

Update on Hematologic Malignancies

PRESENTED BY Michael R. Bishop, MD, FACP, FASCO

University of Chicago



Update of Hematologic Malignancies

Disclosures

Membership on a Advisory Board or Consultant: KITE/Gilead,

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Speakers Bureau: AstraZeneca, BMS, Kite/Gilead, Servier, Abbvie, Incyte, GenMab, ADC Therapeutics

Discussion of off-label drug use: N/A



Update of Hematologic Malignancies

Multiple Myeloma





Isatuximab Plus Lenalidomide and Dexamethasone with Weekly Bortezomib versus Isatuximab Plus Lenalidomide and Dexamethasone in Newly Diagnosed Transplant Ineligible Multiple Myeloma. The BENEFIT (IFM 2020-05) Study

Xavier Leleu¹ and Cyrille Hulin², Lambert Jerome³, Arthur Bobin¹, Aurore Perrot⁴, Lionel Karlin⁵, Roussel Murielle⁶, Lydia Montes⁷, Brieuc Cherel⁸, Thomas Chalopin⁹, Borhane Slama¹⁰, Marie-Lorraine Chretien¹¹, Kamel Laribi¹², Claire Dingremont¹³, Christophe Roul¹⁴, Clara Mariette¹⁵, Sophie Rigaudeau¹⁶, Claire Calmettes¹⁷, Mamoun Dib¹⁸, Mourad Tiab¹⁹, Laure Vincent²⁰, Jacques Delaunay²¹, Alberto Santagostino²², Margaret Macro²³, Emmanuelle Bourgeois²⁴, Frederique Orsini-Piocelle²⁵, Julie Gay²⁶, Benoit Bareau²⁷, Noemie Bigot³, François Vergez²⁸, Pierre Lebreton²⁹, Reza Tabrizi³⁰, Agathe Waultier-Rascalou³¹, Laurent Frenzel³², Ronan Le Calloch³³, Emilie Chalayer³⁴, Thorsten Braun³⁵, Florence Lachenal³⁶, Selim Corm³⁷, Celine Kennel³⁸, Rakiba Belkhir³⁹, Jean-Sebastien Bladé⁴⁰, Bertrand Joly⁴¹, Valentine Richez-Olivier⁴², Helene Demarquette⁴³, Daniela Robu-Cretu⁴⁴, Laurent Garderet ⁴⁵, Muriel Newinger-Porte⁴⁶, Amine Kasmi⁴⁷, Bruno Royer⁴⁸, Olivier Decaux⁴⁹, Bertrand Arnulf⁴⁸, Karim Belhadj⁵⁰, Cyrille Touzeau⁵¹, Mohamad Mohty⁵², Salomon Manier⁵³, Philippe Moreau⁵¹, Hervé Avet-Loiseau²⁸, Jill Corre²⁸, **Thierry Facon⁵³**

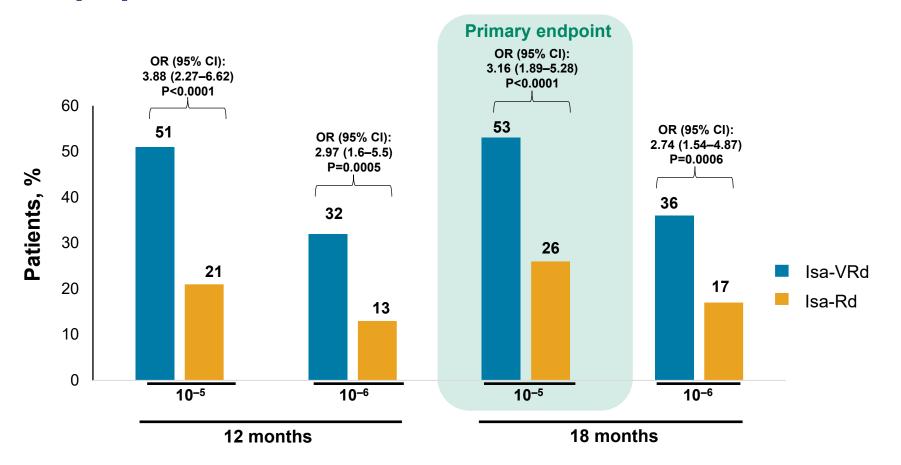








BENEFIT (IFM 2020-05) Study Primary Endpoint: MRD(–)* Rate at 18 months – ITT population



Isa-VRd resulted in deep response rates, with a significant improvement in the MRD at 12 and 18 months, and at 10⁻⁵ and 10⁻⁶ in the ITT population

MRD was assessed on the basis of IMWG recommendations.¹

CI, confidence interval; Isa, isatuximab; ITT, intent-to-treat; MRD-, minimal residual disease negativity; NGS, next generation sequencing; OR, odd ratio; R, lenalidomide; V, bortezomib

1. Kumar S, et al. Lancet Oncol 2016;17:e328-e346.



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Phase 3 Study Results of Isatuximab, Bortezomib, Lenalidomide, and Dexamethasone (Isa-VRd) versus VRd for Transplant-Ineligible Patients with Newly Diagnosed Multiple Myeloma (IMROZ)

<u>Thierry Facon</u>,¹ Meletios-Athanasios Dimopoulos,² Xavier Leleu,³ Meral Beksac,^{4,5} Ludek Pour,⁶ Roman Hajek,⁷ Zhuogang Liu,⁸ Jiri Minarik,⁹ Philippe Moreau,¹⁰ Joanna Romejko-Jarosinska,¹¹ Ivan Spicka,¹² Vladimir Vorobyev,¹³ Michele Cavo,¹⁴ Hartmut Goldschmidt,¹⁵ Thomas Martin,¹⁶ Salomon Manier,¹⁷ Marie-France Brégeault,¹⁸ Sandrine Macé,¹⁸ Christelle Berthou,¹⁸ Robert Z. Orlowski¹⁹

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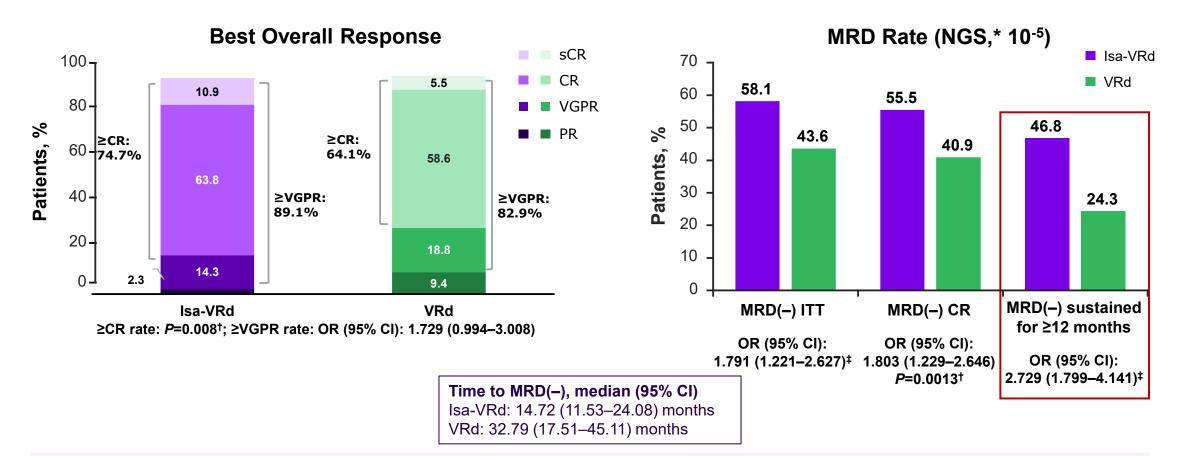
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Clinical Response



Isa-VRd resulted in deep response rates, with a significant improvement in the MRD(–) CR rate, as well as higher rates of MRD(–) and sustained MRD(–) for ≥12 months at any point in the ITT population

*Adaptive Biotechnologies clonoSEQ[®]. †Stratified Cochran-Mantel-Haenszel test. One-sided significance level is 0.025. ‡P value not reported; not a key secondary endpoint. MRD–, minimal residual disease negativity.

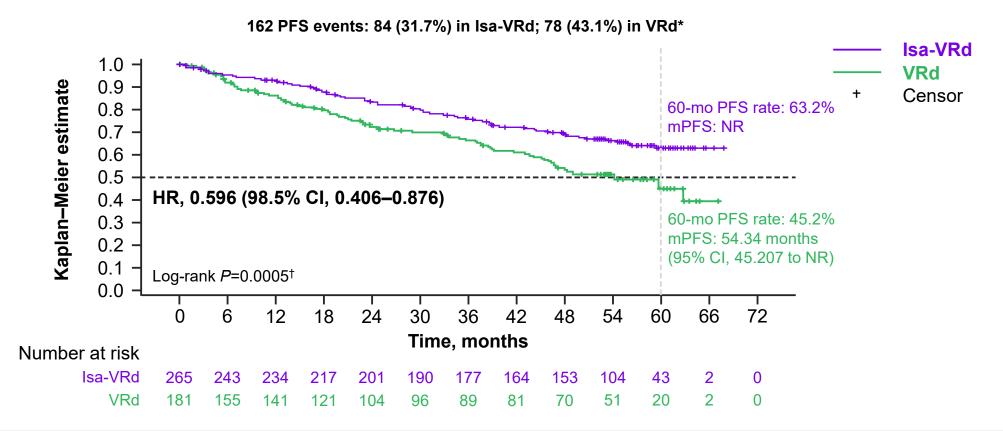






Abstract #7501

Primary endpoint met: Interim PFS analysis - IRC assessment in ITT population



At a median follow-up of 5 years (59.7 months), Isa-VRd led to a statistically significant reduction in the risk of progression or death by 40.4%

*Cutoff date for PFS analysis: September 26, 2023 (median follow-up, ~5 years). [†]Nominal one-sided *P* value. NR, not reached.







Abstract #7501



Daratumumab (DARA) + Bortezomib/Lenalidomide/ Dexamethasone (VRd) with DARA-R (D-R) Maintenance in Transplant-Eligible Patients with Newly Diagnosed Multiple Myeloma (NDMM): Analysis of Minimal Residual Disease (MRD) in the PERSEUS Trial*

*ClinicalTrials.gov Identifier: NCT03710603; sponsored by EMN in collaboration with Janssen Research & Development, LLC.

