



EMORY WINSHIP CANCER INSTITUTE

A Cancer Center Designated by
the National Cancer Institute

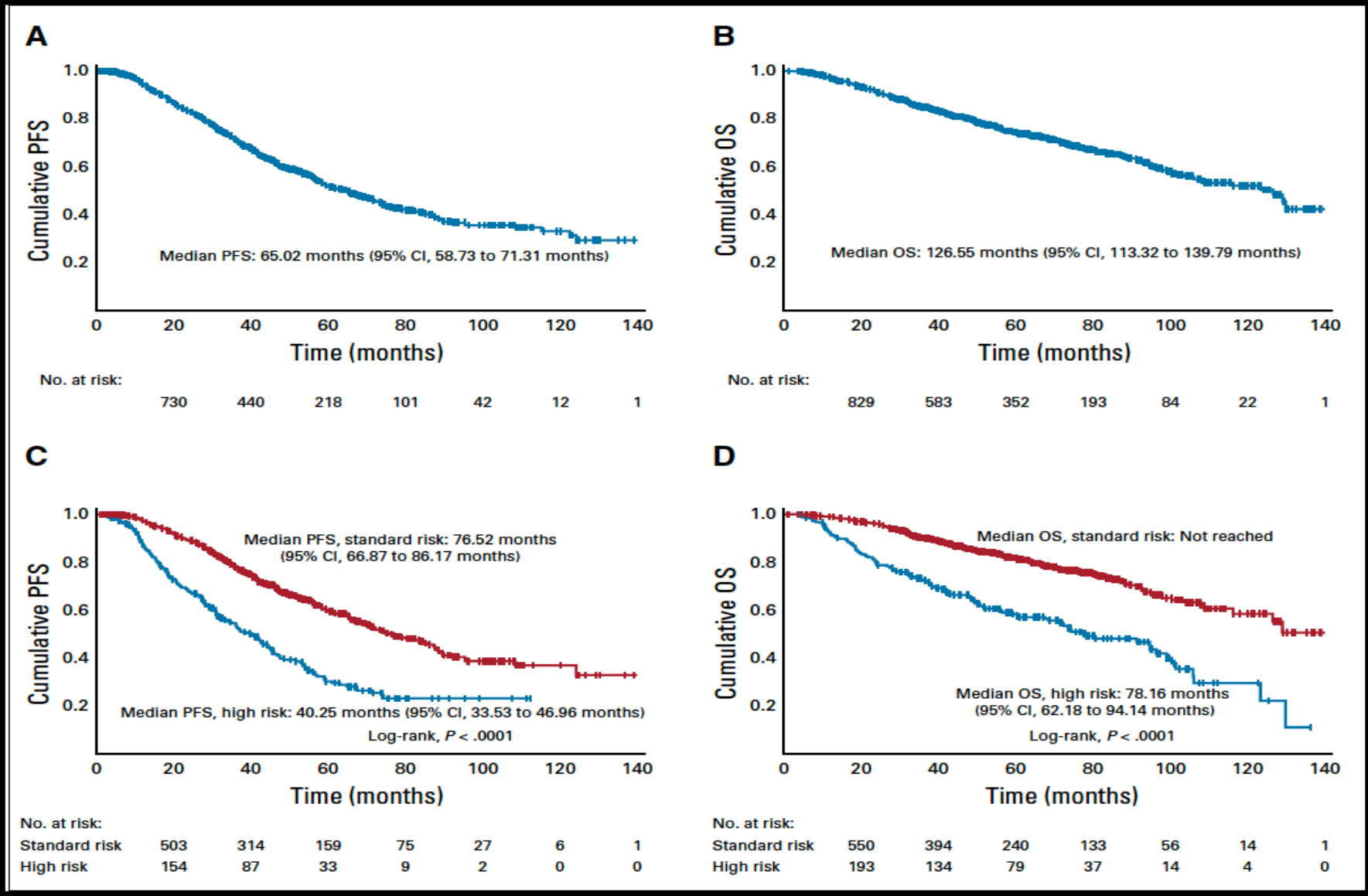


EMORY
UNIVERSITY
SCHOOL OF
MEDICINE

Beyond the Congress Induction Therapy

Sagar Lonial, MD
Professor and Chair
Department of Hematology and Medical Oncology
Chief Medical Officer, Winship Cancer Institute
Emory University School of Medicine

Outcomes from RVD 1000 series

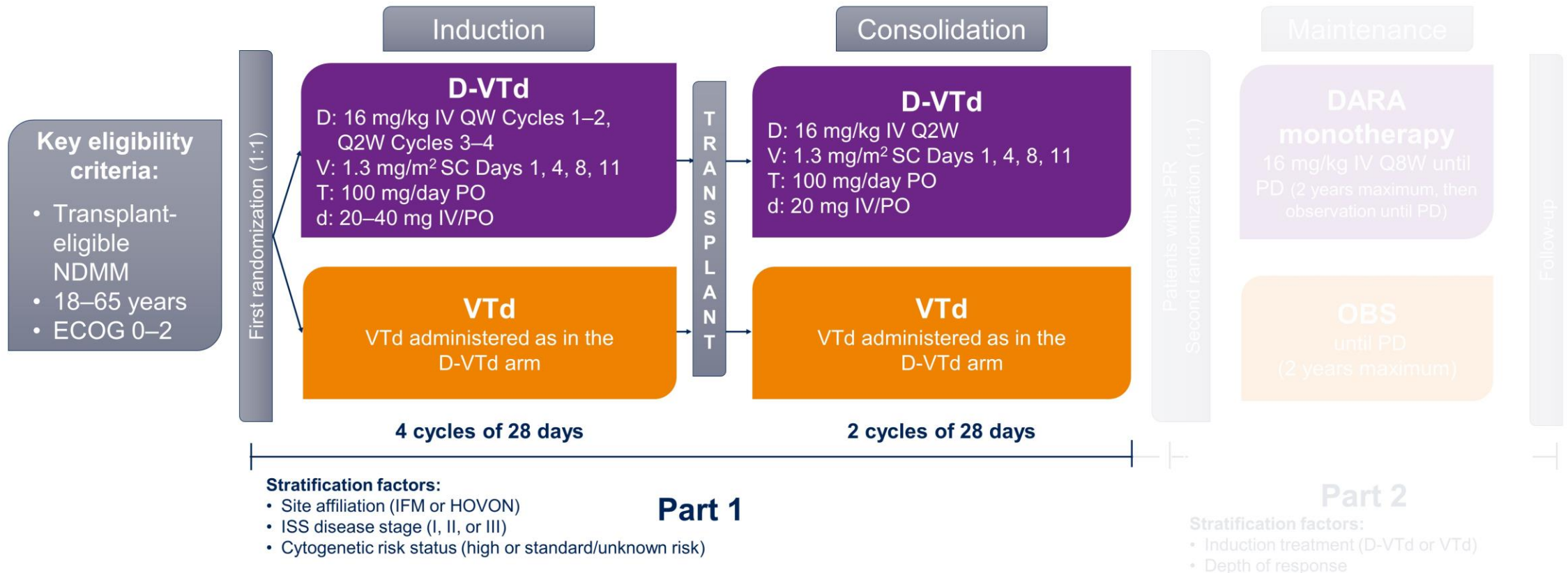


Induction Principles

- Goals are to induce a rapid and deep response
- Do above without significant toxicity
- Current standard of care is IMiD+PI+Dex
- Rapidly expanding towards IMiD+PI+ Dex+ CD38 Moab

CASSIOPEIA Part 1 Study Design

- Part 1 compared D-VTd vs VTd as induction/consolidation



D-VTd, daratumumab, bortezomib, thalidomide, and dexamethasone; ECOG, Eastern Cooperative Oncology Group; IFM, Intergroupe Francophone du Myélome; ISS, International Staging System; HOVON, the Dutch-Belgian Cooperative Trial Group for Hematology-Oncology; IV, intravenous; NDMM, newly diagnosed multiple myeloma; PO, oral; Q2W, every 2 weeks; QW, every week; SC, subcutaneous; VTd, bortezomib, thalidomide, and dexamethasone.

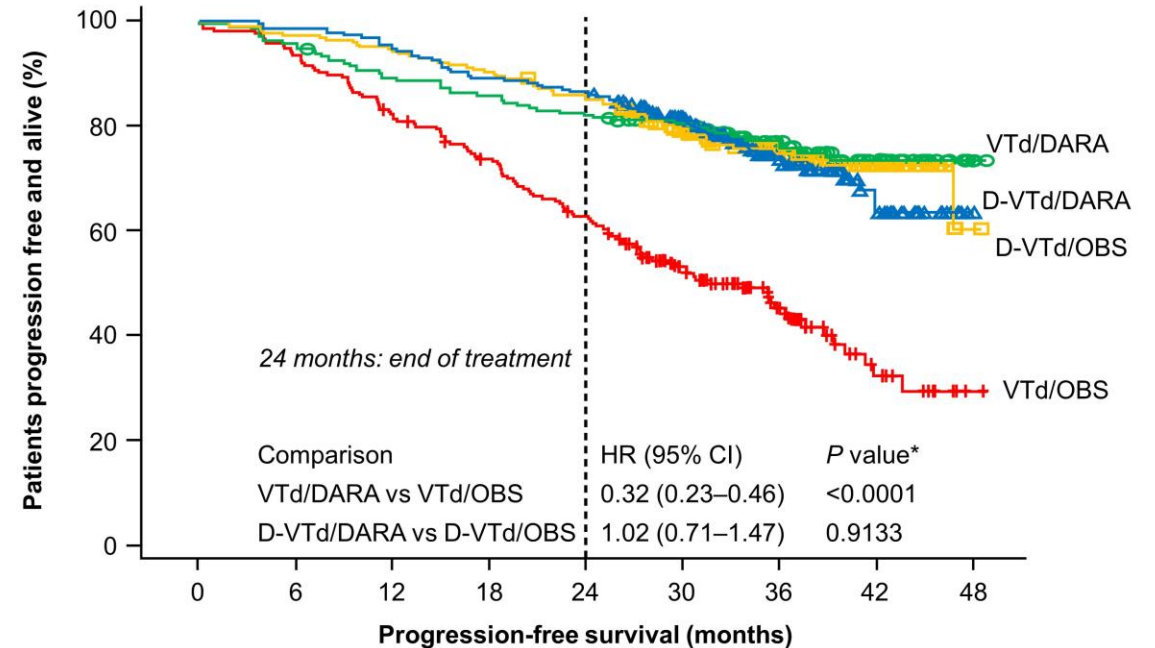
Presented By: **Philippe Moreau**

#ASCO21 | Content of this presentation is the property of the author, licensed by ASCO. Permission required for reuse.

Content of this presentation is the property of the author, licensed by ASCO. Permission required for reuse.

DARA Significantly Improved PFS vs OBS in Patients Treated With VTd Induction/Consolidation

- A prespecified analysis showed significant interaction between maintenance and induction/consolidation therapy
- A PFS benefit was observed for VTd/DARA vs VTd/OBS
- PFS was not different for D-VTd/DARA vs D-VTd/OBS

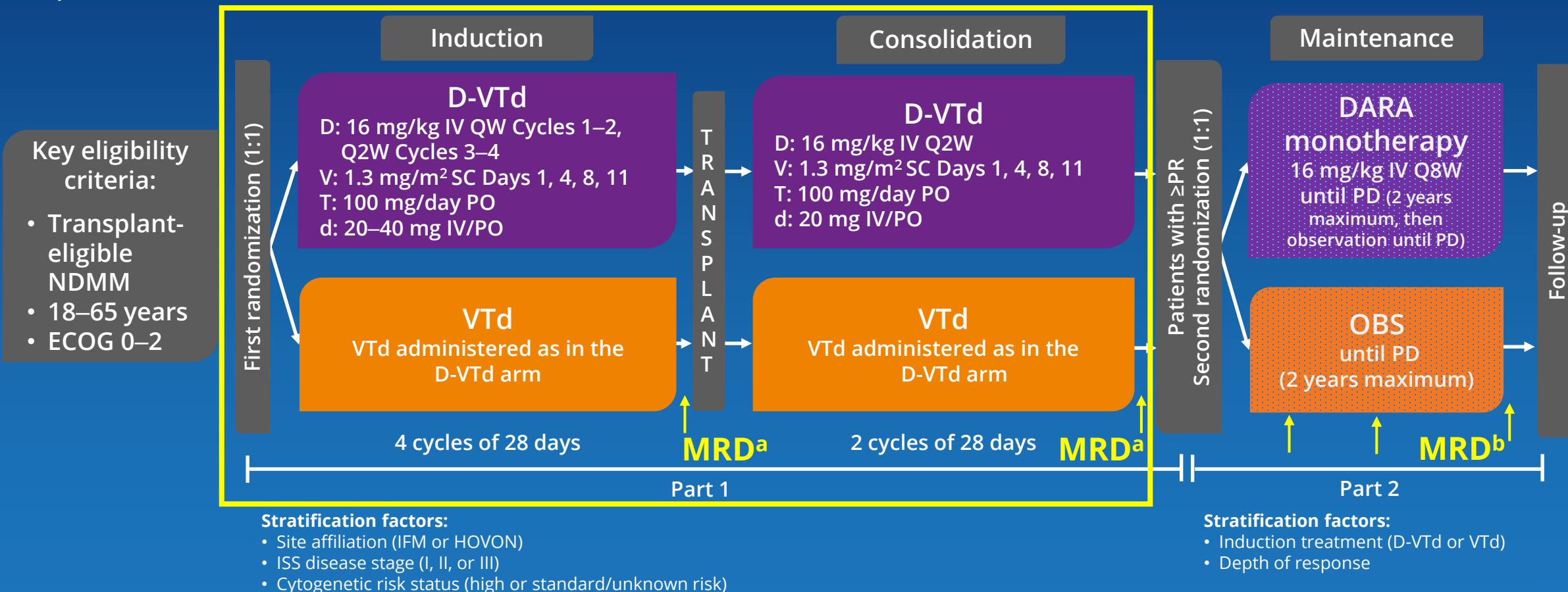


	Patients at risk									
	0	6	12	18	24	30	36	42	48	
■ VTd/OBS	215	201	176	155	131	83	43	15	1	
■ VTd/DARA	213	203	189	182	174	138	79	34	1	
■ D-VTd/OBS	229	223	216	207	195	144	75	38	2	
■ D-VTd/DARA	229	226	217	204	198	145	76	30	0	

*Nominal P value.
 CI, confidence interval; D-VTd, daratumumab, bortezomib, thalidomide, and dexamethasone; DARA, daratumumab;
 HR, hazard ratio; OBS, observation; PFS, progression-free survival; VTd, bortezomib, thalidomide, and dexamethasone.

