POST-ORLANDO 2025
Novità dal Meeting della Società Americana di Ematologia

Novità dal Meeting della Società Americana di Ematologia

Torino
Centro Congressi Lingotto
19-21 febbraio 2026

MGUS e Mieloma asintomatico

Massimo Offidani

Clinica di Ematologia

AOU delle Marche, Ancona

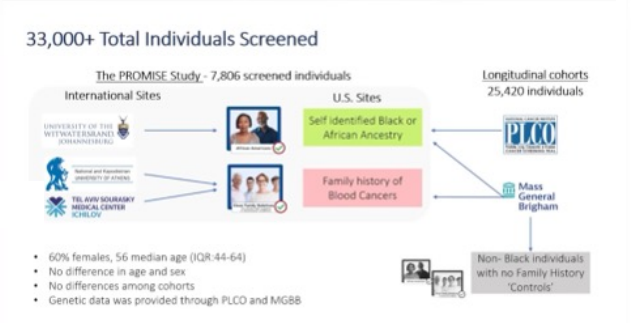
DICHIARAZIONE Massimo Offidani

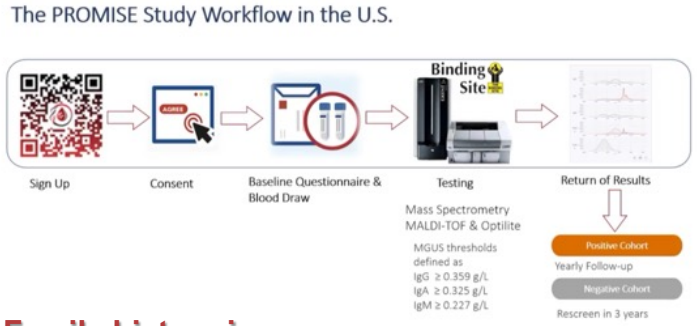
Company name	Research support	Employee	Consultant	Stockholder	Speakers bureau	Advisory board	Other
Amgen			X			x	Honoraria
BMS							Honoraria
GSK	x		x			x	Honoraria
J&J	x		x			x	Honoraria
Menarini			x			x	Honoraria
Oncopeptides			x			x	Honoraria
Pfizer	x		x			x	Honoraria
Sanofi	x		x			x	Honoraria

EPIDEMIOLOGY

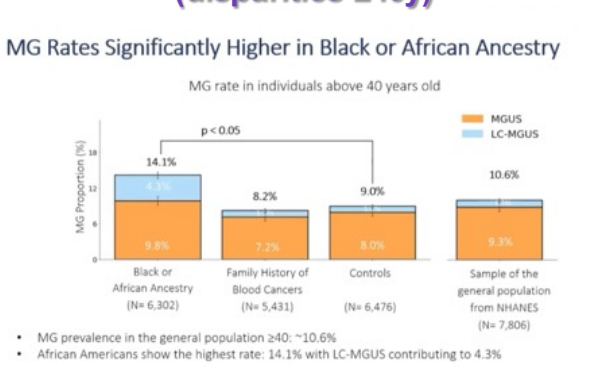
PROMISE Study

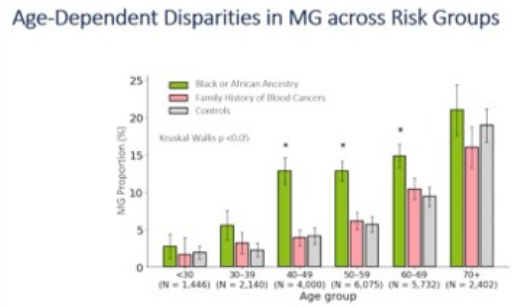
Allam S et al, abstract 403



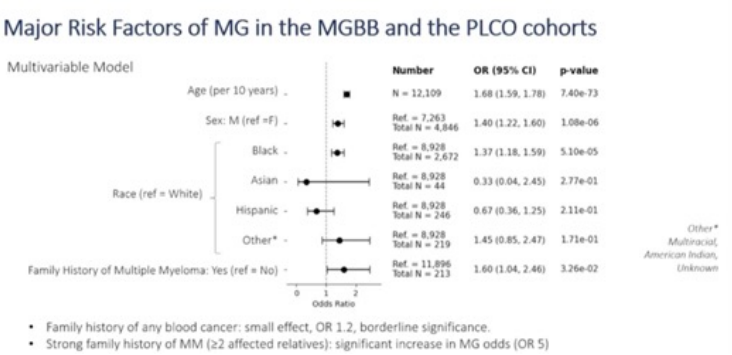


Higher MG prevalence in Black/African ancestry (disparities ≥40y)

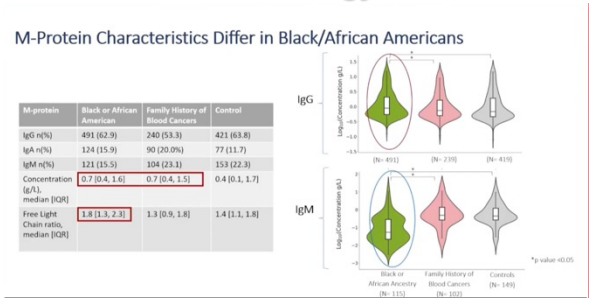




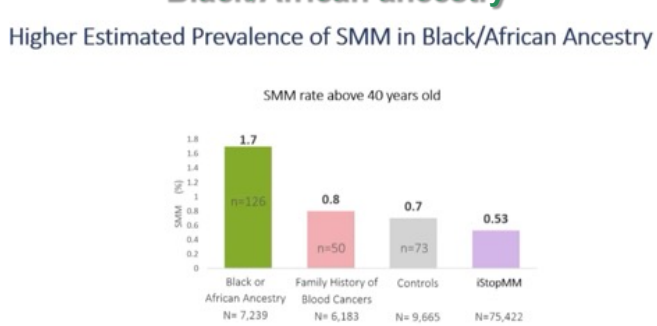
Family history is a strong MG risk factor (≥2 relatives)



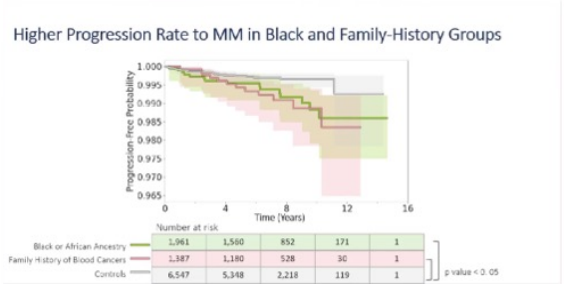
MGUS biology differs



Higher estimated SMM prevalence in Black/African ancestry

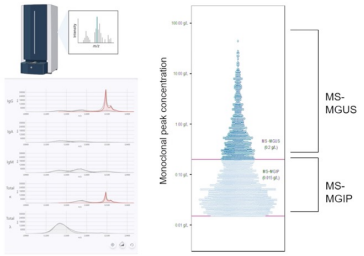


Higher rate of progression to MM in Black and family-history groups



PRECURSORS BIOLOGY and EVOLUTION MODELS

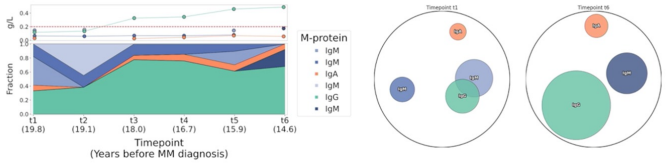
Monoclonal gammopathy of indeterminate potential (MGIP) as a Potential Premalignant Entity Preceding Hematologic Malignancy



- Previously identified **low-level monoclonal gammopathies (<0.2g/L) by mass spectrometry (MS)** and their prevalence in a large cohort study[1]
- **Questions**
  - **Does MGIP present before multiple myeloma (MM) in a non-transient manner?**
  - **Are they from clonal populations?**

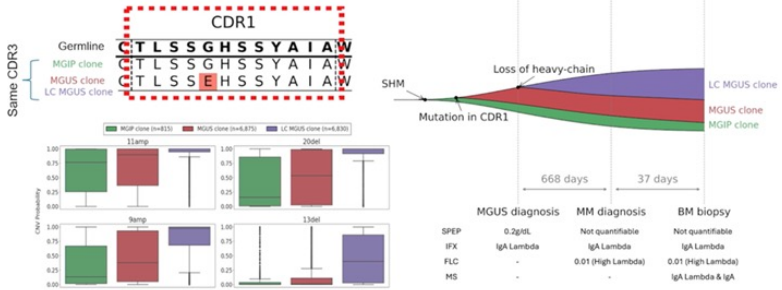
MGIP is a dynamic state

An example of 'shifting dominance': **IgM MGIP to IgG MGUS**



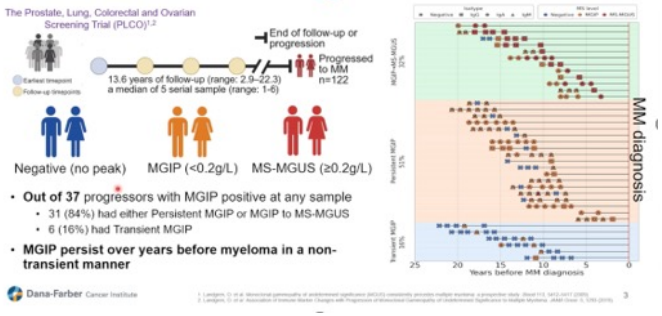
- IgG MGIP (second largest clone at first sample) consistently grow to MGUS
- **Myeloma can arise from an oligoclonal background where multiple clones compete before one becomes dominant**
- **Using MS, we can track disease course earlier and more accurately**

