



WHAT DO THESE RESULTS MEAN?

In the CEPHEUS study, adding daratumumab to VRd helped more patients with newly diagnosed multiple myeloma (MM) who were not eligible for a stem cell transplant or for whom a transplant was not planned to reach undetectable levels of cancer cells in the bone marrow, and these results often lasted longer compared with VRd treatment. After more than 6 years of follow-up, patients who received Dara-VRd also lived longer without their MM getting worse, supporting durable disease control

▶ See glossary below for definitions of key terms



WHAT WAS THE PURPOSE OF THIS STUDY?

- In the CEPHEUS study, researchers wanted to see if adding daratumumab to the VRd treatment regimen improved outcomes
- This analysis looked at the extent to which adding daratumumab to VRd provided a long-lasting reduction of cancer cells in the bone marrow and helped patients to live longer without their MM getting worse



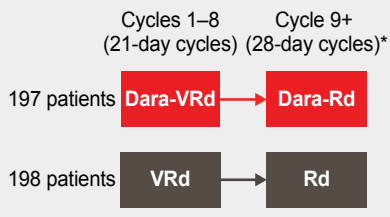
WHO WAS IN THE STUDY AND HOW WAS IT CARRIED OUT?

- The CEPHEUS study (NCT03652064) was conducted by randomly assigning 395 adult patients with newly diagnosed MM who were not eligible for a stem cell transplant or for whom a transplant was not planned to receive treatment with VRd with or without daratumumab



Patients had a new diagnosis of MM and were not eligible for or did not plan to receive a stem cell transplant

Patients randomly assigned to treatment groups



Primary study assessment was MRD negativity with complete response or better

*Treatment continued until disease progression or unacceptable toxicity.

The Benefit of Daratumumab Plus Bortezomib, Lenalidomide, and Dexamethasone (Dara-VRd) on Depth and Durability of Response in the Phase 3 CEPHEUS Trial: Updated Minimal Residual Disease Analysis

Sonja Zweegman,¹ Nizar J Bahlis,² Thierry Facon,³ Vania Hungria,⁴ Christopher P Venner,⁵ Aurore Perrot,⁶ Marc Braunstein,⁷ Josep Marti,⁸ Supratik Basu,⁹ Yael C Cohen,^{10,11} Morio Matsumoto,¹² Kenshi Suzuki,¹³ Cyrille Hulin,¹⁴ Sebastian Grosicki,¹⁵ Wojciech Legiec,¹⁶ Meral Beksac,¹⁷ Angelo Maiolino,^{18,19} Maria Krevvata,²⁰ Huiling Pei,²¹ Lorena Lopez-Masi,²² Jaclyn Stanzio,²² Matteo Loi,²³ Fredrik Borgsten,²² Melissa Rowe,²⁴ Saad Z Usmani²⁵

¹Amsterdam UMC, Vrije Universiteit Amsterdam, Cancer Center Amsterdam, Amsterdam, The Netherlands; ²Amie Charbonneau Cancer Research Institute, University of Calgary, Calgary, AB, Canada; ³University of Lille, CHU Lille, Service des Maladies du Sang, Lille, France; ⁴Clinica Médica São Gerardo, São Paulo, Brazil; ⁵Cross Cancer Institute, University of Alberta, Edmonton, AB, Canada; ⁶BC Cancer-Vancouver Centre, University of British Columbia, Vancouver, BC, Canada; ⁷Centre Hospitalier Universitaire de Toulouse, Oncopole, Toulouse, France; ⁸Perlmutter Cancer Center, NYU Langone Health, New York, NY, USA; ⁹Hospital Universitario Mútua de Terrassa, Terrassa, Spain; ¹⁰Royal Wolverhampton NHS Trust and University of Wolverhampton, CRN West Midlands, NIHR, Wolverhampton, UK; ¹¹Tel Aviv Sourasky (Ichilov) Medical Center, Tel Aviv, Israel; ¹²Gray Faculty of Medical and Health Sciences, Tel Aviv University, Tel Aviv, Israel; ¹³Department of Hematology, National Hospital Organization Shikukawa Medical Center, Gunma, Japan; ¹⁴Japanese Red Cross Medical Center, Tokyo, Japan; ¹⁵Hôpital Haut Lévéque, University Hospital, Pessac, France; ¹⁶School of Public Health, Medical University of Silesia, Katowice, Poland; ¹⁷Center of Oncology of the Lublin Region (Centrum Onkologii Ziemi Lubelskiej im. św. Jana z Dukli, COZL), Lublin, Poland; ¹⁸Istinye University, Ankara Liv Hospital, Ankara, Turkey; ¹⁹Instituto Américas de Ensino, Pesquisa e Inovação, Rio de Janeiro, Brazil; ²⁰Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil; ²¹Johnson & Johnson, Spring House, PA, USA; ²²Johnson & Johnson, Titusville, NJ, USA; ²³Johnson & Johnson, Raritan, NJ, USA; ²⁴Johnson & Johnson, Leiden, The Netherlands; ²⁵Johnson & Johnson, High Wycombe, UK; ²⁶Memorial Sloan Kettering Cancer Center, New York, NY, USA



