyBorD
- VTD
- VRD
- KRD
- IRD
- Dara + triplet

SCT
- VD/VRD

Front line treatment
- Thal/Dex
- VAD
- DEX

Consolidation
- SCT

Maintenance
- Nothing
- Prednisone
- Thalidomide

Post consolidation

Relapsed
- Bortezomib
- Lenalidomide
- Thalidomide
- Carfilzomib
- Ixazomib
- Pomalidomide
- Daratumumab
- Isatuximab
- Selinexor
- Elotuzumab
- Panobinostat
- Bendamustine
- Belantamab Mafodotin

OLD
- Few options

Rescue
S0777 Trial: VRd vs Rd

Eight 21-day Cycles of VRd
- Bortezomib 1.3/mg² IV
  Days 1, 4, 8, and 11
- Lenalidomide 25 mg/day PO
  Days 1-14
- Dexamethasone 20 mg/day PO
  Days 1, 2, 4, 5, 8, 9, 11, 12

Six 28-day Cycles of Rd
- Lenalidomide 25 mg/day PO
  Days 1-21
- Dexamethasone 40 mg/day PO
  Days 1, 8, 15, 22

Randomization
N = 525
Newly diagnosed MM

Stratification:
- ISS (I, II, III)
- Intent to transplant @ progression (yes/no)

6 month of triplet followed by doublet

Durie BGM, et al. ASH 2015
S0777 Trial: VRd vs Rd

1A. Progression-Free Survival (N = 460)

- Events / N: Rd 185/225, VRd 167/235
- Median in Months: Rd 28.98 (23.85, 37.09), VRd 40.77 (33.05, 51.09)
- *P-value = 0.003

41 months

1C. Overall Survival (N = 460)

- Deaths / N: Rd 125/225, VRd 102/235
- Median in Months: Rd 68.99 (58.41, 86.16), VRd 79.90 (79.90, NA)
- *P-value = 0.0114

*One-sided, stratified log-rank test

Blood Cancer Journal

https://www.nature.com/articles/s41408-020-0311-8

OS 80% = 4 years
55% = 7 years
PFS & OS with ASCT in Myeloma

Progression Free Survival (PFS)
36 months

Overall Survival (OS)
>82% 4-year survival rate
Long-term data
Carfilzomib, lenalidomide, and dexamethasone (KRd) versus bortezomib, lenalidomide, and dexamethasone (VRd) for initial therapy of newly diagnosed multiple myeloma: results of ENDURANCE (E1A11) phase 3 trial

Shaji K. Kumar, Susanna J. Jacobus, Adam D. Cohen, Matthias Weiss, Natalie Scott Callander, Avina A. Singh, Terri L. Parker, Alexander Menter, Alex Yang, Benjamin Marshall Parsons, Pankaj Kumar, Prashant Kapoor, Aaron Seth Rosenberg, Jeffrey A. Zonder, Edward Anthony Faber, Sagar Lonial, Paul G. Richardson, Robert Z. Orlowski, Lynne I. Wagner, S. Vincent Rajkumar
Key Eligibility Criteria

- **Excluding high-risk patients:**
  
  $[t(14;20); t(14;16); \text{del}17\text{p}; \text{PCL}; \text{LDH} > 2]$

- **Included** $t(11;14)$ and $t(4;14)$; $1\text{q}+$ not assessed

- CRAB features; no SLiM CRAB
KRd versus VRd comparison

Median Progression Free Survivals

VRd
31.7 months

KRd
32.8 months

Numbers at Risk
KRd: 545 401 252 187 127 83 59 38 25 13 3
VRd: 542 377 243 183 114 73 43 31 26 14 0
Treatment-related Adverse Events

**KRd: Cardio/Pulmonary and Renal**

![Bar chart showing cardiac, pulmonary, and renal adverse events](image)

**VRd: Neuropathy**

![Bar chart showing peripheral neuropathy](image)

* Grades 1-2 not required reporting.
VRd vs KRd: Conclusions

• In this trial, KRd does not improve PFS compared with VRd
• Higher rate of peripheral neuropathy is seen with VRd, while rate of cardio-pulmonary and renal toxicity is higher with carfilzomib
• No difference has been seen in overall survival
• Based on this data VRd should remain the standard of care for initial therapy of multiple myeloma