CASSIOPEIA: Induction/Consolidation

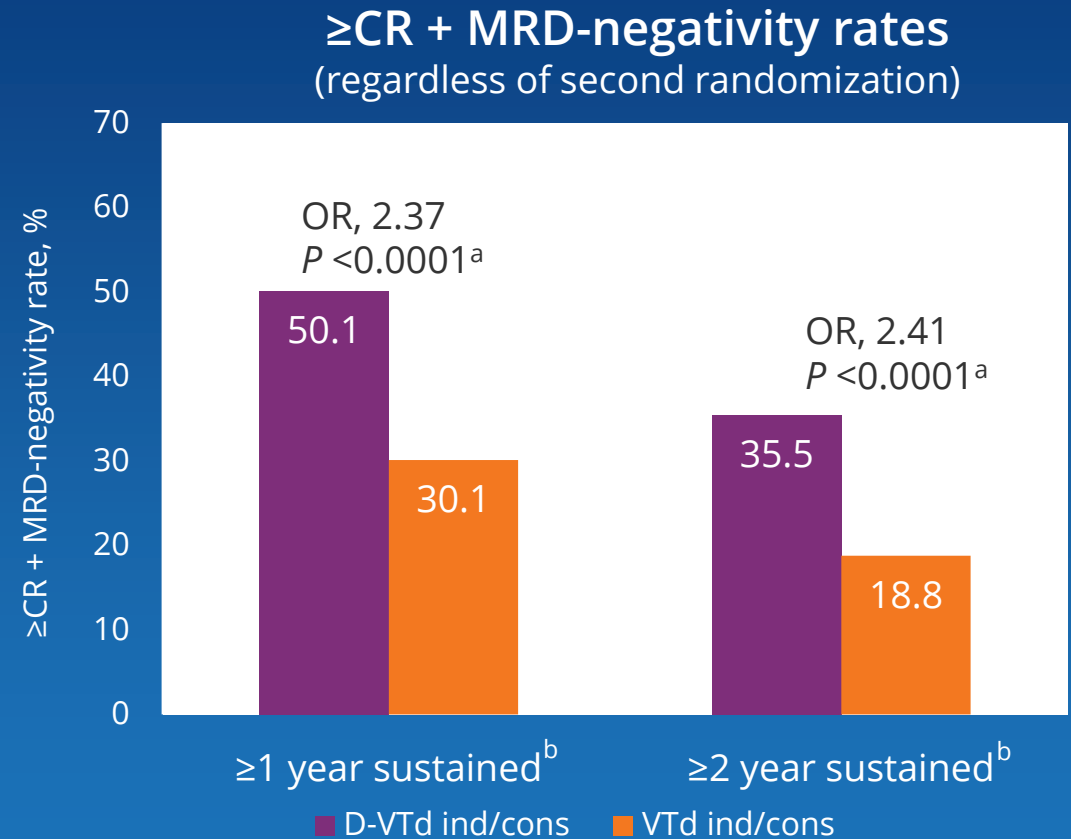
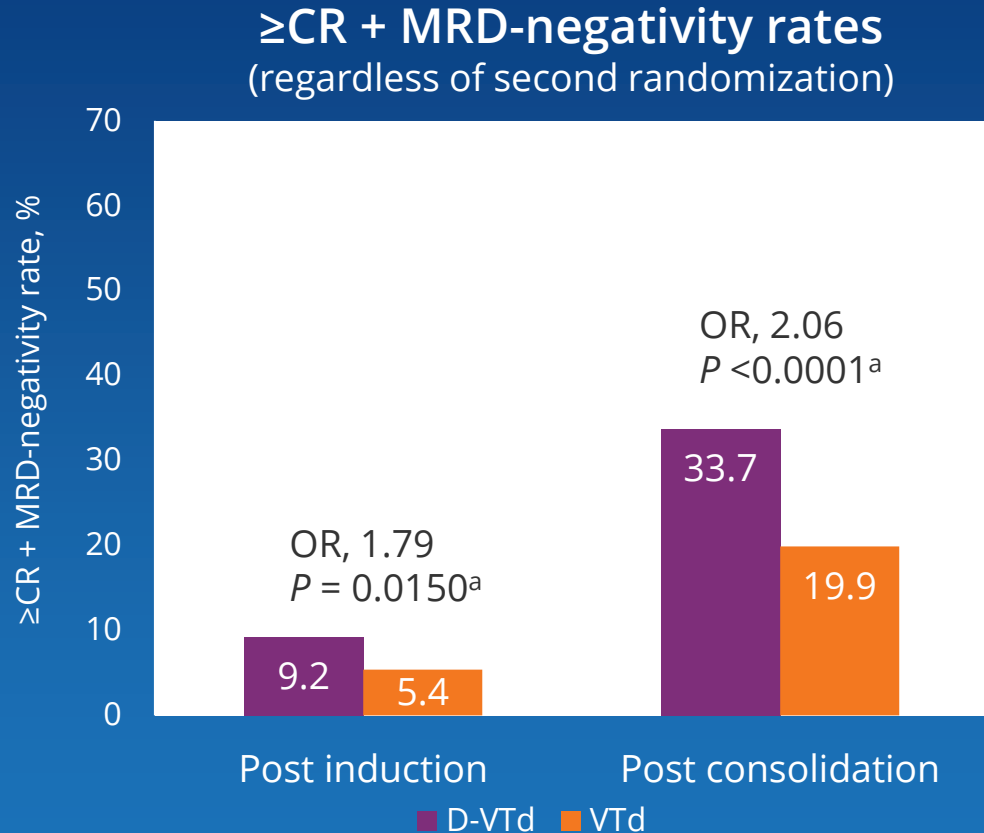
- Analyses in Part 1 were conducted in the ITT population (N=1085), which included all first-randomization patients



≥PR, partial response or better; IV, intravenous; Q8W, every 8 weeks; OBS, observation; ECOG, Eastern Cooperative Oncology Group; QW, every week; Q2W, every 2 weeks; SC, subcutaneous; PO, oral; IFM, Intergroupe Francophone du Myélome; HOVON, the Dutch-Belgian Cooperative Trial Group for Hematology-Oncology; ISS, International Staging System; PD, progressive disease; ≥VGPR, very good partial response or better.

^aMRD analyses were performed at predefined timepoints for all patients, regardless of response. ^bMRD analyses were performed in patients with ≥VGPR at Weeks 25, 52, and 105.

CASSIOPEIA: D-VTd Improved Rates of \geq CR + MRD Negativity (MFC; 10^{-5}) Versus VTd Following Induction and Consolidation



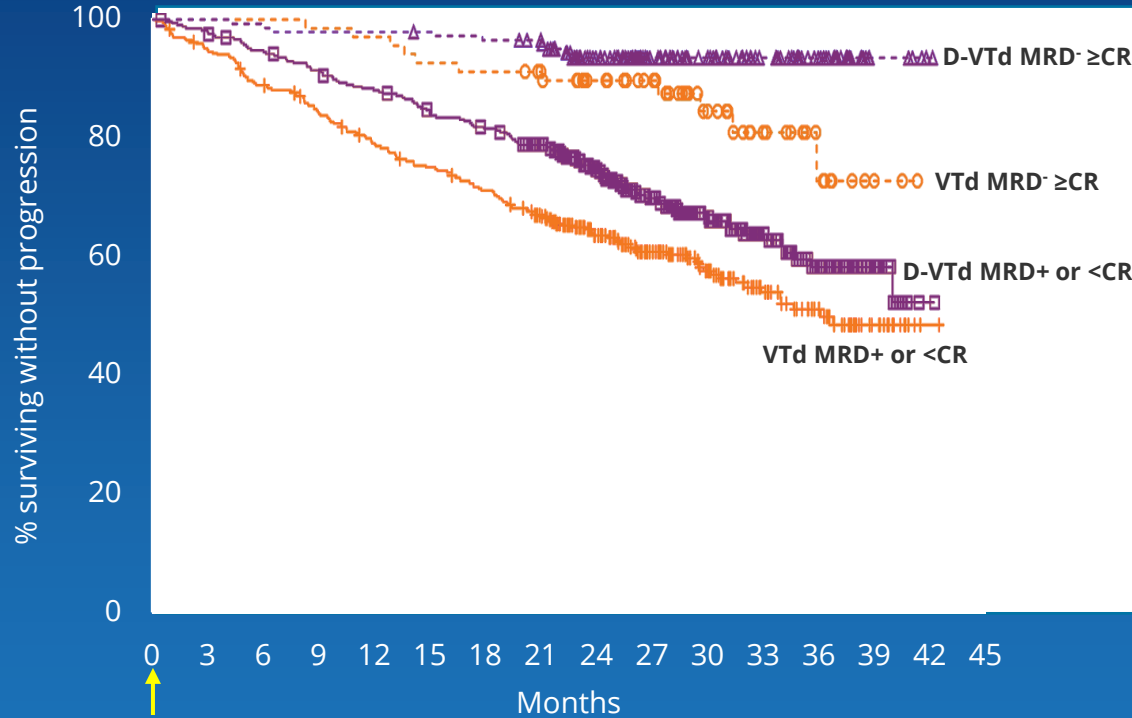
- Post-consolidation MRD-negativity rates among patients who achieved \geq CR were consistent across subgroups, including ISS disease stage and high-risk cytogenetics

MFC, multiparametric flow cytometry.

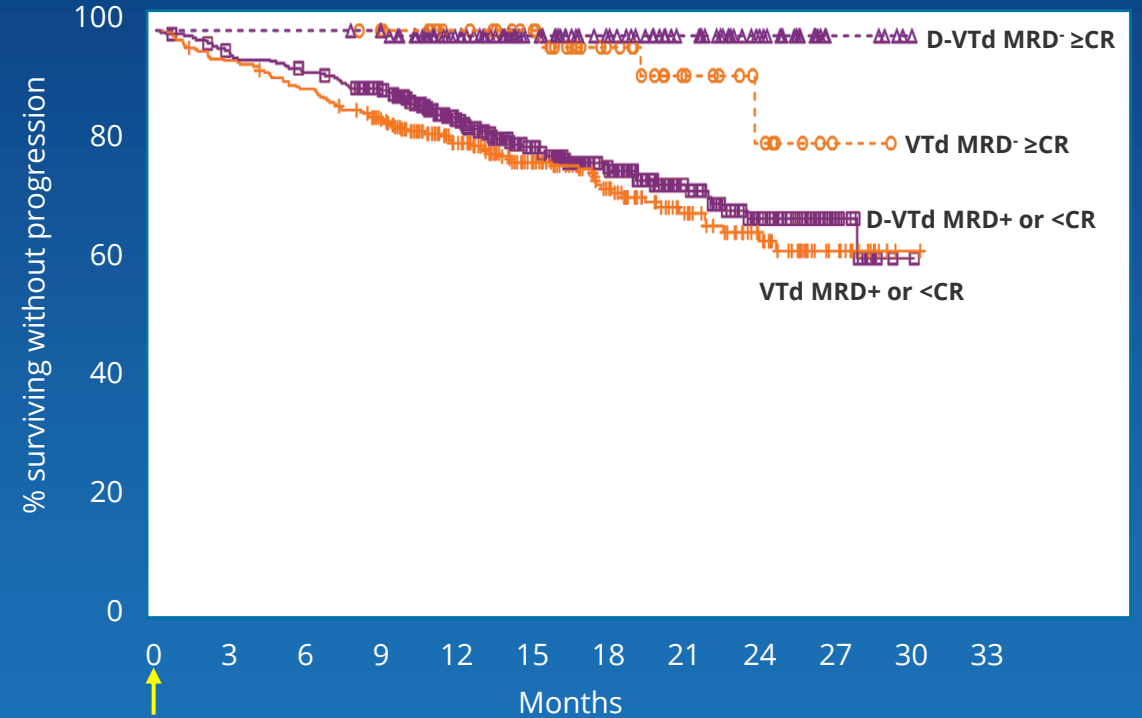
^aCochran-Mantel-Haenszel estimate of the common odds ratio for stratified tables was used. The stratification factors were study site affiliation, ISS disease stage, and cytogenetics. P value was calculated based on a stratified Cochran-Mantel-Haenszel chi-squared test.