MGIP clone diverges earlier than other clones suggesting **MGIP clone can be the earliest detectable clone**



Oligoclonal origins precede MM

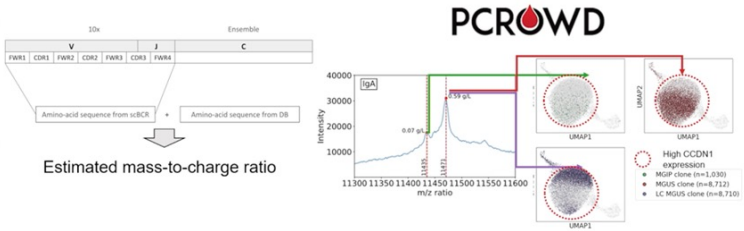
84% of MM progressors with MGIP positive had either **"Persistent MGIP"** or **"MGIP->MS-MGUS"** before MM diagnosis



- **Out of 37** progressors with MGIP positive at any sample
  - 31 (84%) had either Persistent MGIP or MGIP to MS-MGUS
  - 6 (16%) had Transient MGIP
- **MGIP persist over years before myeloma in a non-transient manner**

MGIP derives from B and PCs

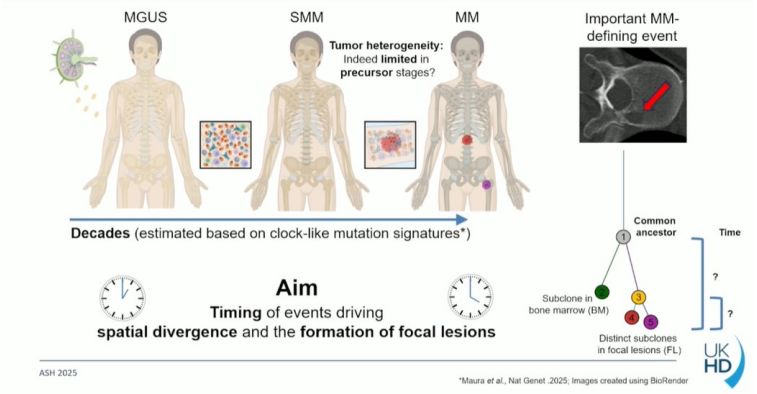
MGIP detected by mass spectrometry is **derived from one of heterogenous PC clone in a MM patient**



- Developed **a method to estimate the mass-to-charge ratio** from each cell using scBCR-seq, allowing directly match MS peaks to individual cells
- **Identified MGIP clones from PCs in BM** in one MM patient with multiple MS peaks

MGIP represents the earliest detectable monoclonal expansion, with potential progression to plasma-cell and B-cell malignancies, enabling early diagnosis, risk stratification and targeted monitoring

Kim S et al, abstract 582



Poos AM et al, abstract 685

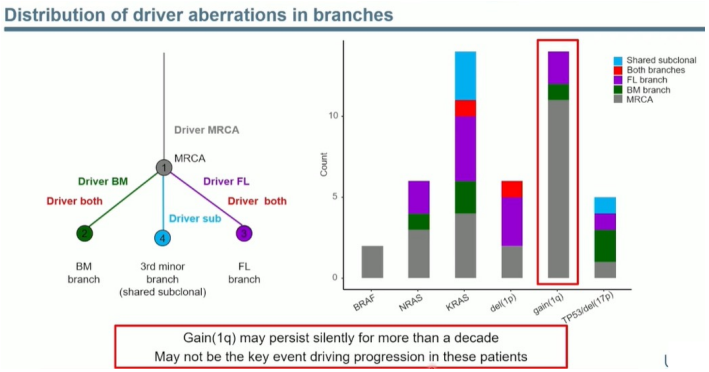
Early spatial clonal divergence >10 years before MM

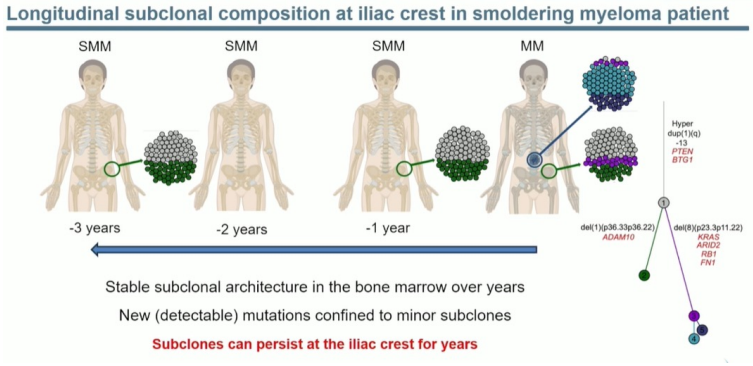
Late focal lesions reflect subclonal selection

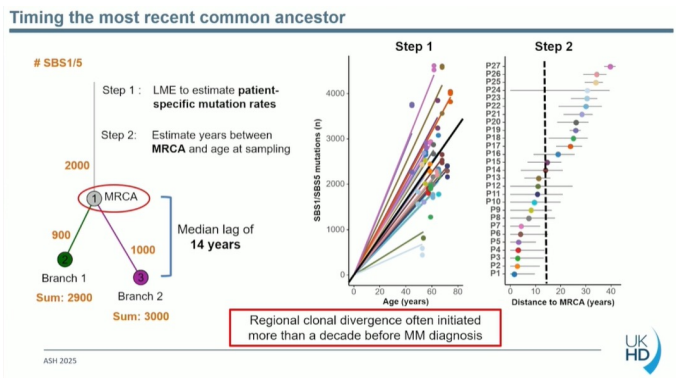
Advanced subclones already present in precursors

Genomic basis for abrupt lesion emergence

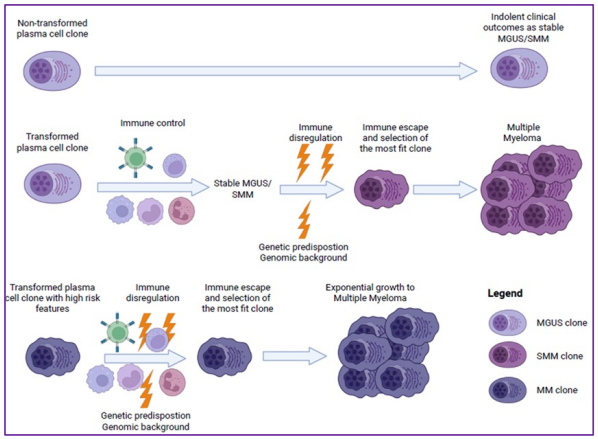
Persistent 1q gain in precursor states







Need for deeper understanding of early genomic events driving myeloma pathogenesis



Genomics define neoplastic transformation in multiple myeloma precursor conditions

Maura F et al, abstract 686

CLASSIFICATION

Malignant plasma cell clones can exist for years without progression

STABILITY *vs* PROGRESSION

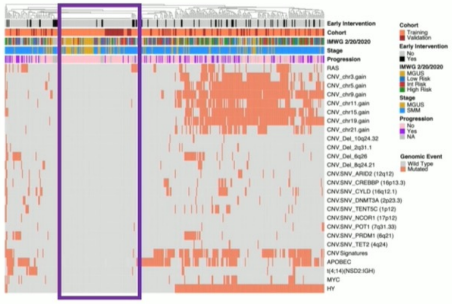
Absence of malignant transformation identifies non-progressors

PROGNOSTICATION

Integrating genomic and clinical models improves risk stratification

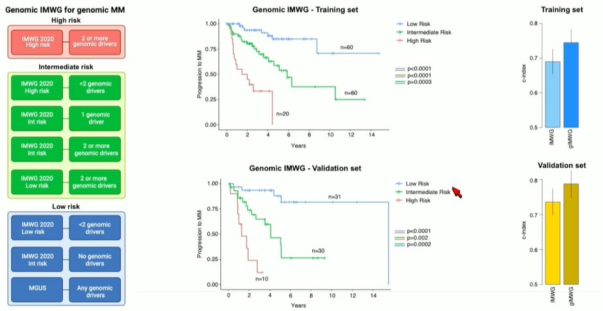
Myeloma genomic defining events in SMM and MGUS