A summary of this abstract is also available on the IMF website:
MAIA Trial: DRd vs Rd

STaMINA PFS by Treatment Received

PFS @ 5 yrs | Auto/Auto | Auto/RVD | Auto/Maint | P Value
--- | --- | --- | --- | ---
Hi Risk | 43.7% (33-58) | 37.3% (26-48) | 32% (24-40) | 0.03
Std Risk | 58.1% (48-67) | 48.2% (40-56) | 47.7% (41-54) | 0.196

PFS BENEFIT FOR AUTO/AUTO ARM; esp. in HR GROUP

Auto/Auto

Auto/Auto

p=0.015

17
## PFS Landmark Analysis: Len continued beyond 38 mo. vs Not Len stopped

### Table: PFS Comparison

<table>
<thead>
<tr>
<th>PFS</th>
<th>Stopped Len (N = 207)</th>
<th>Continued Len (N = 215)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 yr</td>
<td>80.1% (74-85)</td>
<td>95.8% (92-98)</td>
</tr>
<tr>
<td>5 yr</td>
<td>67.2% (60-73)</td>
<td>86.5% (81-90)</td>
</tr>
<tr>
<td>6 yr</td>
<td>61% (54-67)</td>
<td>79.5% (73-84)</td>
</tr>
</tbody>
</table>

### Graph: Probability of PFS

- **P Value:** p<0.001
- **Legend:** Len stopped

### Major PFS Benefit for Continuation

- **5 Yr. PFS**
  - **High Risk (N=117):**
    - Len Stopped: 67.8% (52-79)
    - Len Cont’d: 86.7% (77-94)
    - P Value: 0.2
  - **Std Risk (N=303):**
    - Len Stopped: 66.7% (58-74)
    - Len Cont’d: 86.3% (80-91)
    - P Value: <0.001
• What is best?

• Are dara + triplet regimens the way forward?
• Anti-CD38
• Now FDA approved as subcutaneous shot (DARZALEX FASPRO™)!
• Use broadly approved: → Frontline to relapse
• Combinations well tolerated/ manageable

https://www.myeloma.org/resource-library/understanding-darzalex
Polling Question

Have you taken DARZALEX Faspro™ (daratumumab subcutaneous shot)?

1. Yes
2. No
ASH Abstract #691: Dara plus VRd v VRd: Griffin Study Update

PFS

OS

Median PFS and OS not reached for D-RVd and RVd

Peter M. Voorhees, MD, et. al.
Daratumumab + bortezomib, thalidomide, and dexamethasone (D-VTd) in transplant-eligible newly diagnosed multiple myeloma (TE NDMM): Baseline SLiM-CRAB based subgroup analysis of CASSIOPEIA.

**“SLiM” CRAB:** ≥ Sixty % CPC; Light chain ratio ≥ 100; > 1 focal lesion on MRI

<table>
<thead>
<tr>
<th></th>
<th>Slim-only</th>
<th>CRAB</th>
<th>Pvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 81)</td>
<td>(n = 1004)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORR, %</td>
<td>90</td>
<td>91</td>
<td>0.4053</td>
</tr>
<tr>
<td>sCR</td>
<td>25</td>
<td>25</td>
<td>0.9776</td>
</tr>
<tr>
<td>≥CR</td>
<td>32</td>
<td>33</td>
<td>0.9690</td>
</tr>
<tr>
<td>MRD neg(MFC, 10^{-5}), %</td>
<td>46</td>
<td>54</td>
<td>0.1261</td>
</tr>
<tr>
<td>Median PFS, mo</td>
<td>NR</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>PFS HR (95% CI)</td>
<td>0.73 (0.36-1.50)</td>
<td>0.3888</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Slim-only</th>
<th></th>
<th>Pvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 36)</td>
<td>(n = 45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-Vth</td>
<td>97</td>
<td>84</td>
<td>0.0377</td>
</tr>
<tr>
<td>Vth</td>
<td>36</td>
<td>16</td>
<td>0.0083</td>
</tr>
<tr>
<td>MRD neg(MFC, 10^{-5}), %</td>
<td>50</td>
<td>18</td>
<td>0.0003</td>
</tr>
<tr>
<td>Median PFS, mo</td>
<td>NR</td>
<td>NR</td>
<td>-</td>
</tr>
<tr>
<td>PFS HR (95% CI)</td>
<td>1.19 (0.30-4.78)</td>
<td>0.8023</td>
<td></td>
</tr>
</tbody>
</table>