CASSIOPEIA: Landmark PFS Analysis From Post-induction \geq CR + MRD-negativity (MFC; 10^{-5}) Status By Treatment Group

1-year sustained MRD negativity
(regardless of second randomization)



2-year sustained MRD negativity
(regardless of second randomization)



No. at risk

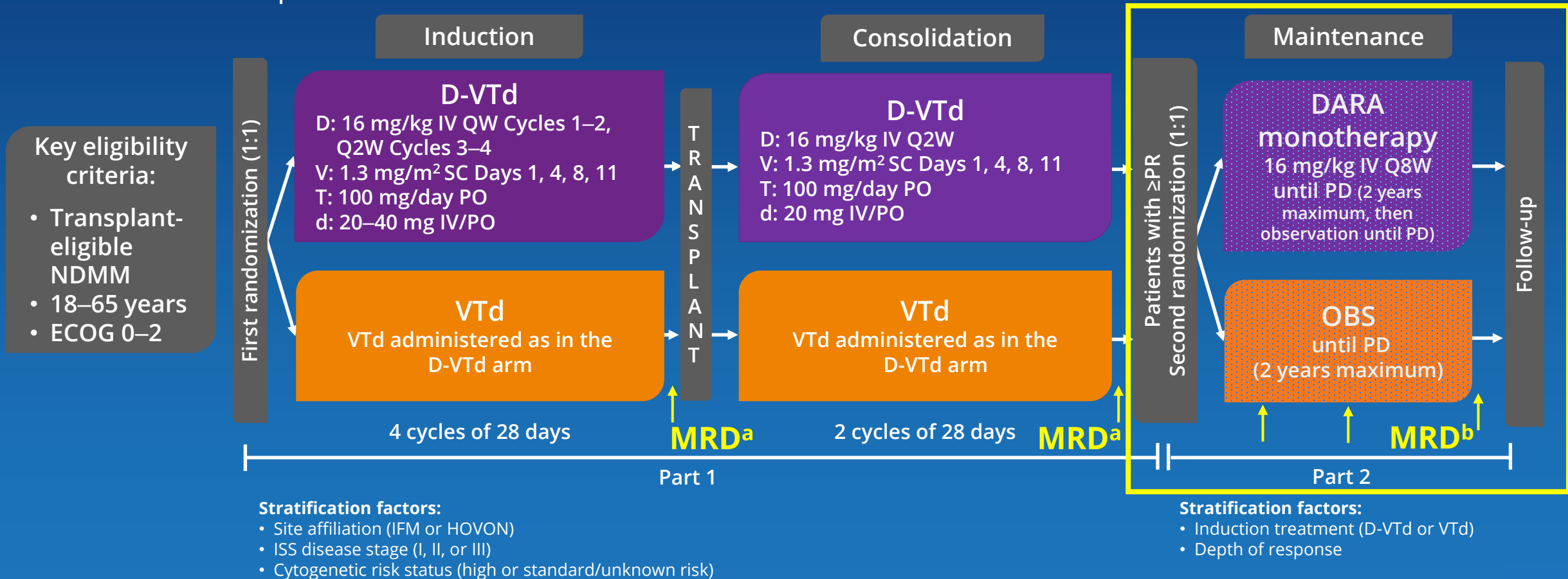
VTd MRD ⁻ \geq CR	380	359	336	315	294	279	264	239	185	137	99	64	43	19	1	0
VTd MRD ⁻ \geq CR	70	70	70	69	68	65	64	60	53	45	27	18	9	2	0	0
DVTd MRD ⁺ or <CR	337	329	316	305	293	277	269	251	194	148	101	68	42	15	1	0
DVTd MRD ⁺ or <CR	147	147	145	144	144	143	141	135	107	79	60	42	26	5	1	0

No. at risk

VTd MRD ⁻ \geq CR	311	294	278	252	196	145	104	68	45	20	1	0
VTd MRD ⁻ \geq CR	50	50	50	48	42	37	23	14	7	1	0	0
DVTd MRD ⁺ or <CR	326	309	299	280	211	159	112	72	46	15	0	0
DVTd MRD ⁺ or <CR	111	111	111	108	90	68	51	38	22	5	1	0

CASSIOPEIA: Maintenance

- Analyses in Part 2 were conducted in the maintenance ITT population (N=886), which included all re-randomized patients

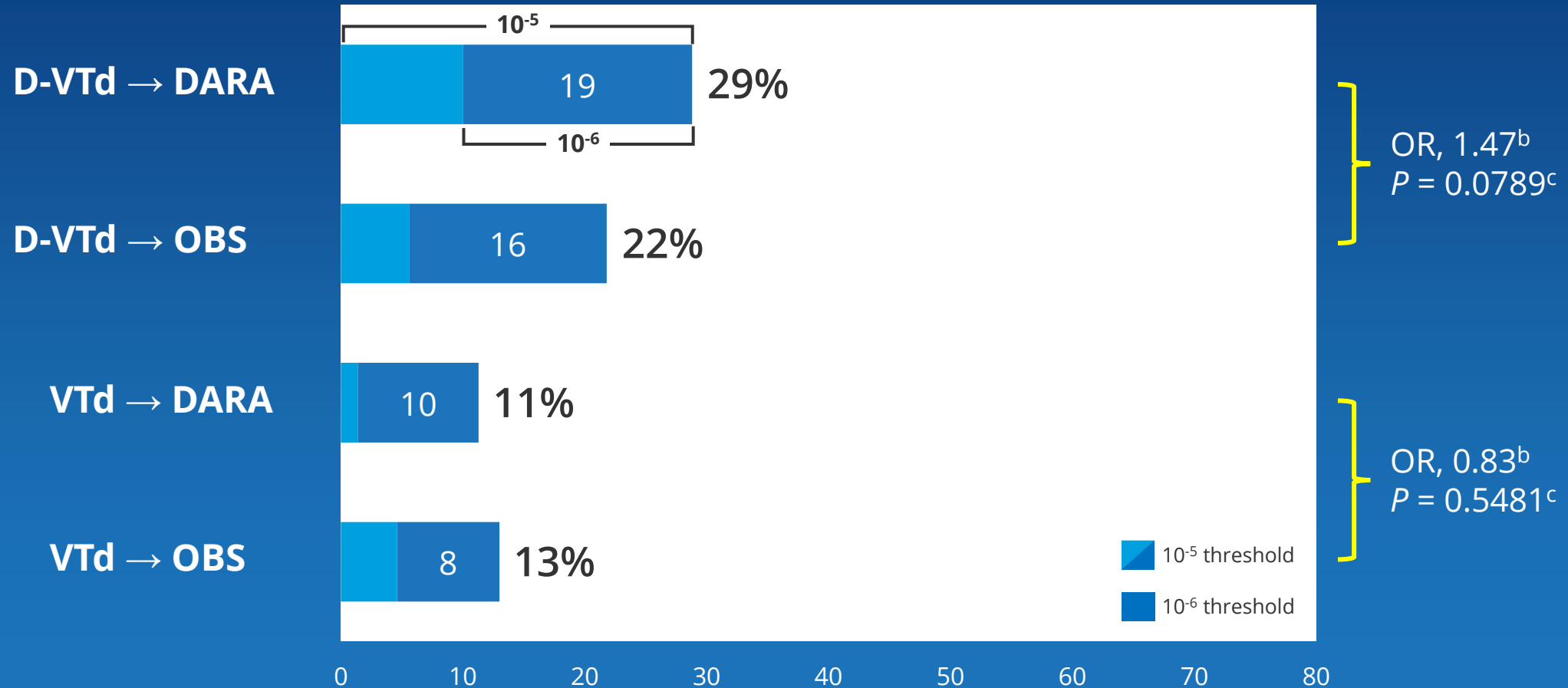


\geq PR, partial response or better; IV, intravenous; Q8W, every 8 weeks; OBS, observation; ECOG, Eastern Cooperative Oncology Group; QW, every week; Q2W, every 2 weeks; SC, subcutaneous; PO, oral; IFM, Intergroupe Francophone du Myélome; HOVON, the Dutch-Belgian Cooperative Trial Group for Hematology-Oncology; ISS, International Staging System; PD, progressive disease; \geq VGPR, very good partial response or better.

^aMRD analyses were performed at predefined timepoints for all patients, regardless of response. ^bMRD analyses were performed in patients with \geq VGPR at Weeks 25, 52, and 105.

CASSIOPEIA: Rates of 2-year Sustained \geq CR + MRD Negativity at 10^{-5} and 10^{-6} (NGS) at Any Timepoint During Maintenance^a

2-year sustained MRD negativity during maintenance



^aPost-consolidation after the second randomization.

^bOdds ratio for 10^{-5} MRD-negativity rates.

^cP value was calculated based on a stratified Cochran-Mantel-Haenszel chi-squared test.

Daratumumab (DARA) Plus Lenalidomide, Bortezomib, and Dexamethasone (RVd) in Patients (Pts) With Transplant-eligible Newly Diagnosed Multiple Myeloma (NDMM): Updated Analysis of GRIFFIN After 24 Months of Maintenance

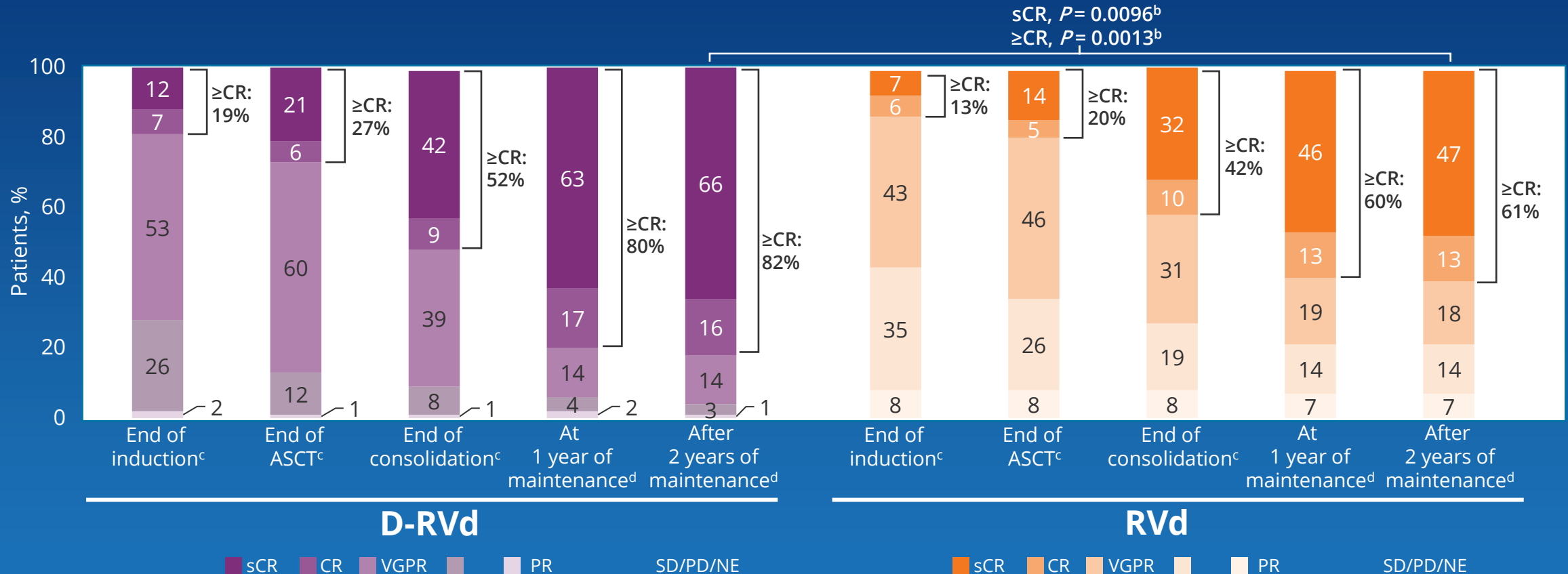
Jacob Laubach,^{1,*} Jonathan L. Kaufman,² Douglas W. Sborov,³ Brandi Reeves,⁴ Cesar Rodriguez,⁵ Ajai Chari,⁶ Rebecca Silbermann,⁷ Luciano J. Costa,⁸ Larry D. Anderson Jr,⁹ Nitya Nathwani,¹⁰ Nina Shah,¹¹ Naresh Bumma,¹² Yvonne A. Efebera,¹³ Sarah A. Holstein,¹⁴ Caitlin Costello,¹⁵ Andrzej Jakubowiak,¹⁶ Tanya M. Wildes,¹⁷ Robert Z. Orlowski,¹⁸ Kenneth H. Shain,¹⁹ Andrew J. Cowan,²⁰ Huiling Pei,²¹ Annelore Cortoos,²² Sharmila Patel,²² J. Blake Bartlett,²³ Jessica Vermeulen,²⁴ Thomas S. Lin,²² Paul G. Richardson,¹ Peter M. Voorhees²⁵

¹Dana-Farber Cancer Institute, Boston, MA, USA; ²Winship Cancer Institute, Emory University, Atlanta, GA, USA; ³Huntsman Cancer Institute, University of Utah School of Medicine, Salt Lake City, UT, USA; ⁴University of North Carolina – Chapel Hill, Chapel Hill, NC, USA; ⁵Wake Forest University School of Medicine, Winston-Salem, NC, USA; ⁶Tisch Cancer Institute, Mount Sinai School of Medicine, New York, NY, USA; ⁷Knight Cancer Institute, Oregon Health & Science University, Portland, OR, USA; ⁸University of Alabama at Birmingham, Birmingham, AL, USA; ⁹Simmons Comprehensive Cancer Center, UT Southwestern Medical Center, Dallas, TX, USA; ¹⁰Judy and Bernard Briskin Center for Multiple Myeloma Research, City of Hope Comprehensive Cancer Center, Duarte, CA, USA; ¹¹Department of Medicine, University of California San Francisco, San Francisco, CA, USA; ¹²Division of Hematology, The Ohio State University Comprehensive Cancer Center, Columbus, OH, USA; ¹³OhioHealth, Columbus, OH, USA; ¹⁴Division of Oncology & Hematology, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska, USA; ¹⁵Moore's Cancer Center, University of California San Diego, La Jolla, CA, USA; ¹⁶University of Chicago Medical Center, Chicago, IL, USA; ¹⁷Cancer & Aging Research Group, St. Louis, MO, USA; ¹⁸Department of Lymphoma and Myeloma, The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ¹⁹Department of Malignant Hematology, H. Lee Moffitt Cancer Center, Tampa, FL, USA; ²⁰Division of Medical Oncology, University of Washington, Seattle, WA, USA; ²¹Janssen Research & Development, LLC, Titusville, NJ, USA; ²²Janssen Scientific Affairs, LLC, Horsham, PA, USA; ²³Janssen Research & Development, LLC, Raritan, NJ, USA; ²⁴Janssen Research & Development, LLC, Leiden, The Netherlands; ²⁵Levine Cancer Institute, Atrium Health, Charlotte, NC, USA.

