

ARROW2

A Study Comparing Once-weekly vs Twice-weekly Carfilzomib in Combination With Lenalidomide and Dexamethasone in Subjects With Relapsed or Refractory Multiple Myeloma

NCT-Nummer:

[NCT03859427](#)

Studienbeginn:

Mai 2019

Letztes Update:

15.04.2021

Wirkstoff:

Carfilzomib, Lenalidomide, Dexamethasone

Indikation (Clinical Trials):

Multiple Myeloma, Neoplasms, Plasma Cell

Geschlecht:

Alle

Altersgruppe:

Erwachsene (18+)

Phase:

Phase 3

Sponsor:

Amgen

Collaborator:

-

Studien-Informationen

Brief Summary:

Compare efficacy of 56 mg/m² carfilzomib administered once-weekly in combination with lenalidomide and dexamethasone (KRd 56 mg/m²) to 27 mg/m² carfilzomib administered

twice-weekly in combination with lenalidomide and dexamethasone (KRd 27 mg/m²) in subjects with relapsed or refractory multiple myeloma (RRMM) with 1 to 3 prior lines of therapy.

Ein-/Ausschlusskriterien

Inclusion Criteria:

Documented relapse or progressive multiple myeloma after last treatment. Subjects refractory to the most recent line of therapy are eligible, unless last treatment contained PI or lenalidomide and dexamethasone). Refractory is defined as disease that is nonresponsive or progresses within 60 days of last therapy.

Subjects must have at least PR to at least 1 line of prior therapy.

Subjects must have received at least 1 but not more than 3 prior lines of therapy for multiple myeloma (induction therapy followed by stem cell transplant and consolidation maintenance therapy will be considered as 1 line of therapy).

Prior therapy with a PI or the combination of lenalidomide and dexamethasone are allowed, if, the patient had at least a PR to the most recent therapy with a PI or lenalidomide and dexamethasone, neither PI or lenalidomide and dexamethasone in combination were ceased due to toxicity (unless at the time of enrollment that toxicity was neuropathy not exceeding grade 2 which has either resolved or if ongoing is less than or equal to grade 1), the patient has not received a PI and has not received lenalidomide and dexamethasone in combination in the 6 months prior to first study treatment. (Patients are permitted to have received single agent lenalidomide as maintenance therapy during the 6 months prior to first treatment)

Previous treatment with a lenalidomide and dexamethasone containing regimen is allowed, as long as the subject did not progress during the first 3 months after initiating lenalidomide and dexamethasone containing therapy.

Measurable disease with at least 1 of the following assessed within 21 days prior to

randomization:

- Immunoglobulin G (IgG) multiple myeloma: serum monoclonal protein (M-protein) level \geq 1.0 g/dL
 - Immunoglobulin A (IgA), Immunoglobulin D (IgD), Immunoglobulin E (IgE) multiple myeloma: serum M-protein level \geq 0.5 g/dL
 - Urine M-protein \geq 200 mg per 24 hours
 - In subjects without measurable serum or urine M-protein, serum-free light chain (SFLC) \geq 100 mg/L (involved light chain) and an abnormal serum kappa lambda ratio
- Eastern Cooperative Oncology Group Performance Status (ECOG PS) of 0 \leq 2

Other inclusion criteria may apply

Exclusion Criteria:

Waldenström macroglobulinemia.

Multiple myeloma of Immunoglobulin M (IgM) subtype.

Plasma cell leukemia ($> 2.0 \times 10^9$ /L circulating plasma cells by standard differential).

Uncontrolled hypertension, defined as a subject whose blood pressure exceeds \geq 160 mmHg systolic or \geq 100 mmHg diastolic when taken in accordance with the European Society of Hypertension/European Society of Cardiology 2018 guidelines.

Active congestive heart failure (New York Heart Association Class III to IV), symptomatic ischemia, uncontrolled arrhythmias, screening ECG with corrected QT interval (QTc) of > 470 msec, pericardial disease, or myocardial infarction within 4 months prior to randomization.

Calculated or measured creatinine clearance < 1.0 mL/s (calculation must be based on the Cockcroft and Gault formula) within 21 days prior to randomization.

