A Randomized, Multicenter, Multinational, Double-Blind Study to Assess the Efficacy and Safety of MB02 (Bevacizumab Biosimilar Drug) Versus Avastin® in Combination With Carboplatin and Paclitaxel for the Treatment of Subjects With Stage IIIB/IV Non-squamous Non-Small Cell Lung Cancer (NSCLC)

10/08/2025 23:36:09

Main Information

Primary registry identifying number
LBCTR2018120171

Protocol number
MB02-C-02-17

MOH registration number
2018/2/9597

Study registered at the country of origin
Yes

Study registered at the country of origin: Specify

Type of registration
Retrospective

Type of registration: Justify
LBCTR was not available

Date of registration in national regulatory agency
05/03/2018

Primary sponsor
mAbxience Research S.L.

Primary sponsor: Country of origin
Spain

Date of registration in primary registry
17/12/2020

Date of registration in national regulatory agency
05/03/2018

Public title
A Randomized, Multicenter, Multinational, Double-Blind Study to Assess the Efficacy and Safety of MB02 (Bevacizumab Biosimilar Drug) Versus Avastin® in Combination With Carboplatin and Paclitaxel for the Treatment of Subjects With Stage IIIB/IV Non-squamous Non-Small Cell Lung Cancer (NSCLC)

Acronym
STELLA

Scientific title
A Randomized, Multicenter, Multinational, Double-Blind Study to Assess the Efficacy and Safety of MB02 (Bevacizumab Biosimilar Drug) Versus Avastin® in Combination With Carboplatin and Paclitaxel for the Treatment of Subjects With Stage IIIB/IV Non-squamous Non-Small Cell Lung Cancer (NSCLC)

Acronym
STELLA

Brief summary of the study: English

This is a multicenter, multinational, double-blind, 1:1 randomized, parallel-group, equivalence Phase 3 study to compare the efficacy and safety of MB02 versus Avastin® in subjects with Stage IIIB/IV non-squamous NSCLC in combination with Carboplatin and Paclitaxel.
MB02/Avastin® plus chemotherapy will be repeated every 21 days for 6 cycles. After 6 cycles, subjects can continue to receive MB02/Avastin® monotherapy treatment every 3 weeks . Patients will stay on treatment until evidence of disease progression, intolerance or until unacceptable toxic effects develop. The study ends at Week 52; no further study assessments will be made after this time.

Brief summary of the study: Arabic

هذه الدراسة هي دراسة تكافؤ في المرحلة الثالثة وهي متعددة المراكز، متعددة الجنسيات، مزدوجة التعمية، بتوزيع عشوائي بنسبة ١:١، بمجموعتين متوازيتين، والغرض منها مقارنة فعالية وسلامة العقار
MB02
بالمقارنة مع العقار أفاستين ® لدى المشاركين المُصابين بسرطان الرئة ذي الخلايا غير الصغيرة وغير الحرشفية
(NSCLC)
في المرحلة
IIIB/IV
مع العقارين كاربوبلاتين و باكليتاكسيل.
سيتم تكرار العلاج بواسطة
/MB02أفاستين®
دورات، بإمكان المشاركين الاستمرار بتلقي العلاج الأحادي٦ دورات. بعد ٦ يوم ولـ ٢١بالإضافة إلى العلاج الكيميائي كل
/MB02 أفاستين® بـ
أسابيع. وسيستمر المرضى على هذا العلاج إلى حين ظهور دليل على تطور المرض أو على عدم تحمل العلاج أو إلى حين تطور آثار٣كل
٤؛ ولن يتم بعد ذلك الوقت إجراء أي تقييمات خاصة بالدراسة٥٢سميّة غير مقبولة. وتنتهي الدراسة في الأسبوع رقم.

Health conditions/problem studied: Specify

Stage IIIB/IV Non-squamous Non-Small Cell Lung Cancer

Interventions: Specify

Cycle 1 through Cycle 6 (Monoclonal Immnuglobulin therapy in combination with chemotherapy administered on Day 1 of every 3 week treatment cycle)
- Arm 1:
MB02 (bevacizumab biosimilar) IV at an intended dose of 15 mg/ kg
Paclitaxel IV at an intended dose of 200 mg/ m2
Carboplatin IV to achieve and AUC 6
- Arm 2:
Avastin (bevacizumab) IV at an intended dose of 15 mg/ kg
Paclitaxel IV at an intended dose of 200 mg/ m2
Carboplatin IV to achieve and AUC 6

