ASH 2016 Data Review Meeting

December 5, 2016

Live in San Diego and via Webcast 20:00 – 21:45 PST

Genmab

Forward Looking Statement

This presentation contains forward looking statements. The words “believe”, “expect”, “anticipate”, “intend” and “plan” and similar expressions identify forward looking statements. All statements other than statements of historical facts included in this presentation, including, without limitation, those regarding our financial position, business strategy, plans and objectives of management for future operations (including development plans and objectives relating to our products), are forward looking statements. Such forward looking statements involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Such forward looking statements are based on numerous assumptions regarding our present and future business strategies and the environment in which we will operate in the future. The important factors that could cause our actual results, performance or achievements to differ materially from those in the forward looking statements include, among others, risks associated with product discovery and development, uncertainties related to the outcome of clinical trials, slower than expected rates of patient recruitment, unforeseen safety issues resulting from the administration of our products in patients, uncertainties related to product manufacturing, the lack of market acceptance of our products, our inability to manage growth, the competitive environment in relation to our business area and markets, our inability to attract and retain suitably qualified personnel, the unenforceability or lack of protection of our patents and proprietary rights, our relationships with affiliated entities, changes and developments in technology which may render our products obsolete, and other factors. Further, certain forward looking statements are based upon assumptions of future events which may not prove to be accurate. The forward looking statements in this document speak only as at the date of this presentation.

Agenda

20:00	Welcome & Introduction	Dr. Jan van de Winkel, President & CEO
20:05	CASTOR Data Sub-analyses	Dr. Meletios-Athanasios Dimopoulos, M.D., National and Kapodistrian University of Athens, School of Medicine
20:20	POLLUX Data Sub-analyses	Prof. Philippe Moreau, M.D., University Hospital of Nantes
20:35	Daratumumab Subcutaneous & I-O Data	Dr. Saad Usmani, M.D., FACP, University of North Carolina at Chapel Hill, Levine Cancer Institute
20:50	Daratumumab Q&A	
21:15	Genmab 2017 & Beyond: Positioned for Success	Dr. Jan van de Winkel
21:20	Genmab 2017 & Beyond: Key 2017 Priorities	Dr. Jan van de Winkel
21:25	General Q&A	
21:45	Refreshments	

Creating Value for Patients and Shareholders

Daratumumab

- Approved in 2nd & 3rd line RRMM
- Studies across all MM indications
- Studies in new indications planned
- Significant market potential

Ofatumumab

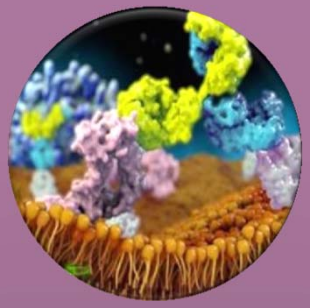
- New opportunity in relapsing Multiple Sclerosis
- Approved in certain types of CLL

Two proprietary next generation clinical programs

- Promising preliminary tisotumab vedotin data
- HuMax-AXL-ADC now in the clinic

Value Creation

Creating Value for Patients and Shareholders



Novel differentiated drug candidates

- DuoBody-CD3xCD20 – '17 IND candidate
- HexaBody-DR5/DR5; broad potential in cancer – '17 IND
- DuoBody Immuno-Oncology programs with partners

Innovation powerhouse

- World class antibody expertise
- Inspired by nature
- Inventing tomorrow's differentiated medicines via next generation antibody technologies

Positioned for success

- Substantial earnings potential
- Able to robustly invest in & accelerate future pipeline
- Building commercial capabilities

Value Creation

Key Achievements Year to Date

Regulatory Achievements

- DARZALEX® approved in EU
- DARZALEX applications for label expansion
- DARZALEX 2nd line combo approval in US
- Arzerra® label expansions in US
- 2nd daratumumab Breakthrough Therapy Designation

Clinical Development

- Daratumumab positive Phase III data – POLLUX & CASTOR
- Multiple new daratumumab studies
- Ofatumumab Phase III MS studies initiated
- HuMax-AXL-ADC in the clinic
- Promising preliminary tisotumab vedotin data

Technology & Partnerships

- 3 Janssen DuoBody programs in Phase I
- Commercial DuoBody deal with Gilead

Financial Performance

- $372M DARZALEX sales – $45M in royalties
- DKK462 in milestone income
- Guidance updated 4 times
- Selective targeted investment in pipeline

DARZALEX® (daratumumab) Overview

- First-in-class antibody targeting CD38
- Marketed as monotherapy in US and EU for relapsed / refractory MM
- Approved in US in combination with Revlimid & dex or Velcade & dex for relapsed / refractory MM
- 2 FDA Breakthrough Therapy Designations
- Clinical studies ongoing or announced in MM, NHL, NKT-cell lymphoma and solid tumors
- Blockbuster potential – growing royalty income
- Collaboration with Janssen Biotech

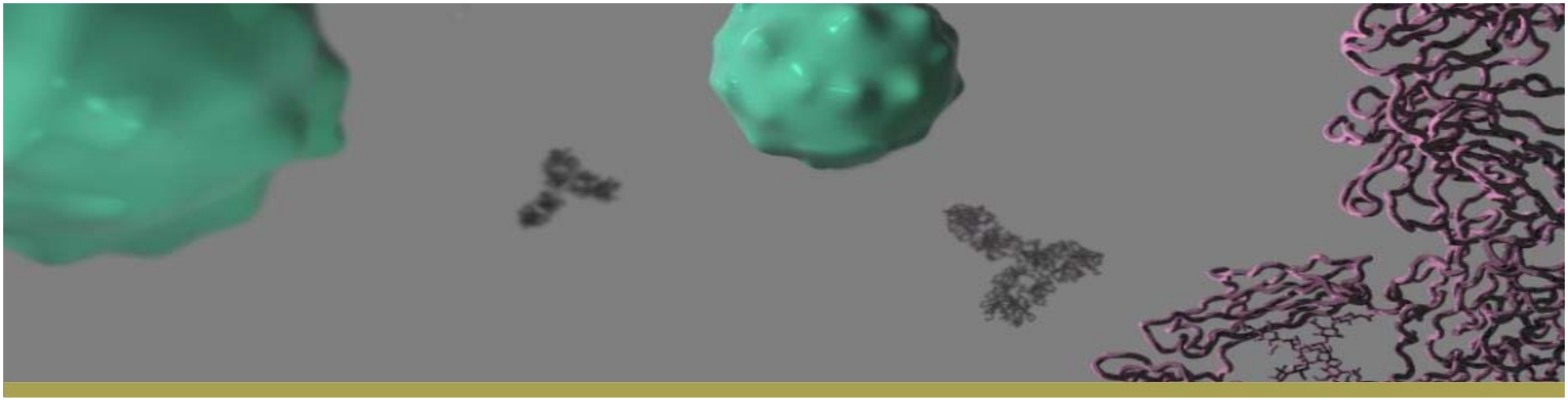
DARZALEX® (daratumumab) Regulatory Status

Approved Indications

US	EU
Multiple myeloma (MM) patients who have received at least 3 prior lines of therapy including a PI & an immunomodulatory agent or who are double refractory to a PI & an immunomodulatory agent In combination with lenalidomide & dexamethasone or bortezomib & dexamethasone for MM patients who received ≥1 prior therapy	Relapsed and refractory MM patients whose prior therapy included a PI & an immunomodulatory agent and who have progressed on last therapy

Applications Under Review

US	EU
In combination with pomalidomide & dexamethasone for MM patients who received ≥2 prior therapies incl. a PI & an immunomodulatory agent	MM patients who have received ≥1 prior therapy



CASTOR Data Sub-analyses

Daratumumab

Presented by Dr. Meletios-Athanasios Dimopoulos, M.D.,
National and Kapodistrian University of Athens, School of Medicine

Genmab

Efficacy of Daratumumab, Bortezomib, and Dexamethasone Versus Bortezomib and Dexamethasone in Relapsed or Refractory Multiple Myeloma Based on Prior Lines of Therapy: Updated Analysis of CASTOR

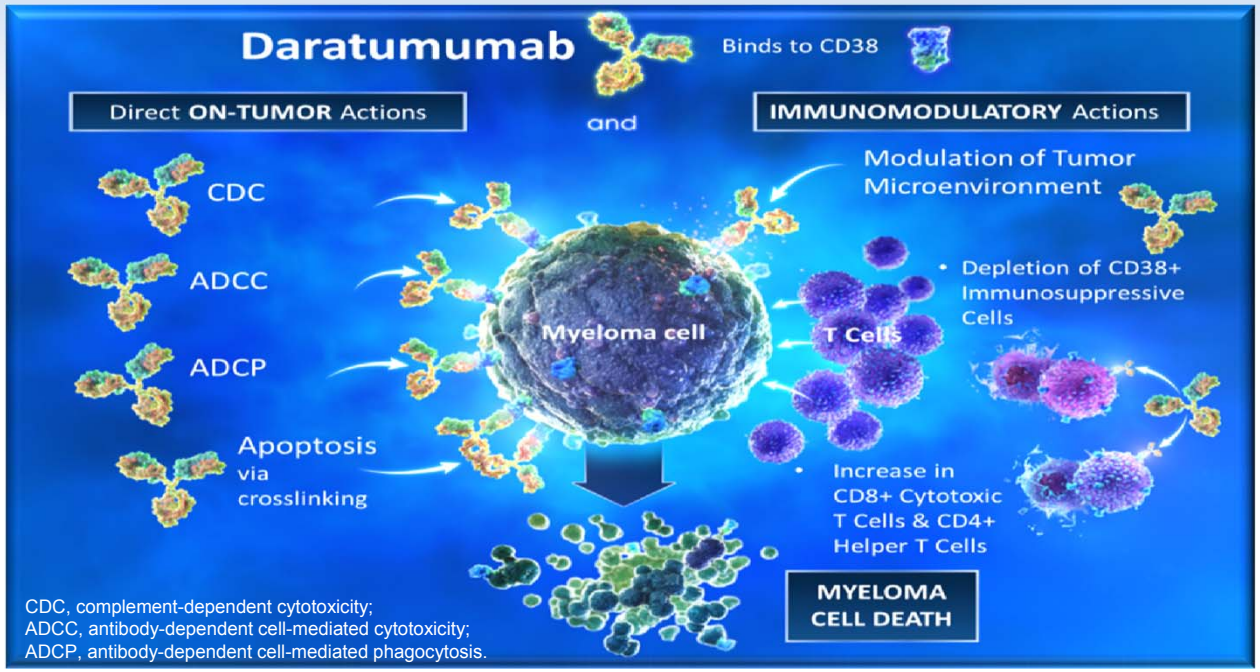
Maria-Victoria Mateos,[1] Jane Estell,[2] Wolney Barreto,[3] Paolo Corradini,[4] Chang-Ki Min,[5] Eva Medvedova,[6] Ming Qi,[7] Jordan Schecter,[8] Himal Amin,[8] Xiang Qin,[7] William Deraedt,[9] Tineke Casneuf,[9] Christopher Chiu,[7] A. Kate Sasser,[7] Ajay Nooka[10]

[1]University Hospital of Salamanca/IBSAL, Salamanca, Spain; [2]Haematology Department, Concord Cancer Centre, Concord Hospital, Concord, NSW, Australia; [3]Hospital Santa Marcelina, Sao Paulo, Brazil; [4]Fondazione IRCCS Instituto Nazionale dei Tumori, Milan, Italy; [5]Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, South Korea; [6]Oregon Health & Science University, Portland, Oregon, USA; [7]Janssen Research & Development, LLC, Spring House, PA, USA; [8]Janssen Research & Development, LLC, Raritan, NJ, USA; [9]Janssen Research & Development, Beerse, Belgium; [10]Winship Cancer Institute, Emory University, Atlanta, GA, USA.

ClinicalTrials.gov Identifier: NCT02136134

Background

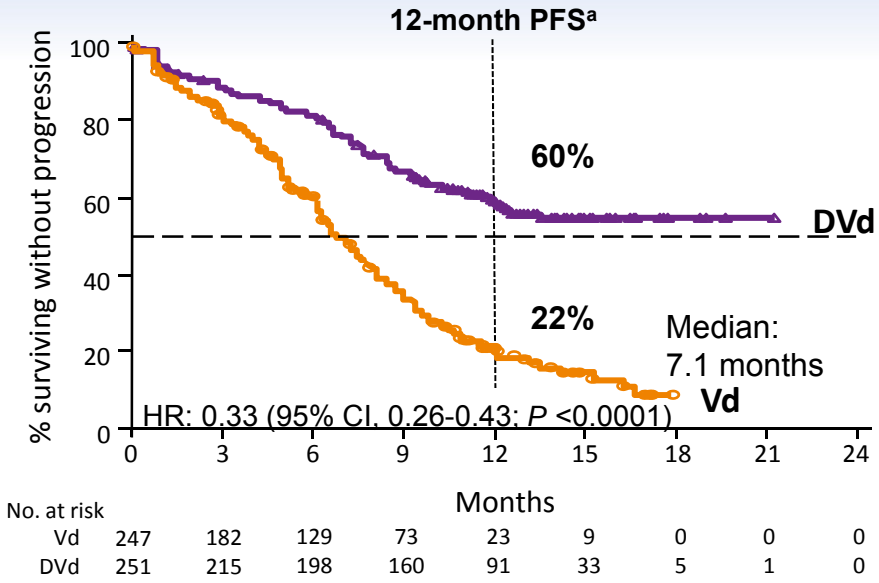
- Daratumumab
  - Human monoclonal antibody targeting CD38
  - Direct on-tumor and immunomodulatory MoA[1-5]
- Approved
  - As monotherapy for heavily pretreated RRMM by the FDA, EMA, Health Canada, Mexico, and Singapore
  - Combo with standard of care regimens for RRMM after ≥1 prior therapy (POLLUX and CASTOR) by the FDA
- Early phase study of daratumumab in combination with bortezomib[6]
  - Deep and durable responses
  - Well tolerated with manageable adverse events

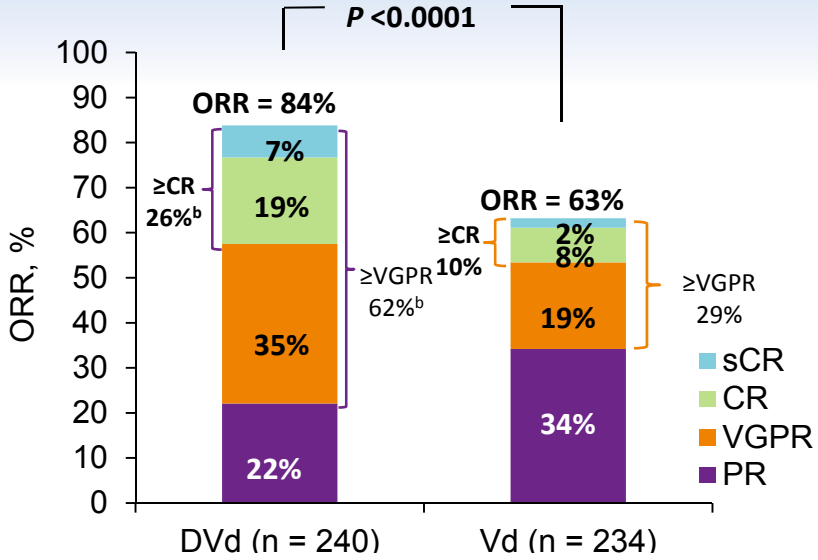


MoA, mechanism of action; RRMM, relapsed or refractory multiple myeloma ; FDA, Food and Drug Administration; EMA, European Medicines Agency; CDC, complement-mediated cytotoxicity; ADCC, antibody-dependent cell-mediated cytotoxicity; ADCP, antibody-dependent cellular phagocytosis.

1. Lammerts van Bueren J, et al. *Blood*. 2014;124. Abstract 3474.
2. Overdijk MB, et al. *J Immunol*. 2016;197(3):807-813.
3. de Weers M, et al. *J Immunol*. 2011;186(3):1840-1848.
4. Overdijk MB, et al. *MAbs*. 2015;7(2):311-321.
5. Krejcik J, et al. *Blood*. 2016;128(3):384-394.
6. Mateos MV, et al. Presented at the 20th Congress of the European Hematology Association; 11-14 June 2015; Vienna, Austria. P275.