Paula Rodriguez-Otero¹, Philippe Moreau², Meletios A Dimopoulos³, Meral Beksac⁴, Aurore Perrot⁵, Annemiek Broijl⁶, Francesca Gay⁷, Roberto Mina⁷, Niels WCJ van de Donk⁸, Fredrik Schjesvold⁹, Michel Delforge¹⁰, Hermann Einsele¹¹, Andrew Spencer¹², Sarah Lonergan⁶, Diego Vieyra¹³, Anna Sitthi-Amorn¹³, Robin Carson¹³, Joan Bladé¹⁴, Mario Boccadoro¹⁵, Pieter Sonneveld⁶

¹Department of Hematology, Cancer Center Clínica Universidad de Navarra, Pamplona, Navarra, Spain; ²Hematology Department, University Hospital Hôtel-Dieu, Nantes, France; ³National and Kapodistrian University of Athens, Athens, Greece; ⁴Ankara University, Ankara, Turkey; ⁵CHU de Toulouse, IUCT-O, Université de Toulouse, UPS, Service d'Hématologie, Toulouse, France; ⁶Department of Hematology, Erasmus MC Cancer Institute, Rotterdam, The Netherlands; ⁷Division of Hematology 1, AOU Città della Salute e della Scienza di Torino, and Department of Molecular Biotechnology and Health Sciences, University of Torino, Torino, Italy; ⁸Department of Hematology, Amsterdam University Medical Center, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands; ⁹Oslo Myeloma Center, Department of Hematology, and KG Jebsen Center for B-cell Malignancies, University of Oslo, Oslo, Norway; ¹⁰University of Leuven, Leuven, Belgium; ¹¹Department of Internal Medicine II, University Hospital Würzburg, Würzburg, Germany; ¹²Malignant Haematology and Stem Cell Transplantation Service, Alfred Health-Monash University, Melbourne, Australia; ¹³Janssen Research & Development, LLC, Spring House, PA, USA; ¹⁴Hospital Clínic de Barcelona, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), University of Barcelona, Barcelona, Spain; and GEM/PETHEMA; ¹⁵Myeloma Unit, Division of Hematology, University of Torino, Azienda Ospedaliero-Universitaria Città della Salute e della Scienza di Torino, Torino, Italy

Presented by P Rodriguez-Otero at the American Society of Clinical Oncology (ASCO) Annual Meeting; May 31-June 4, 2024; Chicago, IL, USA

https://www.congresshub.com/Oncology/ AM2024/Daratumumab/Rodriguez-Otero

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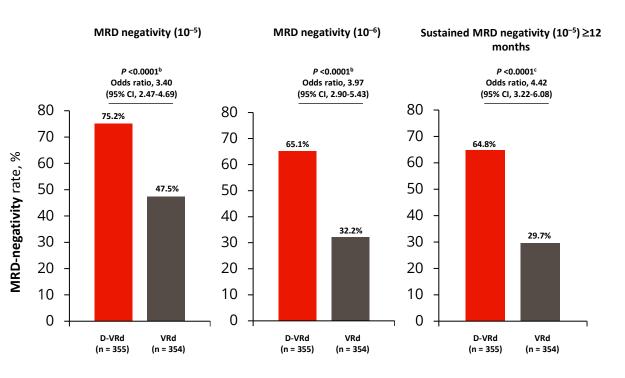


PERSEUS Primary Analysis: D-VRd Followed by D-R Maintenance Significantly Improved PFS and Depth of Response Versus VRd Followed by R Maintenance¹

Median time to reach post-consolidation: 9.7 months 48-month PFS 100 84.3% surviving without progression D-VRd 80 67.7% VRd Median follow-up:47.5 months 60 40 20 HR, 0.42; 95% CI, 0.30-0.59; P < 0.0001 % 0 39 0 3 6 9 12 15 18 21 24 27 30 33 36 42 45 48 51 54 Months No. at risk VRd 354 335 321 311 304 297 291 283 278 270 258 247 238 228 219 D-VRd 355 345 335 329 327 322 318 316 313 309 305 302 299 295 286 226 90 11

Progression-free Survival

Overall and sustained MRD-negativity rates^a



58% reduction in the risk of progression or death in patients receiving D-VRd

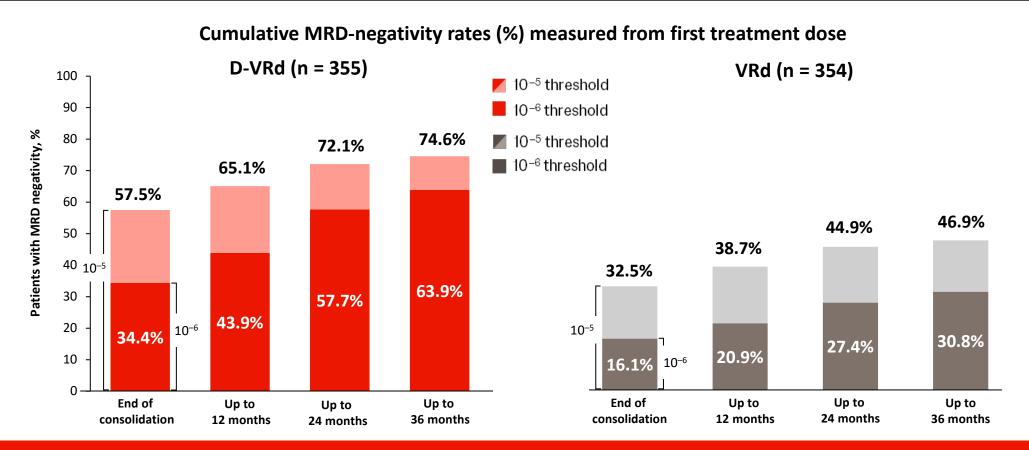
Deep and durable MRD negativity achieved with D-VRd

HR, hazard ratio; CI, confidence interval. ^aMRD-negativity rate was defined as the proportion of patients who achieved both MRD negativity and ≥CR. MRD was assessed using bone marrow aspirates and evaluated via NGS (clonoSEQ assay, version 2.0; Adaptive Biotechnologies, Seattle, WA, USA). ^bP values were calculated with the use of the stratified Cochran–Mantel–Haenszel chi-square test. ^cP value was calculated with the use of Fisher's exact test. 1. Sonneveld P, et al. N Engl J Med. 2024;390(4):301-313.



Presented by P Rodriguez-Otero at the American Society of Clinical Oncology (ASCO) Annual Meeting; May 31-June 4, 2024; Chicago, IL, USA

PERSEUS: MRD Negativity Rates 10⁻⁵ and 10⁻⁶ (ITT)



D-VRd + D-R doubled the rates of deeper MRD negativity at 10⁻⁶ versus VRd + R
 MRD negativity at 10⁻⁶ increased by approximately 30% during maintenance with D-R

MRD-negativity rate was defined as the proportion of patients who achieved both MRD negativity and \geq CR in the ITT population. Patients who were not evaluable or had indeterminate results were considered MRD positive. *P* values were calculated using the stratified Cochran–Mantel–Haenszel chi-square test. *P* <0.0001 for all comparisons of D-VRd versus VRd.



Presented by P Rodriguez-Otero at the American Society of Clinical Oncology (ASCO) Annual Meeting; May 31-June 4, 2024; Chicago, IL, USA



Class Comparison of BCMA-Directed Therapies in Relapsed Multiple Myeloma

Dr Matthew J Rees¹, Dr Aytaj Mammadzadeh¹, Dr Abiola Bolarinwa¹, Dr Mohammed E Elhaj¹, Dr Arwa Bohra¹, Dr Radhika Bansal¹, Dr Sikander Ailawadhi², Dr Ricardo Parrondo², Dr Saurabh Chhabra³, Dr Suzanne Hayman¹, Dr Angela Dispenzieri¹, Dr Francis Buadi¹, Dr David Dingli¹, Dr Rahma Warsame¹, Dr Prashant Kapoor¹, Dr Morie Gertz¹, Dr Eli Muchtar¹, Dr Taxiarchis Kourelis¹, Dr Wilson

Gonsalves¹, Dr S. Vincent Rajkumar¹, Dr Yi Lin¹, Dr Shaji Kumar¹

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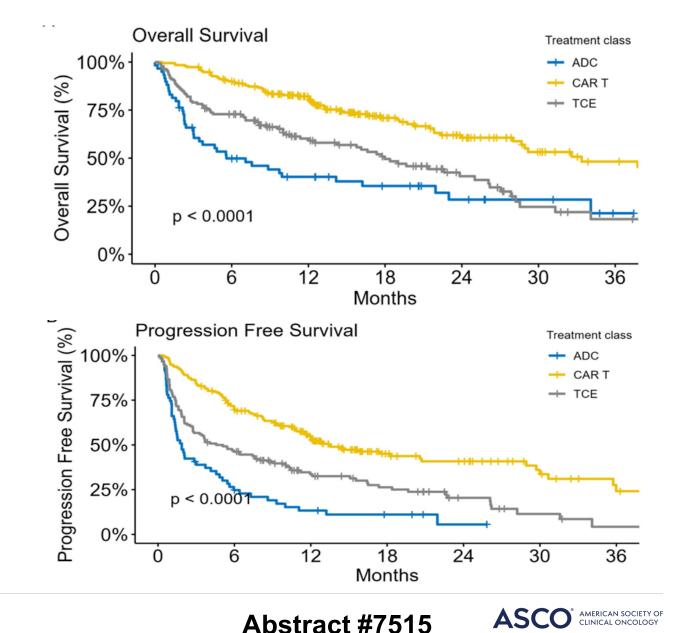
Class Comparison of BCMA-Directed Therapies in Relapsed Multiple Myeloma

- Median OS:
 Median PFS:
 - CAR-T = 33.4 m CAR-T = 13.4 m
 - TCE = 18 m TCE = 4.6 m
 - ADC = 5.6 m ADC = 1.9 m
- CAR-T produced superior PFS and OS
- This remained significant on multivariable analysis adjusted for age, EMD/PCL, double-hit HRCA, prior BCMA-directed therapy, and the number of LOTs in the preceding 1year

CAR-T: chimeric antigen receptor T cells; TCE: T-cell engager; ADC: antibody drug conjugate

2024 ASCO

ANNUAL MEETING



KNOWLEDGE CONQUERS CANCER

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PRESENTED BY: Dr Matthew J Rees

Update of Hematologic Malignancies

Chronic Myeloid Leukemia







ASC4FIRST, A Pivotal Phase 3 Study of Asciminib vs Investigator-Selected Tyrosine Kinase Inhibitors in Newly Diagnosed Patients with Chronic Myeloid Leukemia: Primary Results

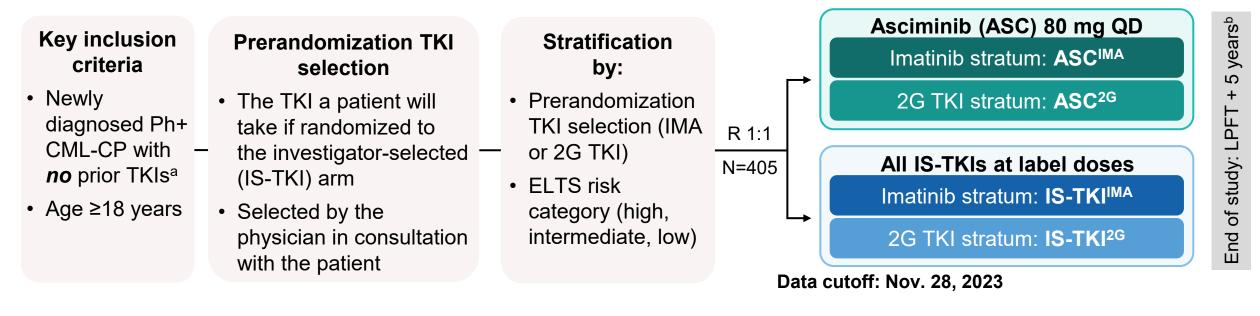
Timothy P. Hughes, Andreas Hochhaus, Naoto Takahashi, Ghayas C. Issa, Richard A. Larson, Felice Bombaci, Jianxiang Wang, Dong-Wook Kim, Dennis Dong Hwan Kim, Jiri Mayer, Yeow-Tee Goh, Philipp Le Coutre, David J. Andorsky, Shruti Kapoor, Tracey McCulloch, Kamel Malek, Lillian Yau, Sophie Ifrah, **Jorge E. Cortes**

This study is sponsored by Novartis Pharmaceuticals Corporation. For more information, please refer to https://www.clinicaltrials.gov/study/NCT04971226.