Other exclusion criteria may apply

Studien-Rationale

Primary outcome:

1. Overall Response Rate (ORR) (Time Frame - Through study completion, an average of 14 months):

ORR defined as the proportion of best overall response of stringent complete response [sCR], complete response [CR], very good partial response [VGPR] and partial response [PR] per

Secondary outcome:

1. Progression free survival (PFS) (Time Frame - Through study completion, an average of 14 months)
2. Convenience (Time Frame - Through study completion, an average of 14 months):
As measured by the Patient-reported convenience with carfilzomib dosing schedule question
3. Subject incidence of treatment-emergent adverse events (Time Frame - Through study completion, an average of 14 months)
4. Additional efficacy parameter - Time to Response (Time Frame - Through study completion, an average of 14 months):
As measured by Time to Response (TTR)
5. Additional efficacy parameter - Duration of Response (Time Frame - Through study completion, an average of 14 months):
Duration of Response (DOR)
6. Additional efficacy parameter - Time to Progression (Time Frame - Through study completion, an average of 14 months):
Time to Progression (TTP)
7. Overall Survival (Time Frame - Through study completion, an average of 14 months)
8. MRD[-]CR rate (Time Frame - Through study completion, an average of 14 months):
Defined as achievement of CR or better by Independent Review Committee (IRC) per IMWG-URC and achievement of Minimal Residual Disease (MRD) negativity as assessed by next-generation sequencing method at a 10^{-5} threshold
9. MRD[-] rate at 12 months (Time Frame - 12 months):
Defined as achievement of Minimal Residual Disease (MRD) negativity at 12 months (+/- 2 weeks) from randomisation as assessed by next-generation sequencing method at a 10^{-5} threshold
10. Physical functioning and role functioning (Time Frame - Through study completion, an average of 14 months):
As measured by the Physical Functioning and Role Functioning scales of the European Organization for Research and Treatment of Cancer Quality-of-life Questionnaire Core 30 (EORTC-QLQ-C30), a 30-item generic instrument for use in cancer subjects across tumor types
11. Treatment satisfaction as measured by the Satisfaction with Therapy (SWT) subscale of the Cancer Therapy Satisfaction Questionnaire (CTSQ) (Time Frame - 4 months):
Cancer Therapy Satisfaction Questionnaire (CTSQ) - measures treatment satisfaction in individuals with cancer

Studien-Arme

- Active Comparator: Carfilzomib once-weekly
Carfilzomib, lenalidomide, dexamethasone (KRd) regimen using once-weekly carfilzomib 56 mg/m²
- Active Comparator: Carfilzomib twice-weekly
Carfilzomib, lenalidomide, dexamethasone (KRd) regimen using twice-weekly carfilzomib 27 mg/m²

Geprüfte Regime

- Carfilzomib:
Once weekly IV over 30 minutes on day 1, 8 and 15 of each 28 day cycle. The dose will be 20 mg/m² on cycle 1 day 1 and 56 mg/m² beginning with cycle 1 day 8 and thereafter. 12 cycles or until progression, unacceptable toxicity, death, loss to follow up or withdrawal of consent.
- Carfilzomib:
Twice weekly IV over 10 minutes on day 1, 2, 8, 9, 15 and 16 of each 28 day cycle. The dose will be 20 mg/m² on cycle 1 days 1 and 2 and 27 mg/m² beginning with cycle 1 day 8 and thereafter. 12 cycles or until progression, unacceptable toxicity, death, loss to follow up or withdrawal of consent.
- Lenalidomide:
Once daily orally 25 mg days 1 to 21 of each cycle. 12 cycles or until progression, unacceptable toxicity, death, loss to follow up or withdrawal of consent
- Dexamethasone:
Once daily orally or by IV 40 mg days 1, 8 and 15 of each cycle. Also day 22 of cycles 1 to 9. 12 cycles or until progression, unacceptable toxicity, death, loss to follow up or withdrawal of consent

Studienleiter

MD

Study Director
Amgen

Kontakt

Amgen Call Center

Kontakt:

Phone: 866-572-6436

E-Mail: medinfo@amgen.com

Studienlocations (3 von 107)