Updated Efficacy



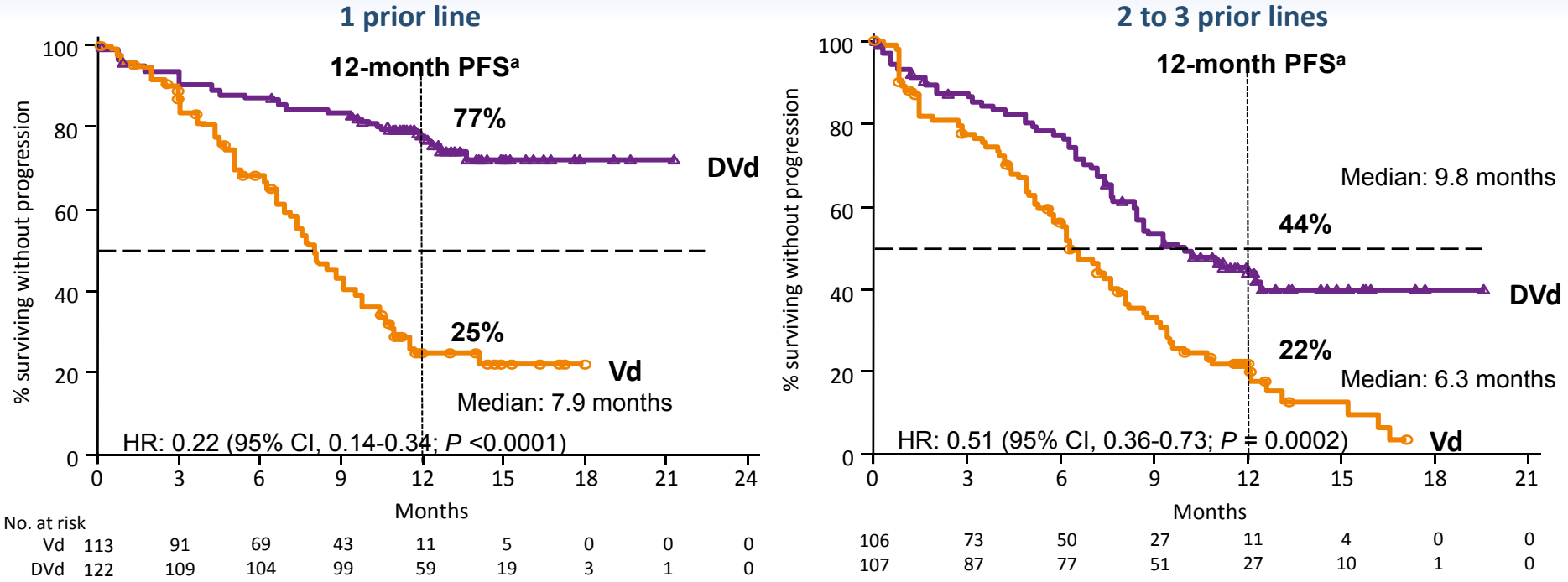


- Median (range) follow-up: 13.0 (0-21.3) months
- An additional 7% of patients receiving DVd achieved ≥CR with longer follow up

Responses continue to deepen in the DVd group with longer follow-up

ITT, intent to treat.
Note: PFS: ITT population; ORR: response-evaluable population.
[a]Kaplan-Meier estimate.
[b]*P* <0.0001 for DVd versus Vd.

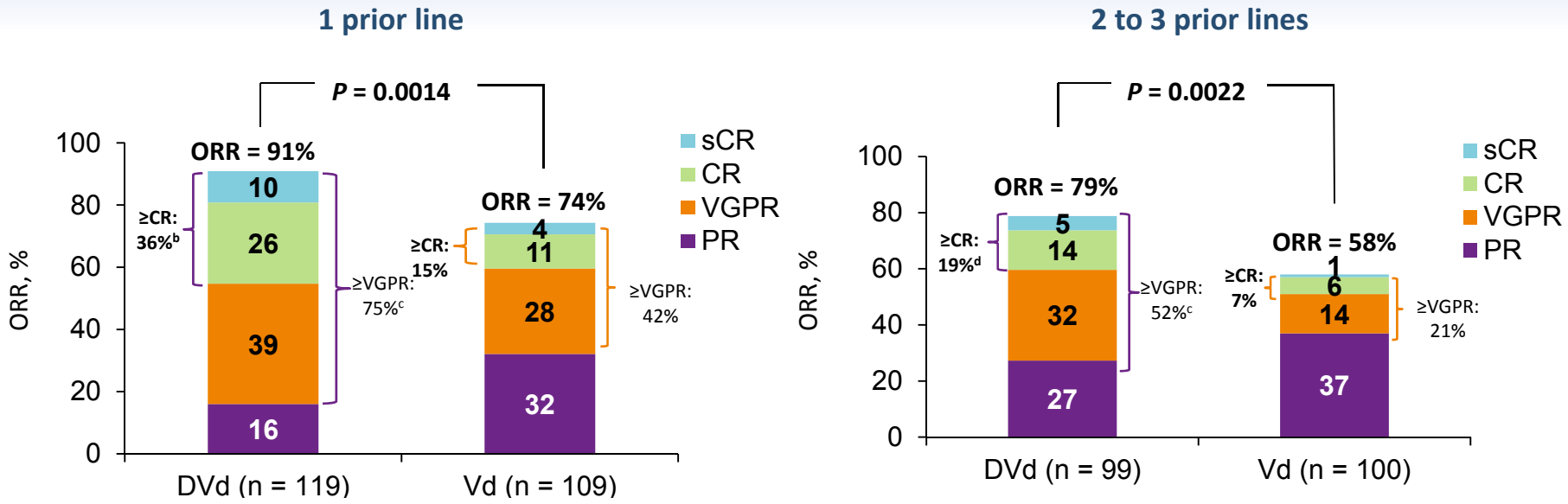
PFS: Prior Lines of Treatment



DVd is superior to Vd regardless of prior lines of therapy, with greatest benefit observed in 1 prior line

[a]Kaplan-Meier estimate.

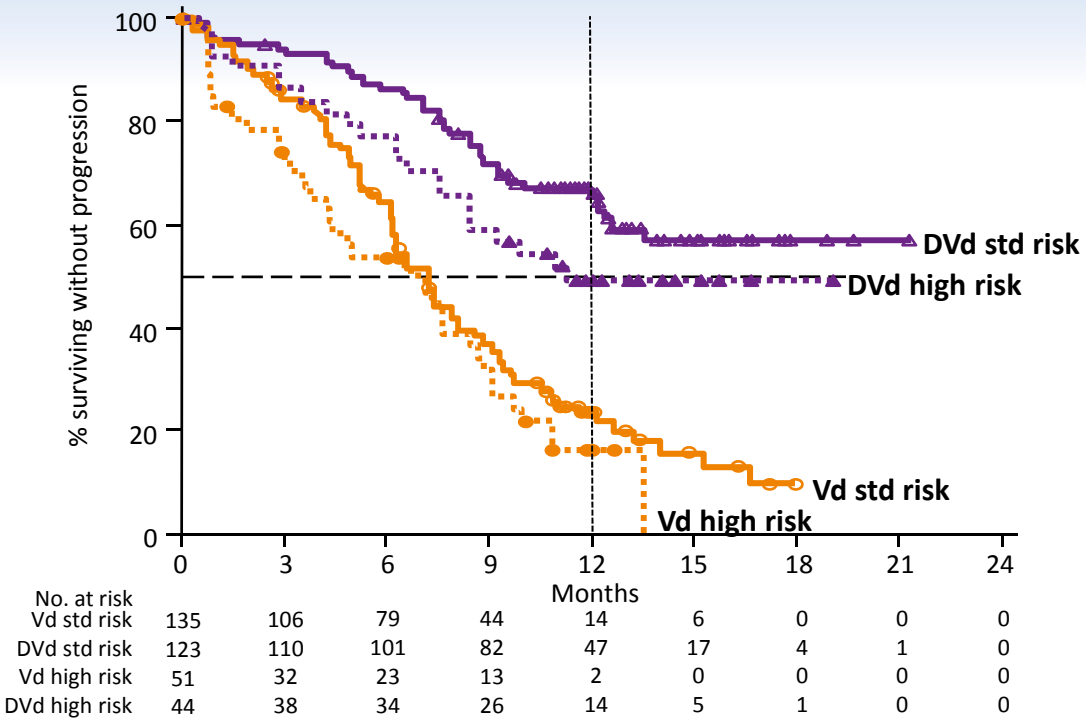
ORR by Prior Lines[a]



More patients achieve a deeper response with DVd after 1 prior line of treatment

[a]Response-evaluable population.
[b]*P* = 0.0006 for DVd vs Vd.
[c]*P* <0.0001 for DVd vs Vd.
[d]*P* = 0.0133 for DVd vs Vd.

PFS: Cytogenetic Risk in All Evaluable Patients[a]



High risk[b]	DVd n = 44	Vd n = 51
Median PFS, mo	**11.2**	**7.2**
HR (95% CI)	0.49 (0.27-0.89)	
P value	0.0167	
	n = 44	n = 47
ORR, %	**82**	**62**
P value	0.039	

Standard risk	DVd n = 123	Vd n = 135
Median PFS, mo	**NR**	**7.0**
HR (95% CI)	0.29 (0.20-0.43)	
P value	<0.0001	
	n = 118	n = 131
ORR, %	**85**	**64**
P value	0.0003	

DVd improves outcomes regardless of cytogenetic risk

NR, not reached.
[a]ITT/Biomarker risk–evaluable analysis set.
[b]Central next-generation sequencing. High-risk patients had any of t(4;14), t(14;16), or del17p. Standard-risk patients had an absence of high-risk abnormalities.

Conclusions

- PFS benefit continues to be maintained with DVd over time
- DVd is superior to Vd regardless of prior lines of therapy
- Largest magnitude of benefit with DVd is observed in patients with 1 prior line of therapy
  - 78% reduction in risk of progression or death for DVd versus Vd
- More patients in DVd achieved deeper responses with longer follow-up
  - Higher CR and MRD-negative rates
  - MRD negativity translated into longer PFS
- DVd is superior to Vd regardless of cytogenetic risk or time since last therapy
- No new safety signals were reported

These data further support the use of this newly approved regimen of DVd in RRMM, with most benefit in patients with 1 prior line of therapy

Poster: Daratumumab, Bortezomib, and Dexamethasone Versus Bortezomib and Dexamethasone Alone for Relapsed or Refractory MM Based on Prior Treatment Exposure: Updated Efficacy Analysis of CASTOR

Asher Chanan-Khan,[1] Suzanne Lentzsch,[2],* Hang Quach,[3] Noemi Horvath,[4] Marcelo Capra,[5] Roberto Ovilla,[6] Jae-Cheol Jo,[7] Ho-Jin Shin,[8] Ming Qi,[9] Jordan Schecter,[10] Himal Amin,[10] Xiang Qin,[9] William Deraedt,[11] Tineke Casneuf,[11] Christopher Chiu,[9] A. Kate Sasser,[9] Pieter Sonneveld[12]

[1]Division of Hematology & Medical Oncology, Mayo Clinic Florida, Jacksonville, FL, USA; [2]Columbia University Medical Center, New York, NY, USA; [3]St. Vincent's Hospital, University of Melbourne, Melbourne, Australia; [4]Department of Haematology, Royal Adelaide Hospital, SA Pathology, SA, Australia; [5]Hospital Mãe de Deus, Porto Alegre, Brazil; [6]Hospital Angeles Lomas, Naucalpan de Juárez y Alrededores, México; [7]Ulsan University Hospital, Ulsan, South Korea; [8]Pusan National University Hospital, Busan, South Korea; [9]Janssen Research & Development, LLC, Spring House, PA, USA; [10]Janssen Research & Development, LLC, Raritan, NJ, USA; [11]Janssen Research & Development, Beerse, Belgium; [12]Department of Hematology, Erasmus MC, Rotterdam, The Netherlands.

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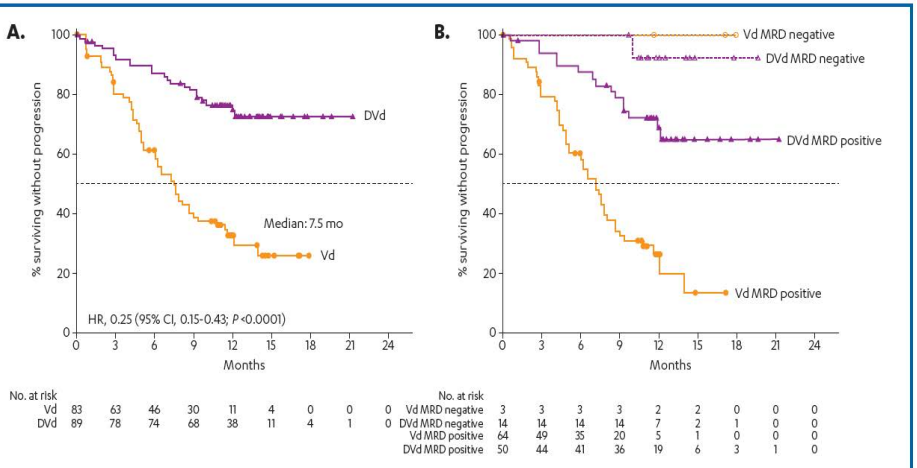
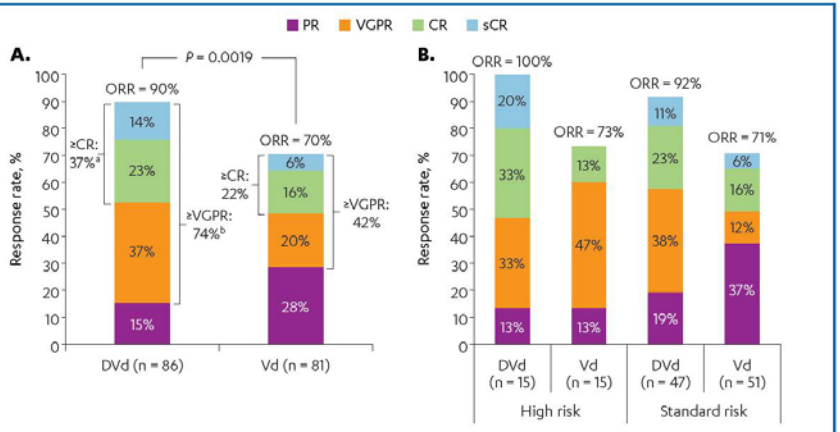


PFS, progression-free survival; MRD, minimal residual disease; ITT, intent-to-treat; DVd, daratumumab/bortezomib/dexamethasone; Vd, bortezomib/dexamethasone; HR, hazard ratio; CI, confidence interval.

Figure 2. (A) Overall PFS and (B) PFS by MRD status (10^{-5}) in bortezomib-naïve patients.



PR, partial response; VGPR, very good partial response; CR, complete response; sCR, stringent complete response; ORR, overall response rate; DVd, daratumumab/bortezomib/dexamethasone; Vd, bortezomib/dexamethasone.
[a]P <0.05 for DVd vs Vd.
[b]P <0.0001 for DVd vs Vd.

Figure 3. Summary of (A) overall best confirmed response and (B) responses by cytogenetic status in bortezomib-naïve patients in CASTOR (response-evaluable analysis set).

Asher Chanan-Khan,1 Suzanne Lentzsch,2,* Hang Quach,3 Noemi Horvath,4 Marcelo Capra,5 Roberto Ovilla,6 Jae-Cheol Jo,7 Ho-Jin Shin,8 Ming Qi,9 Jordan Schecter,10 Himal Amin,10 Xiang Qin,9 William Deraedt,11 Tineke Casneuf,11 Christopher Chiu,9 A. Kate Sasser,9 Pieter Sonneveld12

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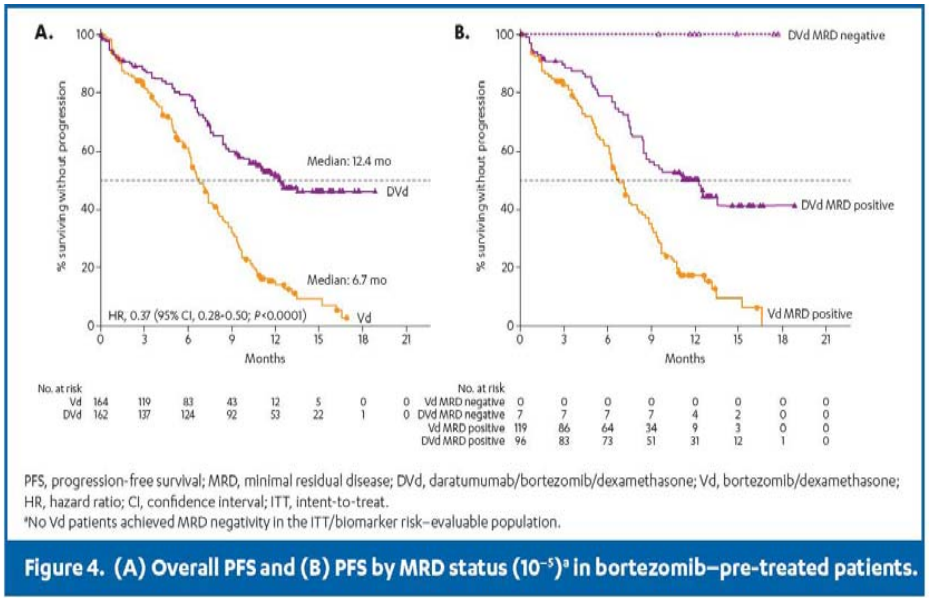
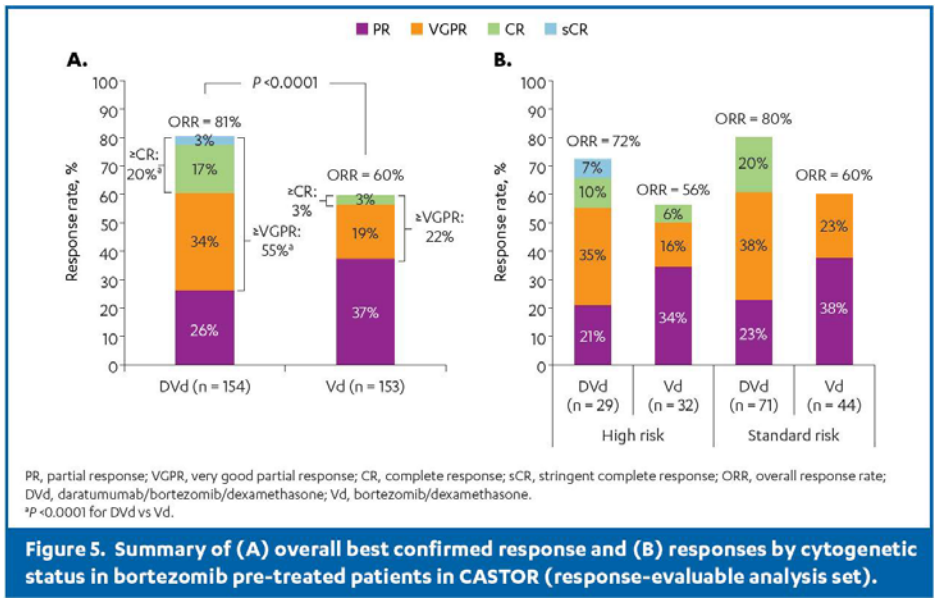


PFS, progression-free survival; MRD, minimal residual disease; DVd, daratumumab/bortezomib/dexamethasone; Vd, bortezomib/dexamethasone; HR, hazard ratio; CI, confidence interval; ITT, intent-to-treat.
[a]No Vd patients achieved MRD negativity in the ITT/biomarker risk–evaluable population.