Late Breaking Abstract #6500

ASC4FIRST, a head-to-head study comparing asciminib vs all standardof-care TKIs in newly diagnosed patients with CML

NCT04971226



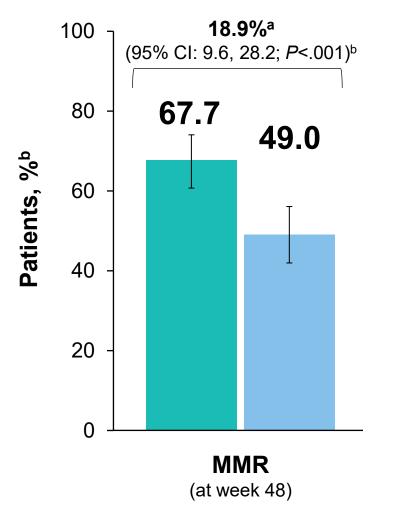
Primary endpoints:
MMR at week 48 for asciminib vs all investigator-selected TKIs
MMR at week 48 for asciminib vs investigator-selected TKI within the imatinib stratum

ASC, asciminib; ELTS, EUTOS long-term survival score; EUTOS, European Treatment and Outcome Study; IMA, imatinib; LPFT, last person first treatment; Ph, Philadelphia chromosome; QD, once daily; R, randomized.

^a Either imatinib, bosutinib, dasatinib, or nilotinib is allowed for up to 2 weeks prior to randomization. Treatment with other TKIs prior to randomization was not permitted.

^b Patients will remain on study for 5 years after the last patient first dose, unless they have discontinued early due to treatment failure, disease progression, pregnancy, intolerance, or investigator or patient decision.

MMR rate at week 48 was superior with asciminib vs all IS-TKIs, meeting the first primary endpoint



ASC (n=201)
 IS-TKI (n=204)

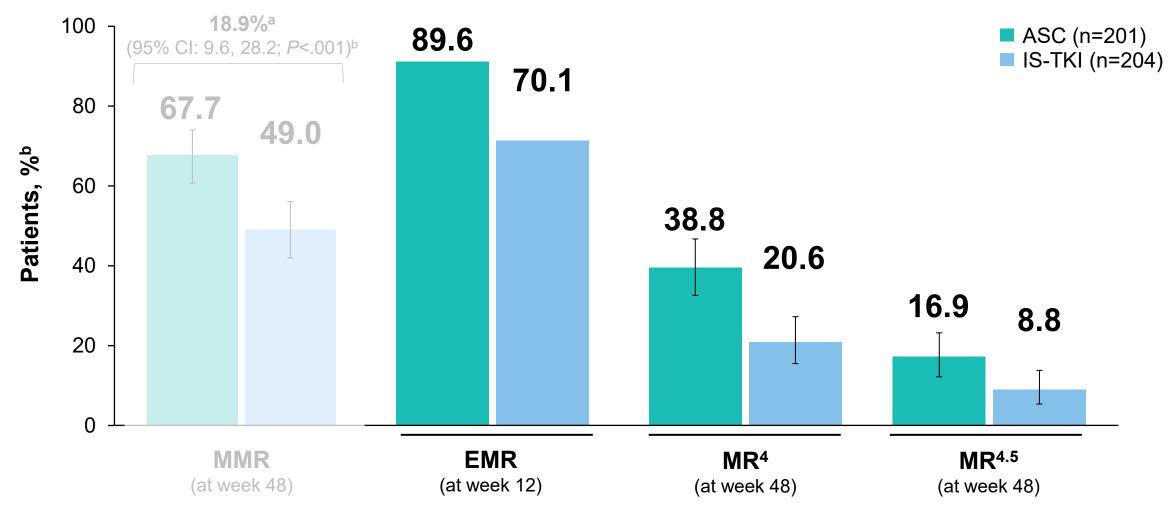
IRT, interactive response technology. Error bars represent 95% CIs.

^a The common treatment difference and its 95% CI are estimated using the Mantel-Haenszel method after stratifying for (a) pre-randomization selected TKI, and (b) baseline ELTS risk groups (both IRT data).

^b Adjusted 1-sided p-value calculated based on the graphical gatekeeping procedure. The null hypothesis is rejected if the adjusted p-value is ≤0.025.



A higher proportion of patients achieved early and deep molecular responses with asciminib vs all IS-TKIs



IRT, interactive response technology; MMR, major molecular response; EMR, early molecular response; MR, molecular response Error bars represent 95% CIs.

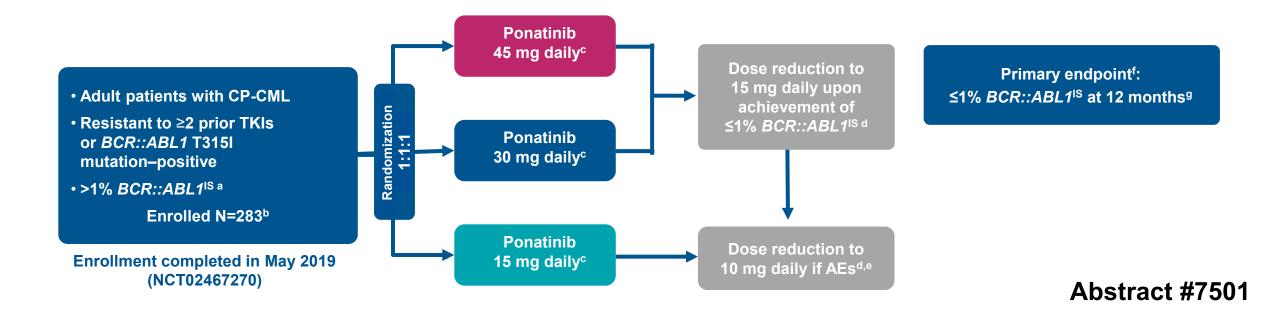
^a The common treatment difference and its 95% CI are estimated using the Mantel-Haenszel method after stratifying for (a) pre-randomization selected TKI, and (b) baseline ELTS risk groups (both IRT data). ^b Adjusted 1-sided p-value calculated based on the graphical gatekeeping procedure. The null hypothesis is rejected if the adjusted p-value is <0.025. Late Breaking Abstract #6500

Oral presentation at: 2024 ASCO Annual Meeting; May 31-June 4, 2024; Chicago, Illinois, and virtual.

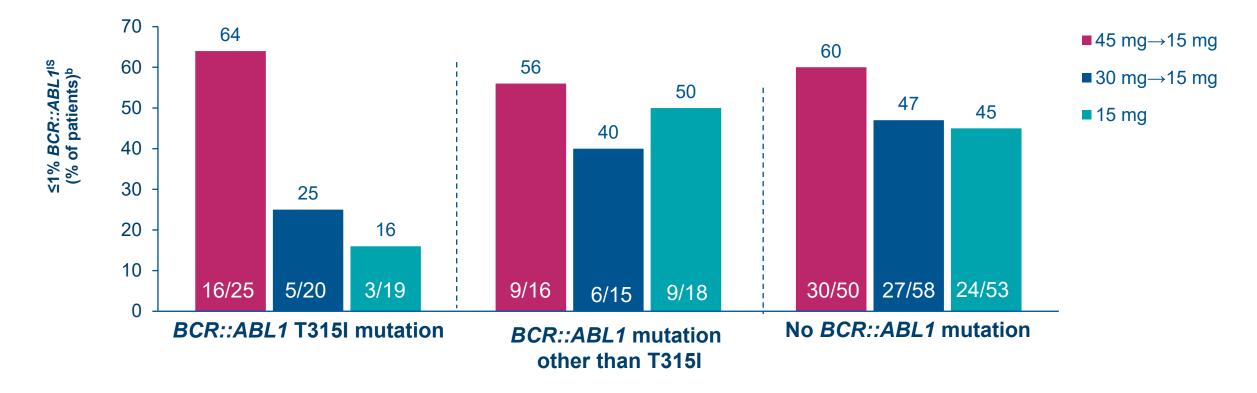
Ponatinib in Patients with Chronic-phase Chronic Myeloid Leukemia and the T315I Mutation: 4-year Results from OPTIC

Michael Deininger, MD, PhD,¹ Jane Apperley, MD,² Christopher Kevin Arthur, MD,³ Charles Chuah, MD,⁴ Andreas Hochhaus, Dr. med.,⁵ Hugues de Lavallade, MD, PhD,⁶ Jeffrey Lipton, MD, PhD,⁷ Elza Lomaia, MD, PhD,⁸ James McCloskey, MD,⁹ Lori Maness, MD,¹⁰ Michael Mauro, MD,¹¹ Beatriz Moraghi, MD,¹² Carolina Pavlovsky, MD,¹³ Gianantonio Rosti, MD,¹⁴ Philippe Rousselot, MD, PhD,¹⁵ Maria Undurraga Sutton, MD,¹⁶ Xiaowei Ren, PhD,¹⁷ Alexander Vorog, MD,¹⁷ Hagop Kantarjian, MD,¹⁸ **Jorge Cortes, MD**¹⁹