28 myeloma genomic defining events* were associated with progression into MM

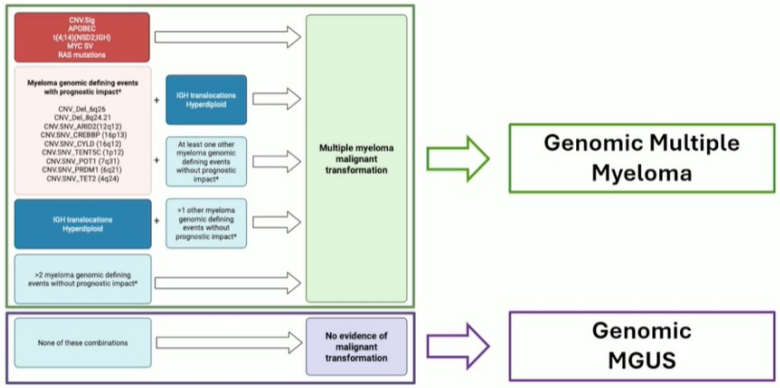


Genomic IMWG 2020

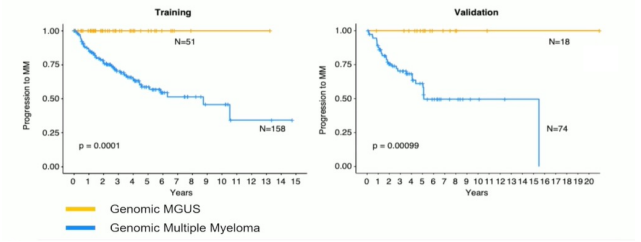
The model include ONLY patients with evidence of malignant transformation



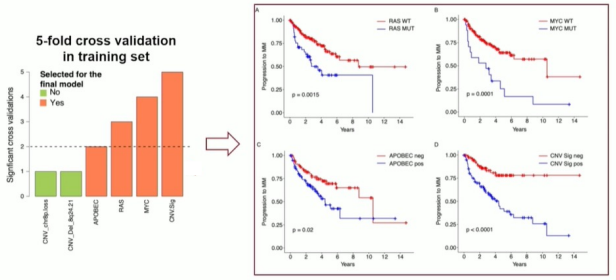
Malignant transformation in SMM and MGUS



Clinical impact of malignant transformation



Genomic features associated with MM progression



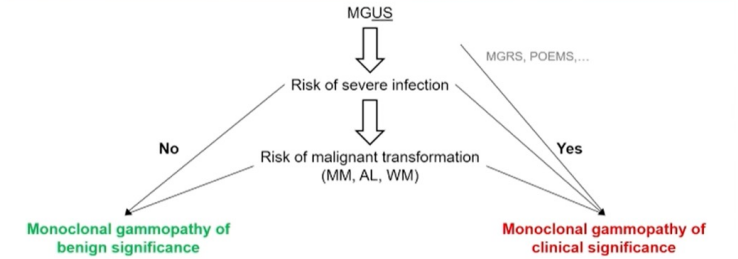
Ending the Undetermined Significance of Monoclonal Gammopathies: First Results of the NoMoreMGUS study

M Lasa, E Martin-Sanchez, A Zabaleta, D Allignani, C Gonzalez, MA Fortuño, N Puig, J Labrador, M Casanova, L Rosiñol, S Garzon, E Ocio, A Perez, I Romera, C Couto, S Lakhwani, F Prosper, A Alegre, ME Cabezudo, I Carro, C Motllo, M Cortes, I Garcia-Cabrera, M Romera, J de la Rubia, A Manubens, A Suarez, F Escalante, C Aguilar, R del Campo, E Clavero, J Martinez-Lopez, V Cabañas, MJ Blanchard, A Lopez de la Guia, D Sanchez, A Oriol, M Reinoso, ML Amador, C Benavente, JM Arguiñano, E Gonzalez, F Taboada, JJ Lahuerta, J Blade, MV Mateos, J San Miguel, B Paiva,

on behalf of the PETHEMA/GEM cooperative group

PETHEMA GEM GRUPO ESPAÑOL DE MIELOMA — NoMoreMGUS

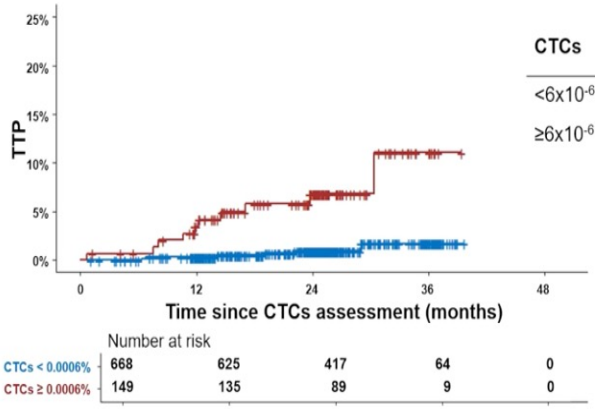
NoMoreMGUS: ending the undetermined significance of monoclonal gammopathies



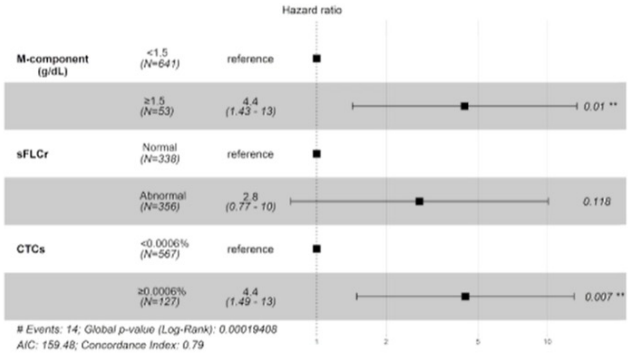
Aim: Add malignant and infection significance into the existing list of monoclonal gammopathies of clinical significance (eg, renal), towards new diagnostic criteria that eliminates the term "undetermined" and classifies monoclonal gammopathies into benign vs clinical significance

Lasa M et al, abstract 578

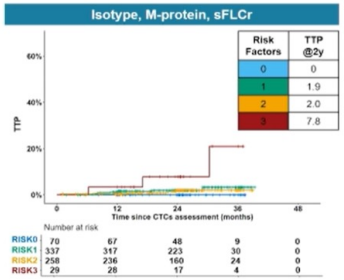
≥0.0006% CTCs in non-IGM MGUS is associated with a 7.6-fold increased risk of transformation to MM or AL



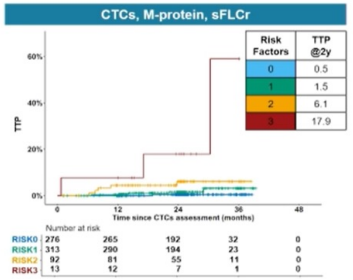
Multivariate analysis of TTP in non-IgM MGUS



Risk model of TTP in non-IgM MGUS



C-index **0.64** (95% 0.43 - 0.85)
HR: 2.04 (95% 0.98 - 4.22); *P* = .056



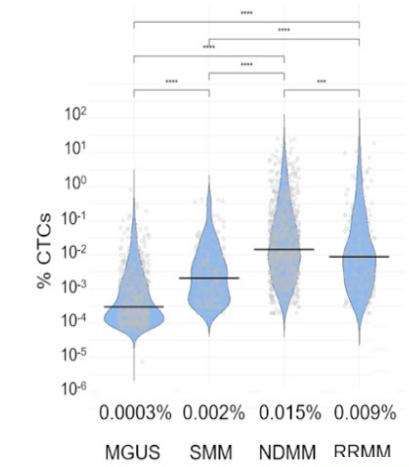
C-index **0.87** (95% 0.76 - 0.98)
HR: 3.95 (95% 2.16 - 7.21); *P* < .001

Circulating plasma cells correlate with progression risk and improve risk stratification, particularly in non-IgM MGUS and hold promise to redefine malignant *vs* non-malignant monoclonal gammopathies

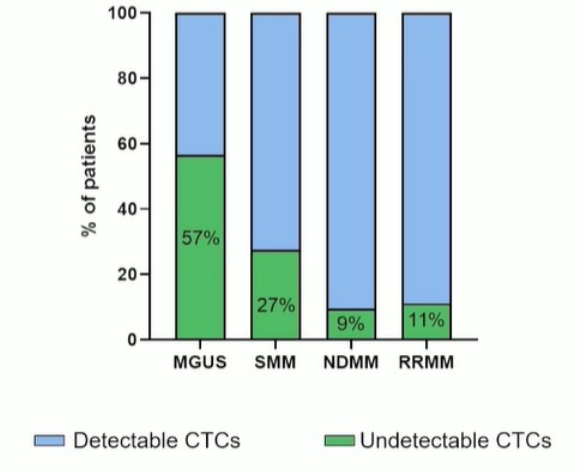
Absence Of Circulating Tumor Cells (CTCs) Defines a Subtype of Multiple Myeloma (MM) Patients (Pts) with Unique Clinical and Biological Features