Figure 4. (A) Overall PFS and (B) PFS by MRD status (10^{-5})[a] in bortezomib–pre-treated patients.



PR, partial response; VGPR, very good partial response; CR, complete response; sCR, stringent complete response; ORR, overall response rate; DVd, daratumumab/bortezomib/dexamethasone; Vd, bortezomib/dexamethasone.
[a]P <0.0001 for DVd vs Vd.

Figure 5. Summary of (A) overall best confirmed response and (B) responses by cytogenetic status in bortezomib pre-treated patients in CASTOR (response-evaluable analysis set).

Asher Chanan-Khan,1 Suzanne Lentzsch,2,* Hang Quach,3 Noemi Horvath,4 Marcelo Capra,5 Roberto Ovilla,6 Jae-Cheol Jo,7 Ho-Jin Shin,8 Ming Qi,9 Jordan Schecter,10 Himal Amin,10 Xiang Qin,9 William Deraedt,11 Tineke Casneuf,11 Christopher Chiu,9 A. Kate Sasser,9 Pieter Sonneveld12

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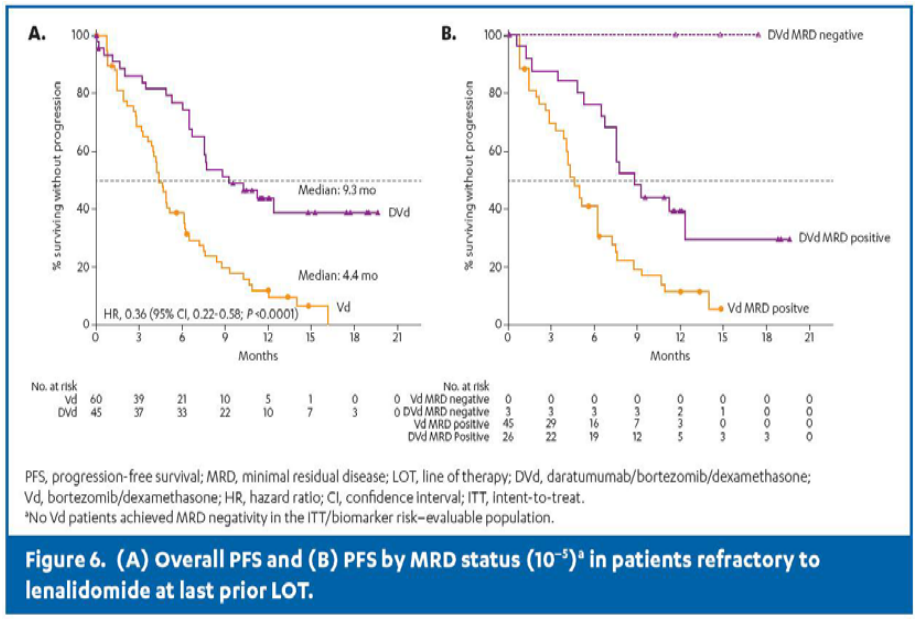
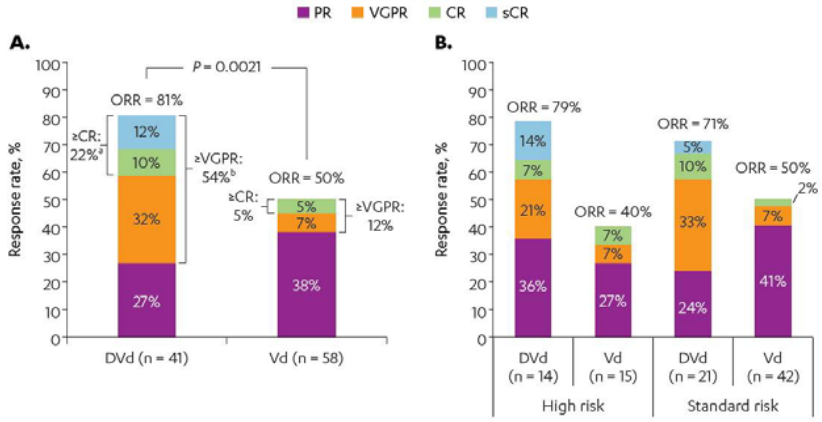


PFS, progression-free survival; MRD, minimal residual disease; LOT, line of therapy; DVd, daratumumab/bortezomib/dexamethasone; Vd, bortezomib/dexamethasone; HR, hazard ratio; CI, confidence interval; ITT, Intent-to-treat.
[a]No Vd patients achieved MRD negativity in the ITT/biomarker risk–evaluable population.

Figure 6. (A) Overall PFS and (B) PFS by MRD status (10^{-5})[a] in patients refractory to lenalidomide at last prior LOT.



LOT, line of therapy; PR, partial response; VGPR, very good partial response; CR, complete response; sCR, stringent complete response; ORR, overall response rate; DVd, daratumumab/bortezomib/dexamethasone; Vd, bortezomib/dexamethasone.
[a]P <0.05 for DVd vs Vd.
[b]P <0.0001 for DVd vs Vd.

Figure 7. Summary of (A) overall best confirmed response and (B) responses by cytogenetic status in patients refractory to lenalidomide at last prior LOT in CASTOR (response-evaluable analysis set).

Asher Chanan-Khan,1 Suzanne Lentzsch,2,* Hang Quach,3 Noemi Horvath,4 Marcelo Capra,5 Roberto Ovilla,6 Jae-Cheol Jo,7 Ho-Jin Shin,8 Ming Qi,9 Jordan Schecter,10 Himal Amin,10 Xiang Qin,9 William Deraedt,11 Tineke Casneuf,11 Christopher Chiu,9 A. Kate Sasser,9 Pieter Sonneveld12

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CONCLUSIONS

- DVd significantly improves outcomes for patients with relapsed or refractory multiple myeloma, regardless of prior treatment with bortezomib
- Importantly, the treatment benefit of DVd versus Vd was maintained in patients who were refractory to lenalidomide at their last prior LOT
  - These results suggest that DVd treatment can be sequenced after patients become refractory to lenalidomide
- Patients who achieved MRD negativity demonstrated prolonged PFS regardless of prior exposure to bortezomib or lenalidomide
- High rates of responses were observed in high-risk and standard-risk patients treated with DVd across all subgroups examined
- DVd should be considered a new standard of care for patients with myeloma who are currently receiving Vd alone and received ≥1 prior therapy

Asher Chanan-Khan,1 Suzanne Lentzsch,2,* Hang Quach,3 Noemi Horvath,4 Marcelo Capra,5 Roberto Ovilla,6 Jae-Cheol Jo,7 Ho-Jin Shin,8 Ming Qi,9 Jordan Schecter,10 Himal Amin,10 Xiang Qin,9 William Deraedt,11 Tineke Casneuf,11 Christopher Chiu,9 A. Kate Sasser,9 Pieter Sonneveld12

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Evaluation of Minimal Residual Disease (MRD) in Relapsed/Refractory Multiple Myeloma (RRMM) Patients Treated With Daratumumab in Combination With Lenalidomide Plus Dexamethasone or Bortezomib Plus Dexamethasone

Hervé Avet-Loiseau,[1] Tineke Casneuf,[2] Christopher Chiu,[3] Jacob Laubach,[4] Je-Jung Lee,[5] Philippe Moreau,[6] Torben Plesner,[7] Hareth Nahi,[8] Nushmia Z. Khokhar,[3] Ming Qi,[3] Jordan Schecter,[9] Victoria Carlton,[10] Xiang Qin,[3] Kevin Liu,[9] Kaida Wu,[3] Sen Hong Zhuang,[9] Tahamtan Ahmadi,[3] A. Kate Sasser,[3] Jesus San-Miguel[11]

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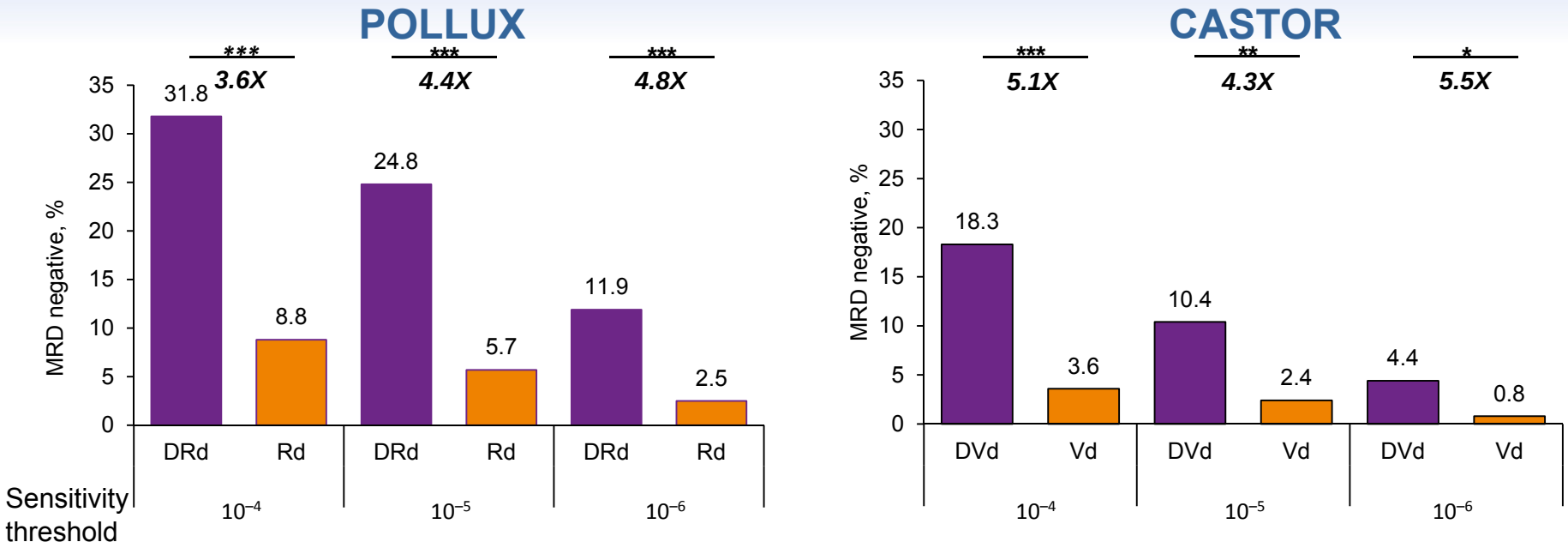
ClinicalTrials.gov Identifiers: NCT02136134 and NCT02076009

Minimal Residual Disease

- Minimal residual disease (MRD) is a more sensitive measure of disease burden than traditional definitions of clinical response[1,2]
- MRD-negative status is associated with prolonged progression-free survival (PFS) and overall survival (OS) in newly diagnosed MM patients[1,2]
  - In the future, MRD may be a primary endpoint for clinical studies
- International Myeloma Working Group guidelines recommend an MRD-sensitivity threshold of at least 10^{-5} using next-generation sequencing (NGS) or next-generation flow cytometry[3]
- This study is the first evaluation of MRD in relapsed and refractory (RR) MM using a randomized, controlled, and prospective analysis

1. Munshi NC, et al. *JAMA Oncol.* 2016. [Epub ahead of print.]
2. Landgren O, et al. *Bone Marrow Transplant*. 2016. [Epub ahead of print.]
3. Kumar S, et al. *Lancet Oncol.* 2016;17(8):e328-e346.

Proportion of MRD-negative Patients at 10^{-4}, 10^{-5}, and 10^{-6} Thresholds



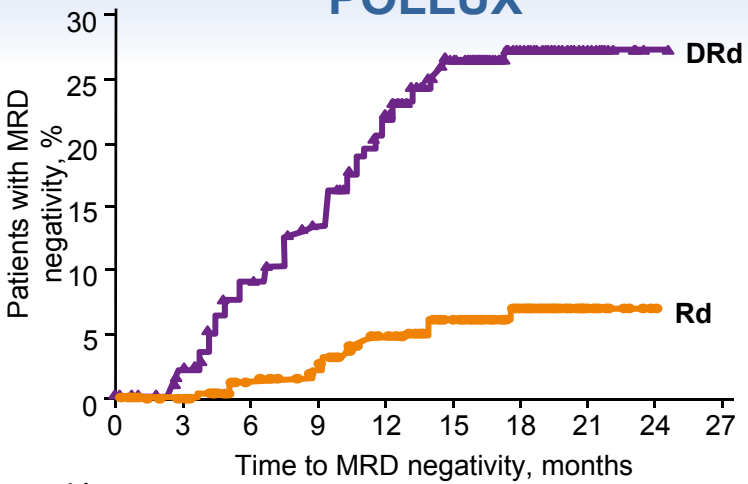
- Daratumumab in combination with standard of care significantly improved MRD-negative rates at all thresholds

*** *P* <0.0001
** *P* <0.005
* *P* <0.05

P values calculated using likelihood-ratio chi-square test.

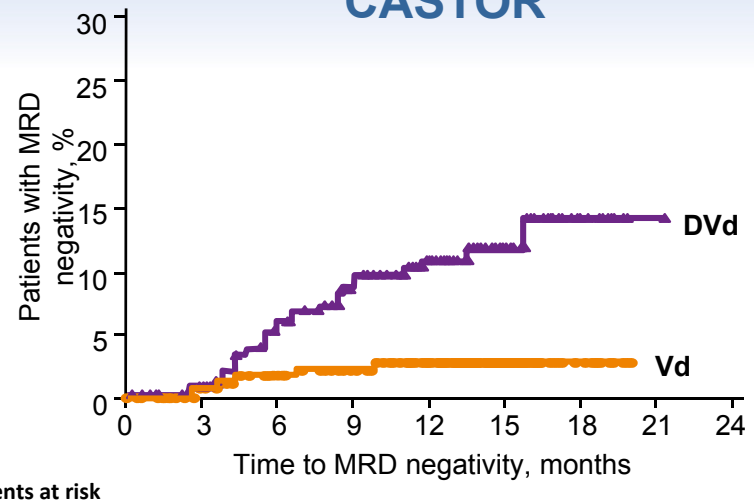
Time to MRD (10^{-5})

POLLUX



Patients at risk										
Rd	283	272	252	243	225	202	83	18	0	0
DRd	286	271	247	229	202	169	71	15	1	0

CASTOR



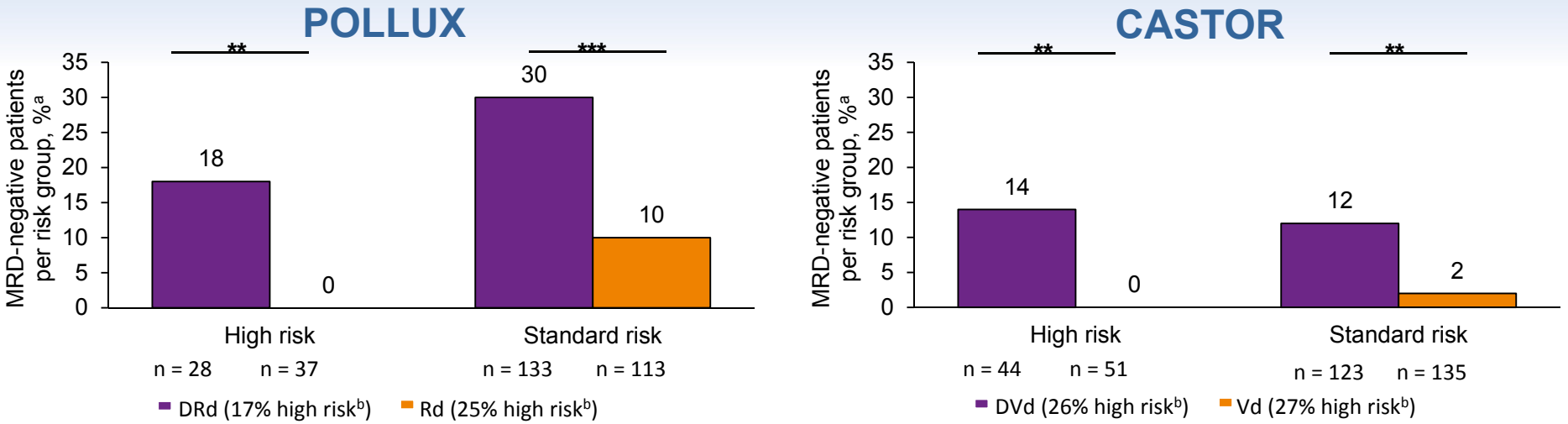
Patients at risk										
Vd	247	217	202	187	130	55	13	0	0	
DVd	251	229	212	190	137	58	12	1	0	

- Rapid accumulation of MRD-negative events in patients treated with daratumumab-containing regimens versus standard of care
- MRD-negative patients continued to accumulate over time in both studies

Majority of patients maintain MRD negativity; patients will continue to be followed annually

Only 1 MRD-negative sample counted per patient.