MFC, multiparametric flow cytometry; NR, not reached

**SLiM Only**
Treatment Algorithm in Frontline

Newly Diagnosed MM

Not Transplant Candidate
- VRd x 8-12 cycles followed by Len
- DRd

Transplant Candidate
- VRd x 4 cycles
  - Early Auto SCT followed by Maintenance
  - Collect & store Continue VRd x4 Maintenance
    - Delayed Transplant

*Based on CALGB 100104, S0777, IFM-2009, MAIA
¶ VTd/VCd if VRd not available

RAJKUMAR SV. 2020
Myeloma: Frontline Treatment

**Newly Diagnosed MM**

- **Not Transplant Candidate**
  - Rd or VMP
  - VMP-Dara or VRD followed by Len or DRd following approval

- **Transplant Candidate**
  - VRd or VTd or VCD if VRd not available or Dara-based quadruplet induction following approval
  - Auto-SCT Maintenance (Len for std risk; Len+PI-based for high risk)

**No Delayed Transplant**

*Except for COVID-19 crisis!
Frontline Therapy

OPEN DISCUSSION
What are recommendations for maintenance?
Ixazomib vs Placebo as Post-Induction Maintenance Therapy in Newly Diagnosed Multiple Myeloma (NDMM) Patients (PTS) Not Undergoing Autologous Stem Cell Transplant (ASCT): Phase 3 TOURMALINE-MM4 Trial
• Current Approaches

• Revlimid ± Proteasome Inhibitor
  (Velcade® subcutaneous or Ninlaro®)

• Modifying for side effects

• Stopping for intolerance and/or MRD +/-
  or COVID-19 crisis!
What are current relapse options?
Dara Kd Demonstrated Significantly Longer Progression-Free Survival Versus Kd: CANDOR Study

Treatment with KdD resulted in a 37% reduction in the risk of progression or death vs Kd in patients with RRMM.

CI, confidence interval; Kd, carfilzomib and dexamethasone; KdD, carfilzomib, dexamethasone, and daratumumab; NE, not estimable; NR, not reached; PF, progression-free survival; PI, proteasome inhibitor; RRMM, relapsed and/or refractory multiple myeloma.


Median OS was not reached in either arm at a median follow-up of 17 months (HR, 0.75; 95% CI, 0.49–1.13; P=0.08)
Kyprolis® (carfilzomib)

- New combo with dara/dex
  - Very active:
    - standard/ high risk
    - IMiD free!
    - Potent early
- Schedule can be
  - weekly Kyprolis
  - Dara now SQ

https://www.myeloma.org/resource-library/understanding-kyprolisr-carfilzomib-injection
Polling Question

Have you used the new Kyprolis/daratumumab/dex treatment (CANDOR Trial)?

1. Yes

2. No
Isatuximab Plus Carfilzomib and Dexamethasone vs Carfilzomib and Dexamethasone in Relapsed/Refractory Multiple Myeloma (IKEMA): Interim Analysis of A Phase 3 Randomized, Open-Label Study

A summary of this abstract is also available on the IMF website: https://www.myeloma.org/videos/isatuximab-plus-carfilzomib-dexamethasone-ikema-phaseii
Sarclisa® (isatuximab)

- Alternate anti-CD38 MoAB
- Well tolerated IV infusion protocol
- Approved in combo with pom/dex (ICARIA study)
- Early use post IMiD (Revlimid®)/ PI beneficial

https://www.myeloma.org/resource-library/understanding-sarclisa
Myeloma: First Relapse

First Relapse

Not Refractory to Lenalidomide*

- DRd
- or KRd

Alternatives including if Dara Refractory:
- KRd, IRd, Kd, Erd;
- Dara-Kd or Isa+Pd

Refractory to Lenalidomide

- PVd or DVD
  - (DPd, DKd, KPd
  - or Isa+Pd)

Alternatives including if Dara Refractory:
- KPd, PVd, or Epd
  - Frail: Pd, IPd

Frail:

