18th International Myeloma Workshop
SEPTEMBER 8-11, VIENNA AUSTRIA
Wednesday, September 8th

09:00-10:00  **OPENING SESSION**
Opening Ceremonies and Welcome to IMW18  Organizers of 18th IMW
IMS President Address  Nikhil Munshi

**PLENARY SESSIONS**

10:00-11:15  **Precursor Conditions**
*Session Chairs: Mario Boccadoro/Sigurdur Kristinson*

Genomic evolution - germinal B cell to MGUS/SMM/MM  Brian Walker
Role of the immune Microenvironment in the journey to MGUS/SMM/MM  Madhav Dhodapkar
Molecular Timing of Initiation  Niels Weinhold
Risk factors for MGUS/SMM progression  Vincent Rajkumar
Management of Smoldering Myeloma  Marivi Mateos
Should we screen for precursor conditions?  Irene Ghobrial

11:15-12:30  **Molecular dissection of myeloma**
*Session Chairs: Leif Bergsagel/Masood Shammas*

Clonal diversity in Myeloma  Mehmet Samur
Transcriptome  Jill Corre
Epigenomic  Wee Joo Chng
Microbiome  Leif Bergsagel
Proteomics  Arun Wiita
Metabolomics  Rafael Fonseca

12:30-13:30  **EXPOSITION AND LUNCH**

**PLENARY SESSION**

13:30-14:30  **Multiple Myeloma Diagnosis**
*Session Chairs: Sonja Zweegman/P. Joy Ho*

Diagnostic criteria and work-up in 2021  Shaji Kumar
How should we define standard and high risk MM in 2022?  Herve Avet-Loiseau
Role of imaging in diagnosis and response assessment  Elena Zamagni
Circulating tumor cells and tumor DNA for response assessment  Bruno Paiva
Mass-spec to monitor the treatment response  Dave Murray
Assessment of patient frailty and functional status  Alessandra Larocca

14:30-15:15  **IMS AWARDS**
Bart Barlogie/Ken Anderson Young Investigator Award Presentation
Waldenstrom Award Presentation and Lecture
15:15-15:45  EXPOSITION AND BREAK

15:45-16:45  INDUSTRY SYMPOSIUM SUPPORTED BY SANOFI

Welcome and Introduction  Tom Martin (Chair)
A critical part of the puzzle: Should MRD guide adaptive treatment?  Fredrik Schjesvold
Assembling the evidence: The pros and cons of MRD as a surrogate endpoint  Tom Martin
The role of MRD negativity in HR NDMM: a new piece to overcoming poor prognosis?  Martin Kaiser
Panel discussion and concluding remarks  All faculty

16:45-17:45  HOT TOPICS IN MYELOMA

Regulatory considerations
Session Moderators: Nikhil Munshi/Jesús San-Miguel
FDA perspective  Nicole Gormley
EMA perspective  TBC
I square effort updates and future directions  Brian Durie

17:45-19:15  WELCOME RECEPTION IN EXPOSITION AREA

Thursday, September 9th

08:00-09:00  MEET THE EXPERTS

Extramedullary disease  Cyrille Touzeau
Plasma cell leukemia  Artur Jurczyszyn/Ravi Vij
Management of Monoclonal gammopathy of renal significance  Javier de la Rubia/Moshe Gatt
Management of Monoclonal gammopathy of clinical significance  Laura Rosiñol/Ajay Nooka
Special forms of MM: macrofocal, non-secretory MM  Stathis Kastritis/Jacob Laubach
Management of LC Amyloidosis  Vaishali Sanchorawala/Eli Muchtar
Management of Waldström's Macroglobulinemia  Ramón García-Sanz/Prashant Kapoor
Management of POEMS  Angela Dispenzieri/Anita D'Souza
Allogeneic Stem Cell Transplantion in MM  Amrita Krishnan/Charlotte Pawlyn

08:00-09:00  CAREER DEVELOPMENT WORKSHOP

Writing successful grants  Suzanne Lentzsch/Diane Jelinek
09:00-09:30  **OPENING SESSION**  
**Novel therapies for myeloma**  
Kenneth Anderson

09:30-10:30  **PLENARY SESSION**  
**Newly diagnosed Multiple Myeloma: Current Treatment Approaches**  
*Session Chairs: David Siegel*