MRD at 10^{-5} by Cytogenetic Risk by NGS



- No high-risk MRD negative patients have progressed or converted to MRD positive
  - High risk = any of t(4;14), t(14;16), del17p
  - Standard risk = conclusive absence of all 3 markers

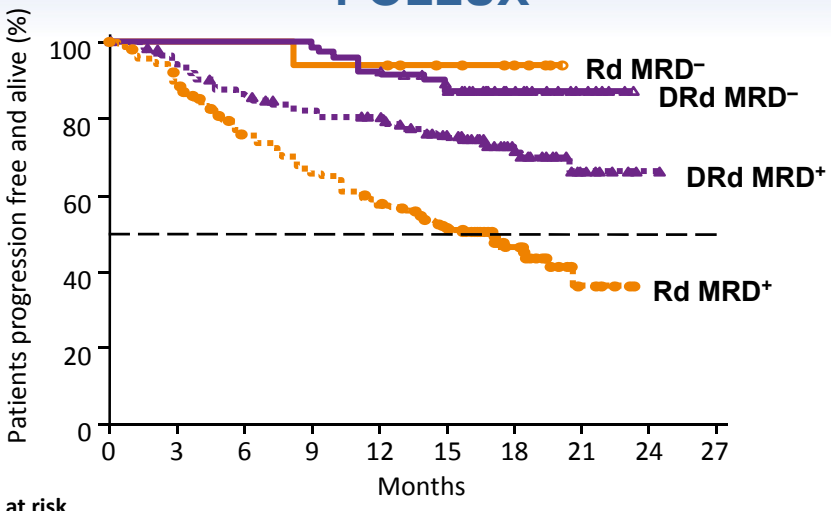
In high-risk patients, MRD-negative status was achieved only in those treated with daratumumab-containing regimens

P values calculated using likelihood-ratio chi-square test.
[a]Percentage of patients within a given risk group and treatment arm.
[b]Percentage of patients within a given treatment arm within the biomarker-evaluable population.

*** ***P* <0.0001**
** ***P* <0.005**

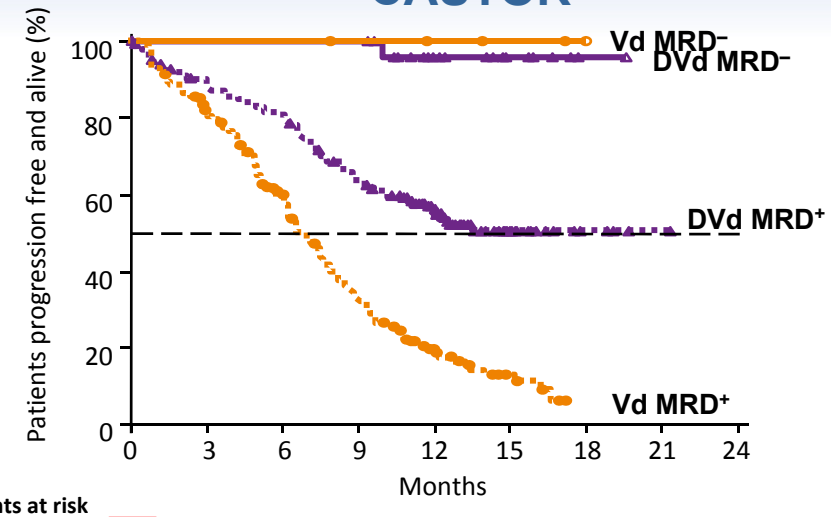
PFS According to MRD Status at 10^{-5}

POLLUX



Patients at risk										
Rd MRD negative	16	16	16	15	15	12	10	0	0	0
DRd MRD negative	71	71	71	70	66	57	28	6	0	0
Rd MRD positive	267	233	190	166	144	120	38	5	0	0
DRd MRD positive	215	195	178	167	161	137	54	9	1	0

CASTOR



Patients at risk									
Vd MRD negative	6	6	6	5	3	2	0	0	0
DVd MRD negative	26	26	26	26	15	7	1	0	0
Vd MRD positive	241	176	123	68	20	7	0	0	0
DVd MRD positive	225	189	172	134	76	26	4	1	0

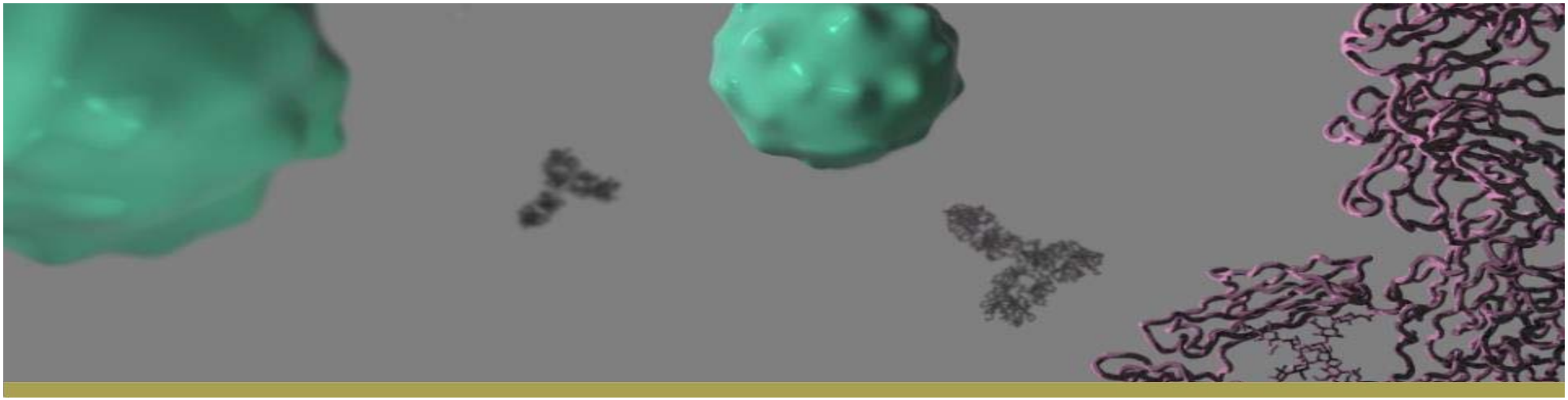
- Lower risk of progression in MRD-negative patients
- PFS benefit in MRD-positive patients who received daratumumab-containing regimens versus standard of care

Conclusions

- Daratumumab induced MRD negativity in over 3 times as many patients as standard of care regimens
- Daratumumab led to rapid and durable achievement of MRD negativity
  - Patients continued to achieve MRD negativity over time
- Daratumumab allowed high-risk patients to achieve MRD-negative status
- MRD-negative status was associated with a lower risk of progression
- The high rate of MRD negativity and deep clinical responses induced by daratumumab may lead to improved long-term clinical benefit

The magnitude of daratumumab-induced MRD negativity in the RRMM setting is unprecedented

The potential benefit of MRD-negative status induced by daratumumab in newly diagnosed MM is being explored in ongoing studies



POLLUX Data Sub-analyses

Daratumumab

Presented by Prof. Philippe Moreau, M.D.,
University Hospital of Nantes

Genmab

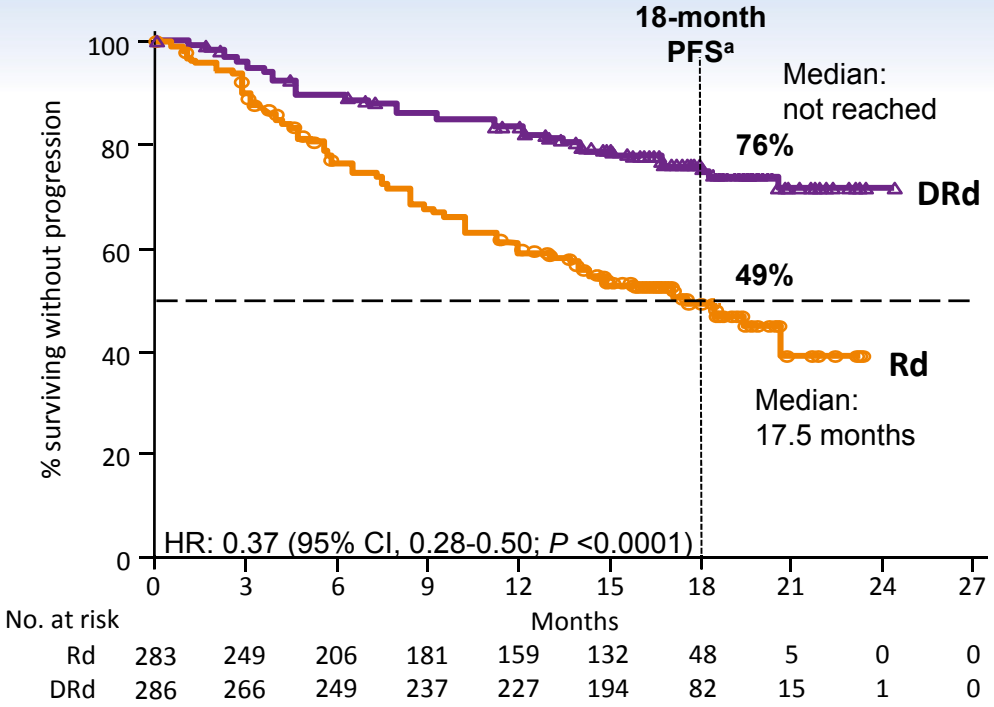
Efficacy of Daratumumab, Lenalidomide, and Dexamethasone Versus Lenalidomide and Dexamethasone in Relapsed or Refractory Multiple Myeloma Patients With 1 to 3 Prior Lines of Therapy: Updated Analysis of POLLUX

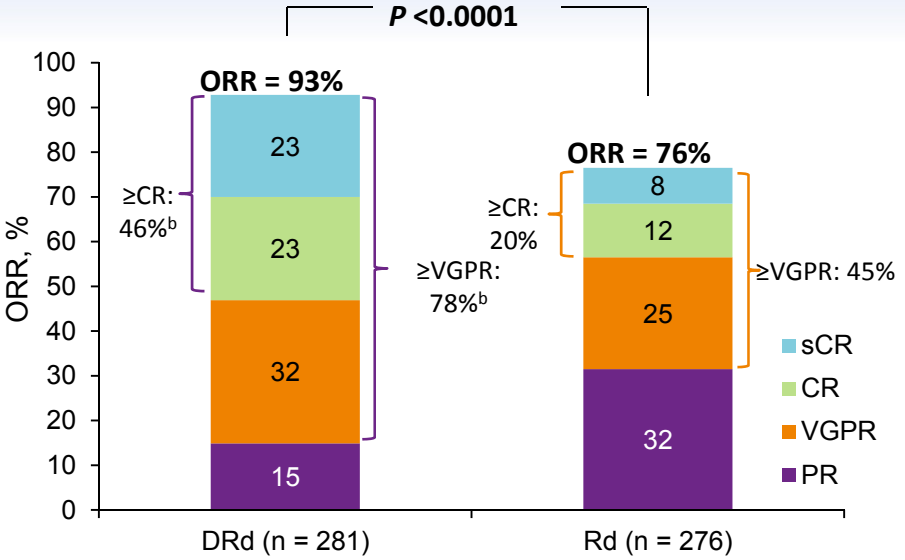
Saad Z. Usmani,[1] Meletios A. Dimopoulos,[2] Andrew Belch,[3] Darrell White,[4] Lotfi Benboubker,[5] Gordon Cook,[6] Merav Leiba,[7] James Morton,[8] P. Joy Ho,[9] Kihyun Kim,[10] Naoki Takezako,[11] Nushmia Z. Khokhar,[12] Mary Guckert,[12] Kaida Wu,[12] Xiang Qin,[12] Tineke Casneuf,[13] Christopher Chiu,[12] A. Kate Sasser,[12] Jesus San-Miguel[14]

[1]Levine Cancer Institute/Carolinas HealthCare System, Charlotte, NC, USA; [2]National and Kapodistrian University of Athens, Athens, Greece; [3]Department of Oncology, University of Alberta Cross Cancer Institute, Edmonton, Alberta, Canada; [4]QEII Health Sciences Center, Dalhousie University, Halifax, Nova Scotia, Canada; [5]Service d'Hématologie et Thérapie Cellulaire, Hôpital Bretonneau, Centre Hospitalier Régional Universitaire (CHRU), Tours, France; [6]St James's Institute of Oncology, Leeds Teaching Hospitals NHS Trust and University of Leeds, Leeds, UK; [7]Sheba Medical Center, Tel Hashomer, Ramat Gan, Israel; [8]Icon Cancer Care, South Brisbane, QLD, Australia; [9]Institute of Haematology, Royal Prince Alfred Hospital, Camperdown, NSW, Australia; [10]Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, South Korea; [11]Department of Hematology, National Hospital Organization Disaster Medical Center of Japan, Tachikawa, Japan; [12]Janssen Research & Development, LLC, Spring House, PA, USA; [13]Janssen Research & Development, Beerse, Belgium; [14]Clínica Universidad de Navarra-CIMA, IDISNA, Pamplona, Spain.