- Pd
- IPd
Early Relapse

OPEN DISCUSSION
Immune Therapies

- CAR-T: bb2121 and JNJ 4528
- Bi-specific antibody: Teclistamab
- Antibody/drug conjugate: DREAMM-6
Idecabtagene vilcabucel (ide-cel; bb2121), a BCMA-targeted CAR T-cell therapy, in patients with relapsed and refractory multiple myeloma (RRMM): Initial KarMMa results
bb2121: Overall Results

Conclusions

- Deep and durable responses
- Target dose of $450 \times 10^6$
- CAR T cells best
- Tolerable

A summary of this abstract is also available on the IMF website: https://www.myeloma.org/videos/idecabtagene-vicleucel-ide-cel-bb2121-bcma-targeted-car-t-cell-therapy-patients
Update of CARTITUDE-1: A phase Ib/II study of JNJ-4528, a BCMA-directed CAR-T-cell therapy, in relapsed refractory multiple myeloma

- 100% of patients achieved a reduction in paraprotein
CARTITUDE-1: Overall Results

Response Rate

\[ \text{ORR}^a = 100\% \ (N = 29) \]

86% sCR
10% ≥VGPR
3% PR

Minimal Residual Disease

MRD +

MRD -

A summary of this abstract is also available on the IMF website: https://www.myeloma.org/videos/update-cartitude-1-phase-ibii-study-jnj-4528-bcma-directed-car-t-cell-therapy-0
## CAR-T Comparisons

<table>
<thead>
<tr>
<th></th>
<th>KarMMA (n = 128)</th>
<th>EVOLVE (n = 62)</th>
<th>CARTITUDE-1 (n = 29)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ORR, %</strong></td>
<td>73 (66-81)</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td><strong>sCR/CR, %</strong></td>
<td>33</td>
<td>36</td>
<td>86</td>
</tr>
<tr>
<td><strong>MRD neg ≥10⁻⁵, %</strong></td>
<td>94</td>
<td>84</td>
<td>81</td>
</tr>
<tr>
<td><strong>PFS/DoR, months</strong></td>
<td>8.8/10.7</td>
<td>NR*</td>
<td>NR**</td>
</tr>
<tr>
<td><strong>Screened</strong></td>
<td>150</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td><strong>Apheresed</strong></td>
<td>140</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td><strong>Treated</strong></td>
<td>128</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>

Novel CAR T fully human binder

Krina Patel MD MSc
Oral Abstract Session: CAR T in Multiple Myeloma
Phase I study of teclistamab, a humanized B-cell maturation antigen (BCMA) x CD3 bispecific antibody, in relapsed/refractory multiple myeloma
Teclistamab: Duration of Response

A summary of this abstract is also available on the IMF website:
Belantamab Mafodotin (GSK2857916): a BCMA-Targeted Antibody Drug Conjugate

Mechanisms of Action:
1. ADC mechanism
2. ADCC mechanism
3. Immunogenic cell death

DREAMM-6: Safety and Tolerability of Belantamab Mafodotin in Combination with Bortezomib/ Dexamethasone in Relapsed/ Refractory Multiple Myeloma (RRMM)

**Response Rate**

- **ORR 78%**
  - VGPR 50%
    - n=9
  - PR 28%
    - n=5
  - MR 6%
    - n=1
  - SD 17%
    - n=3

**Conclusions**

- Acceptable safety profile
  - Keratopathy managed with dose modifications
- Deeper responses expected over time

A summary of this abstract is also available on the IMF website: https://www.myeloma.org/videos/dreamm-6-safety-tolerability-belantamab-mafodotin-combination-bortezomib-dexamethasone
BLENREP (belantamab mafodotin-blmf)

- Anti-BCMA MoAB – drug conjugate
- Active even if lower BCMA expression
- Recruits local anti-myeloma immune response
- Off-the-shelf anti-BCMA product
- Corneal toxicities manageable
- Many combos tested/ feasible
- **Now FDA approved!**
New Immune Therapies

OPEN DISCUSSION
Other Novel Therapies
First-in-human phase 1 study of the novel CELMoD agent CC-92480 combined with dexamethasone (DEX) in patients (pts) with relapsed/ refractory multiple myeloma (RRMM)