Martin-Sanchez E et al, abstract 366

Progressive increment of CTCs from MGUS to SMM and NDMM

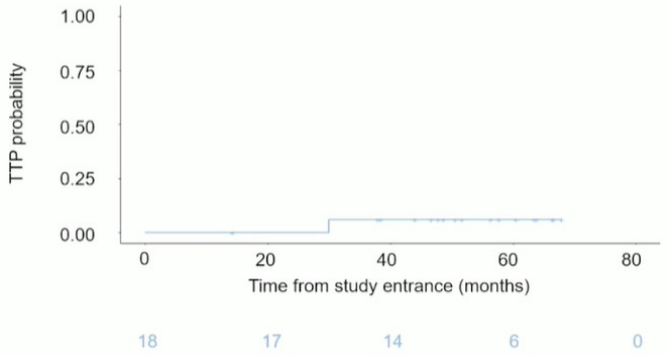


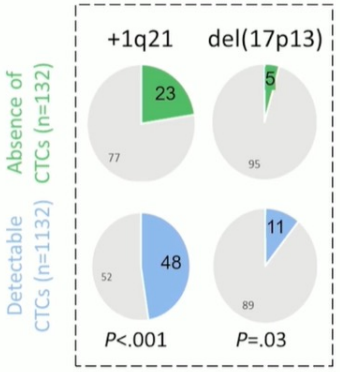
Patients with undetectable CTCs with an LOD of $2x10^{-6}$ are observed throughout the disease course

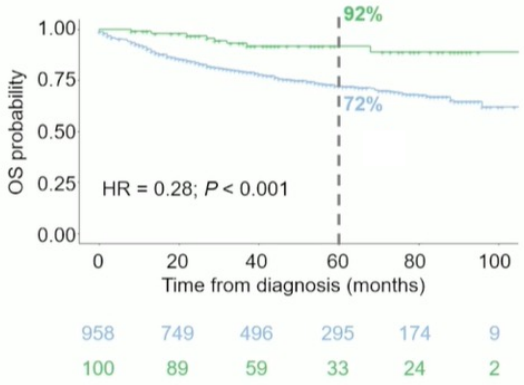


Some MGUS and SMM patients with undetectable CTCs progress into active MM

A few SMM patients with sustained undetectable CTCs may progress into active MM (1/18, 5.6%)





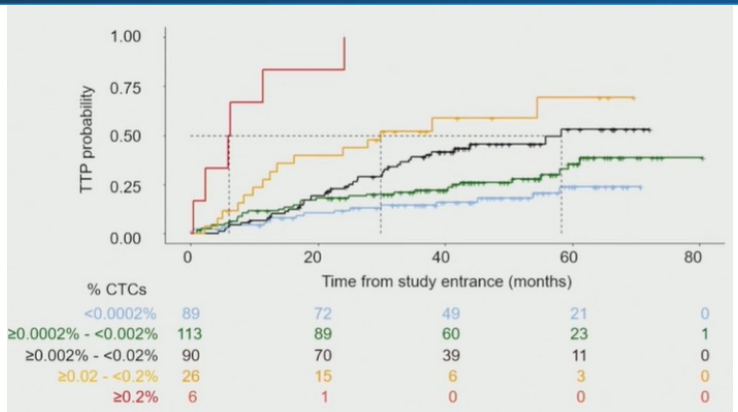


New myeloma subtype showing unprecedented survival, defined by undetectable CTCs with NGF

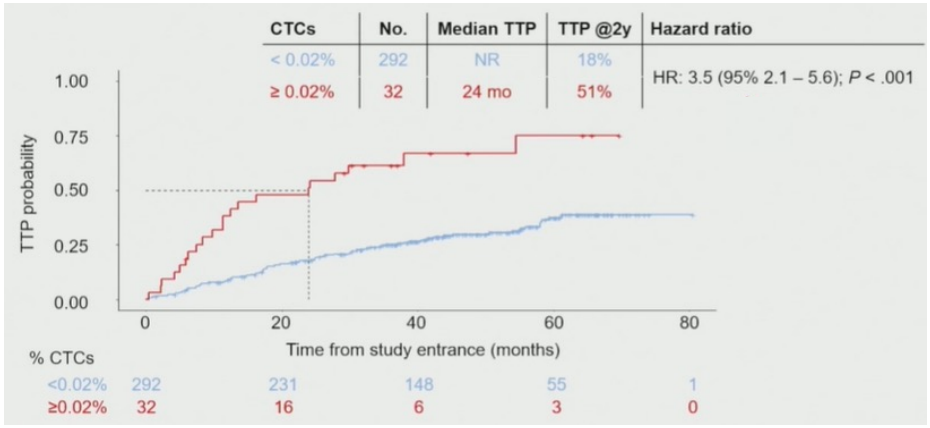
Circulating Tumor Cells (CTCs) for Dynamic Risk Assessment of Patients (Pts) with Smoldering Multiple Myeloma (SMM)

- **Aim:** Investigate the role of CTCs as an alternative to BM tumor cells for dynamic risk assessment of SMM

CTC log levels are significantly associated with TTP



Patients with ≥ 0.02% CTCs have median TTP of 2y



CTCs are an independent prognostic factor in SMM

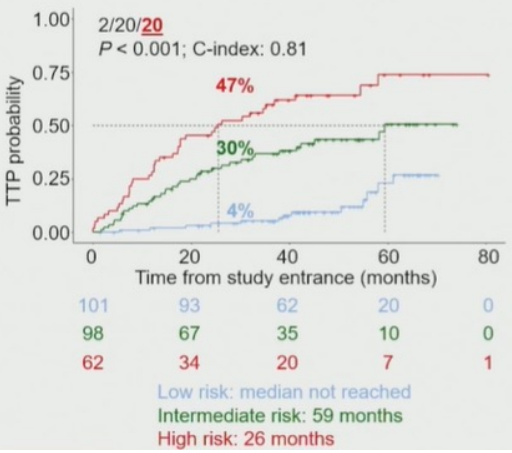
Variable		N	Hazard ratio (95% CI)	P-value
sFLC ratio	≤20	184	Reference	
	>20	63	2.68 (1.71, 4.17)	<0.001
[Serum M-protein] (g/dL)	≤2	142	Reference	
	>2	105	2.12 (1.35, 3.33)	<0.001
% BM PCs	≤20	203	Reference	
	>20	44	1.38 (0.84, 2.28)	0.208
% CTCs	<0.02	219	Reference	
	≥0.02	28	2.18 (1.28, 3.72)	0.004

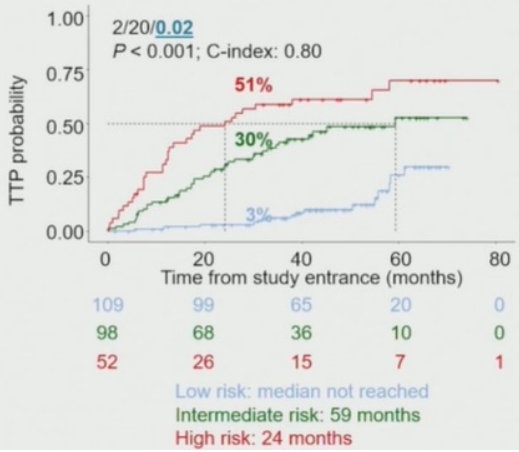
Martin-Sanchez E et al, abstract 493

Circulating Tumor Cells (CTCs) for Dynamic Risk Assessment of Patients (Pts) with Smoldering Multiple Myeloma (SMM)

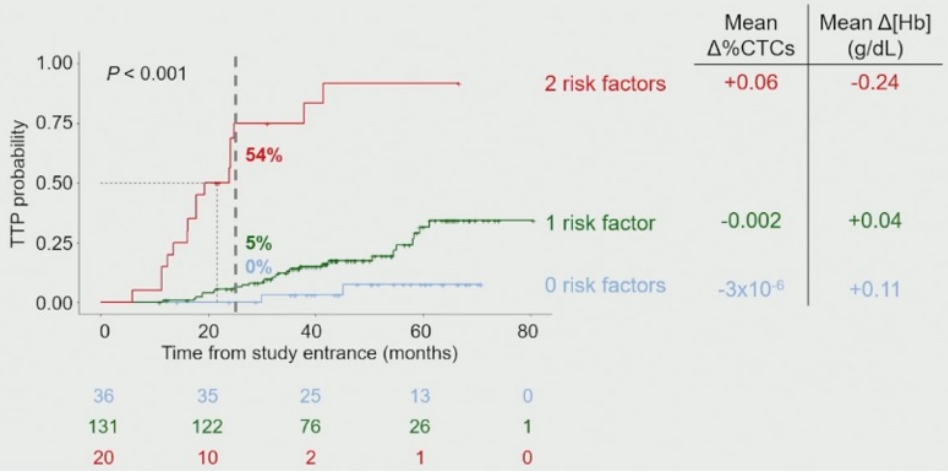
- **Aim:** Investigate the role of CTCs as an alternative to BM tumor cells for dynamic risk assessment of SMM