ClinicalTrials.gov Identifier: NCT02076009

Updated Efficacy



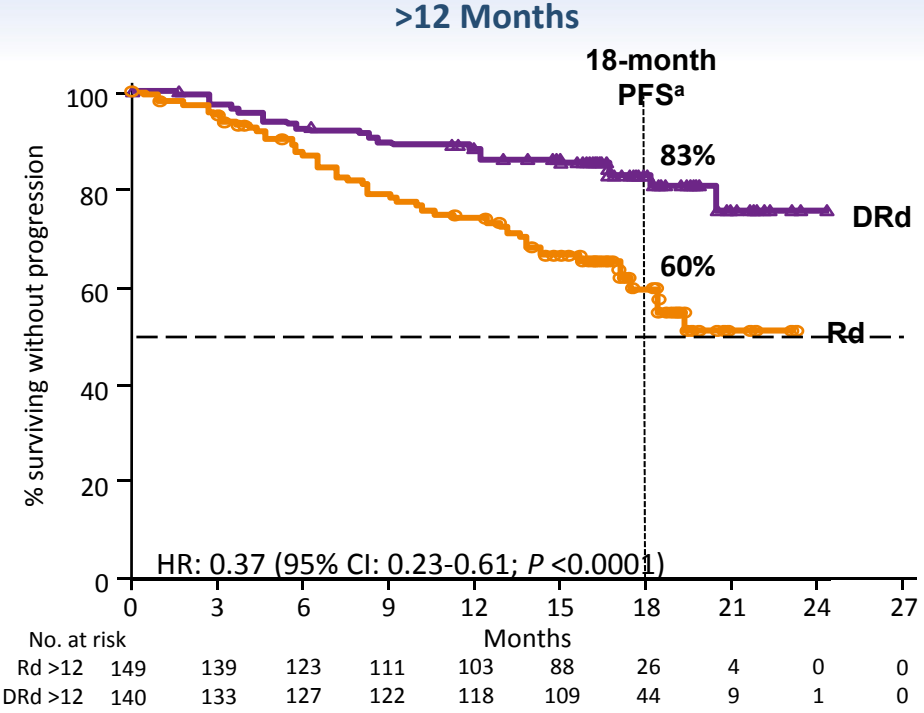


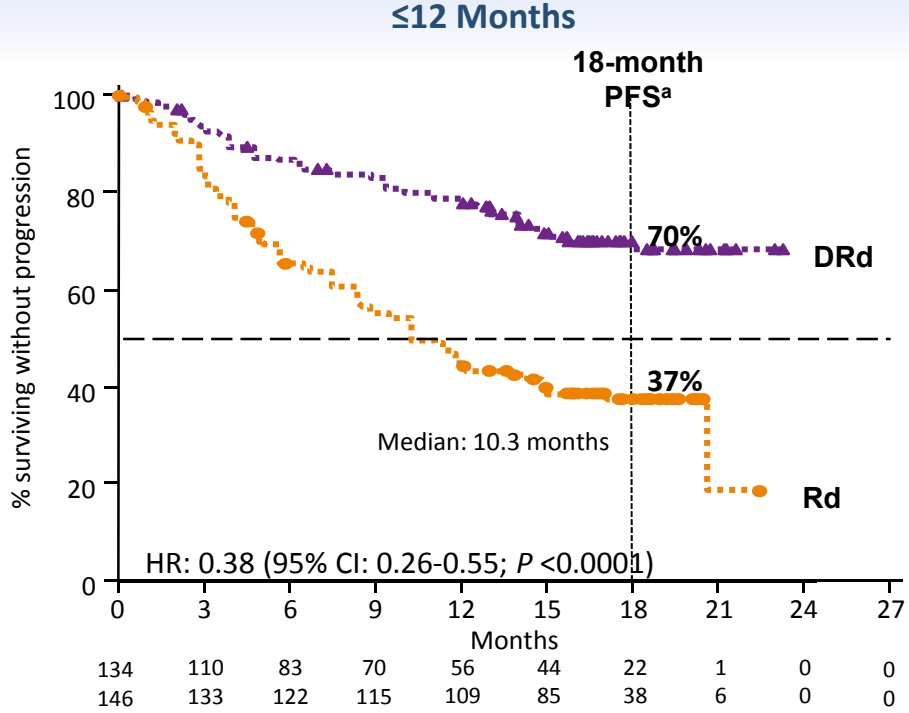
- **Median (range) follow-up: 17.3 (0-24.5) months**

Responses continue to deepen in the DRd group with longer follow-up

HR, hazard ratio; CI, confidence interval; sCR, stringent complete response; PR, partial response.
Note: PFS = ITT population; ORR = response-evaluable population.
[a]Kaplan-Meier estimate;
[b]*P* <0.0001 for DRd vs Rd.

Time From Last Line of Therapy to Study Treatment of > or ≤12 Months

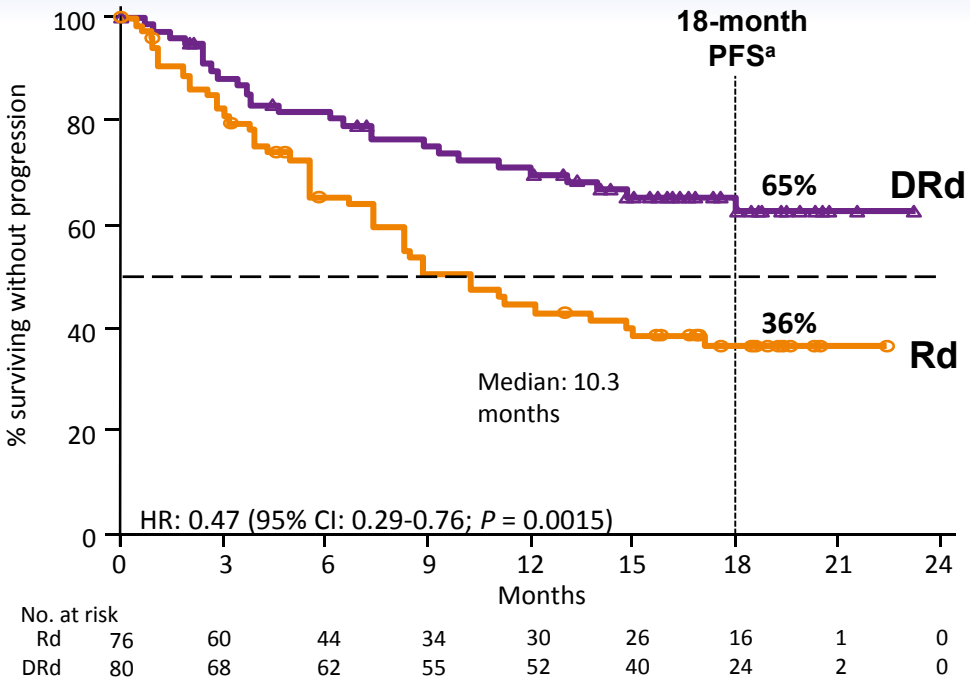


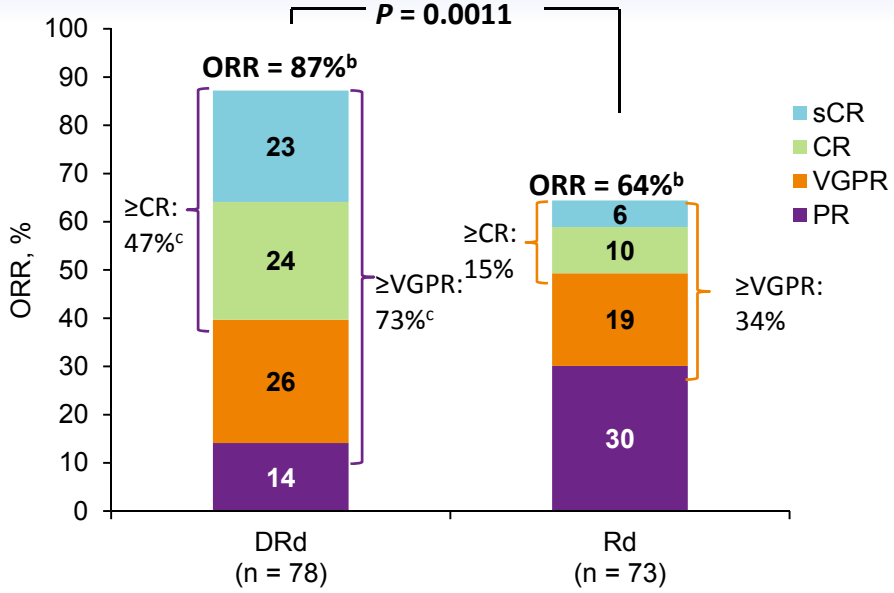


DRd is superior to Rd regardless of time since last therapy

[a]Kaplan-Meier estimate.
[b]Response-evaluable population.

Refractory to Last Line of Therapy



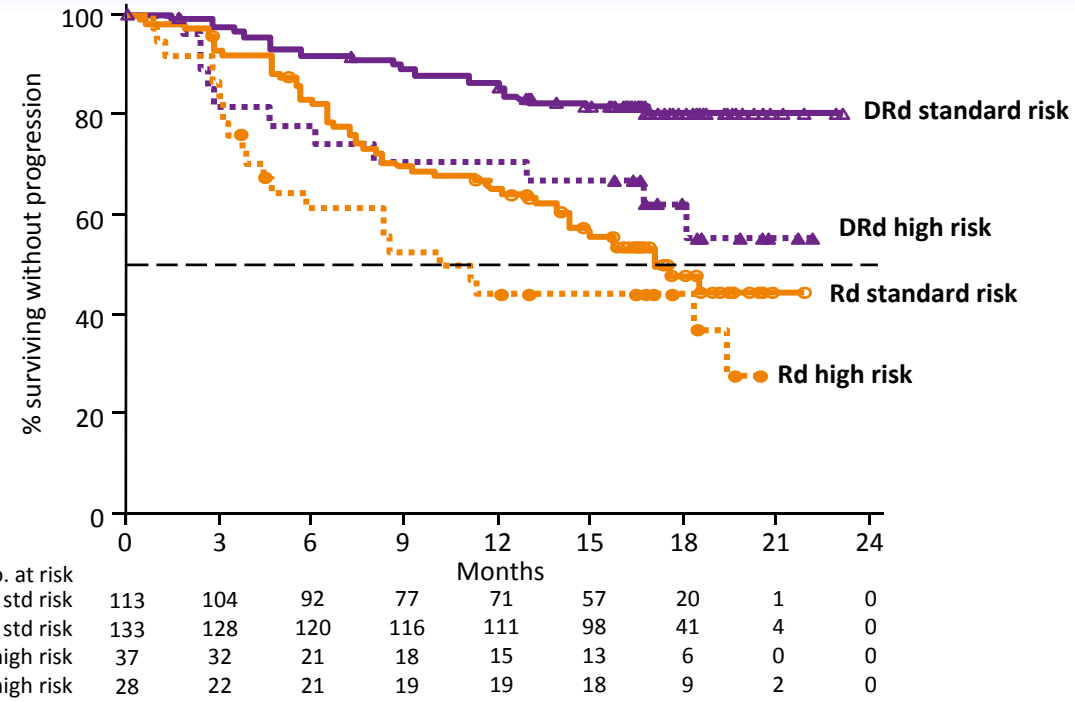


DRd benefits patients refractory to last line of therapy

[a]Kaplan-Meier estimate.
[b]Response-evaluable population.
[c]*P* <0.0001 for DRd vs Rd.

PFS: Cytogenetic Risk in All Evaluable Patients[a]

- **Comparable results in 1 to 3 prior lines population**



No. at risk									
Rd std risk	113	104	92	77	71	57	20	1	0
DRd std risk	133	128	120	116	111	98	41	4	0
Rd high risk	37	32	21	18	15	13	6	0	0
DRd high risk	28	22	21	19	19	18	9	2	0

High risk	**DRd** n = 28	**Rd** n = 37
Median PFS, mo	**NR**	**10.2**
HR (95% CI)	0.44 (0.19-1.03)	
P value	0.0475	
	n = 27	n = 36
ORR, %	**85**	**67**
P value	NS	

Standard risk	**DRd** n = 133	**Rd** n = 113
Median PFS, mo	**NR**	**17.1**
HR (95% CI)	0.30 (0.18-0.49)	
P value	<0.0001	
	n = 132	n = 111
ORR, %	**95**	**82**
P value	0.0020	

DRd improves outcomes regardless of cytogenetic risk

NR, not reached; NS, not significant.
[a]ITT/Biomarker risk–evaluable analysis set. High-risk patients had any of t(4;14), t(14;16), or del17p. Standard-risk patients had an absence of high-risk abnormalities.

Conclusions

- DRd significantly improved outcomes for patients with myeloma
  - 63% reduction in risk of progression or death for DRd versus Rd
  - Similar findings observed across all analyses in the 1 to 3 prior lines population
- More patients achieve deeper responses including MRD negativity with DRd
- DRd is superior to Rd regardless of time since last therapy, refractoriness to last line of therapy, or cytogenetic risk
- Safety profile remains unchanged

These data support the use of DRd for patients who received ≥1 prior therapy regardless of risk status or refractoriness to prior treatment

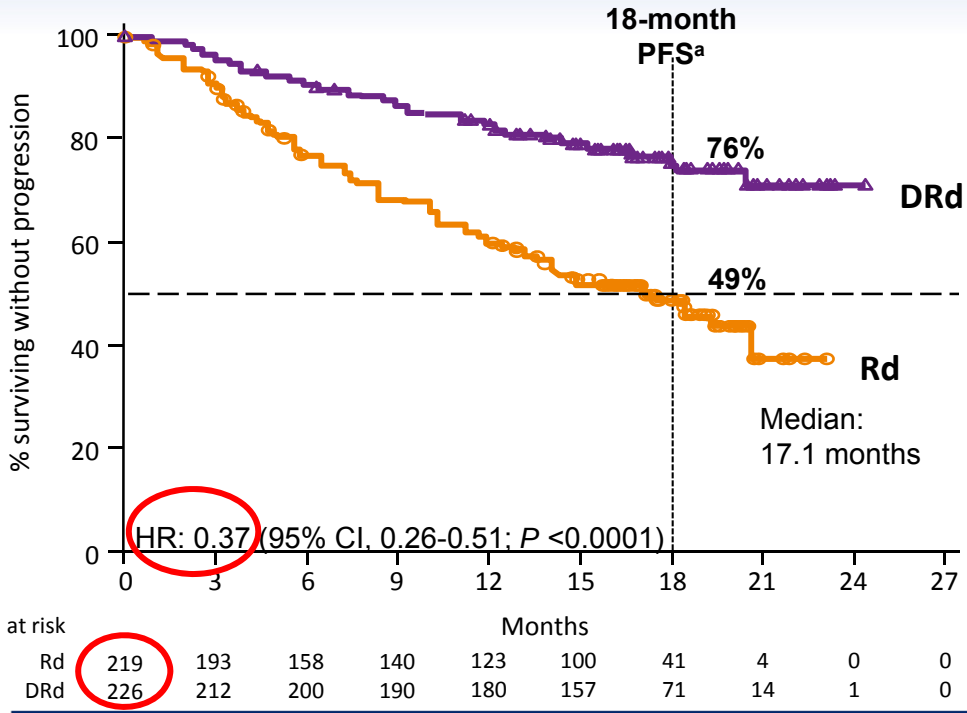
Efficacy of Daratumumab, Lenalidomide, and Dexamethasone Versus Lenalidomide and Dexamethasone Alone for Relapsed or Refractory Multiple Myeloma Among Patients With 1 to 3 Prior Lines of Therapy Based on Previous Treatment Exposure: Updated Analysis of POLLUX

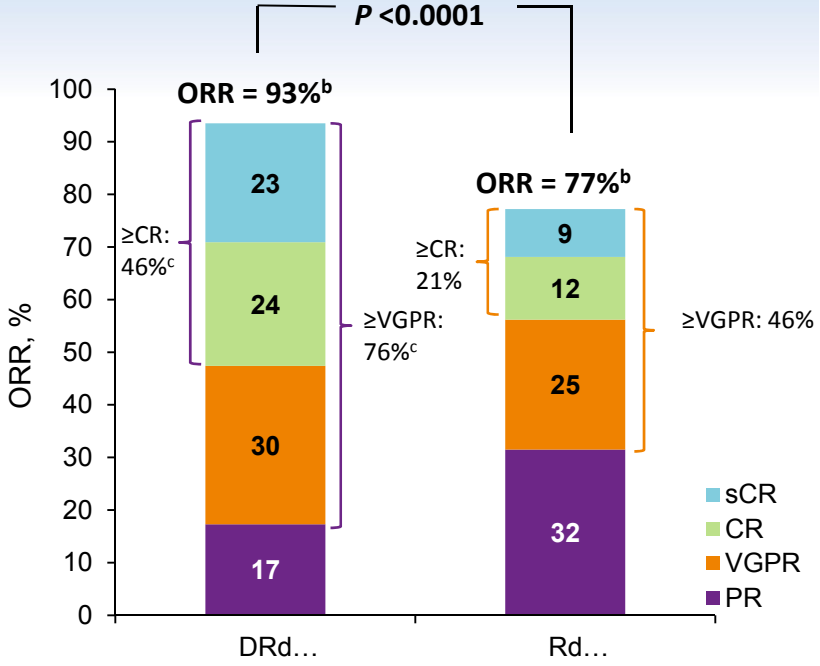
Philippe Moreau,[1] Jonathan L. Kaufman,[2] Heather Sutherland,[3] Marc Lalancette,[4] Hila Magen,[5] Shinsuke Iida,[6] Jin Seok Kim,[7] Miles Prince,[8] Tara Cochrane,[9] Nushmia Z. Khokhar,[10] Mary Guckert,[10] Xiang Qin,[10] Albert Oriol[11]

[1]Hematology, University Hospital Hôtel-Dieu, Nantes, France; [2]Hematology and Medical Oncology, Winship Cancer Institute, Emory University, Atlanta, GA, USA; [3]Cell Separator Unit and Leukemia/Bone Marrow Transplant Program, University of British Columbia, Vancouver, BC, Canada; [4]Hotel-Dieu de Québec, Québec City, Québec, Canada; [5]Institute of Hematology, Davidoff Cancer Center, Beilinson Hospital, Rabin Medical Center, Petah-Tikva and Sackler School of Medicine, Tel-Aviv University, Tel-Aviv, Israel, Petah Tikva, Israel; [6]Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan; [7]Division of Hematology, Department of Internal Medicine, Yonsei University College of Medicine, Severance Hospital, Seoul, South Korea; [8]University of Melbourne, Peter MacCallum Cancer Centre, Melbourne, Australia; [9]Gold Coast University Hospital, Southport, QLD, Australia; [10]Janssen Research & Development, LLC, Spring House, PA, USA; [11]Institut Català d'Oncologia, Institut Josep Carreras, Hospital Germans Trias I Pujol, Barcelona, Spain.