A summary of this abstract is also available on the IMF website: https://www.myeloma.org/videos/first-human-phase-i-study-novel-celmod-agent-cc-92480-combined-dexamethasone-patients
HORIZON: Registrational Trial for Accelerated Approval
Phase 2, Single-Arm, Open-Label, Multicenter Study

Adult patients with
• RR MM refractory to pom or anti-CD38 mAb or both
• ≥2 prior lines of therapy, including an IMiD and a PI
• ECOG PS ≤2

(N=157)

NCT02963493

Melphalan Flufenamide 40 mg + dex 40 mg
(unti disease progression or unacceptable toxicity)

<table>
<thead>
<tr>
<th>28-Day Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
</tr>
<tr>
<td>Melflufen (IV)</td>
</tr>
<tr>
<td>Dex (oral)</td>
</tr>
</tbody>
</table>

PFS and OS follow-up for ≤24 mo

EoT

Primary endpoint
• ORR

Secondary endpoints
• DOR
• PFS
• OS
• CBR
• TTR
• TTNT
• Safety
• TTP
• HRQoL

Data cutoff date: January 14, 2020

Patients aged ≥75 years received dex 20 mg.
CBR, clinical benefit rate; dex, dexamethasone; ECOG PS, Eastern Cooperative Oncology Group performance status; EoT, end of treatment; HRQoL, health-related quality of life; IMiD, immunomodulatory agent; IV, intravenous; mAb, monoclonal antibody; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; PI, proteasome inhibitor; RR MM, relapsed/refractory multiple myeloma; TTNT, time to next treatment; TTP, time to progression; TTR, time to response.


References
Weekly selinexor, bortezomib, and dexamethasone versus twice weekly bortezomib and dexamethasone in patients with multiple myeloma: Initial results of the phase III BOSTON study

A summary of this abstract is also available on the IMF website: https://www.myeloma.org/videos/weekly-selinexor-bortezomib-dexamethasone-versus-twice-weekly-bortezomib-dexamethasone
Xpovio® (selinexor)

• Novel mechanism: also anti-viral
• Active in triple refractory
• Oral dosing convenient
• Unique side effects require proactive care
• Can broadly be partnered
• BOSTON data support early/ combo benefit

https://www.myeloma.org/resource-library/understanding-xpovio-selinexor
Polling Question

Have you taken Xpovio® (selinexor)?

1. Yes

2. No
Primary analysis of the randomized phase II trial of bortezomib, lenalidomide, dexamethasone with/without elotuzumab for newly diagnosed, high-risk multiple myeloma (SWOG-1211)

A summary of this abstract is also available on the IMF website: https://www.myeloma.org/videos/primary-analysis-phase-ii-trial-vrd-elotuzumab-swog1211

Elo had no added benefit
Empliciti® (elotuzumab)

- Best tolerated MoAB!
- Synergistic with IMiDs
- Impressive results with pom/dex combo
- Attractive in resistant setting

https://www.myeloma.org/resource-library/understanding-empliciti
Updated results from BELLINI, a phase III study of venetoclax or placebo in combination with bortezomib and dexamethasone in relapsed/refractory multiple myeloma

**Progression Free Survival**

- **Bortezomib/ Dex + Venetoclax**
  - 23.2 months

- **Bortezomib/ Dex**
  - 11.4 months

**Overall survival benefit for Venetoclax in t(11;14)/ high BCL-2**

A summary of this abstract is also available on the IMF website: [https://www.myeloma.org/videos/updated-results-bellini-phase-iii-study-venetoclax-or-placebo-combination-bortezomib](https://www.myeloma.org/videos/updated-results-bellini-phase-iii-study-venetoclax-or-placebo-combination-bortezomib)
Panel Discussion

How important are these trial results?