Presented at the 63rd American Society of Hematology (ASH) Annual Meeting & Exposition; December 11-14, 2021; Atlanta, GA/Virtual

*Presenting author.

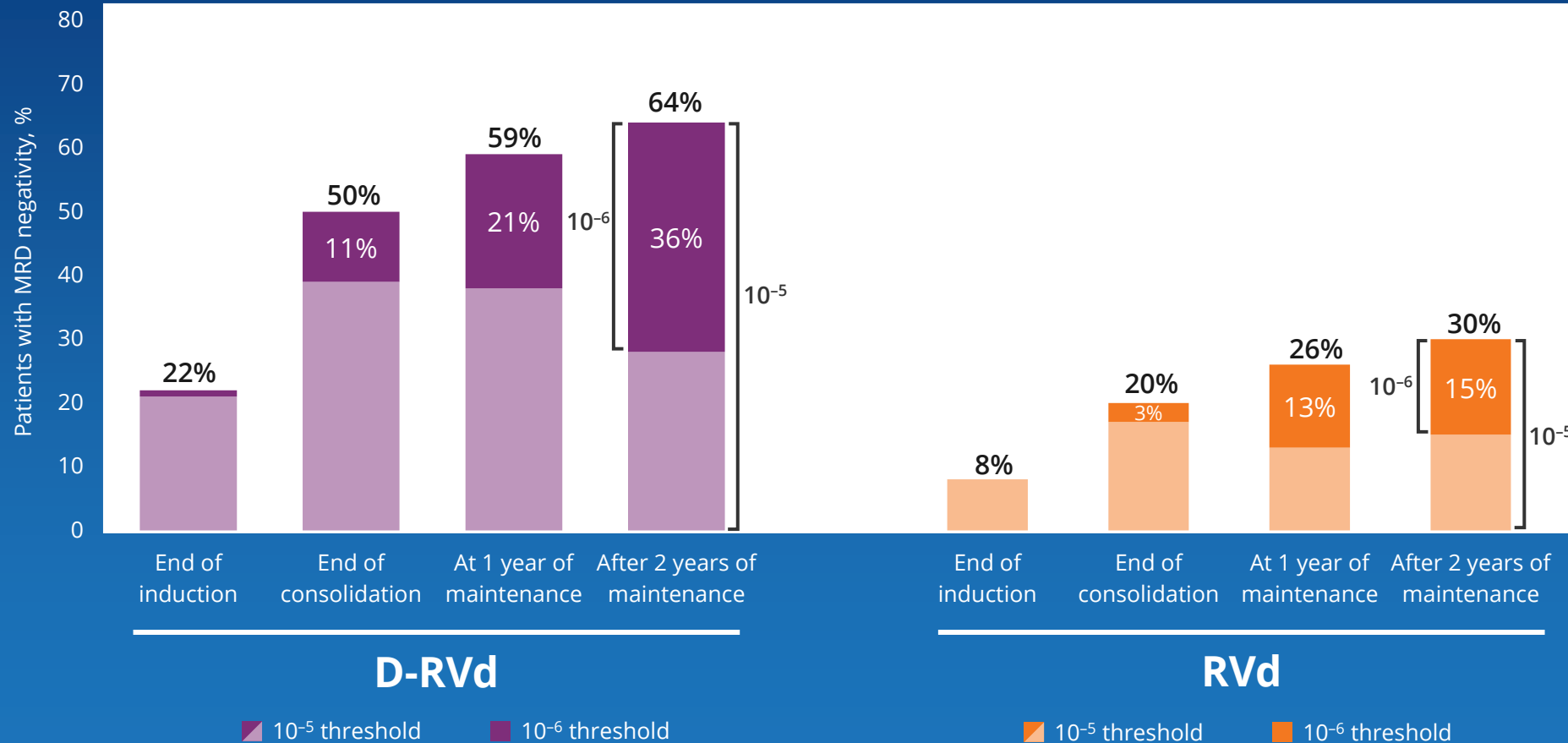
GRIFFIN: Responses Deepened Over Time^a



- Response rates for sCR and ≥CR were greater for D-RVd versus RVd at all time points, with the deepest responses occurring after 2 years of maintenance therapy

PR, partial response; SD/PD/NE, stable disease/progressive disease/not evaluable. ^aData are shown for the response-evaluable population. ^b P values (2-sided) were calculated using the Cochran–Mantel–Haenszel chi-square test. ^cResponse rates are from the primary analysis cutoff (median follow-up: 13.5 mo), and the response-evaluable population included 196 patients (D-RVd, $n=99$; RVd, $n=97$). ^dResponse rates for the maintenance phase have longer follow-up (median: 38.6 mo), and the response-evaluable population included 197 patients (D-RVd, $n=100$; RVd, $n=97$). Percentages may not add up due to rounding.

GRIFFIN: MRD-negativity^a Rates Improved Throughout the DR Maintenance Period

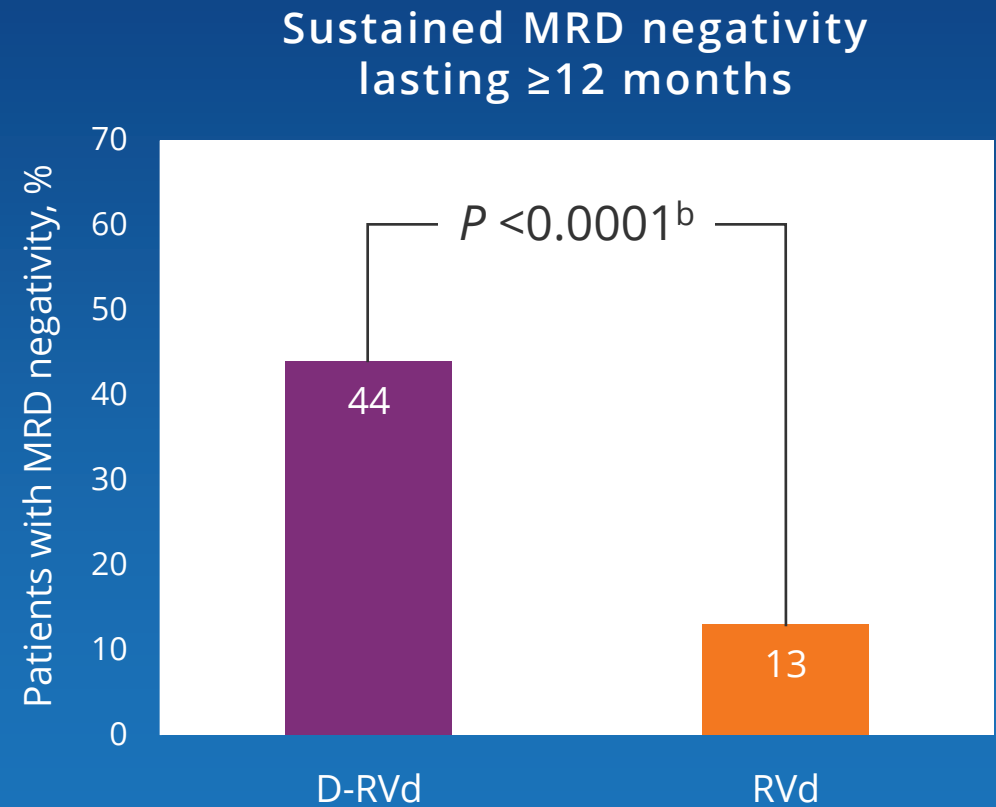
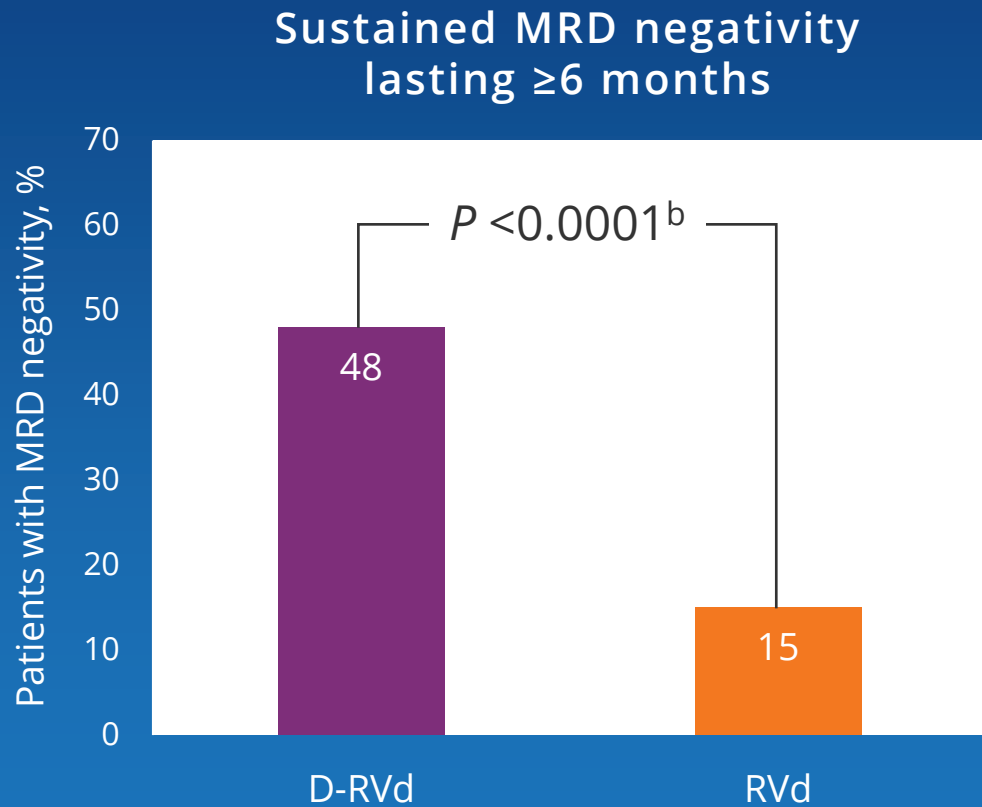


MRD-negative (10⁻⁵) conversion rate

- 29% (15/52) of D-RVd patients and 12% (10/82) of RVd patients who were MRD positive at the end of consolidation became MRD negative after 2 years of DR or R maintenance

^aThe threshold of MRD negativity was defined as 1 tumor cell per 10⁵ white cells. MRD status is based on the assessment of bone marrow aspirates by NGS in accordance with International Myeloma Working Group criteria. Bone marrow aspirates were assessed at baseline, at first evidence of suspected CR or sCR (including patients with VGPR or better and suspected DARA interference), at the end of induction and consolidation, and after 1 and 2 years of maintenance, regardless of response. Median follow-up was 38.6 months, and MRD-negativity rates are among the ITT population (D-RVd, n = 104; RVd, n = 103).