ClinicalTrials.gov Identifier: NCT02076009

Lenalidomide-naïve in 1 to 3 Prior Lines

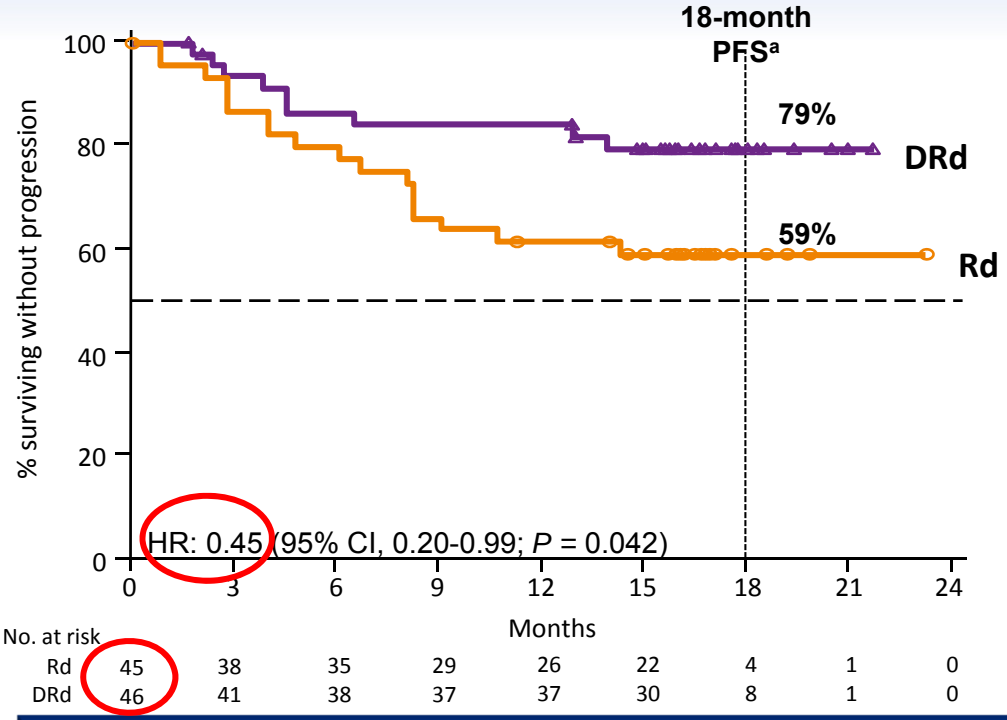


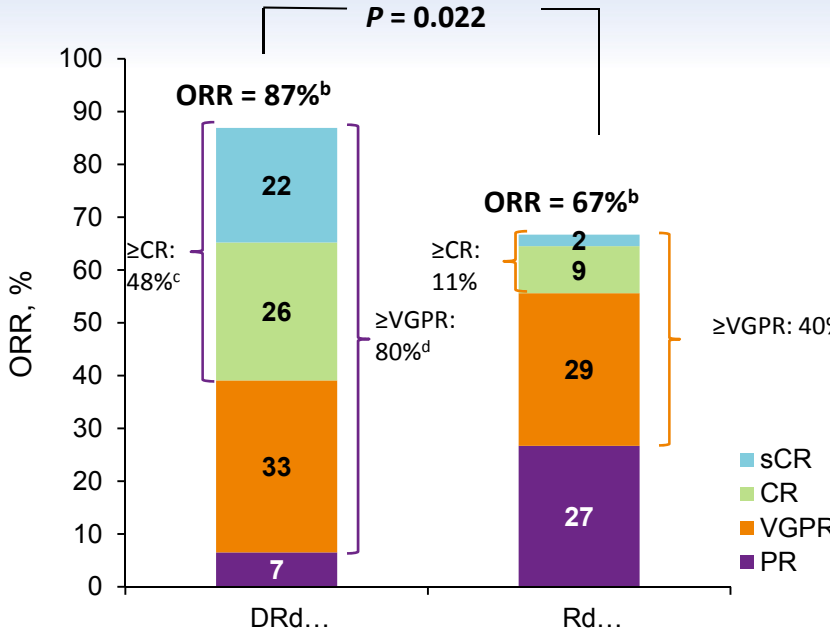


DRd maintains treatment benefit in lenalidomide-naïve patients

[a]Kaplan-Meier estimate.
[b]Response-evaluable population.
[c]*P* <0.0001 for DRd vs Rd.

Lenalidomide-exposed in 1 to 3 Prior Lines

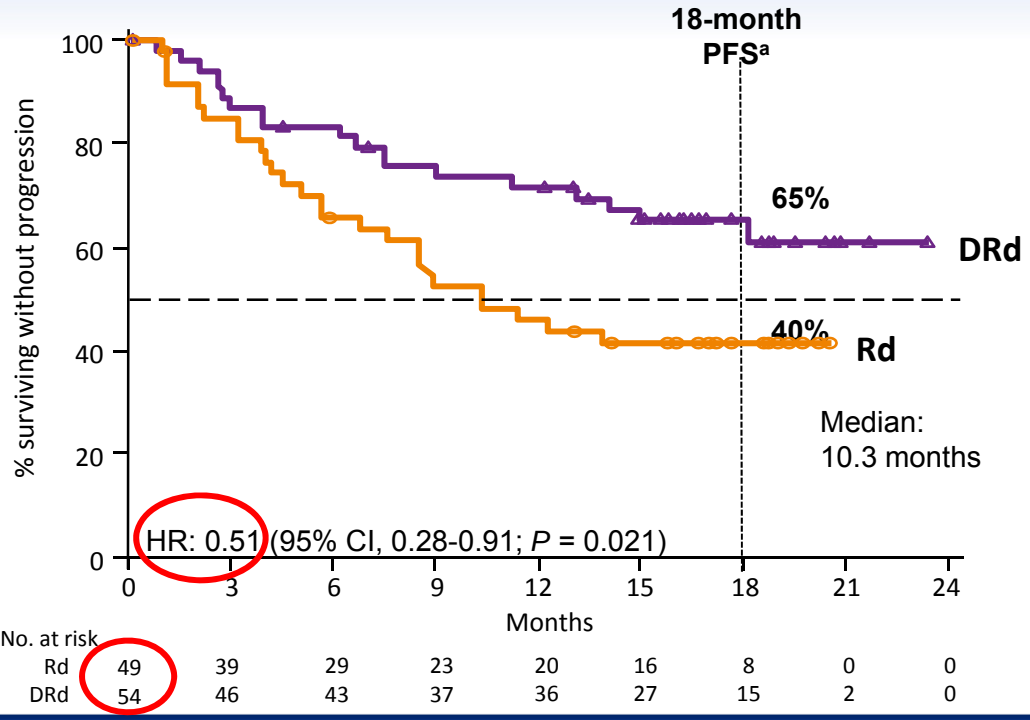


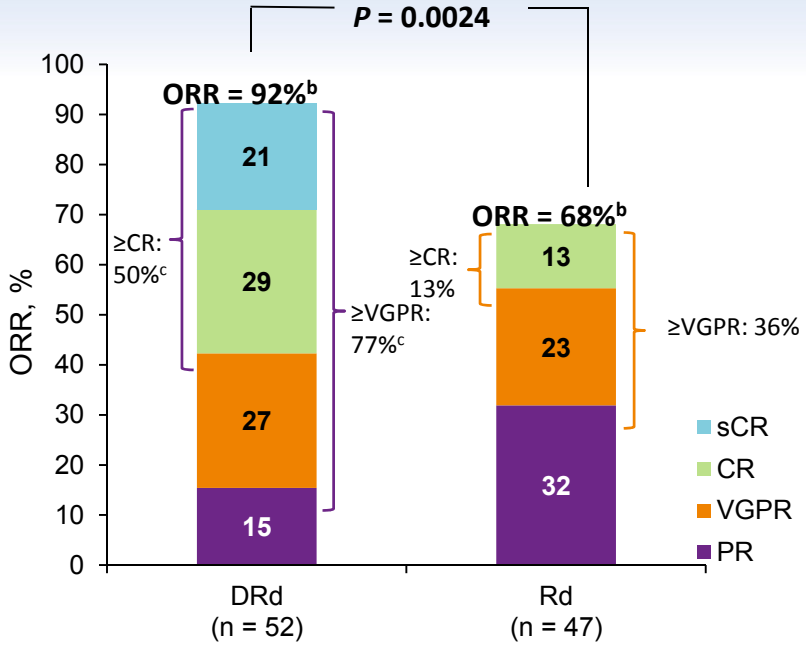


DRd improves outcomes regardless of prior treatment with lenalidomide

[a]Kaplan-Meier estimate.
[b]Response-evaluable population.
[c]*P* = 0.0001 for DRd vs Rd.
[d]*P* <0.0001 for DRd vs Rd.

Bortezomib-refractory in 1 to 3 Prior Lines





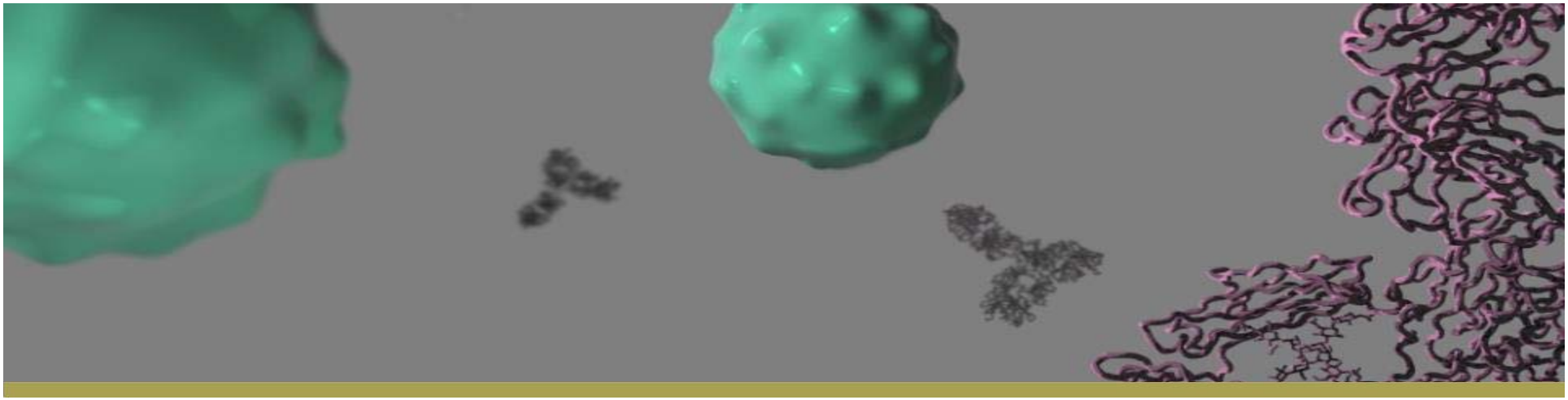
DRd significantly improves outcomes irrespective of bortezomib refractoriness

[a]Kaplan-Meier estimate.
[b]Response-evaluable population.
[c]*P* <0.0001 for DRd vs Rd.

Key Takeaways

- DRd significantly improves outcomes for patients with relapsed/refractory myeloma with 1 to 3 prior lines of treatment
- This treatment benefit of DRd versus Rd was maintained regardless of prior treatment with lenalidomide or refractoriness to bortezomib
- Higher MRD-negative rates (10^{-5}) in DRd versus Rd for all subgroups
- DRd is superior to Rd in both standard- and high-risk cytogenetic patients
- Safety profile remains unchanged

These data support use of DRd, irrespective of prior lenalidomide treatment or bortezomib refractoriness



Subcutaneous & Immunomodulatory Data

Daratumumab

Presented by Dr. Saad Usmani, M.D., FACP,
University of North Carolina at Chapel Hill, Levine Cancer Institute

Genmab

Open-label, Multicenter, Dose-escalation Phase 1b Study to Assess the Subcutaneous Delivery of Daratumumab in Patients (Pts) With Relapsed or Refractory Multiple Myeloma (PAVO)

Saad Z. Usmani,[1,*] Hareth Nahi,[2,*] Maria-Victoria Mateos,[3] Henk M. Lokhorst,[4] Ajai Chari,[5] Jonathan L. Kaufman,[6] Philippe Moreau,[7] Albert Oriol,[8] Torben Plesner,[9] Lotfi Benboubker,[10] Peter Hellemans,[11] Tara Masterson,[12] Pamela L. Clemens,[12] Tahamtan Ahmadi,[12] Kevin Liu,[13] Jesus San-Miguel[14]

[1]Levine Cancer Institute/Carolinas HealthCare System, Charlotte, NC, USA; [2]Karolinska Institute, Department of Medicine, Division of Hematology, Karolinska University Hospital at Huddinge, Stockholm, Sweden; [3]University Hospital of Salamanca/IBSAL, Salamanca, Spain; [4]Department of Hematology, VU University Medical Center, Amsterdam, The Netherlands; [5]Tisch Cancer Institute, Mount Sinai School of Medicine, New York, NY, USA; [6]Winship Cancer Institute, Emory University, Atlanta, GA, USA; [7]University Hospital of Nantes, Nantes, France; [8]Institut Català d'Oncologia, HGTiP, Barcelona, Spain; [9]Vejle Hospital and University of Southern Denmark, Vejle, Denmark; [10]CHU Tours Hopital Bretonneau, Tours, France; [11]Janssen Research & Development, Beerse, Belgium; [12]Janssen Research & Development, LLC, Spring House, PA, USA; [13]Janssen Research & Development, LLC, Raritan, NJ, USA; [14]Clínica Universidad de Navarra-CIMA, IDISNA, Pamplona, Spain.

*Joint first author.

ClinicalTrials.gov Identifier: NCT02519452

Background

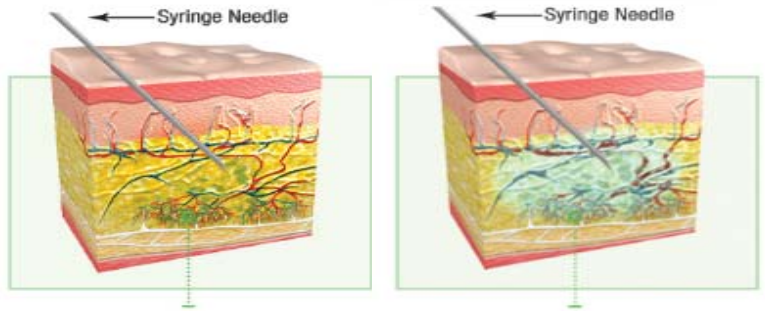
- DARA 16 mg/kg IV monotherapy is approved in the United States, Europe, Canada, Singapore, and Mexico
  - DARA IV in combination with standard of care regimens is approved in the United States
- Intravenous (IV) DARA achieves rapid, deep, and durable responses with significant clinical benefit as monotherapy and when combined with established standard of care[1-3]
- The median duration of first, second, and subsequent IV infusions was 7.0, 4.2, and 3.4 hours, respectively[4]
- DARA IV–associated infusion-related reactions (IRRs) are manageable, and the majority (92%-96%) occur during the first infusion[1-3]

1. Usmani SZ, et al. *Blood*. 2016;128(1):37-44.
2. Dimopoulos M, et al. *N Engl J Med*. 2016;375(14):1319-1331.
3. Palumbo A, et al. *N Engl J Med*. 2016;375(8):754-766.
4. Lonial S, et al. *Lancet*. 2016;387:1551-60.

Recombinant Human Hyaluronidase

- ENHANZE™ platform of recombinant human hyaluronidase (rHuPH20) temporarily breaks down the hyaluronan barrier, allowing rapid absorption of injected drugs[1]
- Herceptin SC® and MabThera SC® are approved in Europe as co-formulate products with rHuPH20[2,3]
  - Dosing time is 5 to 8 minutes with SC versus 0.5 to 6 hours with IV[4-6]

Schematic of rHuPH20[1]



Aim: To determine the safety, pharmacokinetics, and efficacy of DARA as SC administration

1. Halozyme Therapeutics. Mechanism of action for Hylenex recombinant (hyaluronidase human injection). www.hylenex.com/mechanism-of-action. Accessed 11/8/2016.
2. European Medicines Agency. Herceptin: EPAR – product information. 2016
3. European Medicines Agency. MabThera: EPAR – product information. 2016.
4. Ismael G, et al. *Lancet Oncology*. 2012;13(9):869-878.
5. Shpilberg O, et al. *Br J Cancer*. 2013;109(6):1556-1561.
6. De Cock E, et al. *Plos One*. 2016;11(6):e0157957.

PAVO: Study Design

Phase 1b, open-label, multicenter, dose-finding, proof of concept study

Key eligibility criteria
- RRMM with measurable disease
- ≥2 prior lines of treatment
- Not received anti-CD38 therapy

Group 1 (n = 8)
DARA: 1,200 mg
rHuPH20: 30,000 U

→

Group 2[a] (n = 45)
DARA: 1,800 mg
rHuPH20: 45,000 U

Primary endpoints
- C_{trough} of DARA at Cycle 3/Day 1
- Safety

Secondary endpoints
- ORR
- CR
- Duration of response
- Time to response

Dosing schedule
- Approved schedule for IV
  - 1 Cycle = 28 days

Infusion time
- 1,200 mg: 20-min infusion (60 mL)
- 1,800 mg: 30-min infusion (90 mL)

Pre-[b]/post-infusion medication
- Acetaminophen, diphenhydramine, montelukast, and methylprednisolone

RRMM, relapsed or refractory multiple myeloma; QW, weekly; Q2W, every 2 weeks; Q4W, every 4 weeks; C_{trough}, trough concentration; ORR, overall response rate; CR, complete response; PK, pharmacokinetic.