IMWG model using CTCs provides identical risk stratification compared to the model using BM PC





Improved risk stratification with a dynamic model using CTCs and hemoglobin



- Reassessment of risk every 6 months
- 24% of patients had their risk modified over time
- 20% of patients converted from low/intermediate into high risk SMM

- 46% of patients converting from low/intermediate into high risk SMM progressed vs 15% of patients who maintained the low/intermediate risk category

Serial assessment using 2/20/0.02 model uncovers ~ 1/4 of SMM patients had their risk modified over time

Martin-Sanchez E et al, abstract 493

THERAPY

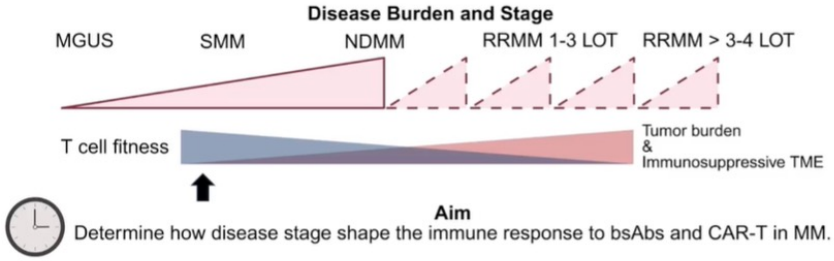
Single-cell immune profiling reveals enhanced immune fitness of endogenous and engineered T cells in patients with high-risk smoldering myeloma compared to Relapsed/Refractory myeloma following bispecific antibodies or CAR-T cell therapies

Francesco Corrado*, Nayda Bidikian*, Anna Bosch-Vilaseca, Yoshinobu Konishi, Marta Larrayoz, Rosa Toenges, Jean-Baptiste Alberge, Ting Wu, Sophie Magidson, Lorena Pantano, Michelle P. Aranha, Elizabeth D. Lightbody, Joseph Casey Flinn, Michael Timonian, David Cordas dos Santos, Rocio Montes De Oca, Tamar Lengil, Diego Vieyra, Mark Wildgust, Vicki Plaks, Denise De Wiest, Kevin De Braganca, Shonali Midha, Elizabeth K. O'Donnell, Yuxin Liu, Ashlee Sturtevant, Kenneth C. Anderson, Nikhil C. Munshi, Adam S. Sperling, Omar Nadeem, Jerome Ritz, Jose Angel Martinez-Climent, Gad Getz#, Romanos Sklavenitis-Pistofidis#, Irene Ghobrial#

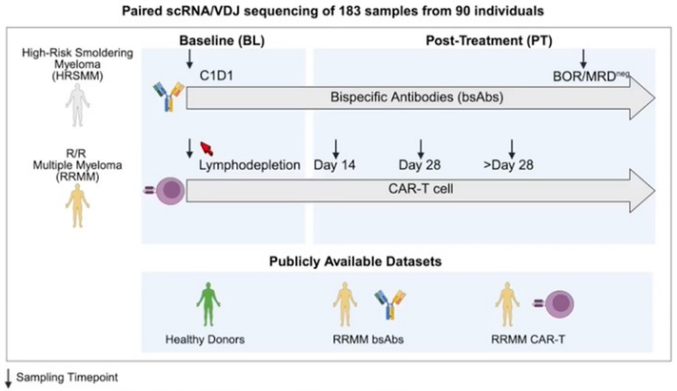
* # Contributed equally

HARVARD MEDICAL SCHOOL · Dana-Farber Cancer Institute · BROAD INSTITUTE

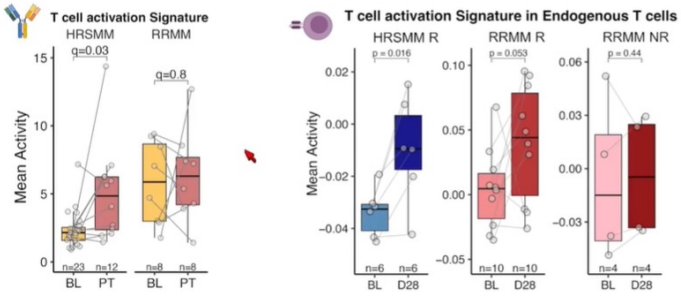
Can we maximize the efficacy of T cell redirecting therapies in MM by earlier administration?



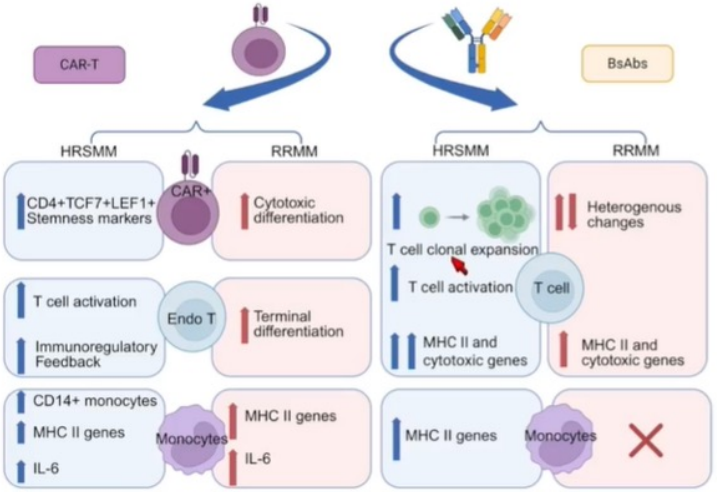
Cohort Overview



Endogenous T cells activation post bsAbs and CAR-T cells is higher in pts with HRSMM



Conclusion



Administered CAR-T and bispecific in early stages of Myeloma, when T-cell fitness is preserved, can improve depth, duration and quality of clinical response

Corrado F et al, abstract 921

American Society of Hematology
Helping hematologists conquer blood diseases worldwide

GLP-1 Receptor Agonists and Plasma Cell Disease Progression

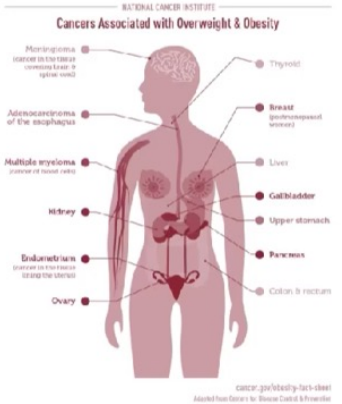
Arooj Abidi[1], Hashim Mann[2], Sneha Purvey[2], Bharadhwaj Kolipakkam[2], Brian Cassel[3], Victor Yazbeck[2, 4]

[1]VCU, School of Public Health [2]VCU Health, Hematology-Oncology [3]VCU School of Medicine, [4]Massey Comprehensive Cancer Center at VCU

VCU

Background: GLP-1 RAs

- MM is one of the obesity associated cancers.
- GLP-1 RA used widely for diabetes and obesity.
- GLP-1 RA reduce weight, improve inflammation and metabolic signaling.
- Possible relevance to clonal evolution.
- Rationale for studying MGUS/SMM progression.



Our Study Methodology: Dataset Source

- Retrospective cohort study
- TriNetX research database
- Constructed cohort queries
- Two groups: MGUS patients exposed to GLP-1 RAs versus those not exposed

Our Study Methodology: Analysis

Propensity Score Matching

1:1 matching using demographics, comorbidities, and laboratory markers

Outcomes

Primary: MGUS to SMM progression

Secondary: SMM to MM progression

Statistical Methods

Kaplan-Meier curves and Cox proportional hazards models computed

Primary Analysis: MGUS to SMM Progression

6,560

GLP-1 RA Users

Matched patients in treatment group

2.80%

GLP-1 RA Progression

184 patients progressed to SMM

6,894

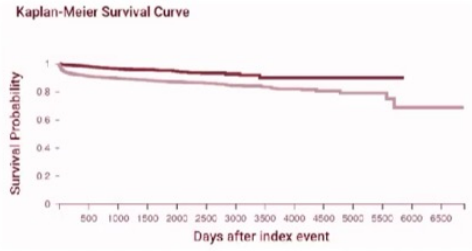
Non-Users

Matched control group patients

10.42%

Control Progression

718 patients progressed to SMM



KM Curve for Risk of Progression

$p < 0.0001$

Risk Reduction

70%

Risk Reduction

Hazard ratio of 0.30 (95% CI: 0.26-0.36, p < 0.0001)

7.61%

Absolute Difference

Risk difference between groups (95% CI: -8.43% to -6.79%)

75%

Odds Reduction

Odds ratio of 0.25 (95% CI: 0.21-0.29)