¹Versiti Blood Research Institute, Milwaukee, WI, USA; ²Imperial College London, London, UK; ³Royal North Shore Hospital, St. Leonards, Australia; ⁴Singapore General Hospital, Duke-NUS Medical School, Singapore; ⁵Universitätsklinikum Jena, Jena, Germany; ⁶King's College Hospital NHS Foundation, London, UK; ⁷Princess Margaret Cancer Centre, Toronto, Ontario, Canada; ⁸Almazov National Medical Research Centre, St. Petersburg, Russia; ⁹The John Theurer Cancer Center at Hackensack Meridian Health, Hackensack, NJ, USA; ¹⁰University of Nebraska Medical Center, Omaha, NE, USA; ¹¹Memorial Sloan Kettering, New York, NY, USA; ¹²Hospital Jose Maria Ramos Mejia, Buenos Aires, Argentina; ¹³Fundaleu, Buenos Aires, Argentina; ¹⁴IRCCS Istituto Romagnolo per lo Studio dei Tumori (IRST) "Dino Amadori", Meldola (FC), Italy; ¹⁵Centre Hospitalier de Versailles University de Versailles Saint-Quentin-en-Yvelines, Paris, France; ¹⁶Hospital del Salvador, Santiago, Chile; ¹⁷Takeda Development Center Americas, Inc., Lexington, MA, USA; ¹⁸The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ¹⁹Georgia Cancer Center at Augusta University, Augusta, GA, USA



Ponatinib in T315I Mutation CML (OPTIC): ≤1% *BCR::ABL*^{IS} Response Rates by Baseline Mutation Status by 48 Months^a



- ≤1% BCR::ABL1^{IS} (MR2) response rate by 48 months was highest in the 45-mg cohort
- The difference in response between dosing cohorts was highest for patients with T315I

^aAnalysis conducted in the ITT population; ^bNumber of patients with ≤1% *BCR::ABL1*^{IS} is counted on cumulative basis by each time point, and a patient with response is counted only once. Percentages are based on the number of patients in each cohort as denominator. ITT, intent-to-treat

Ponatinib in T315I Mutation CML (OPTIC): OS by Mutation **Status and Dosing Cohort**

4-year OS.

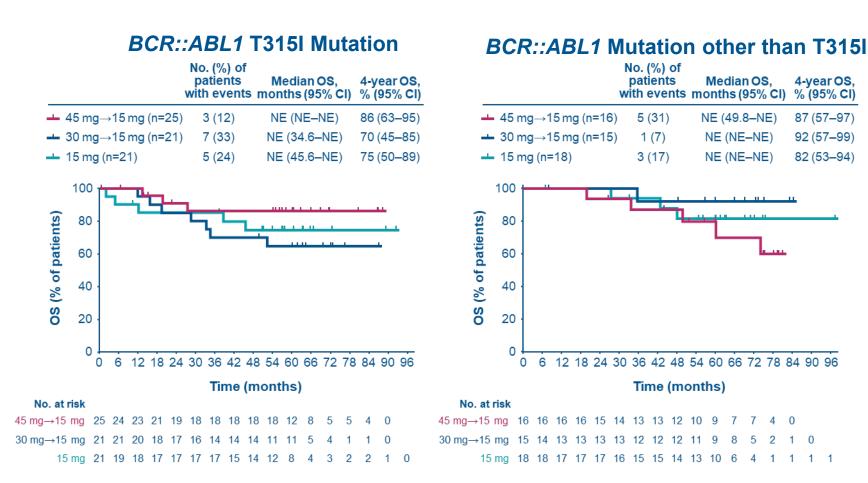
% (95% CI)

87 (57-97)

92 (57-99)

82 (53-94)

45



No BCR::ABL1 Mutation

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<u> </u>	15 mg-	→15	mg	(n=	51)		7 (1	4)		N	E (N	E-I	NE)		88	(75-	-94)
→ 30 mg→15 mg (n=58)				5 (9)				N	NE (NE-NE)				92 (80–97)				
🗕 15 mg (n=54)						4 (7) NE (NE–NE)						94 (83–98)					
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OS (% of patients)	80 ·			1						ш							-
	60 ·																
	40 ·																
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mg→15	5 mg 51	47	47	45	44	41	41	41	41	32	27	21	13	6	4	2	0

15 mg 54 53 52 52 49 48 48 47 46 39 30 27 21 10 4 1 0

 $30 \text{ mg} \rightarrow 15 \text{ mg} 58 55 54 53 49 48 45 42 41 33 29 25 19$

Median OS was not reached at the 4-year analysis regardless of mutation status across all dosing cohorts Abstract #7501

Update of Hematologic Malignancies

Lymphoma



Glofitamab Monotherapy in Patients with Heavily Pretreated Relapsed/Refractory (R/R) Mantle Cell Lymphoma (MCL): Updated Analysis from a Phase I/II Study

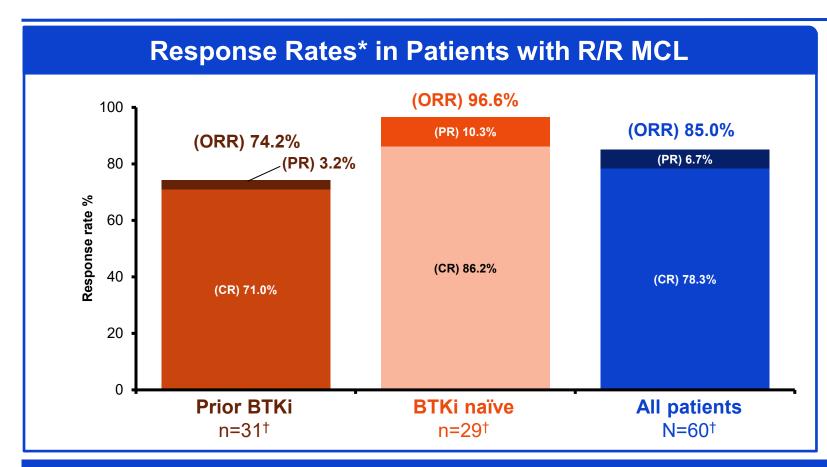
Abstract #7008

Tycel Phillips,¹ Carmelo Carlo-Stella,² Franck Morschhauser,³ Emmanuel Bachy,⁴ Michael Crump,⁵ Marek Trněný,⁶ Nancy L. Bartlett,⁷ Jan Zaucha,⁸ Tomasz Wrobel,⁹ Fritz Offner,¹⁰ Audrey Filézac de L'Etang,¹¹ James Relf,¹² David J. Carlile,¹² Ben Byrne,¹² Estefania Mulvihill,¹¹ Linda Lundberg,¹¹ **Michael Dickinson**¹³

¹City of Hope National Medical Center, Duarte, CA, USA; ²Humanitas University and IRCCS Humanitas Research Hospital, Milano, Italy; ³Centre Hospitalier Universitaire de Lille, France; ⁴Hospices Civils de Lyon and Université Claude Bernard, Pierre-Bénite, France; ⁵Princess Margaret Cancer Centre, Toronto, ON, Canada; ⁶Charles University, Prague, Czech Republic; ⁷Siteman Cancer Center, St. Louis, MO, USA; ⁸Medical University of Gdańsk, Gdańsk, Poland; ⁹Wroclaw Medical University, Wroclaw, Poland; ¹⁰Dept Hematology Universitair Ziekenhuis, Gent, Belgium; ¹¹F. Hoffmann-La Roche Ltd, Basel, Switzerland; ¹²Roche Products Ltd, Welwyn Garden City, United Kingdom; ¹³Peter MacCallum Cancer Centre, Melbourne, Australia

Presented at the 2024 American Society of Clinical Oncology (ASCO) Annual Meeting | May 31 – June 4, 2024

Glofitamab Monotherapy in R/R MCL: Response Rates



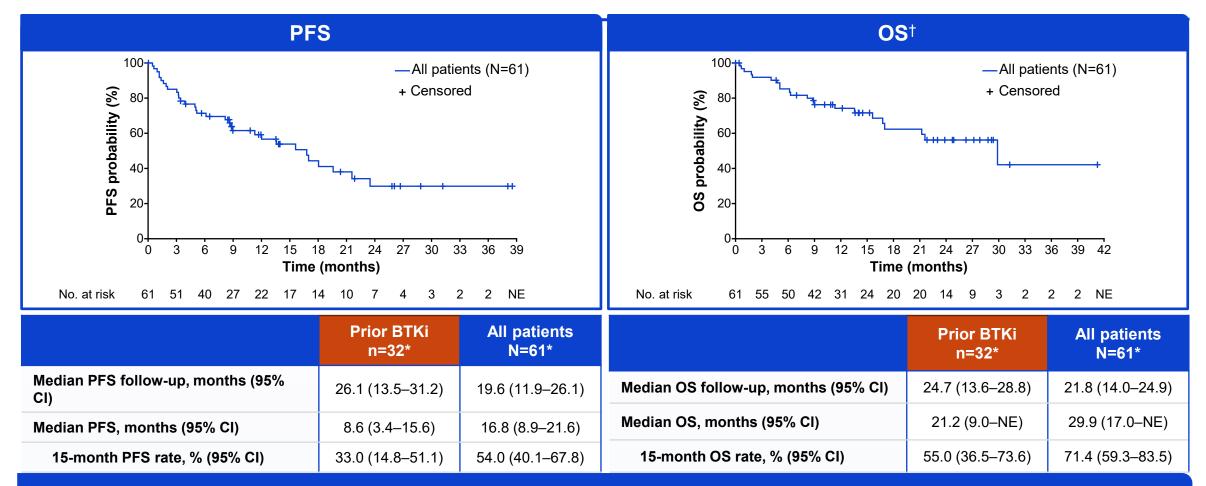
Median time to first response among responders (n=51):
42 days (95% CI: 42.0–45.0)

High CR and OR rates were observed in the overall population and in both BTKi-naïve patients and those with prior BKTi therapy

Clinical cut-off date: September 04, 2023. *Investigator-assessed. †Efficacy evaluable population. CI, confidence interval; ORR, overall response rate; PR partial response.

Abstract #7008

Glofitamab Monotherapy in R/R MCL: Time-to-event endpoints



Clinically significant PFS and OS at 15 months were achieved with fixed-duration glofitamab

Clinical cut-off date: September 04, 2023.

*ITT population. †At the time of analysis, 22 patients had died, the majority due to PD (n=7) or COVID-19 (n=7); other causes of death were pneumonia (n=1),

septic shock (n=1), cardiac arrest (n=1), and unknown/other (n=5). All patients who died due to COVID-19 had achieved a CR.

OS, overall survival; PD, progressive disease; PFS, progression-free survival.