[a]Group 2 comprises 4 distinct cohorts, each treated with DARA 1,800 mg and rHuPH20 45,000 U. C_{trough} on Cycle 3/Day 1 in Group 1 supported dose selection for Group 2. The study evaluation team reviewed safety after Cycle 1 and PK after Cycle 3/Day 1 for each group.

[b]Administered 1 hour prior to infusion.

Patient Disposition

- Clinical cut-off date: November 15, 2016
- Median (range) follow-up
  - 1,200 mg: 6.4 (1.6-12.0) months
  - 1,800 mg: 4.3 (0.8-8.6) months
- Median (range) duration of treatment
  - 1,200 mg: 2.6 (0.7-12.0) months
  - 1,800 mg: 3.4 (0.7-8.6) months

	1,200 mg n = 8	1,800 mg n = 45
Patients treated, n	**8**	**45**
Patients who discontinued treatment, % (n)	**88** (7)	**33** (15)
Reason for discontinuation		
Progressive disease	**63** (5)	**27** (12)
Withdrawal by patient	**13** (1)	**0** (0)
Physician decision	**0** (0)	**4** (2)
Death	**13** (1)	**2** (1)

Summary of Safety Events

TEAE	1,200 mg n = 8	1,800 mg n = 45
Drug-related TEAE, % (n)	**63** (5)	**62** (28)
Serious drug-related TEAE, % (n)	**13** (1)	**7** (3)
Grade ≥3 TEAE, % (n)	**63** (5)	**40** (18)
All-grade hematologic TEAEs >25%, % (n)		
Anemia	**25** (2)	**31** (14)
Thrombocytopenia	**38** (3)	**18** (8)
All-grade nonhematologic TEAEs >25%, % (n)		
Upper respiratory tract infection	**38** (3)	**9** (4)
Insomnia	**38** (3)	**9** (4)
Decreased appetite	**38** (3)	**7** (3)

- No treatment discontinuations due to TEAEs were observed in the 1,800-mg group

AE profile of DARA-PH20 was consistent with IV DARA

TEAE, treatment-emergent adverse event; AE, adverse event; DARA-PH20, daratumumab in combination with recombinant human hyaluronidase.

IRRs

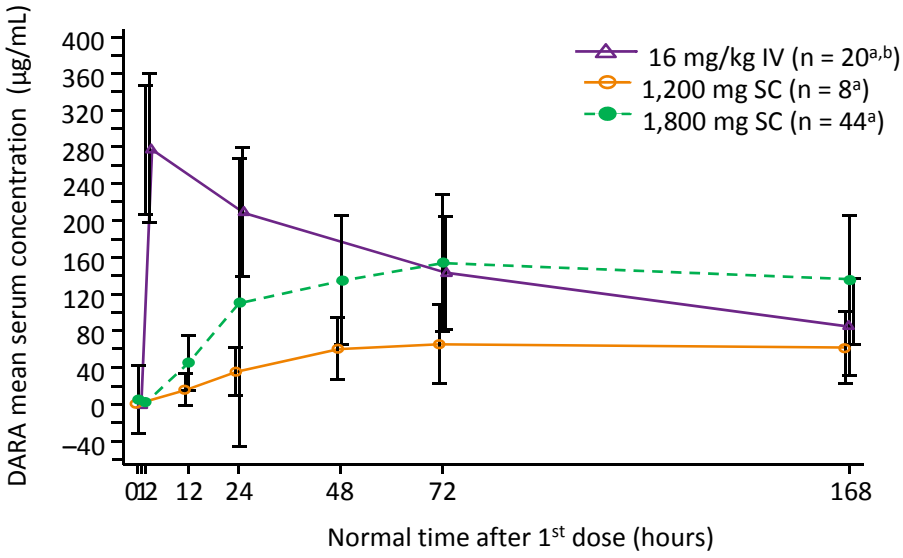
	1,200 mg n = 8	1,800 mg n = 45
IRR, % (n)	**13** (1)	**24** (11)
Chills	**13** (1)	**9** (4)
Pyrexia	**0** (0)	**9** (4)
Pruritus	**0** (0)	**4** (2)
Dyspnea	**13** (1)	**0** (0)
Flushing	**0** (0)	**2** (1)
Hypertension	**0** (0)	**2** (1)
Hypotension	**0** (0)	**2** (1)
Nausea	**0** (0)	**2** (1)
Non-cardiac chest pain	**13** (1)	**0** (0)
Oropharyngeal pain	**0** (0)	**2** (1)
Paresthesia	**0** (0)	**2** (1)
Rash	**0** (0)	**2** (1)
Sinus headache	**0** (0)	**2** (1)
Tongue edema	**0** (0)	**2** (1)
Vomiting	**0** (0)	**2** (1)
Wheezing	**0** (0)	**2** (1)

- All IRRs in the 1,800-mg group were grade 1 or 2
- One grade 3 IRR of dyspnea in the 1,200-mg group
- No grade 4 IRRs were observed
- All IRRs occurred during or within 4 hours of the first infusion
- No IRRs occurred during subsequent infusions in either group
- Abdominal wall SC injections were well tolerated

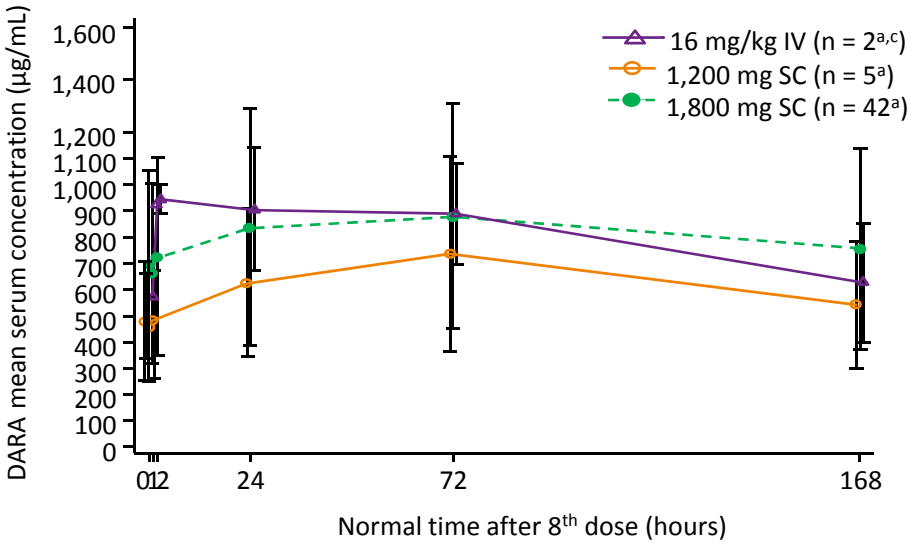
Low IRR incidence and severity with DARA SC

Dose Mean (SD) Profiles

1st dose mean



8th dose mean

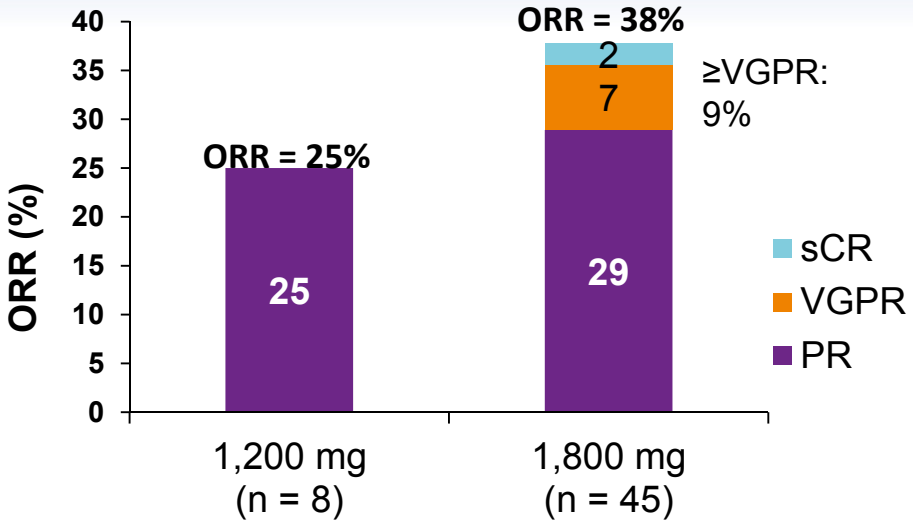


PK for 1,800 mg SC dose is consistent with the 16 mg/kg IV dose, with comparable C_{trough} and variability

SD, standard deviation.
[a]Number of patients with full PK profile at pre-dose.
[b]From study GEN501 Part 2.
[c]From study GEN501 Part 1.

ORR

Response	1,200 mg n = 8	1,800 mg n = 45
ORR, % (n)	**25** (2)	**38** (17)
sCR	**0** (0)	**2** (1)
CR	**0** (0)	**0** (0)
VGPR	**0** (0)	**7** (3)
PR	**25** (2)	**29** (13)
MR	**13** (1)	**11** (5)
SD	**50** (4)	**38** (17)
PD	**13** (1)	**13** (6)



- Responses to DARA-PH20 were observed across both groups

Deeper responses were observed in the 1,800-mg group

Response-evaluable set.
sCR, stringent complete response; VGPR, very good partial response; PR, partial response; MR, minimal response; SD, stable disease; PD, progressive disease.

Conclusions

- DARA can be combined safely with rHuPH20
- SC DARA was well tolerated with low IRR rates
  - SC injections were well tolerated
- PK profile of the 1,800-mg dose was consistent with DARA 16 mg/kg IV
- Efficacy was consistent with IV DARA in a similar patient population
  - 38% ORR, including deep responses (1 sCR)

Tolerability, safety, and PK data support continued development of SC DARA in different settings

Poster: CyTOF® Evaluation of Relapsed/Refractory MM Pts Treated With Daratumumab Supports Immune Modulation as a Novel Mechanism of Action with authors

Homer Adams III,[1],* Frederik Stevenaert,[2] Jakub Krejcik,[3],[4] Koen Van der Borght,[2] Tineke Casneuf,[2] Tina Smets,[2] Jaime Bald,[1] Yann Abraham,[2] Hugo Ceulemans,[2] Greet Vanhoof,[2] Tahamtan Ahmadi,[1] Saad Z. Usmani,[5] Torben Plesner,[4] Sagar Lonial,[6] Berris van Kessel-Welmers,[3] Henk M. Lokhorst,[3] Tuna Mutis,[3] Niels W.C.J. van de Donk,[3] A. Kate Sasser[1]

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[4]Vejle Hospital and University of Southern Denmark, Vejle, Denmark; [5]Levine Cancer Institute/Carolinas Healthcare System, Charlotte, NC, USA; [6]Winship Cancer Institute, Emory University, Atlanta, GA, USA.

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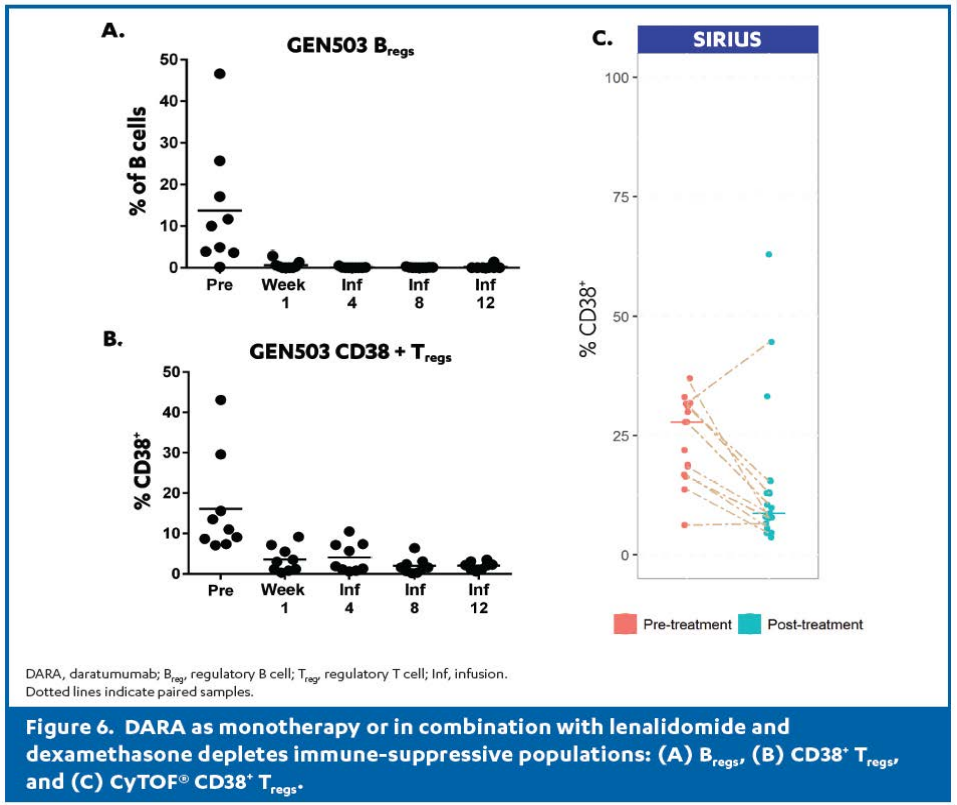

DARA, daratumumab; B_{reg}, regulatory B cell; T_{reg}, regulatory T cell; Inf, infusion.
Dotted lines indicate paired samples.

Figure 6. DARA as monotherapy or in combination with lenalidomide and dexamethasone depletes immune-suppressive populations: (A) B_{regs}, (B) $CD38^+$ T_{regs}, and (C) CyTOF® $CD38^+$ T_{regs}.

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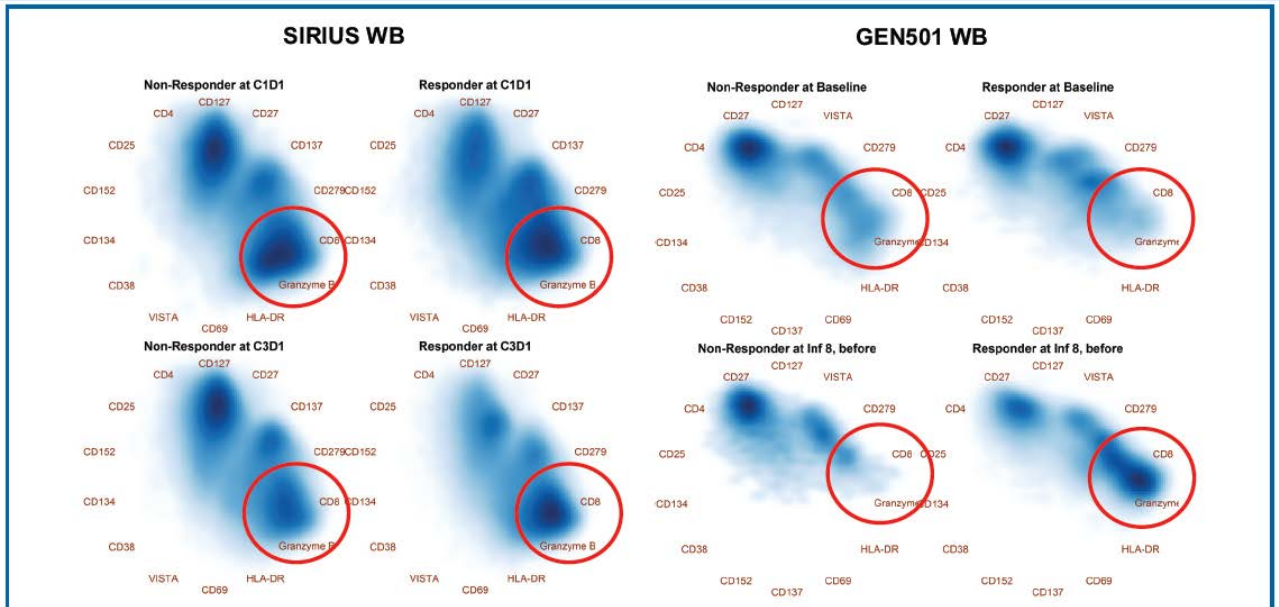

WB, whole blood; C, Cycle; D, day; Inf, infusion.
SIRIUS WB patients (17 nonresponders; 15 responders) and GEN501 WB patients (2 nonresponders; 2 responders).

Figure 7. T-cell population shifts to CD8 prevalence with granzyme B positivity in responders' WB from both monotherapy studies.