- Treatment of Newly Diagnosed Myeloma Transplant Eligible: what is the optimal induction?  
  Philippe Moreau
- ASCT in NDMM transplant eligible  
  Michele Cavo
- Consolidation Strategies for MM  
  Pieter Sonneveld
- Maintenance Strategies for MM  
  Hartmut Goldschmidt
- Treatment of Newly Diagnosed Myeloma Non-Transplant Eligible  
  Therirry Facon

10:30-11:45  **ORAL ABSTRACT SESSIONS**  
*Session Chairs: Lugui Qiu/Ed Stadtmauer*

- Overall Survival and Progression-free Survival by Treatment Duration With Daratumumab + Lenalidomide/ Dexamethasone in Transplant-ineligible Newly Diagnosed Multiple Myeloma: Phase 3 MAIA Study  
  Philippe Moreau
- Daratumumab improves depth of response and progression free survival in transplant-ineligible, high-risk, newly diagnosed multiple myeloma (NDMM)  
  Andrzej Jakubowiak
- CARDAMON:Carfilzomib (K) maintenance following Autologous Stem Cell Transplant (ASCT) or carfilzomib-cyclophosphamide-dexamethasone (KCd) consolidation for newly diagnosed (NDTE) multiple myeloma (MM)  
  Rakesh Popat
- Carfilzomib-Based Induction/Consolidation With or Without Autologous Transplant and Lenalidomide (R) or Carfilzomib-Lenalidomide (KR) Maintenance: Efficacy in High-Risk Patients of the FORTE study  
  Roberto Mina
- Update of Safety and Efficacy of Isatuximab Short-Duration Fixed-Volume Infusion Plus Bortezomib, Lenalidomide, and Dexamethasone Combined Therapy for NDMM Ineligible/With No Immediate Intent for ASCT  
  Enrique Ocio

*Session Chairs: Paola Neri/Dharminder Chauhan/Niklas Zojer*

- A novel algorithm to identify, characterize and define the prognostic impact of complex catastrophic events in Multiple Myeloma  
  Vincenza Solli
- Single-cell multiomic analysis identifies regulatory programs in relapsed/refractory multiple myeloma  
  Alexandra Poos
- Identification of High-Risk Multiple Myeloma with a Plasma Cell Leukemia-Like Transcriptomic Profile  
  Davine Hofste op Bruinink
- Genome-Wide CRISPR interference Screen Identifies RNA Regulator of Lipogenesis (RROL) as a Leading LncRNA Dependency in Multiple Myeloma  
  Eugenio Morelli
Gain(1q) promotes mitochondrial oxidative phosphorylation and suppresses interferon response and tumor immunity in multiple myeloma and other human cancers

Clonal phylogeny and evolution of critical cytogenetic aberrations in multiple myeloma at single cell level

---

**PLENARY SESSION**

11:45-12:45

**Management of relapsed/refractory MM patients**

*Session Chairs: Meral Beksaç/Gösta Gahrton*

- Approach to first relapse
  - Meletios-Athanassios Dimopoulos
- Management of triple refractory patients
  - Bob Orlowski
- Role of immunotherapies for relapsed MM, when and which?
  - Saad Usmani
- Personalized treatment of relapsed MM: genomics?
  - Marc Raab

---

**EXPOSITION AND LUNCH**

12:45-13:45

**INDUSTRY SYMPOSIUM SUPPORTED BY JANSSEN**

The role of non-cellular modern therapeutics in the treatment of myeloma

*Welcome and introduction: Ajai Chari (Chair)*

- Evolving treatment strategies in multiply-relapsed multiple myeloma
  - Gordon Cook
- Clinical results from BCMA targeted T-cell redirectors
  - Niels van de Donk
- Early clinical results of alternative targets for bispecifics and next generation T-cell redirectors
  - Ajai Chari
- Implications for clinical practice with these new agents
  - Hareth Nahi
- Panel discussion and concluding remarks
  - All faculty