Abstract #7008

MAYO CLINIC

Benefit of Rituximab Maintenance after First-line Bendamustine-Rituximab in Mantle Cell Lymphoma

Yucai Wang¹, Melissa C. Larson¹, Anita Kumar², Brian T. Hill³, David A. Bond⁴, Brad S. Kahl⁵, Alexey Danilov⁶, Reid W. Merryman⁷, Natalie S. Grover⁸, Aung Tun⁹, Sabarish Ayyappan¹⁰, Georgios Pongas¹¹, Craig A. Portell¹², Javier L. Munoz¹³, Patrick M. Reagan¹⁴, Muhamad Alhaj Moustafa¹⁵, Priyanka A. Pophali¹⁶, I. Brian Greenwell¹⁷, Jonathon B. Cohen¹⁸, Peter Martin¹⁹

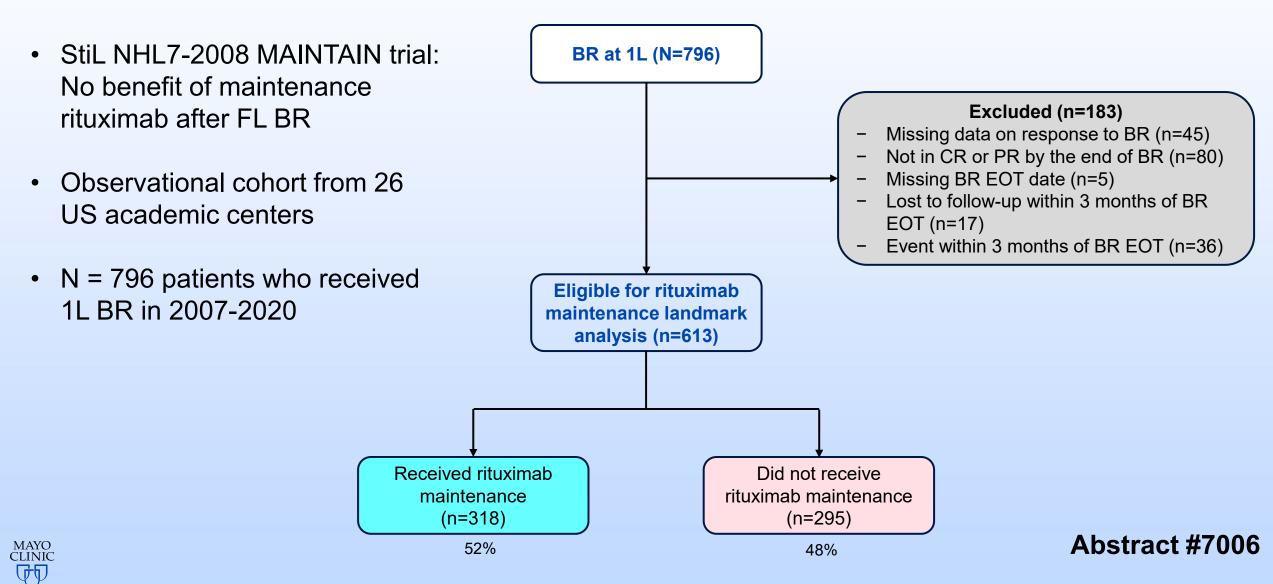
¹Mayo Clinic, Rochester, MN; ²Memorial Sloan-Kettering Cancer Center, New York, NY; ³Cleveland Clinic, Cleveland, OH; ⁴Ohio State University, Columbus, OH; ⁵Washington University in St. Louis, St, Louis, MO; ⁶City of Hope, Duarte, CA; ⁷Dana Farber Cancer Institute, Boston, MA; ⁸University of North Carolina, Chapel Hill, NC; ⁹University of Kansas Medical Center, Kansas City, KS; ¹⁰University of Iowa, Iowa City, IO; ¹¹University of Miami, Miami, FL; ¹²University of Virginia, Charlottesville, VA; ¹³Mayo Clinic, Phoenix, AZ; ¹⁴University of Rochester, Rochester, NY; ¹⁵Mayo Clinic, Jacksonville, FL; ¹⁶University of Wisconsin, Madison, WI; ¹⁷Medical University of South Carolina, Charleston, SC; ¹⁸Emory University, Atlanta, GA; ¹⁹Weill Cornell Medicine, New York, NY



ASCO 2024 June 1, 2024



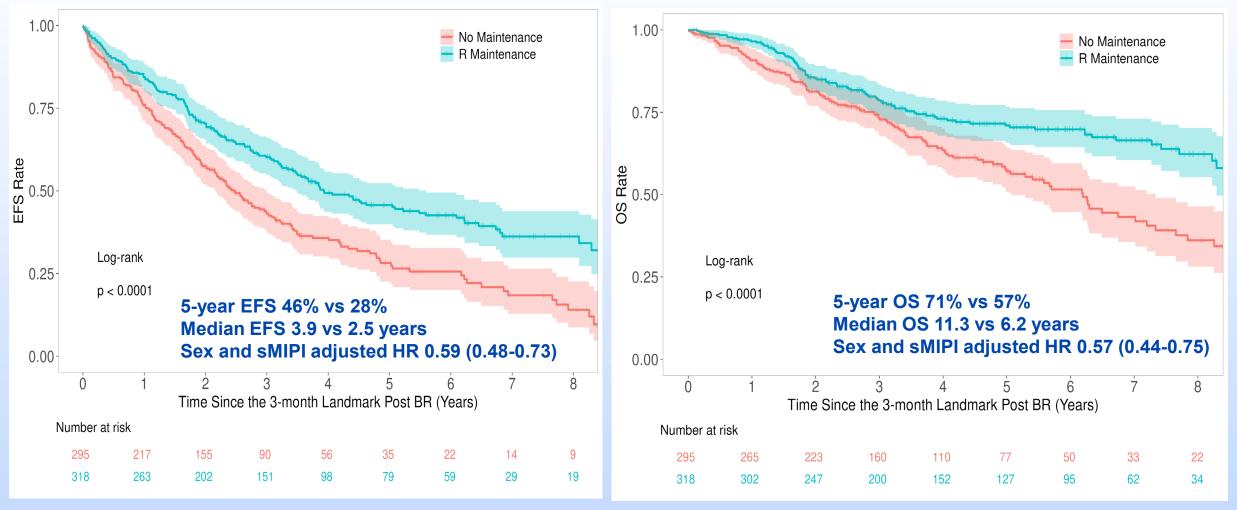
Rituximab Maintenance after FL BR in MCL



Rituximab Maintenance after FL BR in MCL

EFS by Rituximab Maintenance

OS by Rituximab Maintenance





Abstract #7006

Ibrutinib Combined with Venetoclax in Patients with Relapsed/Refractory Mantle Cell Lymphoma: Primary Analysis Results from the Randomized Phase 3 SYMPATICO Study

Michael Wang, MD¹, Wojciech Jurczak, MD, PhD², Marek Trneny, MD³, David Belada, MD⁴, Tomasz Wrobel, MD, PhD⁵, Nilanjan Ghosh, MD, PhD⁶, Mary-Margaret Keating, MD⁷, Tom van Meerten, MD, PhD⁸, Ruben Fernandez Alvarez, MD⁹, Gottfried von Keudell, MD, PhD¹⁰, Catherine Thieblemont, MD, PhD¹¹, Frederic Peyrade, MD¹², Marc Andre, MD¹³, Marc Hoffmann, MD¹⁴, Edith Szafer-Glusman, PhD¹⁵, Jennifer Lin, MS, MA¹⁵, James P. Dean, MD, PhD¹⁵, Jutta K. Neuenburg, MD, PhD¹⁵, Constantine S. Tam, MD, MBBS¹⁶

¹Department of Lymphoma and Myeloma, The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ²Maria Skłodowska-Curie National Research Institute of Oncology, Kraków, Poland; ³General University Hospital in Prague, Prague, Czech Republic; ⁴4th Department of Internal Medicine - Haematology, Charles University, Hospital and Faculty of Medicine, Hradec Králové, Czech Republic; ⁵Wrocław Medical University, Wrocław, Poland; ⁶Levine Cancer Institute, Atrium Health, Charlotte, NC, USA; ⁷Queen Elizabeth II Health Sciences Centre, Halifax, Nova Scotia, Canada; ⁸Universitair Medisch Centrum Groningen, Groningen, Netherlands; ⁹Hospital Universitario de Cabueñes, Asturias, Spain; ¹⁰Beth Israel Deaconess Medical Center, Boston, MA, USA; ¹¹Université de Paris, Assistance Publique-Hôpitaux de Paris, Hôpital Saint-Louis, service d'hémato-oncologie, Paris, France; ¹²Centre Antoine Lacassagne, Nice, France; ¹³CHU UCL Namur Mont-Godinne, Yvoir, Belgium; ¹⁴University of Kansas Cancer Center, Westwood, KS, USA; ¹⁵AbbVie, North Chicago, IL, USA; ¹⁶Peter MacCallum Cancer Centre, Alfred Health and Monash University, Melbourne, Victoria. Australia

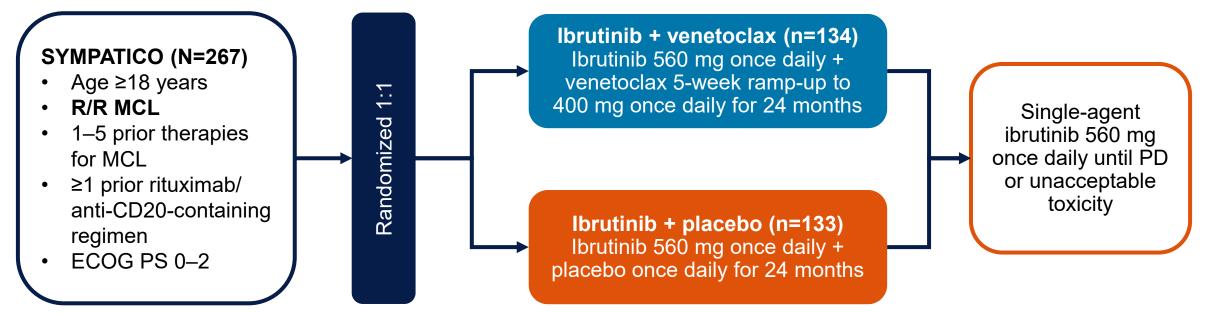


DRAFT – data subject to final QC

Abstract #7007

SYMPATICO Study Design

• SYMPATICO (NCT03112174) is multinational, randomized, double-blind, placebo-controlled, phase 3 study



Stratification: ECOG PS, prior lines of therapy, TLS risk^a

• Primary endpoint:

 PFS by investigator assessment using Lugano criteria

• Secondary endpoints (tested hierarchically in the following order):

- CR rate by investigator assessment
- TTNT^b
- OS (interim analysis)
- ORR by investigator assessment

CR, complete response; ECOG PS, Eastern Cooperative Oncology Group performance status; PD, progressive disease; PFS, progression-free survival; ORR, overall response rate; OS, overall survival; TLS, tumor lysis syndrome; TTNT, time to next treatment.