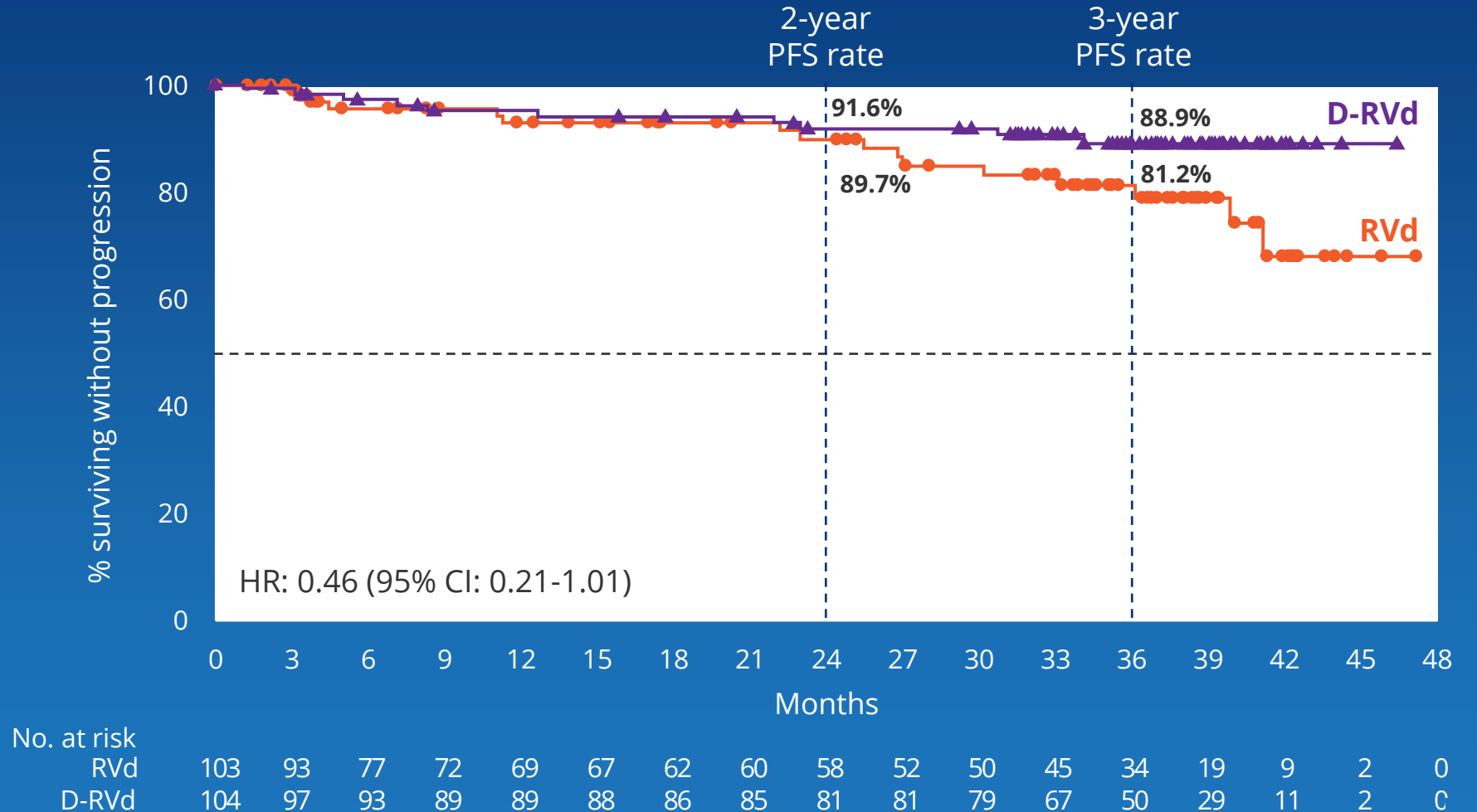
GRIFFIN: D-RVd Improved Rates of Durable MRD Negativity^a (10^{-5}) Lasting ≥ 6 Months or ≥ 12 Months Versus RVd



^aThe threshold of MRD negativity was defined as 1 tumor cell per 10^5 white cells. MRD status is based on the assessment of bone marrow aspirates by NGS in accordance with International Myeloma Working Group criteria. Median follow-up was 38.6 months, and MRD-negativity rates are among the ITT population (D-RVd, $n = 104$; RVd, $n = 103$). Bone marrow aspirates were assessed at baseline, at first evidence of suspected CR or sCR (including patients with VGPR or better and suspected DARA interference), at the end of induction and consolidation, and after 1 and 2 years of maintenance, regardless of response. ^b P values were calculated using the Fisher's exact test.

GRIFFIN: PFS in the ITT Population

- Median follow-up: 38.6 months
- Median PFS was not reached in either group
- There is a positive trend toward improved PFS for D-RVd/DR versus RVd/R
- The separation of the PFS curves begins beyond 1 year of maintenance and suggests a benefit of prolonged DR therapy





UNIVERSITÄTS
KLINIKUM
HEIDELBERG

Addition of Isatuximab to Lenalidomide, Bortezomib and Dexamethasone as Induction Therapy for Newly-Diagnosed, Transplant-Eligible Multiple Myeloma: The Phase III GMMG-HD7 Trial

Hartmut Goldschmidt^{1,2}, Elias K. Mai¹, Eva Nievergall¹, Roland Fenk³, Uta Bertsch^{1,2}, Diana Tichy⁴, Britta Besemer⁵, Jan Dürig⁶, Roland Schroers⁷, Ivana von Metzler⁸, Mathias Hänel⁹, Christoph Mann¹⁰, Anne Marie Asemissen¹¹, Bernhard Heilmeier¹², Stefanie Huhn¹, Katharina Kriegsmann¹, Niels Weinhold¹, Steffen Luntz¹³, Tobias A. W. Holderried¹⁴, Karolin Trautmann-Grill¹⁵, Deniz Gezer¹⁶, Maika Klaiber-Hakimi¹⁷, Martin Müller¹⁸, Cyrus Khandanpour¹⁹, Wolfgang Knauf²⁰, Markus Munder²¹, Thomas Geer²², Hendrik Riesenberger²³, Jörg Thomalla²⁴, Martin Hoffmann²⁵, Marc-Steffen Raab¹, Hans J. Salwender²⁶, Katja C. Weisel¹¹ for the German-speaking Myeloma Multicenter Group (GMMG)

¹Department of Internal Medicine V, University Hospital Heidelberg, Heidelberg, Germany; ²National Center for Tumor Diseases Heidelberg, Heidelberg, Germany;

³Department of Hematology, Oncology and Clinical Immunology, University Hospital Düsseldorf, Düsseldorf, Germany; ⁴Division of Biostatistics, German Cancer Research Center (DKFZ) Heidelberg, Heidelberg, Germany;

⁵Department of Internal Medicine II, University Hospital Tübingen, Tübingen, Germany; ⁶Department for Hematology and Stem Cell Transplantation, University Hospital Essen, Essen, Germany;

⁷Medical Clinic, University Hospital Bochum, Bochum, Germany; ⁸Department of Medicine, Hematology/Oncology, University Hospital Frankfurt, Goethe University, Frankfurt am Main, Germany;

⁹Department of Internal Medicine III, Clinic Chemnitz, Chemnitz, Germany; ¹⁰Department for Hematology, Oncology and Immunology, University Hospital Gießen and Marburg, Marburg, Germany;

¹¹Department of Oncology, Hematology and BMT, University Medical Center Hamburg-Eppendorf, Hamburg, Germany; ¹²Clinic for Oncology and Hematology, Hospital Barmherzige Brüder Regensburg, Regensburg, Germany; ¹³Coordination Centre for Clinical Trials (KKS) Heidelberg, Heidelberg, Germany; ¹⁴Department of Oncology, Hematology, Immuno-Oncology and Rheumatology, University Hospital Bonn, Bonn, Germany; ¹⁵Department of Internal Medicine I, University Hospital Dresden, Dresden, Germany; ¹⁶Department of Hematology, Oncology, Hemostaseology, and Stem Cell Transplantation, Faculty of Medicine,

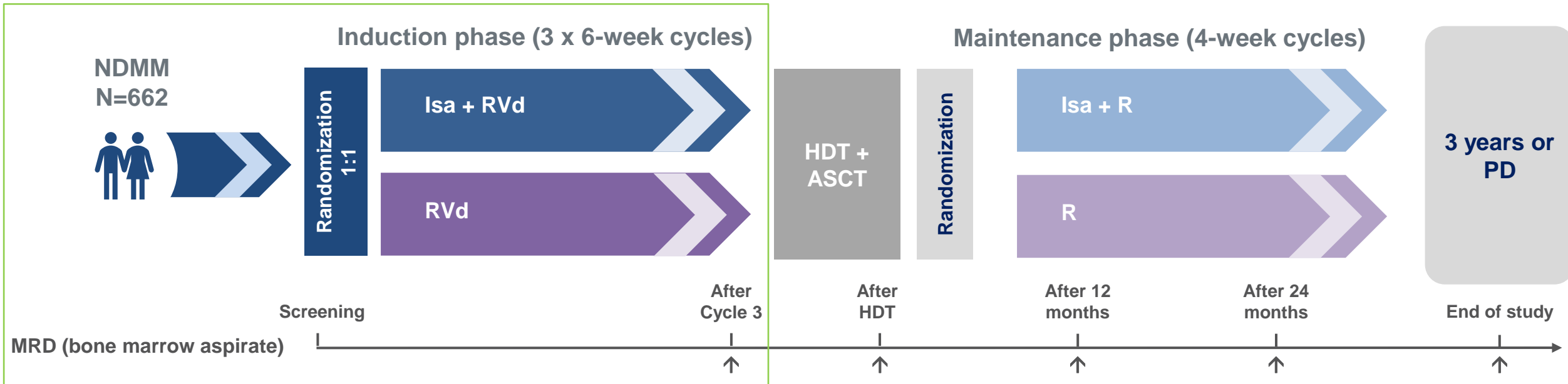
RWTH Aachen University, Aachen, Germany; ¹⁷Clinic for Hematology, Oncology and Palliative Care, Marien Hospital Düsseldorf, Düsseldorf, Germany; ¹⁸Clinic for Hematology, Oncology and Immunology, Klinikum Siloah Hannover, Hannover, Germany; ¹⁹Medical Clinic A, University Hospital Münster, Münster, Germany; ²⁰Center for Hematology and Oncology Bethanien, Frankfurt am Main, Germany;

²¹Department of Internal Medicine III, University Hospital Mainz, Mainz, Germany; ²²Department of Internal Medicine III, Diakoneo Clinic Schwäbisch-Hall, Schwäbisch-Hall, Germany;

²³Hematology/Oncology Center, Bielefeld, Germany; ²⁴Hematology / Oncology Center, Koblenz, Germany; ²⁵Medical Clinic A, Clinic Ludwigshafen, Ludwigshafen, Germany;

²⁶Asklepios Tumorzentrum Hamburg, AK Altona and AK St. Georg, Hamburg, Germany

Primary endpoint: MRD negativity at the end of induction phase



Primary endpoint:

- MRD negativity at the end of induction treatment (NGF, sensitivity 10^{-5}) stratified according to R-ISS

Secondary endpoints:

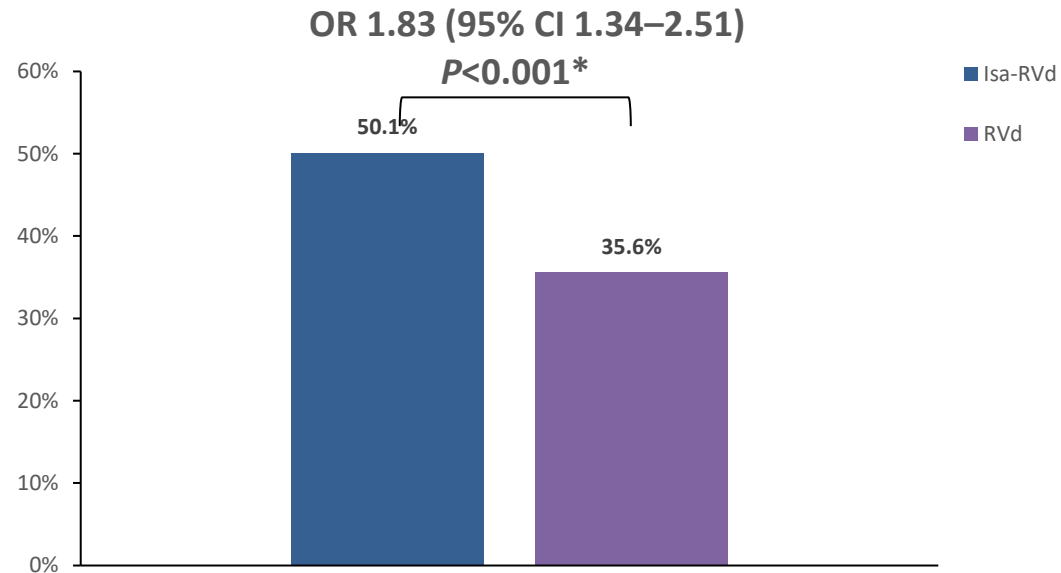
- CR after induction
- Safety

Data cut-off:

- April 2021

First primary endpoint, end of induction MRD negativity by NGF (10^{-5}), was met in ITT analysis

Patients with MRD negativity at the end of induction therapy



Low number of not assessable/missing[†] MRD status: Isa-RVd (10.6%) and RVd (15.2%)