---

**ORAL ABSTRACT SESSIONS**

*Session Chairs: Natalie Callander/Merav Leiba*

- Depth of response and MRD in newly diagnosed ultra high-risk myeloma and plasma cell leukemia treated with Dara-CVRd and V-MEL ASCT: results of the molecularly stratified UK OPTIMUM/MUKnine trial
  - Martin Kaiser
- Iberdomide (IBER) in combination with dexamethasone (DEX) and daratumumab (DARA), bortezomib (BORT), or carfilzomib (CFZ) in patients (pts) with relapsed/refractory multiple myeloma (RRMM)
  - Sagar Lonial
- Newly diagnosed Multiple Myeloma patients with high levels of circulating tumor cells are distinguished by increased bone marrow plasma cell proliferation
  - A. Cathelijne Fokkema
- Minimal residual disease following autologous stem cell transplant for myeloma patients in the Myeloma XI trial: prognostic significance and the impact of lenalidomide maintenance and molecular risk
  - Ruth De Tute
Treatment pathways for patients with multiple myeloma: a real-life study based on the French National Claim database from 2014 to 2019

Session Chairs: Enrique Ocio/Annemeik Brojil

Attenuation of T cell cytotoxicity mediated by CD200 expression on multiple myeloma cells

A BCL2L1 armoured BCMA-targeting CAR T cells to overcome exhaustion and enhance persistence in multiple myeloma

CRISPR screens with single-cell transcriptome readout reveal potential mechanisms of response to natural killer cell treatment in multiple myeloma

The Role of Checkpoint inhibitor PD-1H/VISTA in Multiple Myeloma Bone Disease

BCMA-specific ADC MEDI2228 and Daratumumab induce synergistic myeloma cytotoxicity via enhanced IFN-driven innate immune responses and expression of CD38 and NKG2D ligands

Monoallelic Deletion of BCMA Locus is a Frequent Feature in MM and is Associated with Increased Genomic Loss

16:30-17:00

EXPOSITION AND BREAK

17:00-18:00

INDUSTRY SYMPOSIUM SUPPORTED BY GSK

Welcome and Introduction

Mechanism of action of anti-BCMA ADCs for the treatment of multiple myeloma

Positioning BCMA-targeted ADCs in the relapsed/refractory multiple myeloma setting

Management of adverse events caused by BCMA-targeted ADC therapy

Panel discussion and concluding remarks

18:00-19:00

POSTER SESSION

Friday, September 10th

08:00-09:00

MEET THE EXPERTS

Covid-19 and MM

Vacination and prophylaxis in Myeloma

Management of cellular therapy-related toxicities

Bone disease control in Myeloma

Management of MM patients with renal impairment

Wenming Chen/Sarah Holstein

Laurent Garderet

Jesus Berdeja/Krina Patel

Matthew Drake

Ruben Niesvizky
Which is the ideal patient to be referred for CAR-T vs bi-specific vs ADC?  
Melissa Alsina/
Sham Mailankody
Racial disparity and monoclonal gammopathies  
Craig Cole

08:00-09:00  
**CAREER DEVELOPMENT WORKSHOP**

**Developing your first clinical trial**  
Simon Harrison/
Jean-Luc Harousseau

09:00-09:30  
**OPENING SESSION**

**Future of myeloma treatment**  
Jesus San Miguel

09:30-10:30  
**IMS/EHA SYMPOSIUM**

**Immune Therapies: A game changer for Hematological Malignancies**

*Chairs: Kenneth Anderson/Pieter Sonneveld*

CART TBC
Other Immune Approaches  
John Gribben

10:30-11:45  
**ORAL ABSTRACT SESSIONS**

*Session Chairs: Michael O'Dwyer*

Efficacy and safety of ciltacabtagene autoleucel, a BCMA-directed CAR-T cell therapy, in patients with progressive multiple myeloma after 1–3 prior lines of therapy: Initial results from CARTITUDE-2  
Adam Cohen

Updated results from CARTITUDE-1: Ciltacabtagene autoleucel, a B-cell maturation antigen–directed chimeric antigen receptor T (CAR-T) cell therapy, in relapsed/refractory multiple myeloma (RRMM)  
Sundar Jagannath

Talquetamab, a G protein-coupled receptor family C group 5 member D (GPRC5D)×CD3 bispecific antibody, in relapsed/refractory multiple myeloma (RRMM): Updated results of a phase 1, first-in-human study  
Niels van de Donk