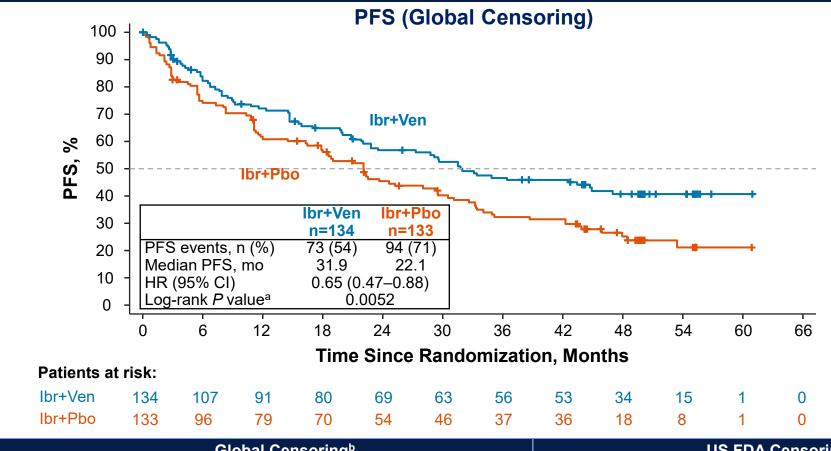
^aIncreased TLS risk was defined as at least 1 lesion >10 cm, or at least 1 lesion >5 cm with circulating lymphocytes >25,000 cells/mm³, and/or creatinine clearance <60 mL/min. ^bFor hierarchical testing per US FDA censoring, TTNT was tested after OS.

DRAFT – data subject to final QC

B

Abstract #7007

Primary Endpoint: Investigator-Assessed PFS Was Significantly Improved With Ibrutinib + Venetoclax Versus Ibrutinib + Placebo



Median PFS, mo		Globa	I Censoring ^b		US FDA Censoring ^c					
	lbr+Ven n=134	lbr+Pbo n=133	HR (95% CI)	Log-rank <i>P</i> valueª	lbr+Ven n=134	lbr+Pbo n=133	HR (95% CI)	Log-rank <i>P</i> valueª		
Investigator assessment	31.9	22.1	0.65 (0.47–0.88)	0.0052	42.6	22.1	0.60 (0.44–0.83)	0.0021		
IRC assessment	31.8	20.9	0.67 (0.49–0.91)	0.0108	43.5	22.1	0.63 (0.45–0.87)	0.0057		

HR, hazard ratio; Ibr, ibrutinib; Pbo, placebo; Ven, venetoclax.

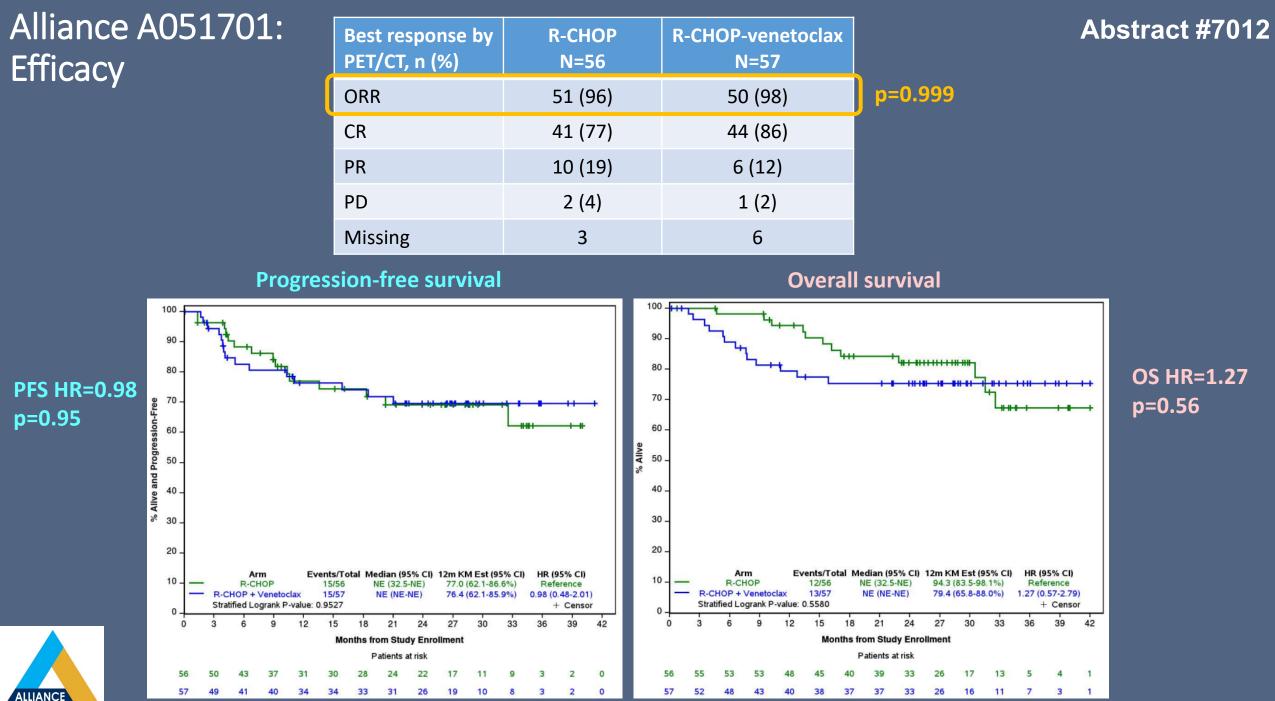
^a*P* values were determined by stratified log-rank test (stratification factors: prior lines of therapy $[1-2 vs \ge 3]$ and TLS risk category [low vs increased risk]). ^bCensoring at last non-PD assessment for patients without PD or death. ^cCensoring at last non-PD assessment for patients without PD or death, with subsequent anticancer therapy, or missing ≥2 consecutive visits prior to PD or death.



Randomized Phase II/III Study of R-CHOP +/- Venetoclax in Previously Untreated Double Expressor Lymphomas: Results from Alliance A051701

Jeremy S. Abramson, Susan Geyer, Levi Pederson, Sharmila Giri, Eric D. Hsi, Richard F. Little, Steven Gore, Daniel Landsburg, Hua-Jay Cherng, Brad Kahl, Neha Mehta-Shah, Shira Dinner, Jonathan W. Friedberg, Nancy L. Bartlett, John P. Leonard





median follow-up 26.4 months

FOR CLINICAL TRIALS IN ONCOLOGY

median follow-up 28.4 months

Abstract 7010

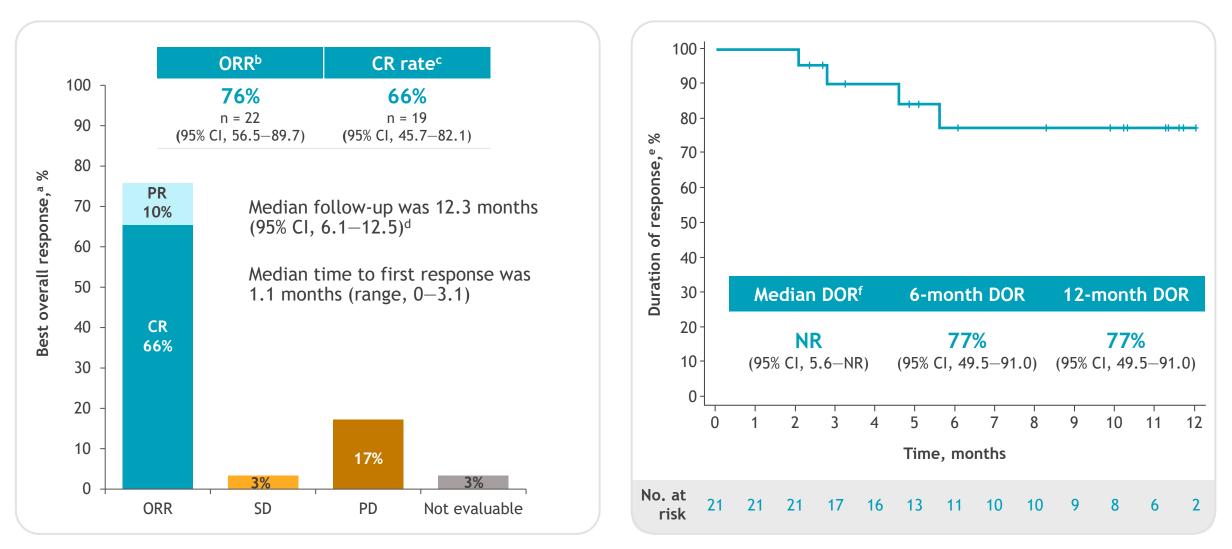


Real-world Outcomes of Lisocabtagene Maraleucel in Patients with Richter Transformation from the Center for International Blood and Marrow Transplant Research (CIBMTR)

<u>Allison Winter, MD</u>,¹ Sushma Bharadwaj, MD,² Alex F. Herrera, MD,³ Chaitanya Iragavarapu, MD,⁴ Abu-Sayeef Mirza, MD, MPH,⁵ M. Lia Palomba, MD,⁶ Sagar S. Patel, MD,⁷ Mecide Gharibo, MD,⁸ David Bernasconi, MSc,⁹ Tracy Krimmel, MSN, DNP,⁸ Fei Fei Liu, GDCE, MBA,⁸ Debasmita Roy, PhD,⁸ Marcelo C. Pasquini, MD, MS¹⁰

¹Cleveland Clinic Taussig Cancer Institute, Cleveland, OH, USA; ²Stanford University School of Medicine, Stanford, CA, USA; ³City of Hope Medical Center, Duarte, CA, USA; ⁴University of Kentucky College of Medicine, Lexington, KY, USA; ⁵Moffitt Cancer Center, Tampa, FL, USA; ⁶Memorial Sloan Kettering Cancer Center, New York, NY, USA; ⁷Huntsman Cancer Institute at the University of Utah, Salt Lake City, UT, USA; ⁸Bristol Myers Squibb, Princeton, NJ, USA; ⁹Celgene, a Bristol-Myers Squibb Company, Boudry, Switzerland; ¹⁰Center for International Blood & Marrow Transplant Research, Medical College of Wisconsin, Milwaukee, WI, USA

CIBMTR Liso-cell in Richter Transformation: ORR, best overall response, and DOR



^aAmong evaluable patients (n = 29); ^bContinued complete remission + CR + PR; ^cContinued complete remission + CR; ^dEstimated using the reverse Kaplan-Meier method; ^eResponders with available DOR data; ^fMedian follow-up was 9.9 months (95% CI, 4.9–11.3). NR, not reached; SD, stable disease.