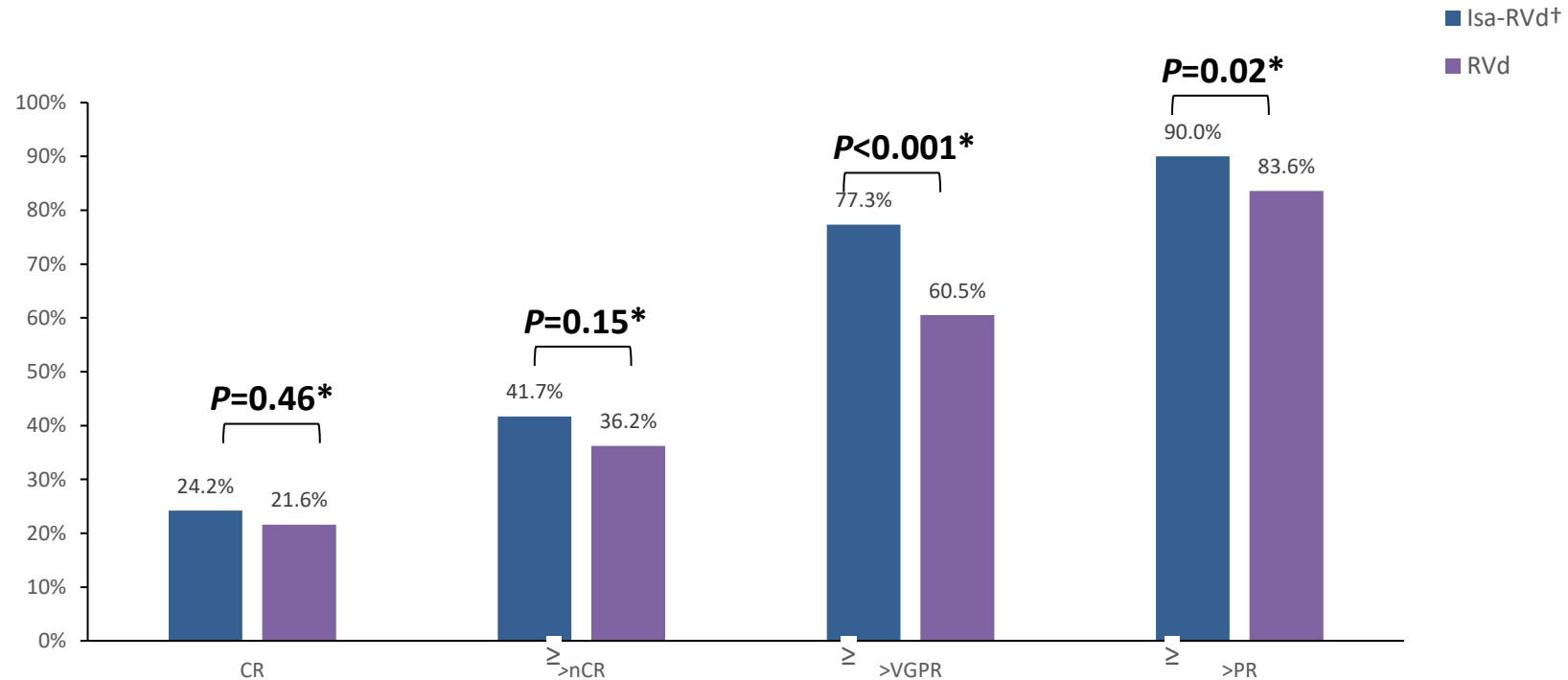
Isa-RVd is the first regimen to demonstrate a rapid and statistically significant benefit from treatment by reaching a MRD negativity of 50.1% at the end of induction and to show superiority vs. RVd in a Phase 3 trial

* P value derived from stratified conditional logistic regression analysis

[†]Missing NGF-MRD values were due to either patients' loss to follow-up during induction therapy or to missing bone marrow samples or technical failures in measurement counted as non-responders, i.e. NGF-MRD positive

CI, confidence interval; d, dexamethasone; Isa, isatuximab; ITT, intent-to-treat; MRD, minimal residual disease; NGF, next-generation flow; OR, odds ratio; R, lenalidomide; V, bortezomib

Response rates after induction therapy



Although the rates of CR after induction therapy did not differ between the Isa-RVd and RVd arms, there was a significant increase in ≥VGPR rates and ORR with Isa-RVd

*P values derived from Fisher's exact test
 †Data adjusted per M-protein interference

CR, complete response; d, dexamethasone; Isa, isatuximab; nCR, near-complete response; ORR, overall response rate; PR, partial response; R, lenalidomide; V, bortezomib; VGPR, very good partial response

Addition of Isa to RVd had limited impact on safety profile

AEs CTCAE grade ≥3, n (%)	Isa-RVd (n=330)	RVd (n=328)	AEs CTCAE grade ≥3, n (%)	Isa-RVd (n=330)	RVd (n=328)
Any AE	210 (63.6)	201 (61.3)	Specific hematologic AE (PT)		
Any serious AE (any grade)	115 (34.8)	119 (36.3)	Leukocytopenia/Neutropenia [†]	87 (26.4)	30 (9.1)
Deaths	4 (1.2)	8 (2.4)	Lymphopenia	48 (14.5)	65 (19.8)
Investigations* (SOC)	79 (23.9)	77 (23.5)	Anemia	13 (3.9)	20 (6.1)
Blood and lymphatic system disorders (SOC)	85 (25.8)	55 (16.8)	Thrombocytopenia	21 (6.4)	15 (4.6)
Infections and infestations (SOC)	43 (13.0)	34 (10.4)	Specific non-hematologic AE (PT)		
Nervous system disorders (SOC)	28 (8.5)	33 (10.1)	Peripheral neuropathy	25 (7.6)	22 (6.7)
Gastrointestinal disorders (SOC)	27 (8.2)	31 (9.5)	Thromboembolic events	5 (1.5)	9 (2.7)
Metabolism and nutrition disorders (SOC)	12 (3.6)	26 (7.9)	Infusion-related reactions [‡]	4 (1.2)	NA

A comparable number of patients discontinued induction therapy due to AEs in the Isa-RVd arm vs. RVd arm

*SOC considered as "Investigations" as defined by the CTCAE

[†]Includes five episodes of febrile neutropenia during induction: Isa-VRd (n=3) vs. VRd (n=2)

[‡]Infusion-related reactions of CTCAE grade 2 or higher in the Isa-RVd arm were n=42 (12.7%)

AE, adverse event; CTCAE, Common Terminology Criteria for Adverse Events; d, dexamethasone; Isa, isatuximab; NA, not applicable; PT, preferred term; R, lenalidomide; SOC, system organ class; V, bortezomib

Daratumumab, Carfilzomib, Lenalidomide and Dexamethasone (Dara-KRd), Autologous Transplantation and MRD Response-Adapted Consolidation and Treatment Cessation-Final Primary Endpoint Analysis of the MASTER Trial

Luciano J. Costa¹, Saurabh Chhabra², Natalie S. Callander, MD³, Eva Medvedova⁴, Bhagirathbhai Dholaria⁵, Rebecca Silbermann⁴, Kelly Godby¹, Binod Dhakal², Susan Bal¹, Smith Giri¹, Anita D'Souza², Timothy Schmidt³, Aric Hall³, Pamela Hardwick¹, Robert F. Cornell⁵, Parameswaran Hari²

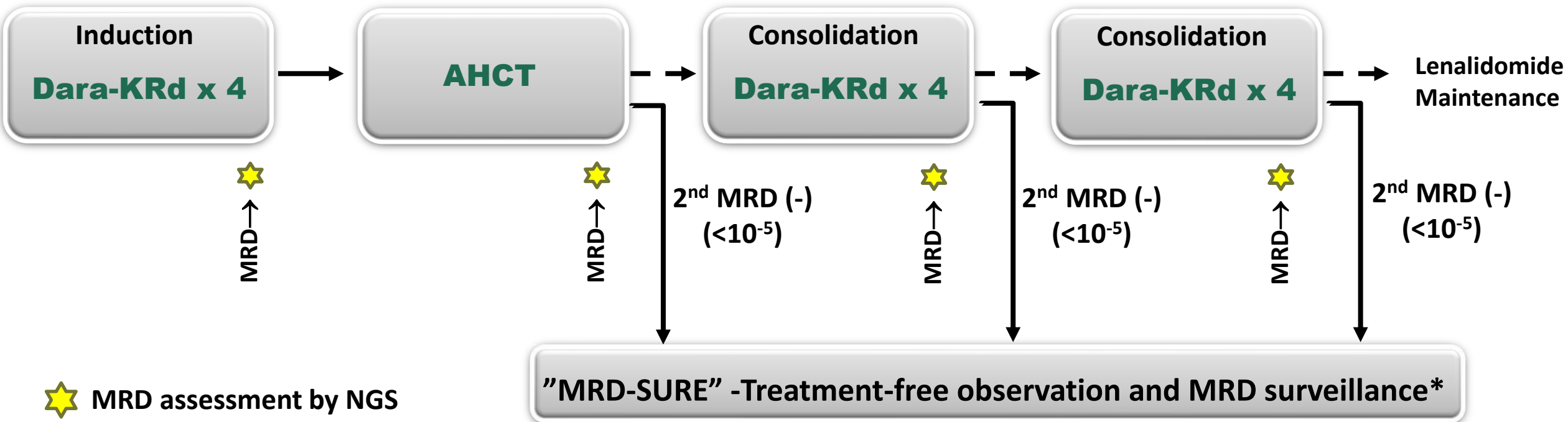
1- University of Alabama at Birmingham; 2- Medical College of Wisconsin; 3- University of Wisconsin at Madison;
4- Oregon Health and Science University; 5- Vanderbilt University

Treatment

Dara-KRd

- Daratumumab 16 mg/m² days 1,8,15,22 (days 1,15 C 3-6; day 1 C >6)
- Carfilzomib (20) 56 mg/m² Days 1,8,15
- Lenalidomide 25 mg Days 1-21
- Dexamethasone 40mg PO Days 1,8,15,22

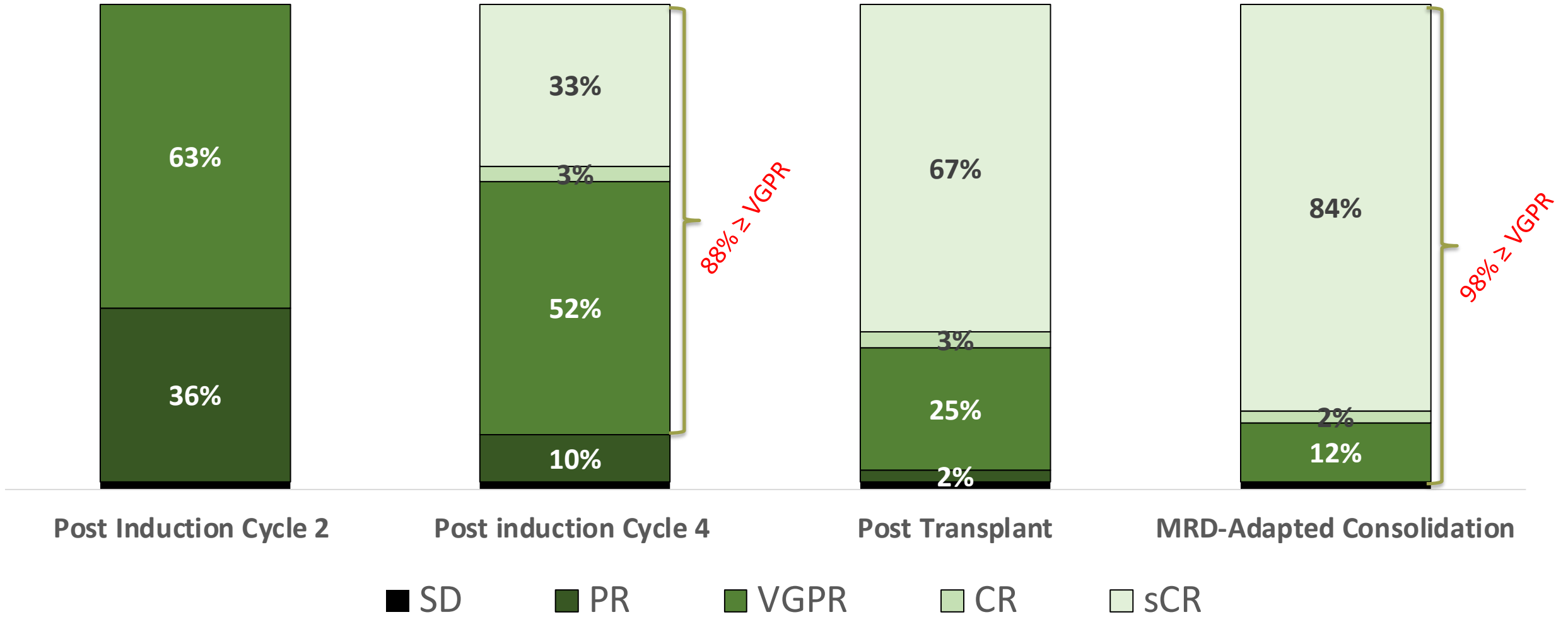
- 123 patients enrolled across 5 sites
- 118 (96%) with MRD trackable by ClonoSEQ[®]
- Median follow-up of 23.8 months