Research Site

92708 Fountain Valley
United States

Status: Abgeschlossen

Research Site

80218 Denver
United States

Status: Abgeschlossen

Research Site

06062 Plainville
United States

Status: Abgeschlossen

Research Site

32207 Jacksonville
United States

Status: Abgeschlossen

Research Site

60068 Park Ridge
United States

Status: Abgeschlossen

Research Site

12208 Albany
United States

Status: Abgeschlossen

Research Site

45242 Cincinnati
United States

Status: Rekrutierend

Research Site

76201 Denton
United States

Status: Abgeschlossen**Research Site**

76177 Fort Worth
United States

Status: Rekrutierend**Research Site**

77030 Houston
United States

Status: Abgeschlossen**Research Site**

78229 San Antonio
United States

Status: Abgeschlossen**Research Site**

77380 The Woodlands
United States

Status: Rekrutierend**Research Site**

5020 Salzburg
Austria

Status: Rekrutierend**Research Site**

4002 Plovdiv
Bulgaria

Status: Rekrutierend**Research Site**

1431 Sofia
Bulgaria

Status: Rekrutierend

Research Site

1756 Sofia
Bulgaria

Status: Rekrutierend

Research Site

625 00 Brno
Czechia

Status: Rekrutierend

Research Site

500 05 Hradec Kralove
Czechia

Status: Rekrutierend

Research Site

775 20 Olomouc
Czechia

Status: Rekrutierend

Research Site

128 08 Praha 2
Czechia

Status: Rekrutierend

Research Site

00290 Helsinki
Finland

Status: Rekrutierend

Research Site

90220 Oulu

Finland

Status: Rekrutierend

Research Site

20521 Turku

Finland

Status: Rekrutierend

Research Site

44000 Nantes

France

Status: Rekrutierend

Research Site

06202 Nice cedex 3

France

Status: Rekrutierend

Research Site

75010 Paris

France

Status: Rekrutierend

Research Site

75013 Paris

France

Status: Rekrutierend

Research Site

69495 Pierre-Benite

France

Status: Rekrutierend

Research Site

86021 Poitiers Cedex
France

Status: Rekrutierend**Research Site**

35033 Rennes
France

Status: Rekrutierend**Research Site**

67033 Strasbourg
France

Status: Rekrutierend**Research Site**

31059 Toulouse cedex 9
France

Status: Rekrutierend**Research Site**

54511 Vandoeuvre les Nancy Cedex
France

Status: Rekrutierend**Research Site**

12200 Berlin
(Berlin)
Germany

Status: Rekrutierend**Research Site**

01307 Dresden
(Sachsen)
Germany

Status: Rekrutierend

Research Site

20246 Hamburg
(Hamburg)
Germany

Status: Rekrutierend**Research Site**

50924 Köln
(Nordrhein-Westfalen)
Germany

Status: Rekrutierend**Research Site**

55131 Mainz
(Rheinland-Pfalz)
Germany

Status: Rekrutierend**Research Site**

68100 Alexandroupoli
Greece

Status: Rekrutierend**Research Site**

10676 Athens
Greece

Status: Rekrutierend**Research Site**

115 22 Athens
Greece

Status: Rekrutierend

Research Site

11525 Athens
Greece

Status: Rekrutierend**Research Site**

11528 Athens
Greece

Status: Rekrutierend**Research Site**

18547 Athens
Greece

Status: Rekrutierend**Research Site**

26504 Patra
Greece

Status: Rekrutierend**Research Site**

54007 Thessaloniki
Greece

Status: Rekrutierend**Research Site**

57010 Thessaloniki
Greece

Status: Rekrutierend**Research Site**

467-8602 Nagoya-shi
Japan

Status: Rekrutierend**Research Site**

441-8570 Toyohashi-shi
Japan

Status: Rekrutierend

Research Site

296-8602 Kamogawa-shi
Japan

Status: Rekrutierend

Research Site

811-1395 Fukuoka-shi
Japan

Status: Rekrutierend

Research Site

503-8502 Ogaki-shi
Japan

Status: Rekrutierend

Research Site

377-0280 Shibukawa-shi
Japan

Status: Rekrutierend

Research Site