Abstract 7010



A Pilot Study of Axicabtagene Ciloleucel in Relapsed/Refractory Primary and Secondary Central Nervous System Lymphomas (PCNSL & SCNSL)

L Nayak, UN Chukwueke, S Hogan, C Meehan, R Redd, E Lee, Al Kim, LN Gonzalez Castro, JR McFaline Figueroa, IC Arrillaga-Romany, M Murakami, R Huang, U Gerdemann, J Kaminski, D Mao, S Filosto, M Mattie, S Poddar, P Armand, LS Kean, **CA Jacobson**

Dana-Farber Cancer Institute; Boston Children's Hospital; Mass General Brigham; Kite, A Gilead Company





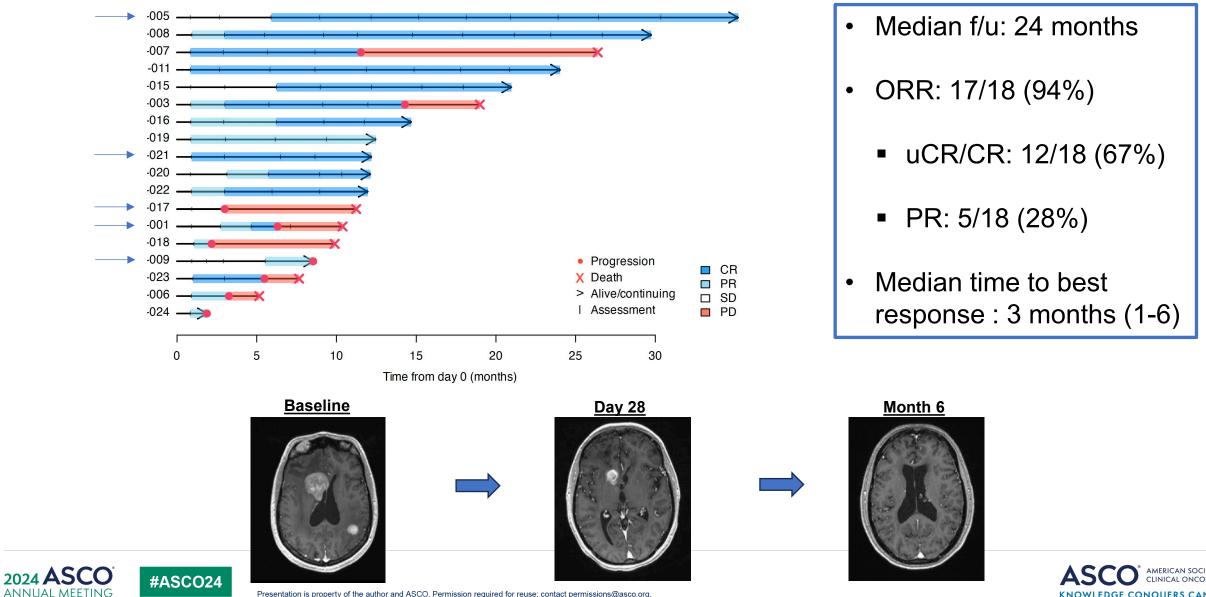
Abstract #2006



Pilot Study of Axi-cel in R/R PCNSL & SCNSL: Efficacy

Abstract #2006

KNOWLEDGE CONQUERS CANCER



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Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma



Outcomes in High-risk Subgroups After Fixed-Duration Ibrutinib + Venetoclax for Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma: Up To 5.5 years of Follow-up in the Phase 2 CAPTIVATE Study

 William G. Wierda, MD, PhD,¹ Ryan Jacobs, MD,² Paul M. Barr, MD,³ John N. Allan, MD,⁴ Tanya Siddiqi, MD,⁵ Alessandra Tedeschi, MD,⁶ Thomas J. Kipps, MD, PhD,⁷ Susan M. O'Brien, MD,⁸ Xavier C. Badoux, MBBS, FRACP, FRCPA,⁹ Andrea Visentin, MD, PhD¹⁰ Masa Lasica, MBBS, FRACP, FRCPA,¹¹ Dennis Carney, MBBS, FRACP, FRCPA,¹²
 Anna Elinder Camburn, MBChB, FRACP, FRCPA,¹³ Javier De Ia Serna, MD,¹⁴ Edith Szafer-Glusman, PhD,¹⁵ Cathy Zhou, MS,¹⁵ Anita Szoke, MD,¹⁵ James P. Dean, MD, PhD,¹⁵ Paolo Ghia, MD, PhD,^{16,17} Constantine S. Tam, MBBS, MD¹⁸

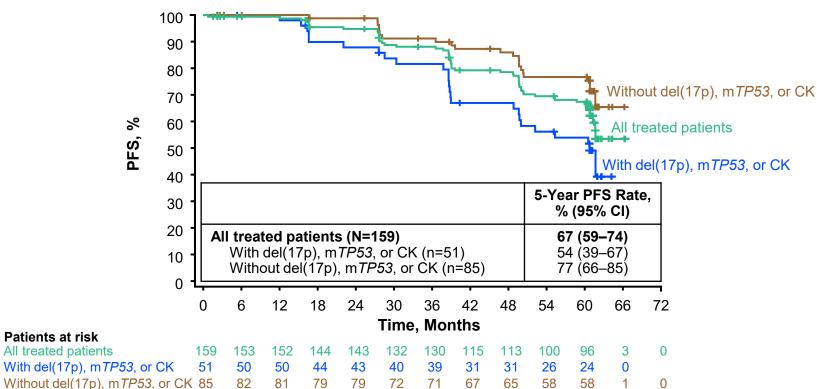
¹The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ²Levine Cancer Institute, Charlotte, NC, USA; ³Wilmot Cancer Institute, University of Rochester Medical Center, Rochester, NY, USA; ⁴Weill Cornell Medicine, New York, NY, USA; ⁵City of Hope National Medical Center, Duarte, CA, USA; ⁶ASST Grande Ospedale Metropolitano Niguarda, Milan, Italy; ⁷University of California San Diego Moores Cancer Center, La Jolla, CA, USA; ⁸UC Irvine, Chao Comprehensive Cancer Center, Orange, CA, USA; ⁹Ministry of Health, Kogarah, NSW, Australia; ¹⁰University of Padova, Padova, Italy; ¹¹St Vincent's Hospital Melbourne, Melbourne, VIC, Australia; ¹²Peter MacCallum Cancer Centre, Melbourne, Australia; ¹³North Shore Hospital, Auckland, New Zealand; ¹⁴Hospital Universitario 12 de Octubre, Madrid, Spain; ¹⁵AbbVie, North Chicago, IL, USA; ¹⁶Università Vita-Salute San Raffaele, ¹⁷IRCCS Ospedale San Raffaele, Milan, Italy; ¹⁸Alfred Hospital and Monash University, Melbourne, VIC, Australia

2024 ASCO Annual Meeting; May 31–June 4, 2024; Chicago, IL, USA

Abstract #7009

CAPTIVATE FD Cohort: Overall Median PFS Was Not Reached With Up to 5.5 Years of Follow-Up Abstract #7009

• Median time on study: 61.2 months (range, 0.8–66.3)



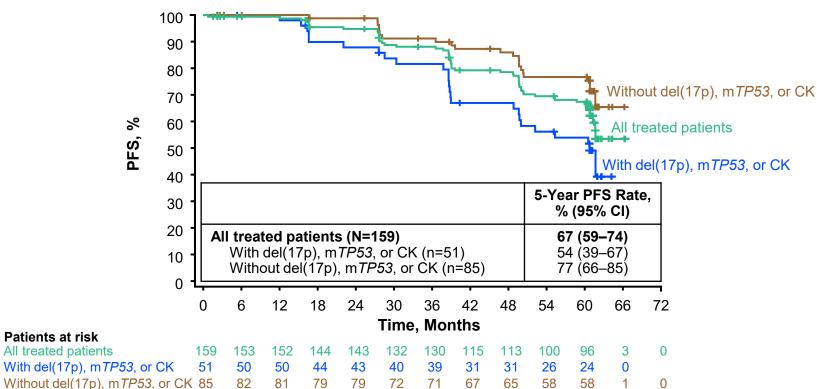
PFS in All Treated Patients and by del(17p), mTP53, or CK Status

		With feature	Without feature			
High-risk feature	n	5-Year PFS rate, % (95% CI)	n	5-Year PFS rate, % (95% CI)		
del(17p)/m <i>TP</i> 53	27	41 (21–59)	129	73 (64–80)		
CK ^a	31	57 (37–72)	102	72 (61–80)		
del(11q) ^b	11	64 (30–85)	74	79 (67–87)		

CK, complex karyotype; m*TP53*, mutated *TP53*; PFS, progression-free survival. ^aDefined as ≥3 chromosomal abnormalities by conventional CpG-stimulated cytogenetics; ^bExcluding patients with del(17p)/mutated *TP53* or CK.

CAPTIVATE FD Cohort: Overall Median PFS Was Not Reached With Up to 5.5 Years of Follow-Up Abstract #7009

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High-risk feature	n	5-Year PFS rate, % (95% CI)	n	5-Year PFS rate, % (95% CI)		
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Myelodysplastic Syndrome





Preliminary safety and efficacy of oral azacitidine in patients with Low-/Intermediate-risk myelodysplastic syndromes: phase 2 results from the ASTREON trial

<u>Guillermo Garcia-Manero</u>,¹ Karen W. L. Yee,² Francisca Hernandez,³ Matteo Giovanni Della Porta,^{4,5} Stefania Paolini,⁶ Seo-Yeon Ahn,⁷ Valeria Santini,⁸ Pierre Fenaux,⁹ Takahiro Suzuki,¹⁰ Mikkael A. Sekeres,¹¹ Jun He,¹² Jerry Li,¹² Ronit Barkalifa,¹² Carlos E. Vigil,¹² Thomas Prebet,¹² Daniel Lopes de Menezes,¹³ Joseph Burnett,¹² Rami S. Komrokji,¹⁴ Aristoteles Giagounidis¹⁵

¹Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, TX, USA; ²Princess Margaret Cancer Centre, Toronto, ON, Canada; ³Hospital Universitario Virgen Nieves, Granada, Spain; ⁴Cancer Center IRCCS Humanitas Research Hospital, Milan, Italy; ⁵Departement of Biomedical Sciences, Humanitas University, Milan, Italy; ⁶IRCCS Azienda Ospedaliero-Universitaria di Bologna - Istituto di Ematologia "Seragnoli", Bologna, Italy; ⁷Chonnam National University Hwasun Hospital, Seoyang-Ro, Republic of South Korea; ⁸MDS Unit, Hematology, University of Florence, DMSC, AOUC, Florence, Italy; ⁹Service d'Hématologie Séniors, Hôpital Saint-Louis, Université Paris 7, Paris, France; ¹⁰Kitasato University, Tokyo, Japan; ¹¹Sylvester Comprehensive Cancer Center, University of Miami, Miami, FL, USA; ¹²Bristol Myers Squibb, Summit, NJ, USA; ¹³Bristol Myers Squibb, San Francisco, CA, USA; ¹⁴Moffitt Cancer Center, Tampa, FL, USA; ¹⁵Marien Hospital Düsseldorf, Düsseldorf, Germany

Oral Azacitine in Low/Int-Risk MDS (ASTREON): Hematologic responses per IWG 2006 criteria¹

100	Achievement of HI within 6 cycles									Oral-AZA 200 mg (N = 23ª)	Oral-AZA 300 mg (N = 21ª)	
100 90 - 80 -			 	 Oral-AZA 200 mg Oral-AZA 300 mg 						Best hematologic response vithin 6 cycles, n (%)		
80 - 70 - 8 60 -			 							CR PR	0 1 (4)	0 1 (5)
Patients - 05 - 05 - 05 - 05 - 05 - 05 - 05 - 0	20	33		33						mCR Stable disease Treatment failure	3 (13) 17 (74) 0	1 (5) 19 (91) 0
30 - 20 -	30		30			17	20	17	В	Disease progression est OR (all cycles), n (%)	2 (9)	0
10 - 0 -					0					CR PR	0 1 (4)	0 1 (5)
n/N =	7/23 Any mľ popula		6/20	aluable		1/6 -P aluable ation ^c	HI-N-ev	1/6 -N valuable ation ^d		mCR mCR with HI Any HI Other ^e	3 (13) 1/3 (33) 6 (26) 13 (57)	1 (5) 1/1 (100) 6 (29) 13 (62)

Additional response data are still being evaluated. Percentages may not sum to 100 due to rounding.