MagnetisMM-1 study of elranatamab (PF-06863135), a B-cell maturation antigen (BCMA) targeted CD3-engaging bispecific molecule, for patients (pts) with relapsed or refractory multiple myeloma (MM)  
Bhagirathbhai Dholaria

Idecabtagene vicleucel (ide-cel, bb2121), a BCMA-directed CAR T-cell therapy, for the treatment of patients with relapsed and refractory multiple myeloma (RRMM): updated results from KarMMa  
Larry Anderson

*Session Chairs: Ruth De Tute/Aurore Perrot/Tomas Jelinek*

FAM46C-Dependent Tuning of Endoplasmic Reticulum Capacity in Multiple Myeloma  
Enrico Milan

Bone marrow adipocytes induce metabolic reprogramming of multiple myeloma cells  
Cristina Panaroni

Combined targeting of distinct c-Myc and JunB transcriptional programs induces synergistic anti-myeloma activity  
Judith Lind
Circular RNA protein tyrosine kinase 2 promotes cell proliferation, migration and suppresses apoptosis via activating microRNA-638 mediated MEK/ERK, WNT/β-catenin signaling pathways in myeloma

Targeting GCK in RAS-mutant multiple myeloma offers a promising therapeutic approach

Loss-of-function of GABARAP drives tumor resistance to bortezomib-induced immunogenic cell death in multiple myeloma

**PLENARY SESSION**

**11:45-12:45**

**Other Plasma Cell Disorders**

*Session Chairs: Giampolo Merlini/Jorge Castillo*

- Current strategies for AL patients
  - Giovanni Palladini

- What are the novel approaches in WM?
  - Steve Treon

- Monoclonal gammopathy of clinical significance
  - Joan Blade

- Monoclonal gammopathy of renal significance
  - Nelson Leung

**12:45-13:45**

**EXPOSITION, POSTER SESSION AND LUNCH**

**13:45-15:15**

**INDUSTRY SYMPOSIUM SUPPORTED BY BMS**

**New Era of Immune Therapies in Multiple Myeloma**

- Welcome and introduction
  - Noopur Raje (Chair)

- Cereblon E3 ligase as a therapeutic mediator for protein degradation
  - Nizar Bahlis

- Early clinical data on cereblon E3 ligase modulators
  - Sagar Lonial

- Clinical evidence for CAR T cell therapy in multiple myeloma
  - Nina Shah

- The future of cellular and immune therapies in multiple myeloma
  - Noopur Raje

- Discussion and Q&A
  - All faculty

**15:15-16:30**

**ORAL ABSTRACT SESSIONS**

*Session Chairs: Jens Hillengass/Angelo Maiolino*

- Evaluating the Impact of Cytogenetic Abnormalities on Treatment Outcomes in Patients with AL Amyloidosis: Subanalyses From the ANDROMEDA Study
  - Shaji Kumar

- Minimally invasive profiling of tumor and immune cells to stratify risk in smoldering multiple myeloma (SMM): the iMMunocell study
  - Rosalinda Termini

- Graded Renal Response Criteria and Revised Renal Progression Criteria for Light chain (AL) Amyloidosis
  - Eli Muchtar

- Assessing the prognostic utility of the Mayo 2018 and IMWG 2020 smoldering multiple myeloma risk stratification scores applied post diagnosis
  - Alyssa Visram

- Graded Cardiac Response Criteria for AL Amyloidosis: The Impact of Depth of Cardiac Response on Survival
  - Eli Muchtar
Distinct immunoglobulin heavy-chain variable gene repertoire and its clinical relevance in Waldenström macroglobulinemia/lymphoplasmacytic lymphoma  
Yuting Yan

Clonal hematopoiesis is associated with increased risk of progression of asymptomatic Waldenström Macroglobulinemia  
Sabrin Tahri

Epithelial-mesenchymal-transition regulated by Junctional Adhesion Molecule-A (JAM-A) associates with aggressive extramedullary multiple myeloma disease.  
Antonio Solimando

Targeting Free Light Chain Secretion via Botulinum Neurotoxin is a Novel Therapeutic Strategy in AL amyloidosis by Inducing a Terminal Unfolded Protein Response  
Maria Moscvin

Progression and probability of progression are driven by different genomic features in precursor conditions in myeloma  
Anil Aktas-Samur