670-8540 Himeji-shi
Japan

Status: Rekrutierend

Research Site

663-8501 Nishinomiya-shi
Japan

Status: Rekrutierend

Research Site

317-0077 Hitachi-shi

Japan

Status: Rekrutierend

Research Site

602-8566 Kyoto-shi

Japan

Status: Rekrutierend

Research Site

983-8520 Sendai-shi

Japan

Status: Rekrutierend

Research Site

951-8566 Niigata-shi

Japan

Status: Rekrutierend

Research Site

701-1192 Okayama-shi

Japan

Status: Rekrutierend

Research Site

543-8555 Osaka-shi

Japan

Status: Rekrutierend

Research Site

589-8511 Osakasayama-shi

Japan

Status: Rekrutierend

Research Site

565-0871 Suita-shi
Japan

Status: Rekrutierend**Research Site**

350-8550 Kawagoe-shi
Japan

Status: Rekrutierend**Research Site**

320-0834 Utsunomiya-shi
Japan

Status: Abgeschlossen**Research Site**

113-8431 Bunkyo-ku
Japan

Status: Rekrutierend**Research Site**

135-8550 Koto-ku
Japan

Status: Rekrutierend**Research Site**

150-8935 Shibuya-ku
Japan

Status: Rekrutierend**Research Site**

50009 Kaunas
Lithuania

Status: Rekrutierend**Research Site**

08661 Vilnius

Lithuania

Status: Rekrutierend

Research Site

1081 HV Amsterdam

Netherlands

Status: Rekrutierend

Research Site

7334 DZ Apeldoorn

Netherlands

Status: Rekrutierend

Research Site

2134 TM Hoofddorp

Netherlands

Status: Rekrutierend

Research Site

022328 Bucharest

Romania

Status: Rekrutierend

Research Site

030171 Bucharest

Romania

Status: Rekrutierend

Research Site

050098 Bucharest

Romania

Status: Rekrutierend

Research Site

020125 Bucuresti

Romania

Status: Rekrutierend

Research Site

400124 Cluj-Napoca

Romania

Status: Rekrutierend

Research Site

700483 Iasi

Romania

Status: Rekrutierend

Research Site

410469 Oradea

Romania

Status: Rekrutierend

Research Site

550245 Sibiu

Romania

Status: Rekrutierend

Research Site

300079 Timisoara

Romania

Status: Rekrutierend

Research Site

660022 Krasnoyarsk

Russian Federation

Status: Rekrutierend

Research Site

123182 Moscow

Russian Federation

Status: Rekrutierend

Research Site

125284 Moscow
Russian Federation

Status: Rekrutierend

Research Site

185019 Petrozavodsk
Russian Federation

Status: Rekrutierend

Research Site

197341 Saint Petersburg
Russian Federation

Status: Rekrutierend

Research Site

443079 Samara
Russian Federation

Status: Rekrutierend

Research Site

851 07 Bratislava
Slovakia

Status: Rekrutierend

Research Site

07010 Palma de Mallorca
Spain

Status: Rekrutierend

Research Site

37007 Salamanca
Spain

Status: Rekrutierend

Research Site

08916 Badalona
Spain

Status: Rekrutierend**Research Site**

08036 Barcelona
Spain

Status: Rekrutierend**Research Site**

28223 Pozuelo de Alarcon
Spain

Status: Rekrutierend**Research Site**

31008 Pamplona
Spain

Status: Rekrutierend**Research Site**

791 82 Falun
Sweden

Status: Rekrutierend**Research Site**

413 45 Goteborg
Sweden

Status: Rekrutierend**Research Site**

301 85 Halmstad
Sweden

Status: Abgeschlossen**Research Site**

971 80 Lulea
Sweden

Status: Rekrutierend

Research Site

221 85 Lund
Sweden

Status: Rekrutierend

Research Site

06560 Ankara
Turkey

Status: Rekrutierend

Research Site

06590 Ankara
Turkey

Status: Rekrutierend

Research Site

34093 Istanbul
Turkey

Status: Rekrutierend

Research Site

34214 Istanbul
Turkey

Status: Rekrutierend

Research Site

34387 Istanbul
Turkey

Status: Rekrutierend

Research Site

35340 Izmir

Turkey

Status: Rekrutierend

Research Site

38039 Kayseri

Turkey

Status: Rekrutierend

Quelle: ClinicalTrials.gov