^amITT population is defined as all patients who received \geq 75% of the cycle 1 Oral-AZA dose and had \geq 1 post-baseline efficacy assessment. ^bPatients in the mITT population with baseline Hb < 11 g/dL or baseline Hb \geq 11 g/dL and baseline RBC-TD with > 1 RBC unit transfused within 56 days. ^cPatients in the mITT population with baseline platelets < 100 × 10⁹/L. ^dPatients in the mITT population with baseline ANC < 1.0 × 10⁹/L. ^ePatients meeting none of the specified response criteria.

CR, complete remission; HI, hematologic improvement; HI-E, HI-erythroid response; HI-N, HI-neutrophil response; HI-P, HI-platelet response; mCR, marrow CR; mITT, modified intent-to-treat; OR, overall response; PR, partial remission.

1. Cheson BD, et al. *Blood* 2006;108:419-425.

Abstract #6509

ASTREON

Myelofibrosis



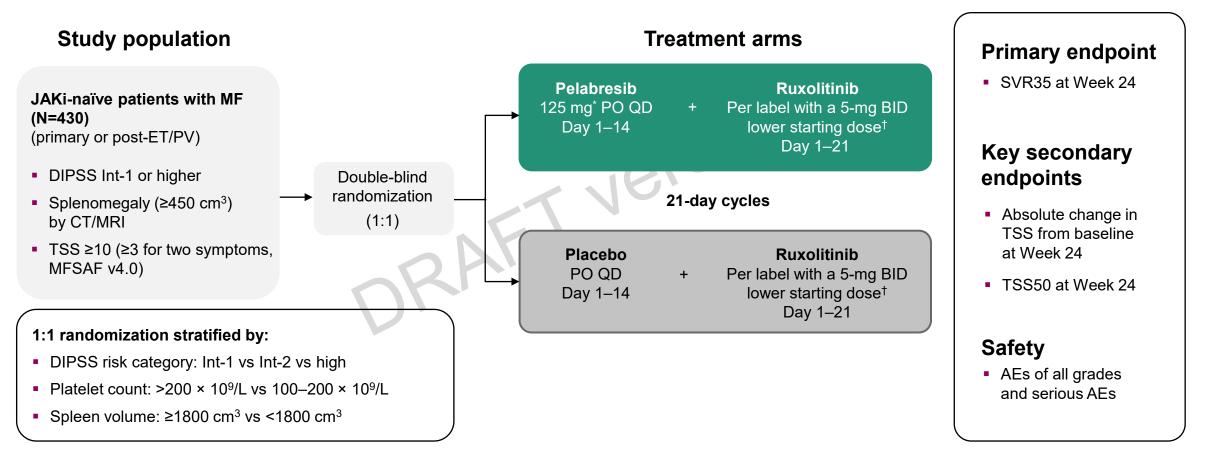
Updated Safety and Efficacy Data From the Phase 3 MANIFEST-2 Study of Pelabresib in Combination With Ruxolitinib for JAK Inhibitor Treatment-Naïve Patients With Myelofibrosis

Raajit K. Rampal,¹ Sebastian Grosicki, Dominik Chraniuk, Elisabetta Abruzzese, Prithviraj Bose, Aaron T. Gerds, Alessandro Vannucchi, Francesca Palandri, Sung-Eun Lee, Vikas Gupta, Alessandro Lucchesi, Stephen Oh, Andrew Kuykendall, Alberto Alvarez Larran, Ruben Mesa, Jean-Jacques Kiladjian, Moshe Talpaz, David Lavie, Morgan Harris, Sarah-Katharina Kays, Anna-Maria Jegg, Manlei Wu, Barbara Brown, Claire Harrison*, **John Mascarenhas***

*Both authors contributed equally

¹Department of Medicine, Leukemia Service, Memorial Sloan Kettering Cancer Center, New York, NY, USA

MANIFEST-2: Randomized, Double-Blind, Active-Control Ph3 Study

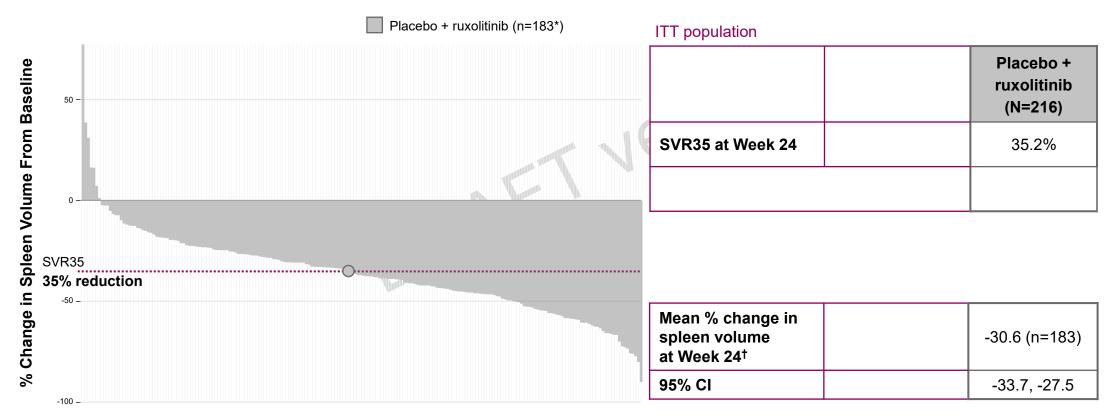


*The starting dose for pelabresib was 125 mg QD and protocol-defined dose modifications based on AEs and treatment response allowed a dose range between 50 mg and 175 mg QD; [†]Ruxolitinib was started at 10 mg BID (baseline platelet count >200 × 10⁹/L) or 15 mg BID (baseline platelet count >200 × 10⁹/L) with a mandatory dose increase by 5 mg BID after one cycle and a maximum dose of 25 mg BID per label. AE, adverse event; BID, twice daily; CT, computed tomography; DIPSS, Dynamic International Prognostic Scoring System; ET, essential thrombocythemia; Int, intermediate; JAKi, Janus kinase inhibitor; MF, myelofibrosis; MFSAF, Myelofibrosis Symptom Assessment Form; MRI, magnetic resonance imagining; PO, orally; PV, polycythemia vera; QD, once daily; SVR35, ≥35% reduction in spleen volume; TSS, total symptom score; TSS50, ≥50% reduction in total symptom score.

Harrison CN, et al. Future Oncol. 2022;18(27):2987-2997; Rampal R, et al. Presented at ASH 2023. [Oral 628].

MANIFEST-2 Study Met its Primary Endpoint: SVR35 at Week 24

SVR35 response at Week 24 was significantly greater in patients treated with pelabresib + ruxolitinib vs placebo + ruxolitinib



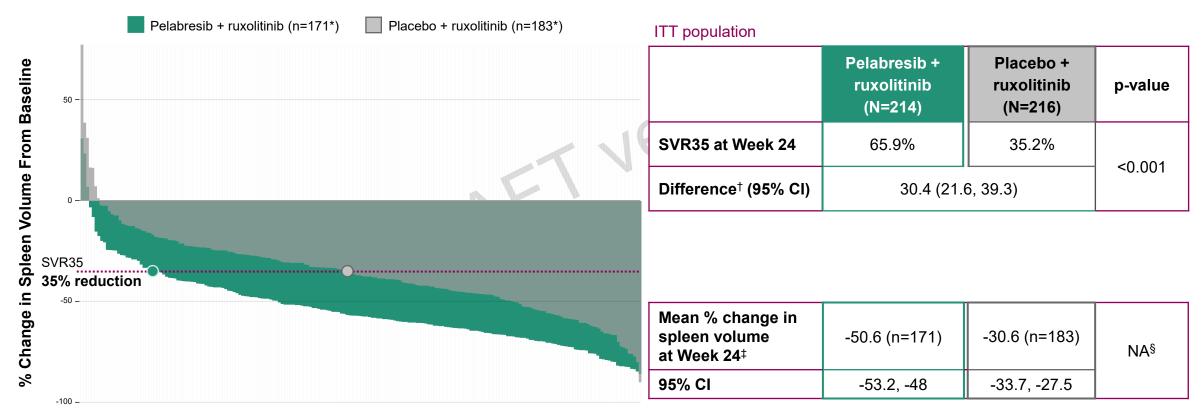
Data cut off: August 31, 2023. Spleen volume assessed by central read.

*Waterfall plots represent patients who have baseline and Week 24 data. †Patients without Week 24 assessment are considered nonresponders.

ITT, intent-to-treat; SVR35, ≥35% reduction in spleen volume.

MANIFEST-2 Study Met its Primary Endpoint: SVR35 at Week 24

SVR35 response at Week 24 was significantly greater in patients treated with pelabresib + ruxolitinib vs placebo + ruxolitinib



Data cut off: August 31, 2023. Spleen volume assessed by central read.

*Waterfall plots represent patients who have baseline and Week 24 data. [†]Calculated by stratified Cochran–Mantel–Haenszel test. [‡]Patients without Week 24 assessment are considered nonresponders. [§]SVR35 at any time and percentage change in spleen volume at Week 24 are exploratory endpoints.

CI, confidence interval; ITT, intent-to-treat; SVR35, ≥35% reduction in spleen volume.

Thank you