Anti-CD38 nanobodies as theranostic agents for multiple myeloma  
Elodie Duray

16:30-17:00  
**EXPOSITION AND BREAK**

17:00-18:00  
**INDUSTRY SYMPOSIUM SUPPORTED BY AMGEN**

Welcome and Introduction  
Keith Stewart (Chair)

Defining Refractories in MM: The Scientific Perspective  
Kwee Yong

Defining Refractories in MM: The clinical Perspective  
Peter Voorhees

Optimal Treatment Sequencing for Managing MM in Early Relapse  
Keith Stewart

Panel discussion and concluding remarks  
All faculty

18:00-19:00  
**HOT TOPICS IN MYELOMA**

**Covid-19 in MM: what we have learnt?**

*Session Moderators: Karthik Ramasamy/Douglas Joshua*

COVID-19 Vaccine Responsiveness in Patients with Multiple Myeloma and Waldenström Macroglobulinemia  
Andrew Branagan

COVID-19 infection in multiple myeloma patients – retrospective analysis of 371 Czech patients  
Jakub Radocha

Plasma cell disorder patients are left vulnerable after one dose of the BNT162b2 mRNA or the ChAdOx-nCOV-19 COVID-19 vaccines  
Wei Yee Chan

Suboptimal humoral immune response to SARS-CoV-2 mRNA vaccination in myeloma patients is associated with anti-CD38 mAb and BCMA-targeted treatment.  
Oliver Van Oekelen

Poor Post-vaccination Anti-SARS-CoV-2 Antibody Response in Patients with Multiple Myeloma correlates with low CD19+ B-lymphocyte count and Anti-CD38 Treatment  
Susanne Ghandili
### M E E T T H E E X P E R T S

<table>
<thead>
<tr>
<th>Topic</th>
<th>Expert(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal models for myeloma</td>
<td>Karin Vanderkerken/Marta Chesi</td>
</tr>
<tr>
<td>Genomic techniques</td>
<td>Mark Bustoros/Ruben Carrasco</td>
</tr>
<tr>
<td>Approaches to proteomic analysis</td>
<td>Saloman Manier/Naomi Puig</td>
</tr>
<tr>
<td>Primary sample processing and enrichment techniques</td>
<td>Jonathan Keats/Daniel Auclair</td>
</tr>
<tr>
<td>Single cell approaches</td>
<td>Manoj Bhasin/Jens Lohr</td>
</tr>
<tr>
<td>Assessing the immune system</td>
<td>Hearn Cho/Tax Kourelis</td>
</tr>
<tr>
<td>Metabolomics techniques in MM</td>
<td>Malathy Shanmugum/Wilson Gonsalves</td>
</tr>
<tr>
<td>ChIP in Myeloma</td>
<td>Adam Sperling</td>
</tr>
</tbody>
</table>

### C A R E E R D E V E L O P M E N T W O R K S H O P

**Setting up your laboratory research program**

- Rodger Tiedeman/Larry Boise

### I N D U S T R Y S Y M P O S I U M S U P P O R T E D B Y O N C O P E P T I D E S

**Welcome and Introduction**

- Graham Jackson (Chair)

**Impact of patient and disease factors on choice to therapy in RRMM - how far have we come today?**

- Sikander Ailawadhi

**Current treatment options in RRMM - which challenges remain?**

- Paula Rodriguez

**What is coming on the horizon for RRMM - are the remaining challenges resolved?**

- Paul Richardson

**Panel discussion and concluding remarks**

- All faculty

### O R A L A B S T R A C T S E S S I O N S

**Session Chairs: Jae Hoon Lee/Elizabet Manasanach**

- Fredrik Schjesvold

**OCEAN (OP-103): A Phase 3, Randomized, Global, Head-to-Head Comparison Study of Melflufen and Dexamethasone (Dex) Versus Pomalidomide (Pom) and Dex in Relapsed Refractory Multiple Myeloma (RRMM)**

- Luciano J. Costa

**Daratumumab, Carfilzomib, Lenalidomide and Dexamethasone (Dara-KRd), Autologous Transplantation and MRD Response-Adapted Treatment Duration and Cessation in Newly Diagnosed Multiple Myeloma (NDMM)**
**Impact of chromosome 1 abnormalities on newly diagnosed multiple myeloma treated with proteasome inhibitor, immunomodulatory drug, and dexamethasone:**
Prashant Kapoor