WHAT WERE THE RESULTS?

After more than 6 years of follow-up, patients who received Dara-VRd were more likely to have deeper responses compared with patients who received VRd alone, as cancer cells could not be detected by very sensitive minimal residual disease (MRD) testing, with results lasting for several years in some patients. Additionally, patients receiving Dara-VRd lived longer without their MM getting worse

Figure 1: No cancer cells detected in the bone marrow (MRD negativity with complete response or better)

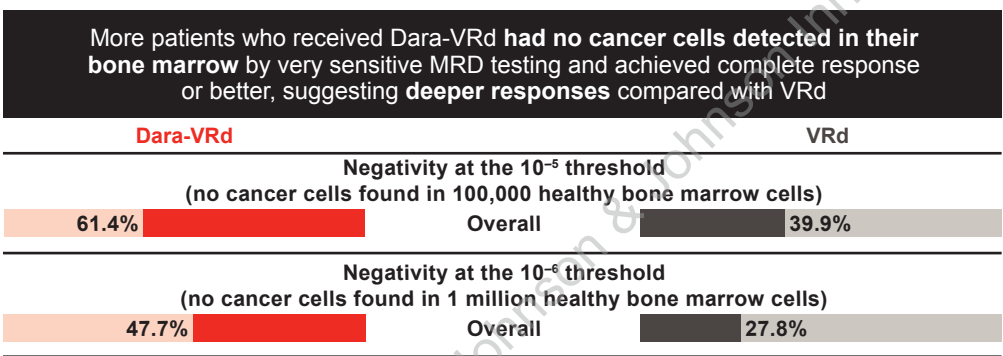


Figure 3: Longer time until MM got worse (progression-free survival)