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Poster: CyTOF® Evaluation of Relapsed/Refractory MM Pts Treated With Daratumumab Supports Immune Modulation as a Novel Mechanism of Action

CONCLUSIONS

- CyTOF® analysis of patient samples from studies of DARA alone or in combination with a standard of care regimen confirm previous flow cytometry findings and corroborate DARA's immune-modulatory MOA
- T-cell changes in WB and BM towards a cytolytic, granzyme B^+ phenotype support adaptive response in patients and may contribute to depth of response
- Although these results are from a limited data set, they support exploration and use of these methodologies in future phase 3 studies of DARA in combination with other antimyeloma agents

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Poster: Daratumumab in Combination With Lenalidomide Plus Dexamethasone Induces Clonality Increase and T-cell Expansion: Results From a Phase 3 Randomized Study (POLLUX)

Christopher Chiu,[1],* Tineke Casneuf,[2] Amy Axel,[1] Andrew Lysaght,[3] Jaime Bald,[1] Nushmia Z. Khokhar,[4] Torben Plesner,[5] Saad Z. Usmani,[6] Hartmut Goldschmidt,[7] Tahamtan Ahmadi,[4] Kenneth Chan,[8] A. Kate Sasser[1]

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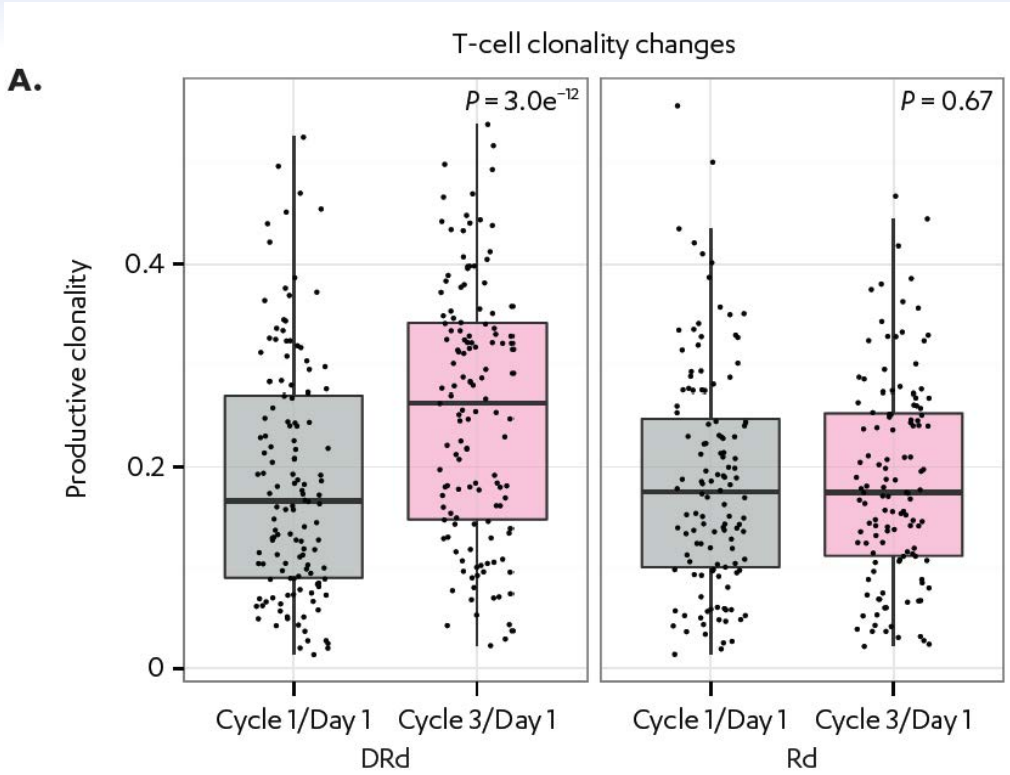

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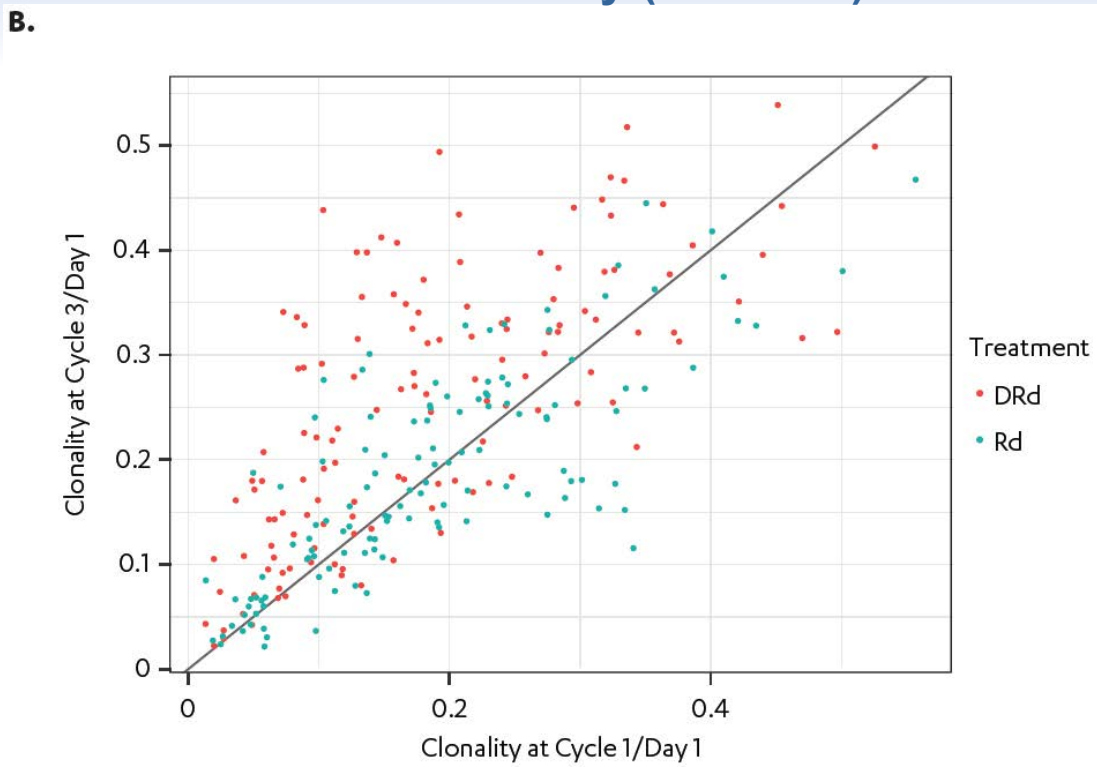

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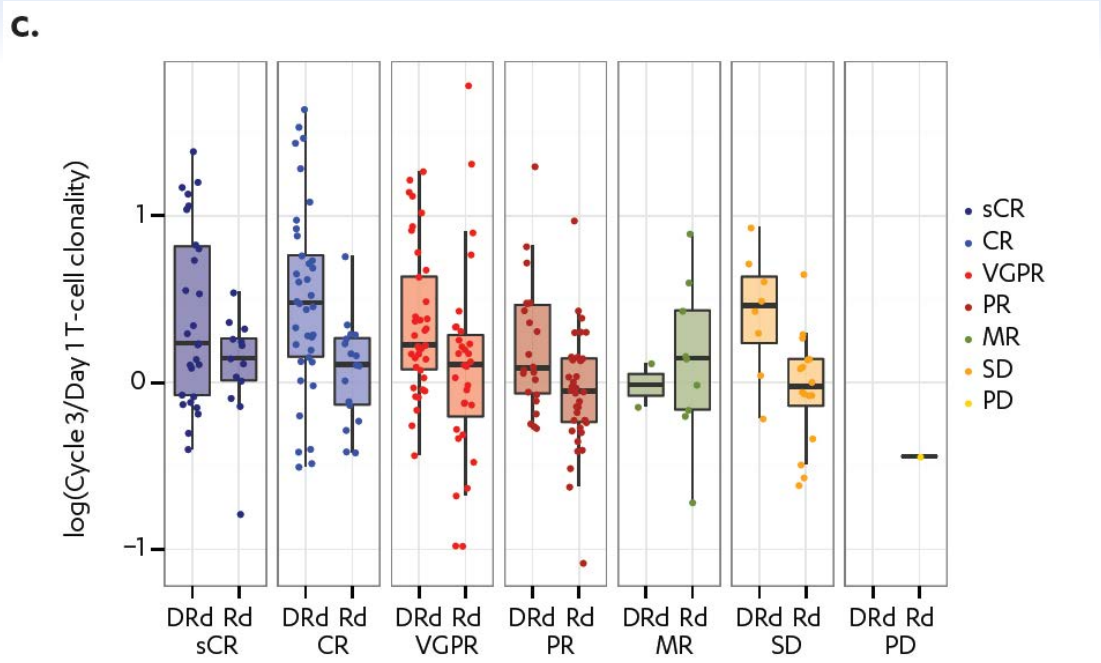

DRd, daratumumab/lenalidomide/dexamethasone; Rd, lenalidomide/dexamethasone; sCR, stringent complete response; CR, complete response; VGPR, very good partial response; PR, partial response; MR, minimal response; SD, stable disease; PD, progressive disease.

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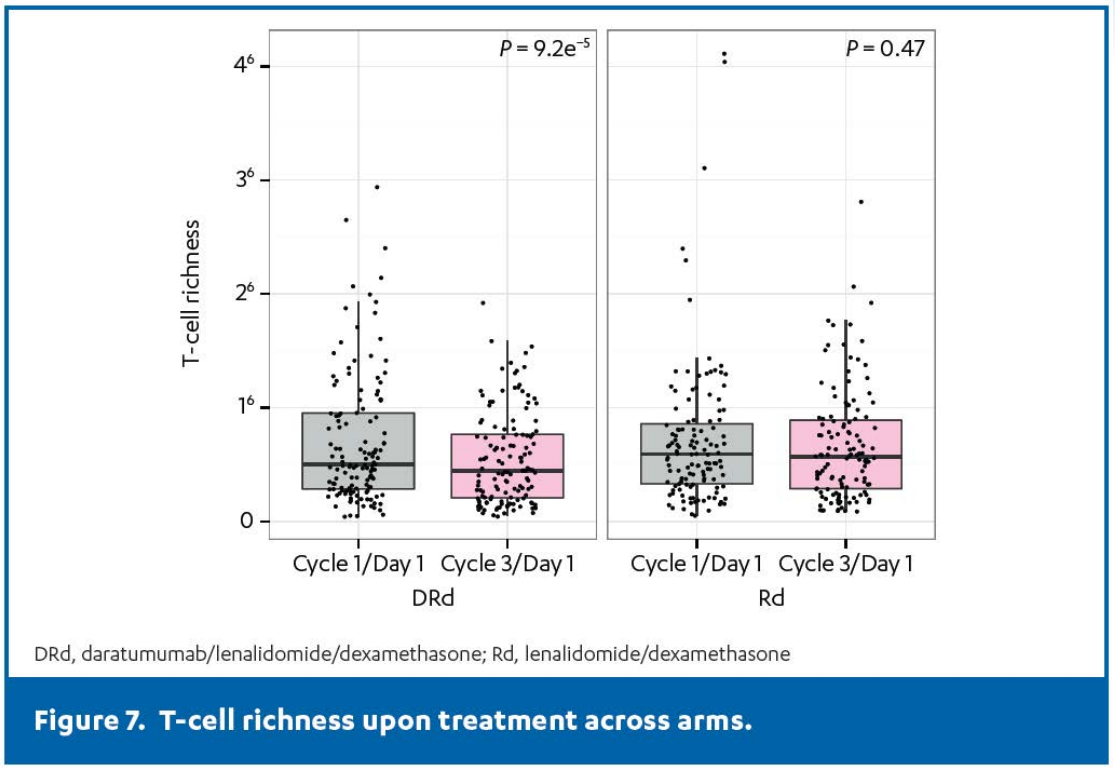

Figure 7. T-cell richness upon treatment across arms.

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CONCLUSIONS

- Findings from the phase 3 POLLUX study confirm the immunomodulatory role of DARA observed in the DARA monotherapy phase 1/2 studies
- No differences in baseline T-cell repertoire metrics, including T-cell fraction, T-cell clonality, or T-cell richness, were observed between treatment arms
- Robust increases in T-cell clonality and T-cell fraction, along with decreases in T-cell richness, were observed with DARA plus Rd treatment, but not with Rd treatment alone
- High TCR richness at baseline predicted improved PFS in the DARA-treated arm only, an observation that is similar to what has been reported for immune checkpoint inhibitors, including ipilimumab[16]
- The findings presented here provide additional evidence for the immunomodulatory activity of DARA and provide additional insights into DARA's effect on the TCR when administered in combination with Rd

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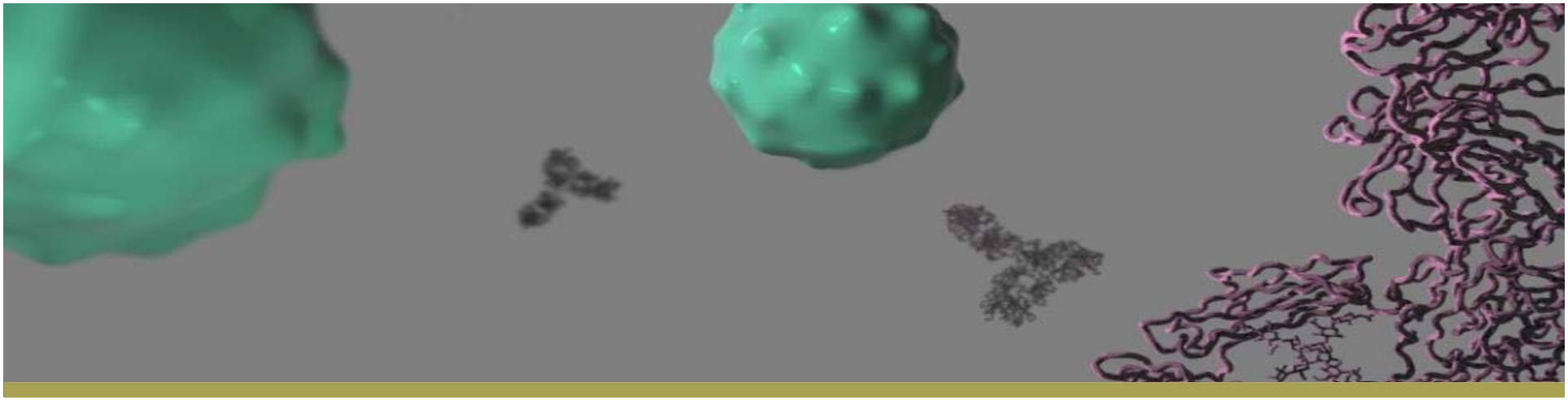

Daratumumab Q&A

Dr. Meletios-Athanasios Dimopoulos
Prof. Philippe Moreau
Dr. Saad Usmani

Genmab

Genmab 2017 & Beyond: Positioned for Success

Jan van de Winkel

President & CEO

Genmab

Our Vision


By 2025, our own product has transformed cancer treatment and we have a pipeline of knock-your-socks off antibodies

Creating Value for Patients and Shareholders

Building on 3 central pillars: Focus, Innovation & Execution

- 2 marketed products
- 2 early stage clinical programs
- 2 proprietary technologies
- Robust pre-clinical pipeline
- Unique Antibody & R&D expertise
- Strategic collaborations
- Building commercial expertise
- Solid financials
- Proven track record

Genmab 2017 & Beyond: Key 2017 Priorities

Jan van de Winkel
President & CEO

Genmab

2017 Goals: Maximizing Differentiated Product Portfolio Value

Priority	✓	Targeted Milestone
Maximize daratumumab progress		» EMA decision & launch in 2nd line+ in multiple myeloma (MM) relapsed / refractory setting » FDA decision in 3rd line MM setting (daratumumab + POM) » Phase III MM interim efficacy analysis in frontline (Alcyone trial) » Start Phase III subcutaneous trial » Start trials in solid tumors and non-MM blood cancers » Report non-MM clinical data
Optimize ofatumumab value		» Phase III refractory follicular lymphoma headline results » European Commission decision in relapsed CLL (ofatumumab + FC)
Strengthen differentiated product pipeline		» Phase I/II tisotumab vedotin data » Progress HuMax-AXL-ADC Phase I/II clinical trial » IND/CTA submission HexaBody-DR5/DR5 » IND/CTA submission DuoBody-CD3xCD20 » Progress pre-clinical pipeline
Strengthen partnership portfolio with next generation technologies		» Enter new technology collaborations » Progress partnered programs
Disciplined financial management		» Execute controlled company growth with selective investments in product pipeline

Q&A

Genmab

Directional Guidance 2017
Guidance Issued February 22, 2017

Daratumumab Drives Revenue

- Milestones achieved early (in 2016)
- Royalty income increasing rapidly

Expenses Driven by Pipeline investment

- 2 products in clinic – 2 INDs 2017
- Advancing pre-clinical candidates
- Similar growth as 2016 - ~$40M

Remain Profitable & Well Capitalized

Moving towards sustainable profitability and creating value from pipeline


Copenhagen · Princeton · Utrecht
Glædelig Jul
og Godt Nytår
Holiday Greetings
Prettige
Feestdagen
Genmab