*24 and 72 weeks after completion of therapy

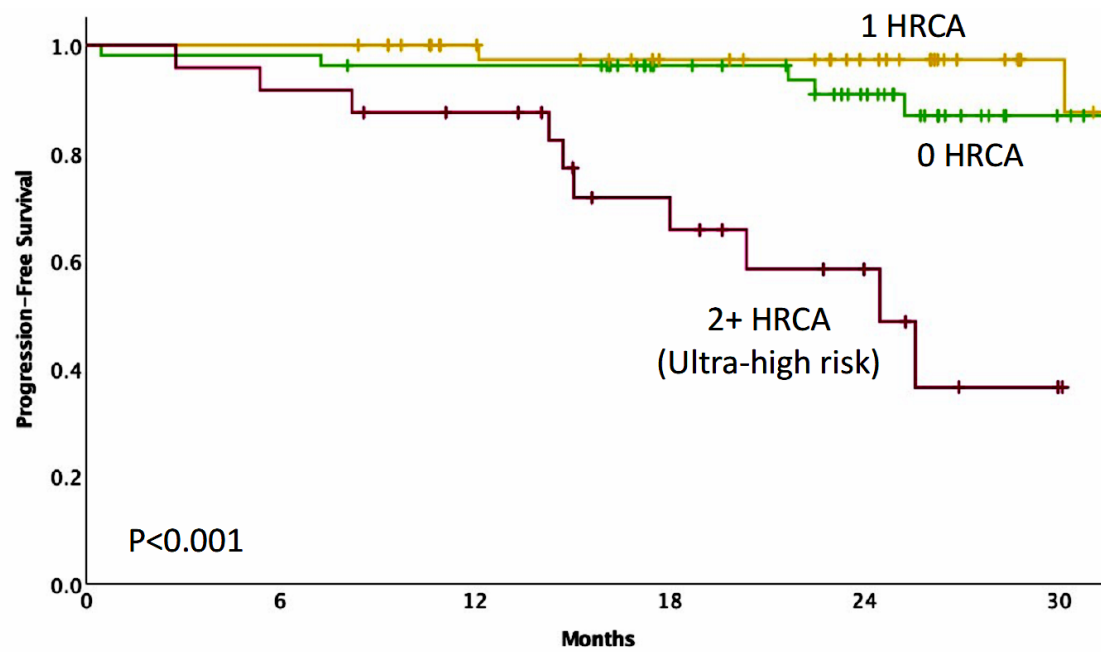
MASTER trial

Best IMWG response by phase of therapy (ITT)



N=123

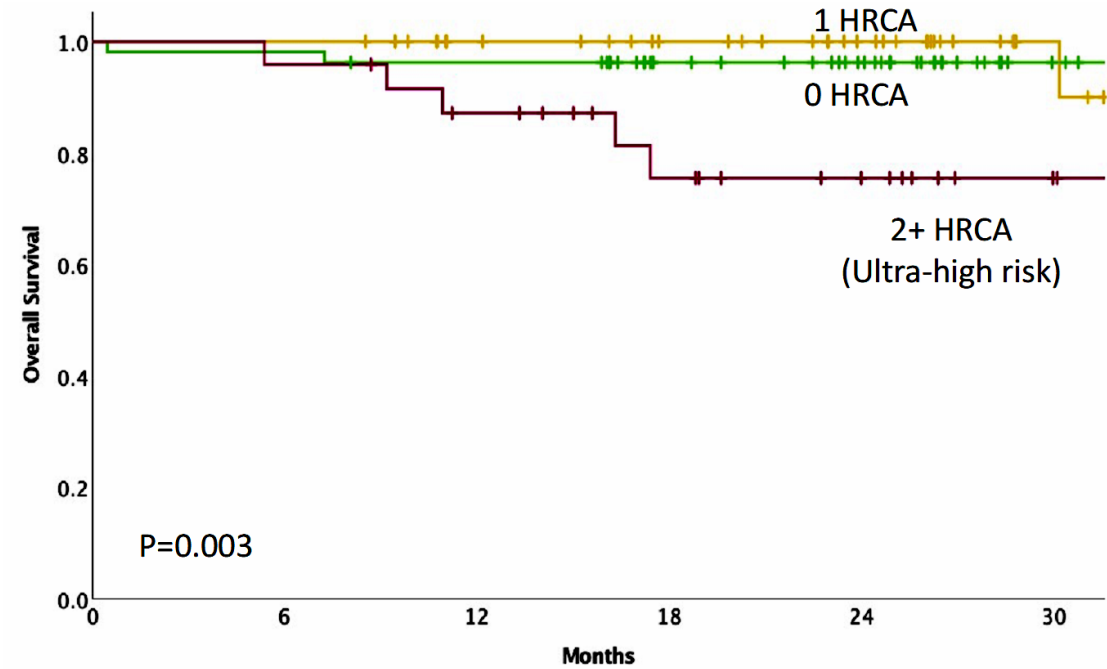
Progression-Free and Overall Survival



No. at risk:

	0	6	12	18	24	30
0 HRCA	50	49	46	36	27	10
1 HRCA	44	44	36	30	23	9
2+ HRCA	24	22	19	12	7	2

2-year PFS	0 HRCA	91%
	1 HRCA	97%
	2+ HRCA	58%



No. at risk:

	0	6	12	18	24	30
0 HRCA	50	49	46	36	29	11
1 HRCA	44	44	36	30	23	9
2+ HRCA	24	23	19	13	9	3

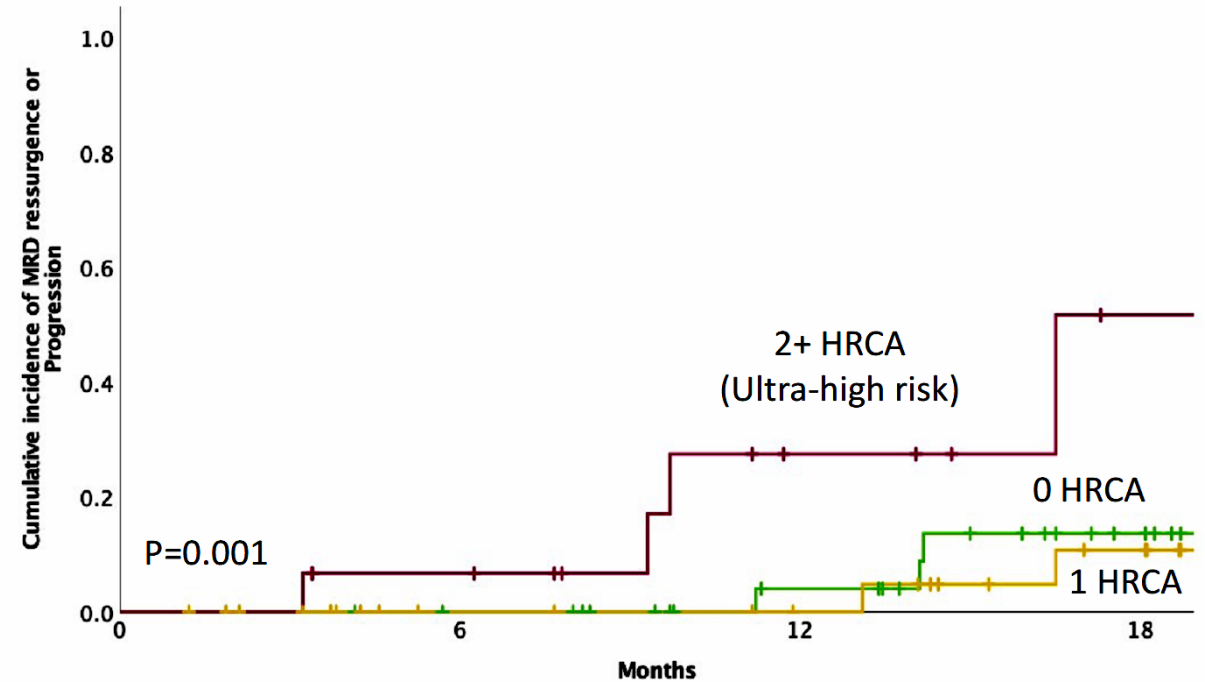
2-year OS	0 HRCA	96%
	1 HRCA	100%
	2+ HRCA	76%

HRCA = gain/amp 1q, t(4;14), t(14;16), t(14;20) or del(17p)

MRD-SURE

- 84 patients achieved MRD-SURE
 - 0 HRCA – 62%
 - 1 HRCA- 78%
 - 2+ HRCA – 63%
- Median follow up in MRD-SURE: 14.2 mo.
- Risk of MRD resurgence or progression 12 months after treatment cessation
 - 0 HRCA – 4%
 - 1 HRCA- 0%
 - 2+ HRCA – 27%
- None** of patients entering MRD-SURE died from MM progression

Cumulative incidence of MRD resurgence or progression

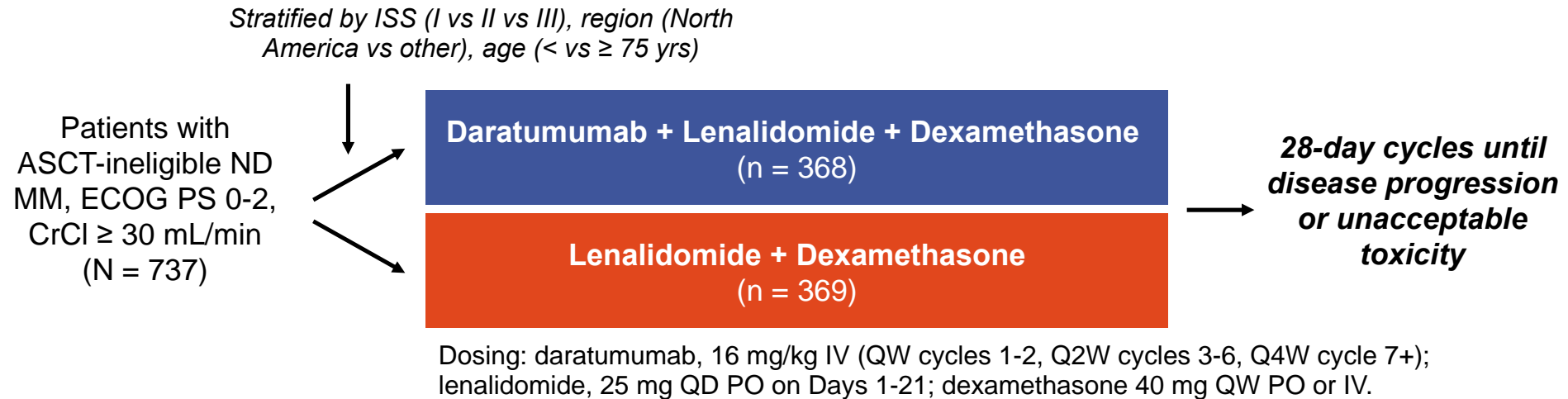


No. at risk:

0 HRCA	33	31	23	12
1 HRCA	36	24	21	14
2+ HRCA	15	23	5	0

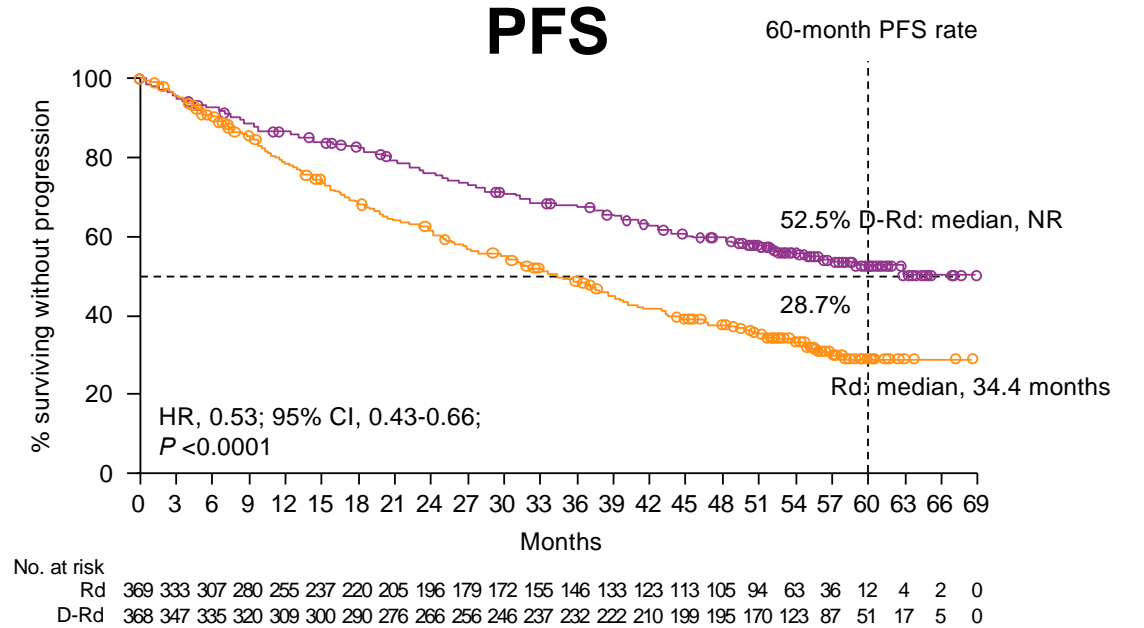
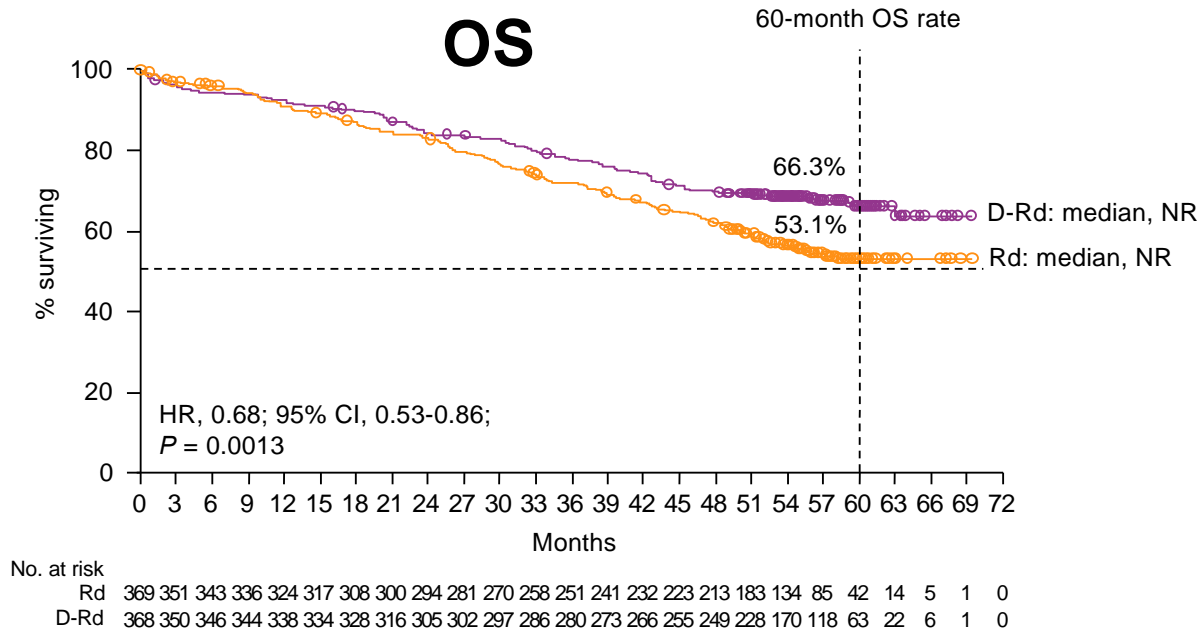
MAIA: Study Design