- CELMoD
- Selinexor
- Elotuzumab
- Venetoclax
- Melflufen Flufenamide

For more information, please visit:
• https://www.myeloma.org/clinical-trials/clinical-trials-fact-sheets
• https://www.myeloma.org/imf-videos
Myeloma: Second or higher relapse

**First Relapse Options**

- Any first relapse options that have not been tried
  
  (2 new drugs; triplet preferred)
  
  Isa-PD, or DPd, or DKd, or KPd

**Additional Options**

- VDT-PACE like anthracycline containing regimens
- Melphalan/ Melflufen Flufenamide
- Adding Panobinostat
- Quadruplet regimens
- CAR T: bb2121, J&J Legend
- Bispecific
- Conjugated BCMA
- Selinexor

Referral for clinical trials always if available
2020 EXPECTATIONS

Potential New Approvals
- GSK – “Bela” → already approved
- bb 2121 CAR T
- Legend CAR T
- Melflufen Flufenamide

Longer Term Results
- Cassiopeia
- Griffin
- Dara KRd → early approval expected
- CESAR/ASCENT follow-up

New Agent Data
- Venetoclax
- I\textsuperscript{131} CLR 140L
- Iberdomide
- Several others
Additional IMF Resources

Acronyms & Abbreviations:

Myeloma Terms & Definitions:
https://www.myeloma.org/sites/default/files/resource/glossary_0.pdf
IMF Patient and Family Webinar
Focus on caregivers

Presented by:
Susie Durie
IMF President & CEO
Support for Caregivers

• Consider holding a special caregiver only meeting.

• Or conduct a regular meeting with both patients and caregivers, and let them share together their concerns.

• **Contact the IMF:** Support Group Directors are available to do a virtual caregiver meeting with support groups.
Polling Question

Are you currently part of a support group?

1. Yes

2. No
Support for Caregivers

• Anxiety not only about myeloma, but of protecting loved ones from contracting COVID-19

  • Remember to take good care of yourself too!

  - Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand rub with at least 60% alcohol.
  - Avoid close contact with people who are sick.
  - Clean and disinfect surfaces and objects that are used often, such as cellphones, door knobs, and light switches.
  - Cough or sneeze into your elbow or cover your nose and mouth with a tissue.
  - Avoid touching your face.
  - If you do become sick, stay home and limit contact with others in your home as much as possible.
Support for Caregivers

• Unable to go into doctor appointments or infusions:
  ▪ Use your cell phone to “be there” and ask questions, report concerns, and take notes
  ▪ Telemedicine appointments when possible
Support for Caregivers

• Safe activities to stay connected
  - Nell Aiello has Skype visits with children/grandchildren cooking a favorite recipe!
  - Safe distance walks or outside small gatherings: “Who is in your bubble?”
Support for Caregivers

• Safe activities to stay connected
  ▪ Watch a funny movie virtually together or even outside!
Support for Caregivers

Sometimes you just have to hug yourself!
IMF Patient and Family Webinar
Take a quick stretch!
SESSION TWO
Update on COVID-19
#1 Message

Stay at home

• Wear a mask
• Physical distance
• Hand washing
• Social networking
Timeline for spread of COVID-19

Likely spread since November 2019 in Wuhan, China

Jan 8, 2020
Wuhan, China

Jan 15, 2020
Seattle, WA, USA

Jan 19, 2020
Munich, Germany

Jan 19-28, 2020
Italy

Feb 24, 2020
States across the U.S.

Feb 26, 2020
Santa Clara County, CA, USA

Feb 27, 2020
Guangzhou, China

March 1, 2020
New York, NY, USA

Map of the outbreak in Washington state by percent infected (as of April 23, 2020)

Map of the outbreak in California by percent infected (as of May 4, 2020)

Map of the outbreak in New York state by percent infected (as of May 4, 2020)
### Global Myeloma Experience with COVID-19*

<table>
<thead>
<tr>
<th>Region</th>
<th>Positive Cases Hospitalized</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia Pacific:</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Singapore, Malaysia, S. Korea, Hong Kong, Taiwan, Japan**, China**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe:</td>
<td>Spain = 166, UK = 76</td>
<td>Spain = 34% (vs. 21%), UK = 54.6%</td>
</tr>
<tr>
<td>Spain, France, Italy, Germany, United Kingdom (UK)</td>
<td>New York = ~200, SF = 0, Arizona = 5, Seattle = 1</td>
<td></td>
</tr>
<tr>
<td>North &amp; South America:</td>
<td>New York = 24-30%, SF = 0, Arizona = 0, Seattle = 1</td>
<td></td>
</tr>
<tr>
<td>United States – New York; San Francisco (SF), CA; Arizona; Seattle, WA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Selected sites providing data
** incomplete: probably rare cases
→ Matched controls
Avoiding exposure is key