Secondary Analysis: SMM to MM Progression

2,218

GLP-1 RA Users

Matched patients in treatment group

11.50%

GLP-1 RA Progression

255 GLP-1 RA users progressed to MM

3,036

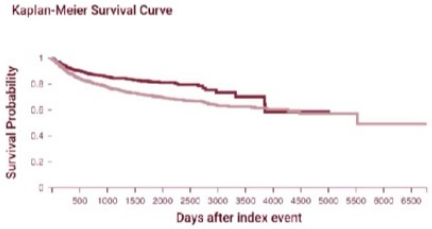
Non-Users

Matched control group patients

20.37%

Control Progression

618 non-users progressed to MM



KM Curve for Risk of Progression

$p < 0.0001$

Multivariable Cox Regression Analysis

Covariate	Hazard Ratio	P-value	95 percent CI
Cohort 1 or Cohort 2 Membership	0.65	<0.0001	(0.58, 0.74)
Male	1.31	<0.0001	(1.26, 1.36)
White	0.99	0.6565	(0.93, 1.05)
Black or African American	1.26	<0.0001	(1.19, 1.35)
Asian	0.79	0.0003	(0.69, 0.90)
Age 18–50 years	1.02	0.8254	(0.86, 1.21)
Age 50–70 years	1.40	0.0004	(1.16, 1.68)
Age >70 years	0.92	0.3766	(0.76, 1.11)

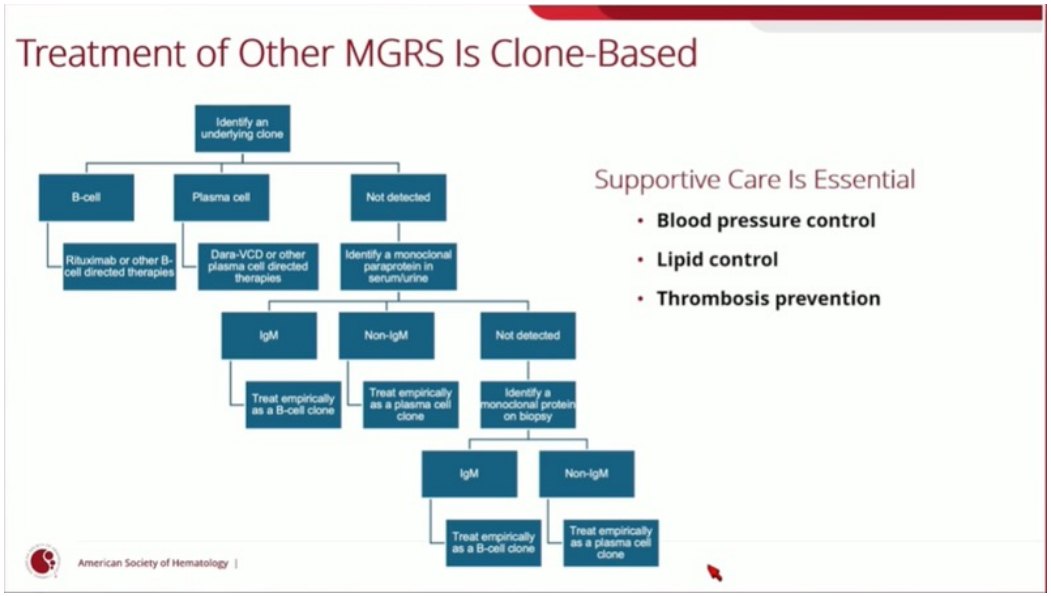
Covariate	Hazard Ratio	P-value	95 percent CI
Hypertensive diseases	0.82	<0.0001	(0.79, 0.86)
Chronic kidney disease (CKD)	0.85	<0.0001	(0.81, 0.90)
Diabetes mellitus	0.78	<0.0001	(0.74, 0.82)
Overweight and obesity	0.76	<0.0001	(0.72, 0.80)

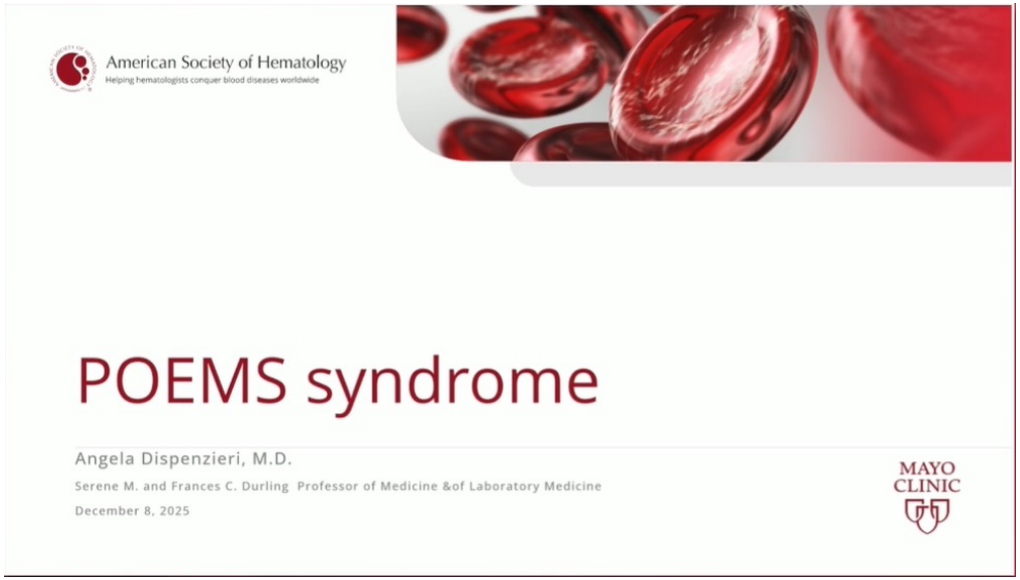
Covariate	Hazard Ratio	P-value	95 percent CI
Albumin <3.5 g/dL	1.79	<0.0001	(1.71, 1.88)
Albumin 3.5–4.5 g/dL	0.89	<0.0001	(0.85, 0.93)
Albumin >4.5 g/dL	0.85	<0.0001	(0.81, 0.89)
CRP 0–3 mg/L	0.79	<0.0001	(0.73, 0.84)
CRP 3–10 mg/L	1.24	<0.0001	(1.16, 1.32)
CRP >10 mg/L	0.78	<0.0001	(0.73, 0.83)
LDH ≥250 U/L	2.60	<0.0001	(2.47, 2.75)
Beta-2 Microglobulin ≥5.5 mg/L	3.55	<0.0001	(3.30, 3.83)
Monoclonal protein ≥3 g/dL (SPEP)	4.37	<0.0001	(3.89, 4.91)

Cohort 1: GLP-1 RA users
Cohort 2: Non-users
Outcome: MGUS progression to MM

Monoclonal Gammopathy of Clinical Significance (MGCS)

Educational session





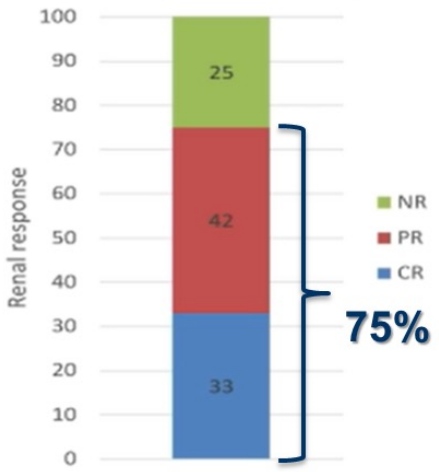
Isatuximab for treatment of Monoclonal Gammopathy of Renal Significance (MGRS): Results from a prospective phase 2 trial

- MGRS represents any B-cell or plasma-cell clonal disorder that does not meet current criteria for immediate treatment but produces a nephrotoxic monoclonal immunoglobulin that directly or indirectly results in kidney disease or injury.

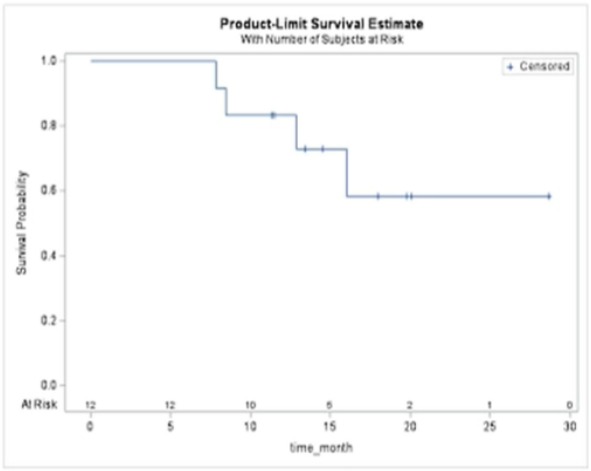
- PGNMID (Proliferative glomerulonephritis with monoclonal Ig deposition) and MG-C3GN (MGUS associated C3 glomerulonephritis) are two well-described types of MGRS without clear treatment recommendations.