**Clinical outcomes of relapsed/refractory multiple myeloma patients after BCMA-targeted CAR T therapy.**
Oliver Van Oekelen

**Single-cell RNA-sequencing identifies immune biomarkers of response to immunotherapy in patients with high-risk Smoldering Myeloma**
Romanos Sklavenitis-Pistofidis

*Session Chairs: Mariateresa Fulciniti/Nicolo Bolli/Maria-Theresa Krauth*

**Gain and Amplification of 1q Induce Transcriptome Deregulation and Worsen the Outcome of Newly Diagnosed Multiple Myeloma Patients**
Mattia D'Agostino

**A machine learning model based on tumor and immune biomarkers to predict undetectable measurable residual disease (MRD) in transplant-eligible multiple myeloma (MM)**
Camila Guerrero

**Temporal-weight estimation of the copy number alterations of 1384 multiple myeloma patients defines an ancestrality index impacting patient survival**
Andrea Poletti

**Predictive relevance of sustained MRD negativity and of early loss of MRD negativity during maintenance therapy after transplant in newly diagnosed Multiple Myeloma patients**
Angelo Belotti

**Towards a comprehensive multimodal minimal residual disease assessment in multiple myeloma: the role of circulating cell-free DNA to define the extent of disease spreading**
Marina Martello

**Prospective comparison of contemporary whole body MRI and FDG PET/CT for disease detection and correlation with markers of disease burden in myeloma: Results of the iTIMM trial**
Martin Kaiser

---

**PLENARY SESSION**

11:15-13:15

**Great Debates in Myeloma**

*Moderators: Ludwig/Goldschmidt/Einsele/Hajek*

**Should every transplant eligible NDMM patient receive a transplant?**
Sergio Giralt/Morie Gertz

**Are we ready for MRD-guided therapy?**
Sundar Jagannath/Ola Landgren

**Is stratification based on genomics ready for primetime?**
Gareth Morgan/Faith Davies

**Which is the best immune approach to replace ASCT?**
Hermann Einsele/Parameswaran Hari

**Can we give our patient treatment free intervals?**
Luçiano Costa/Phil McCarthy

**Is there a role for alkylator in MM?**
Donna Reece/Jeff Wolf
13:15-13:45  **LUNCH**

---

**PLENARY SESSIONS**

13:45-14:45  **Supportive care management**

*Session Chairs: Andrzej Jakubowiak/Rafat Abouneh*

- Management of renal failure  
  Jean-Paul Fernand
- Approaches to bone health  
  Evangelos Terpos
- Management of infections  
  Michel Delforge
- Toxicity management  
  Elizabeth O'Donnell
- Vaccinations in myeloma including COVID-19  
  Heinz Ludwig

---

14:45-15:45  **Immune Therapies**

*Session Chairs: Qing Yi/Ivan Borello*

- Mechanism of resistance to CAR-T cells and bispecifics  
  Yi Lin
- How to improve the efficacy of CAR-T cells and bispecifics?  
  Michael Hudecek
- Allo-CAR-T cells  
  Roman Hajek
- CAR-NK cells  
  Adam Cohen
- Vaccination Therapies for Myeloma  
  David Avigan

---

15:45-16:45  **Clinical Trials in Progress**

*Moderators: William Bensinger/ Raymond Comenzo*

- North America  
  Jonathan Kaufman
- Europe  
  Xavier Leleu
- South America  
  Vania Hungria
- Asia  
  Jeffrey Huang
- Australia  
  Hang Quach

---

16:45-16:55  **WELCOME TO 19TH IMW**

Organizers of 19th IMW

---

16:55-17:00  **CLOSING COMMENTS**

Organizers of 18th IMW  
Ludwig/Goldschmidt/Einsele/Hajek
The IMS gratefully acknowledges the following organizations for their sponsorship of the 18th International Myeloma Workshop:

**TITANIUM LEVEL**
- Bristol Myers Squibb™
- Janssen Oncology

**PLATINUM LEVEL**
- Amgen®
- gsk
- onc peptides
- Sanofi Genzyme

**SILVER LEVEL**
- abbvie
- Takeda Oncology