Zero exposure → Zero cases [as in Asia]
Medical factors for serious COVID-19 infection

• Age > 65 years
• Hypertension/ cardiac issues
• Obesity
• Diabetes (Type-2)
• Underlying lung (± smoking/vaping) or kidney disease
• Cancer diagnosis
• Contact with high risk sources (new mutations?)
• Nursing home
• High density living/ working
• African American, Hispanic or American Indian
If community exposure
• Key factors for poor outcomes are age, hypertension, obesity, diabetes, chronic kidney/ lung disease
• New diagnosis or active relapse patients are at a major risk

Mortality of hospitalized patients = 20-30%
Reasons for persistent community exposure in the United States

- Unrestricted travel
- Lack of rapid testing [+tracing/quarantine]
- Lack of masks
- Continued social/ work gatherings (“crowds”)
- Poor understanding about opening economy with infectious virus
- Public health confusion
COVID-19

INITIAL DISCUSSION
Specific Issues

- Spread among family/ friends
- Elevators/ public transit
- Groceries
- Church/ clubs
- Schools – practice safe visits with children
Food Security

For Everyone

• Grocery trips
• Home Delivery

For Disadvantaged

• Home alone
• Disabled
• Lost job
• Poor/homeless
Strategies to reduce risk during crisis

- Use telemedicine or equivalent
- Limit lab testing or do safely
- Temporarily reduce/ eliminate IV bisphosphonate (Zometa®/ Aredia®)
- Modify therapy to reduce risk of neutropenia
- Use more oral drugs such as ixazomib (Ninlaro®)
- Limit ASCT and/or IV/subcutaneous therapies if possible
- Reassess pros/cons of daratumumab (Darzalex®)
- Be aware that clinical trials can be modified
Polling Question

Have you used telemedicine or equivalent?

1. Yes

2. No
Patient Guidance

Question: Can I go for a walk?
• Yes

Question: Can I go to the dentist?
• Yes, with care
Vaccines & Treatments

- **Vaccines moving ahead**: Questions about
  - Benefit in elderly: booster needed?
  - Value in “immune compromised”?

- **Several potential treatments**
  - Dexamethasone
  - Remdesivir
  - Interferon
* FDA revokes emergency use authorization for hydroxychloroquine
Safety: How to Avoid COVID-19

- If **hot spot** or not?
- Avoid groups/ crowds [5-10 people]
- Masks
- Physical distancing
- Hygiene/ Hand washing

**Notes**

- Outside safer
- Avoid asymptomatic “super spreaders”
- Time/ “dose” very important
- Get COVID-19 test if questions
Over 90 support groups are now holding monthly virtual GoToMeetings through the IMF
Support Group Virtual GoToMeetings

Over 90 support groups are now holding monthly virtual GoToMeetings through the IMF
We will get through this together!

Myeloma has no borders

“Do Remember They Can’t Cancel the Spring”
– David Hockney

Support messages in the sky above Los Angeles

An apricot tree grows in Turkey
Takeaways

- Pandemic prevention is required
- COVID-19 biology is complex
- Transmission is primarily airborne
- Standard prevention precautions work
- Short term adjustments in myeloma care recommended
- Longer term impact of COVID-19 uncertain
Myeloma Patient Safety and the Coronavirus

As the COVID-19 respiratory virus spreads around the world, please know that the IMF is here for you.

People living with myeloma are at an increased risk. “Myeloma patients have compromised immune systems and are highly vulnerable to new infections,” says IMF Chairman Dr. Brian G.M. Durie.

“It is important to be proactive and guard against infection from unknown sources.”

On this page, you will find updated guidance to keep you safe. Featured are Dr. Durie’s blogs and FAQs, aimed specifically at myeloma patients, and links to the best sources of COVID-19 news.

There is currently no vaccine against COVID-19, so it is important for myeloma patients and their families to minimize their risk for contracting the virus. Practices to minimize your risk include:

https://www.myeloma.org/covid19-myeloma-patients
Additional IMF Resources

Acronyms & Abbreviations:

Myeloma Terms & Definitions:
https://www.myeloma.org/sites/default/files/resource/glossary_0.pdf
IMF Patient and Family Webinar
FINAL THOUGHTS
Thank you to our sponsors!