REGIMEN DESCRIPTION					
Agent	cycle	Dose and route	Premedications	Days	Cycle Length
Isatuximab	1	10mg/kg IVPB	diphenhydramine 25 to 50 mg IV or PO methylprednisolone 100 mg IV ranitidine 50 mg IV acetaminophen 650 to 1000 mg PO	1,8,15, 22	4 weeks (28 days)
Isatuximab	2-6	10mg/kg IVPB	diphenhydramine 25 to 50 mg IV or PO methylprednisolone 100 mg IV ranitidine 50 mg IV acetaminophen 650 to 1000 mg PO	1,15	

Renal response



Renal PFS

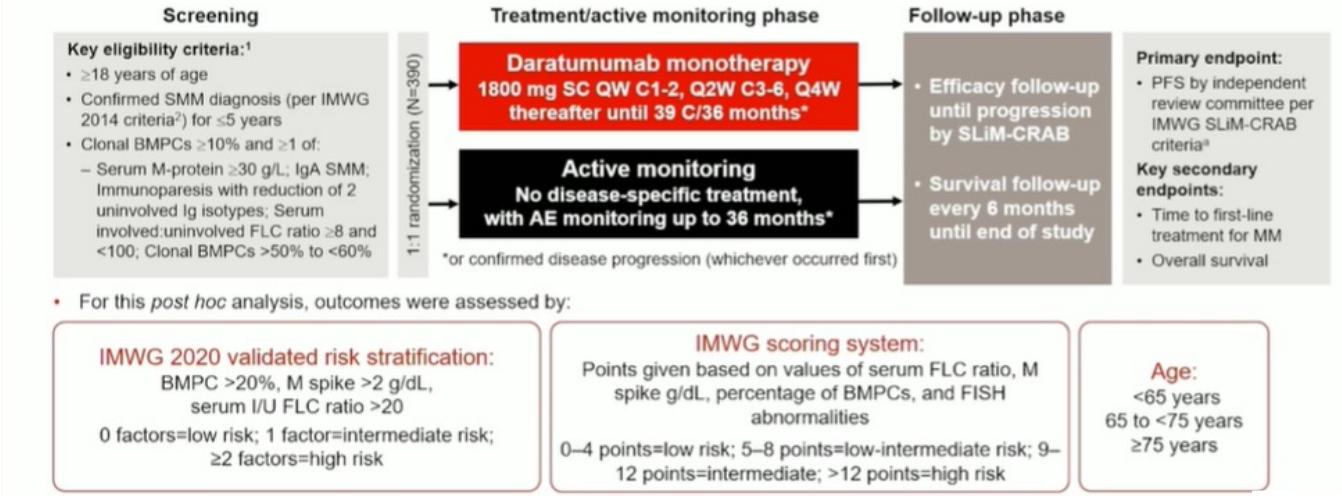


Bhutani D et al, abstract 579

Daratumumab Monotherapy Versus Active Monitoring in Patients With High-Risk Smoldering Multiple Myeloma: AQUILA Outcomes Based on Mayo 2018/IMWG 2020 Risk Stratification, IMWG Scoring, and Age

Peter M Voorhees,[1] Meletios A Dimopoulos,[2] Yael C Cohen,[3] Fredrik Schjesvold,[4] Vania Hungria,[5] Irwindeep Sandhu,[6] Jindriska Lindsay,[7] Ross I Baker,[8] Kenshi Suzuki,[9] Hiroshi Kosugi,[10] Mark-David Levin,[11] Meral Beksac,[12] Keith Stockerl-Goldstein,[13] Hila Magen,[14] Albert Oriol,[15] Gabor Mikala,[16] Gonzalo Garate,[17] Koen Theunissen,[18] Ivan Spicka,[19] Anne K Mylin,[20] Simon Hallam,[21] Sara Bringhen,[22] Katarina Uttervall,[23] Bartosz Pula,[24] Abdullah M Khan,[25] Eva Medvedova,[26] Jing Christine Ye,[27] Andrew J Cowan,[28] Philippe Moreau,[29] Maria-Victoria Mateos,[30] Hartmut Goldschmidt,[31] Diego Vieyra,[32] Ashta Raval,[33] Linlin Sha,[34] Liang Li,[34] Els Rousseau,[35] Robyn M Dennis,[36] Robin L Carson,[32] S Vincent Rajkumar[37]

AQUILA: Study Design and Risk Stratification Methods

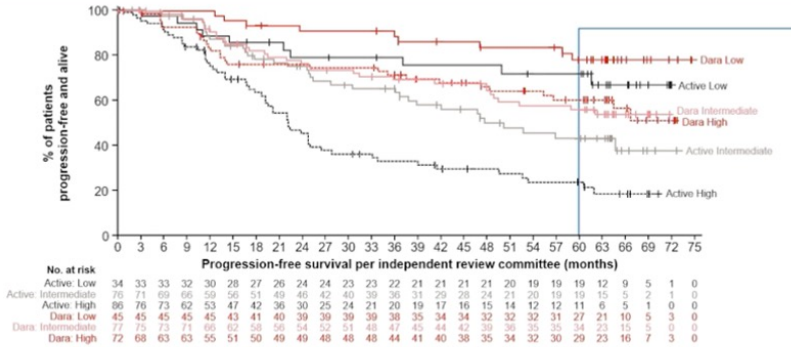


[a] SLiM-CRAB, >60% clonal plasma cells in bone marrow, involved/uninvolved free light chain ratio ≥100 or more with the involved free light chain ≥100 mg/L, magnetic resonance imagine with >1 focal marrow lesion, hypercalcemia, renal insufficiency, anemia, bone lesions. BMPC, bone marrow plasma cell; C, cycle; FLC, free light chain; IMWG, International Myeloma Working Group; M, monoclonal; PFS, progression-free survival; SC, subcutaneous; SMM, smoldering multiple myeloma; QW, once weekly. 1. Dimopoulos MA, et al. *N Engl J Med* 2025;392(18):1777-88. 2. Rajkumar SV, et al. *Lancet Oncol* 2014;15(12):e538-48.

Presented by P Voorhees at the 67th American Society of Hematology (ASH) Annual Meeting, December 6–9, 2025, Orlando, FL, USA

Voorhees PM et al, abstract 372

AQUILA: IMWG 2020 Subgroups: PFS



60-month PFS rates, %:

IMWG 2020 Risk group	Daratumumab	Active monitoring
Low	78.2	71.6
Intermediate	56.2	42.9
High	60.4	23.6

PFS active monitoring vs daratumumab monotherapy, high-risk group:
62.8% vs 37.5% events
HR 0.36 (95% CI: 0.23, 0.58)

Low-intermediate risk per IMWG 2020= 63%

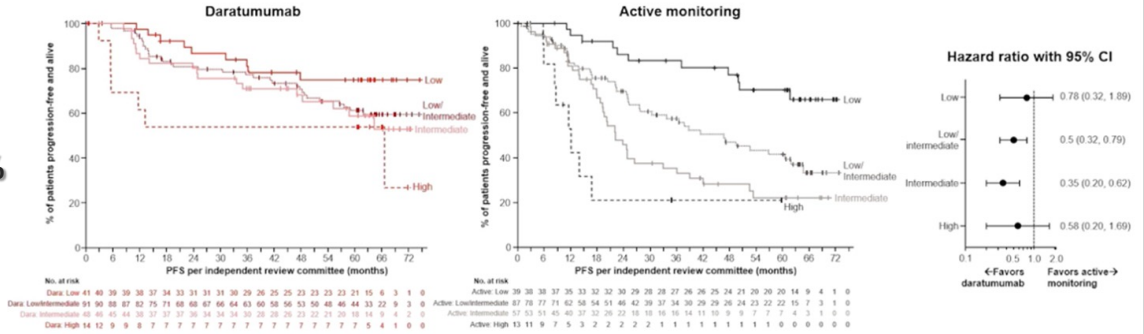
HR= 72 pts (37%)

Daratumumab monotherapy showed a PFS benefit vs active monitoring across IMWG 2020 risk subgroups, with the largest benefit observed in the high-risk subgroup

IMWG 2020 (aka Mayo 2018 or 20-2-20) risk stratification: BMPC >20%, monoclonal spike >2 g/dL, serum l/U FLC ratio >20.
0 factors=low risk; 1 factor=intermediate risk; ≥2 factors=high risk

BMPC, bone marrow plasma cells; FLC, free light chain; IMWG, International Myeloma Working Group; PFS, progression-free survival; SC, subcutaneous; SMM smoldering multiple myeloma.