- Multicenter, open-label, randomized phase III trial



- Primary endpoint: PFS
- Secondary endpoints: TTP, CR/sCR, MRD by NGS (10^{-5}), PFS2, OS, ORR, safety

MAIA: OS and PFS with D-Rd and Rd



D-Rd, daratumumab plus lenalidomide and Dexamethasone; Rd, lenalidomide and Dexamethasone; HR, hazard ration; CI, confidence interval; NR, not reached.

STUDY SCHEME

INDUCTION

9 cycles of 4 weeks

Ixazomib 4 mg day 1, 8, 15

Daratumumab 16 mg/kg

cycle 1-2 day 1, 8, 15, 22

cycle 3-6 day 1, 15

cycle 7-9 day 1

Dexamethasone

cycle 1-2 20 mg day 1, 8, 15, 22

cycle 3-6 10 mg day 1, 15

cycle 7-9 10 mg day 1

MAINTENANCE

8-week cycles (until progression for a maximum of 2 years)

Ixazomib 4 mg day 1, 8, 15, 29, 36, 43

Daratumumab 16 mg/kg day 1

Dexamethasone 10 mg day 1

Antibiotic and -viral prophylaxis: Cotrimoxazole 480 mg/day, Valaciclovir 500 mg twice daily

Vaccinations according to local policy

DEMOGRAPHICS – PATIENT CHARACTERISTICS

	n=65 (%)
Male	35 (54)
Median age (years) [range]	76 [65-80]
≤75 years	28 (43)
76-80 years	37 (57)
WHO performance status (%)	
0	25 (38)
1	28 (43)
2	6 (9)
3	3 (5)
unknown	3 (5)

	n=65 (%)
Activity of Daily Living (ADL)	
≥5	65 (100)
≤4	-
Instrumental ADL (IADL)	
≥6	56 (86)
≤5	9 (14)
Charlson Comorbidity Index (CCI)	
≤1	46 (71)
≥2	19 (29)

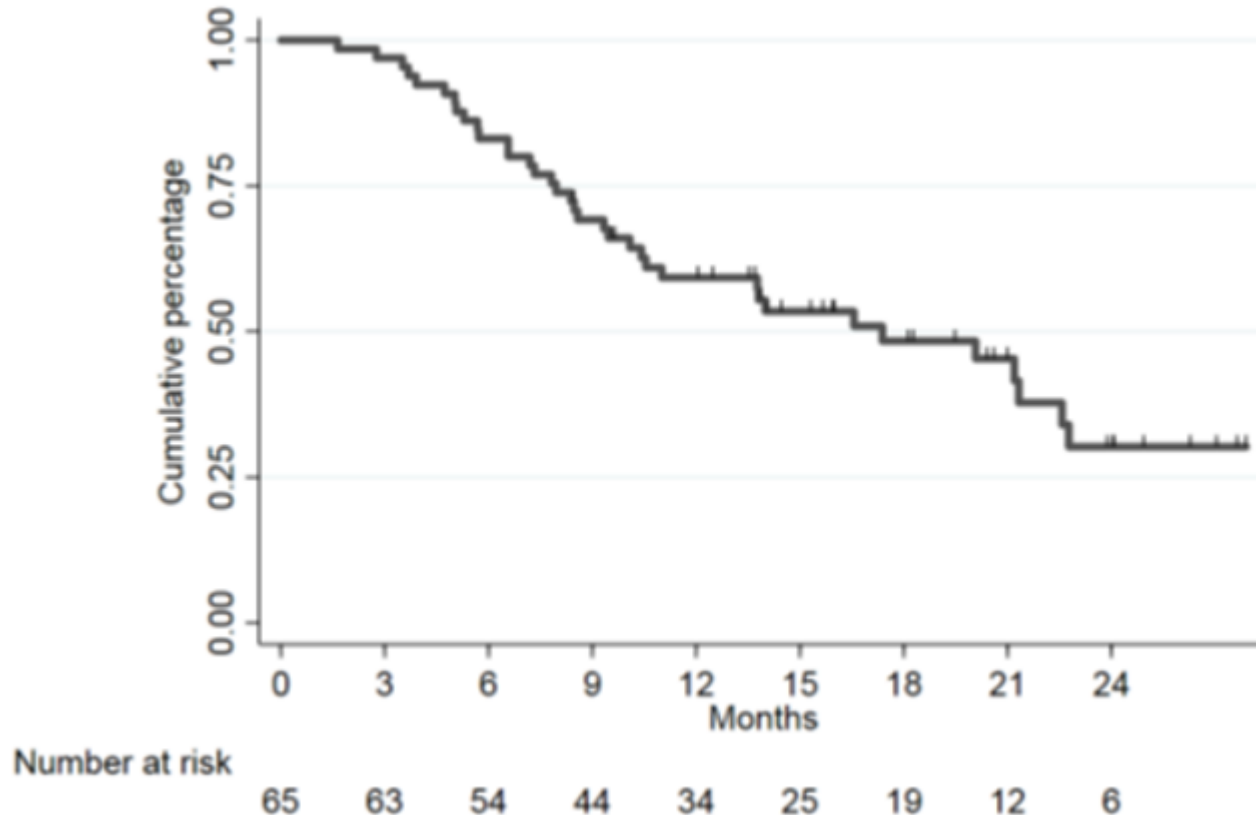
EFFICACY

BEST RESPONSE ON INDUCTION TREATMENT

Response rate (%)	INT-FIT n=65 (%)
ORR	46 (71)
(s)CR	1 (2)
VGPR	23 (35)
PR	22 (34)
MR	11 (17)
SD	7 (11)
Not evaluable	1 (2)

EFFICACY - PROGRESSION FREE SURVIVAL

MEDIAN FOLLOW UP 18.1 MONTHS (RANGE 9.4-27.8)



MEDIAN PFS: 17.4 MONTHS

MEDIAN PFS:

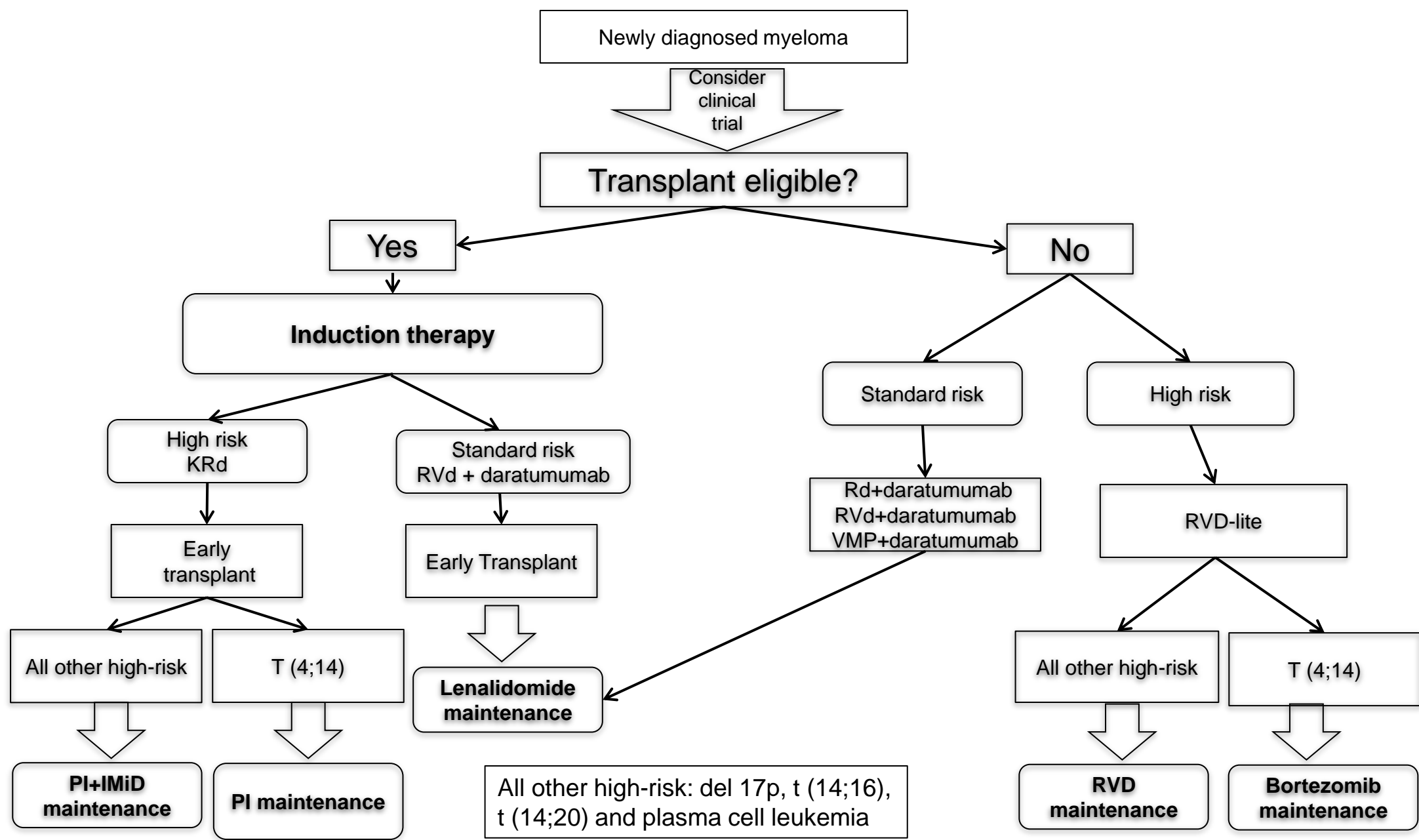
- **AGE: 16.6 MONTHS**
- **CCI/IADL: 18.2 MONTHS**

TOLERABILITY

NON-HEMATOLOGIC TOXICITY

CTCAE grade	II	III	IV
NON-HEMATOLOGIC n (%)	28 (43)	30 (46)	3 (5)
Gastro-intestinal	14 (22)	9 (14)	-
Infections	18 (28)	6 (9)	-
Peripheral neuropathy*	10 (15)	5 (8)	-
Pain	14 (22)	4 (6)	-
Secondary primary malignancy	3 (5)	2 (3)	1 (2)
Cardiac	3 (5)	1 (2)	2 (4)
Infusion related reactions	2 (3)	2 (3)	-

* Grade 1 PNP observed in 12 (18%) patients



Emory Algorithm for newly diagnosed patients

VD: bortezomib/dexamethasone, Rd: lenalidomide/dexamethasone
 RVD: bortezomib/lenalidomide/dexamethasone, RVD-lite: modified RVD
 VMP: bortezomib/melphalan/prednisone

Conclusions

- CD38 based induction clearly adds value in the induction setting
- Role in the maintenance setting remains unclear given the very long outcomes for standard risk with len alone.
- May be more exciting if addition of a second agent to Len allows one to shorten maintenance duration
- **Do Not** yet use MRD to define duration of maintenance

Thanks to:

Jonathan Kaufman
Ajay Nooka
Craig Hofmeister
Madhav Dhodapkar
L.T. Heffner
Vikas Gupta
Nisha Joseph
Leon Bernal
Charise Gleason
Donald Harvey
Colleen Lewis
Amelia Langston
Y. Gu
S-Y Sun
Jing Chen
Mala Shanmugan
Larry Boise
Cathy Sharp

Patients and Families



sloni01@emory.edu

And the Clinical
Research Team

IMS

Golfers Against Cancer
T.J. Martell Foundation

And Many Others who
are part of the B-cell Team



**MULTIPLE
MYELOMA
RESEARCH
FOUNDATION**