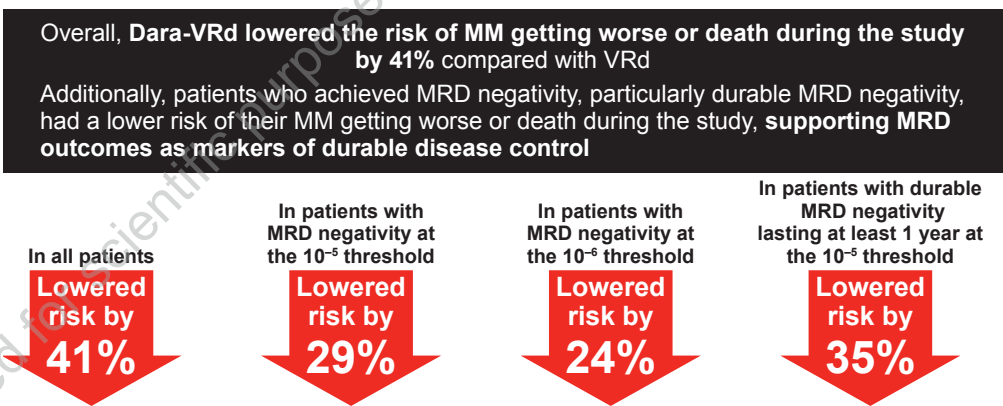
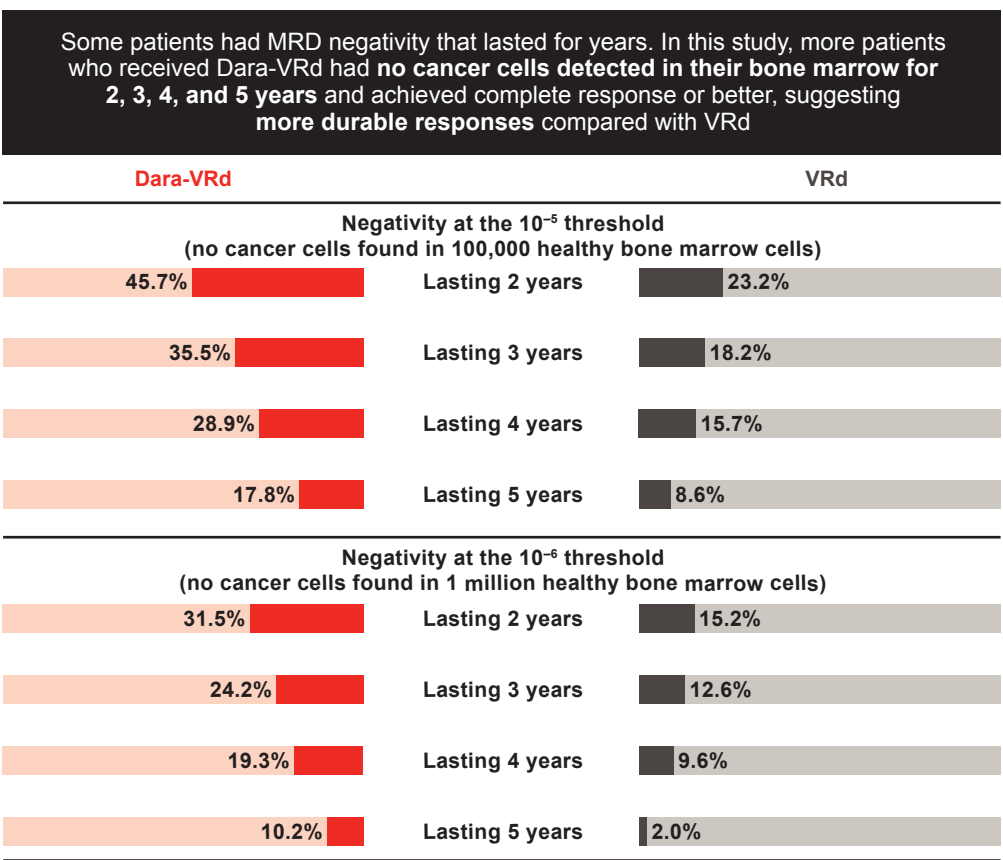


Figure 2: Continued control of MM over time (durable MRD negativity with complete response or better)



Glossary of terms

Complete response	Standard signs of MM are gone from the blood and bone marrow after treatment	Durable minimal residual disease negativity	No cancer cells found below a certain threshold (in a sample of 100,000 [10 ⁻⁵ threshold] or 1 million [10 ⁻⁶ threshold] healthy bone marrow cells) at 2 consecutive tests for MRD that were separated by the indicated time period, with no positive MRD test result in between. This is also sometimes referred to as "sustained minimal residual disease negativity"	Progression-free survival	Length of time since treatment started that patients have lived without their MM getting worse (return, growth, or spread of the MM) or until the patient dies
Minimal residual disease	After treatment, there is sometimes a small number of cancer cells still left in the patient's bone marrow that can be detected with very sensitive tests; these remaining cancer cells could potentially cause the disease to come back. • Negativity at the 10⁻⁴ threshold: No cancer cells found in a sample of 100,000 healthy bone marrow cells • Negativity at the 10⁻⁶ threshold: No cancer cells found in a sample of 1 million healthy bone marrow cells	Stem cell transplant	In this procedure, a patient's own healthy stem cells are collected from their blood or bone marrow and stored safely; these cells can make all the different types of blood cells (such as white blood cells, red blood cells, and platelets). After the patient receives high-dose chemotherapy to kill as many remaining cancer cells as possible, the stored stem cells are returned to their body to help the bone marrow recover and start making healthy blood cells again		



Scan the QR code for the full presentation