AQUILA: IMWG Scoring System Subgroups: PFS



Low-, low-intermediate-, intermediate-risk per IMWG SS= 93%

HR= 14 pts (7%)

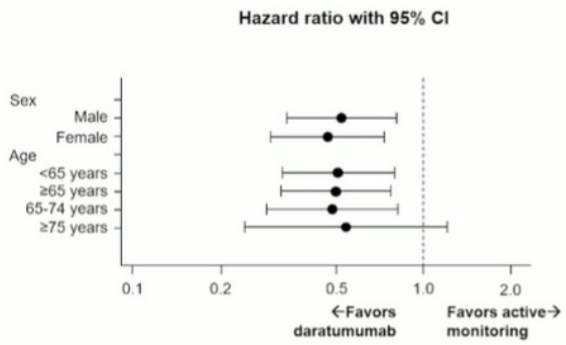
Daratumumab monotherapy showed a PFS benefit in patients at higher risk of progression to active MM

IMWG scoring system: Points given based on values of serum FLC ratio, monoclonal spike g/dL, percentage of BMPCs, and FISH abnormalities
0–4 points=low risk; 5–8 points=low/intermediate risk; 9-12 points=intermediate; >12 points=high risk
Intermediate risk and high risk in the IMWG scoring model correspond to high risk SMM by IMWG 2020

BMPC, bone marrow plasma cells; FISH, fluorescence in situ hybridization; FLC, free light chain; IMWG, International Myeloma Working Group; PFS, progression-free survival; SMM, smoldering multiple myeloma; NE, not estimated.

Voorhees PM et al, abstract 372

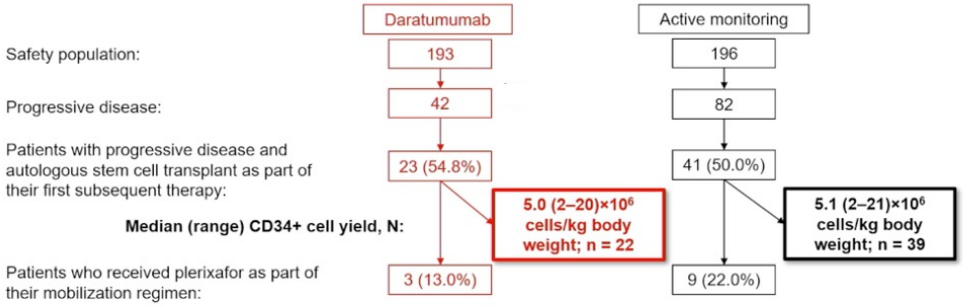
AQUILA: Age Subgroups: PFS



	Daratumumab		Active monitoring		
	Event/N	Median (95% CI)	Event/N	Median (95% CI)	Hazard ratio 95% CI[a]
Male	37/95	NE (57.8, NE)	48/93	41.5 (23.8, 53.3)	0.52 (0.34, 0.80)
Female	30/99	NE (66.7, NE)	51/103	38.9 (25, 61.9)	0.47 (0.30, 0.74)
<65 years	34/106	NE (66.7, NE)	45/98	42 (25, NE)	0.51 (0.32, 0.79)
≥65 years	33/88	NE (57.8, NE)	54/98	38.8 (22, 52.7)	0.50 (0.32, 0.77)
65-74 years	23/67	NE (62, NE)	38/74	50.2 (22, 64.7)	0.49 (0.29, 0.82)
≥75 years	10/21	49.5 (14.2, NE)	16/24	22.4 (17.8, 47)	0.54 (0.24, 1.21)

Daratumumab monotherapy improved PFS regardless of age

AQUILA: Peripheral Blood Stem Cell Collection for Subsequent Transplant



Median CD34+ cell yield was similar among patients in the daratumumab monotherapy arm and those in the active monitoring arm

Voorhees PM et al, abstract 372

Early Rescue Intervention with Daratumumab, Pomalidomide and Dexamethasone (DPd) in HR-SMM patients included in the GEM-CESAR study

- **Biochemical Relapse/Progression**

  — **Biochemical Progressive disease with no MDE:** Increase of 25% from lowest confirmed response value in one or more of the following criteria:

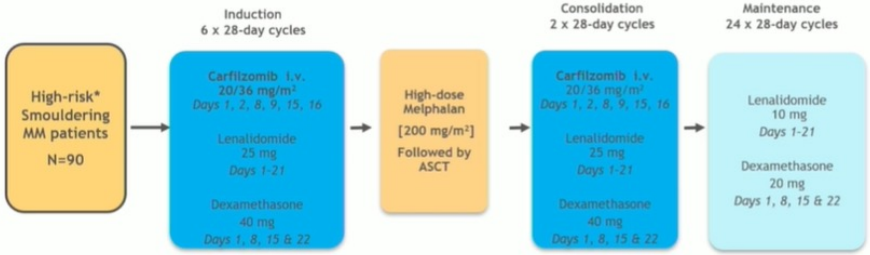
  - Serum M-protein (absolute increase must be ≥0.5 g/dL);
  - Urine M-protein (absolute increase must be ≥200 mg/24 h);
  - In patients without measurable serum and urine M-protein levels, the diff erence between involved and uninvolved FLC levels (absolute increase must be >10 mg/dL);

  — **Relapse from Complete Response:** Reappearance of serum or urine M-protein by immunofixation or electrophoresis, confirmed in a second determination; Development of ≥5% plasma cells in the bone marrow

  — **Relapse from MRD-ve:** Loss of MRD negative (evidence of clonal plasma cells on NGF) confirmed at least 2 months apart

GEM-CESAR: Study Design

- Multicenter, open-label, phase II trial (June 2015-June 2017)



Response category	Induction (n=90)	HDM-ASCT (n=90)	Consolidation (n=90)	Maintenance (n=90)	4 years after ASCT (n=90)
Undetectable Measurable Residual Disease by NGF and 10^{-5}	36 (42%)	**56 (62%)**	48 (53%)	43 (48%)	**28 (31%)**

Four patients had progressed to Multiple Myeloma with Myeloma Defining Events

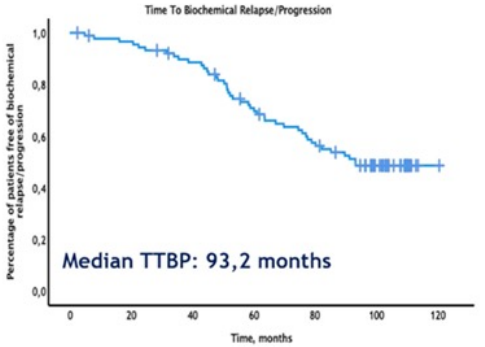
Results

- In the Intent-to-treat population (n=90) and after a median f/u of 103 months (range: 6-120)

Biochemical relapse/progression	Biochemical progression w/o MDE	Relapse from CR	Relapse from MRD-ve
43 out of 90 pts (48%)	12 out of 43 pts (28%)	26 out of 43 pts (60%)	5 out of 43 pts (12%)
- Induction: 2 (5%) - Maintenance: 8 (19%) - **Follow-up: 33 (77%)**			

Time to Biochemical Progression/Relapse in the ITT population (n=90)

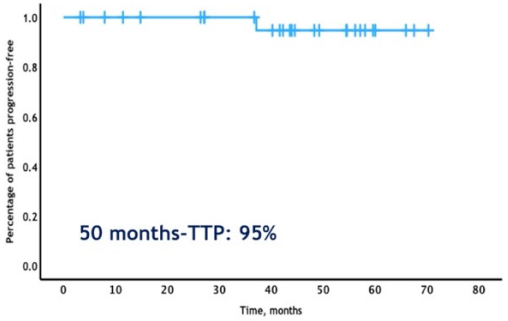
- After a median f/u of 103 months (range: 6-120)



- No significant differences between the different types of biochemical progression

Early rescue intervention with Daratumumab, Pomalidomide and dexamethasone (DPd): TTP to MM

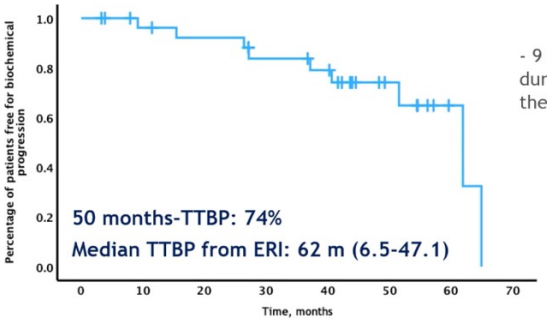
Median follow up: 45.4 months (range: 3.2-70.2) from inclusion in the ERI phase



- 1 pts progressed with CRAB symptomatology
  lytic lessions: vertebral fractures
  high risk CA, p53 plus +1q;
  he had not achieved MRD-ve

Early rescue intervention with Daratumumab, Pomalidomide and dexamethasone (DPd): TTBiochemical Progresion

Median follow up: 45.4 months (range: 3.2-70.2) from inclusion in the ERI phase



- 9 additional patients progressed biochemically during treatment with DPd , with no MDE and they discontinued the study.

GEM-CESAR: outcomes with a median f/u of 103 months

Time To Progression and OS by MRD status at the end of maintenance