From Cycle 7 onwards (Monoclonal Immnuglobulin monotherapy):
Arm 1: MB02 (bevacizumab biosimilar) IV at an intended dose of 15 mg/ kg
- Arm 2: Avastin (bevacizumab) IV at an intended dose of 15 mg/ kg

Key inclusion and exclusion criteria: Inclusion criteria

Inclusion Criteria
To be eligible for study entry, subjects must satisfy all of the following criteria:
1. Males and female subjects aged ≥ 18 years to ≤ 80 years.
2. Signed informed consent must be obtained before initiation of any study-specific procedures or treatment as confirmation of the subject's awareness and willingness to comply with the study requirements.
3. Subjects should have newly diagnosed or recurrent Stage IIIB/IV (defined by seventh edition of the TNM classification for Lung Cancer, 2010) non-squamous NSCLC not amenable to curative intent surgery, and not have received any systemic therapy for advanced disease (exclusion criteria 3 and 4). For subjects with recurrent disease, at least 6 months must have elapsed before randomization from previous adjuvant treatment.
4. Previous radiation therapy if completed >4 weeks before randomization. Palliative radiotherapy to bone lesions is allowed if completed >2 weeks of randomization.
5. Subjects must have at least 1 unidimensional measurable lesion per RECIST version 1.1 (assessed locally).
6. Subjects must have an ECOG performance status ≤1 at Screening.
7. Subjects must have adequate hepatic, renal and hematologic function defined as:
 Hepatic function: bilirubin level <1.5 ULN, ALT and AST levels<2.5×ULN.
 Renal function: serum creatinine level <1.5×ULN, calculated creatinine clearance (CrCl) >30 mL/min (Cockroft-Gault formula), urine protein to creatinine ratio <1. Subjects with urine protein-to-creatinine ratio >1 may be enrolled if they have <1 g of protein in 24-hour urine collection.
 Hematological function: Absolute neutrophil count >1.5×109 /L; platelets >100×109 /L, hemoglobin (Hb) >9 g/dL.
 Adequate coagulation parameters such as: INR ≤ 2.0 and aPTT ≤ 1.5 x ULN within 7 days prior to randomization for patients not receiving anticoagulation therapy.
8. Eligible subjects must have a systolic blood pressure of ≤ 140 mm Hg and a diastolic blood pressure of < 100 mm Hg at screening.

9. Women of childbearing potential, and their partners, must agree to adhere to pregnancy prevention methods throughout the duration of the study (including the Follow-up visits, where applicable). Women of childbearing potential are defined as those who are not surgically sterile (did not underwent bilateral tubal ligation, bilateral oophorectomy, or hysterectomy) and not postmenopausal. Subjects and their partners must agree to use a highly effective method of contraception, to avoid women becoming pregnant throughout the course of the study. Medically acceptable forms of birth control can include the following, with approval of the treating physician:
-Combined (estrogen and progestogen containing) hormonal contraception associated with inhibition of ovulation (oral, intravaginal, or transdermal), progestogen-only hormonal contraception associated with inhibition of ovulation (oral, injectable, implantable), intrauterine device, intrauterine
hormone-releasing system, bilateral tubal occlusion, vasectomised partner, sexual abstinence.
10. Non fertile women can be included, that is, those who are physiologically incapable of becoming pregnant, because of:
 Hysterectomy.
 Bilateral oophorectomy (ovariectomy).
 Bilateral tubal ligation or,
 Postmenopausal women defined as:
Subjects not using HRT and have experienced total cessation of menses for 1 year and be greater than 45 years of age, OR, in questionable cases, have a follicle stimulating hormone >40 mIU/mL and an estradiol value <40 pg/mL (<140 pmol/L).
Subjects must discontinue HRT before study enrolment because of the potential for inhibition of cytochrome enzymes that metabolize estrogens and progestins. For most forms of HRT, at least 2 to 4 weeks must elapse between the cessation of HRT and determination of menopausal status; the length of this interval depends on the type and dosage of HRT.
If a female subject is determined not to be postmenopausal, that subject must use adequate contraception, as defined immediately above (inclusion 8).

Key inclusion and exclusion criteria: Gender

Both

Key inclusion and exclusion criteria: Specify gender

Key inclusion and exclusion criteria: Age minimum

18

Key inclusion and exclusion criteria: Age maximum

80

Key inclusion and exclusion criteria: Exclusion criteria

Exclusion Criteria
Subjects will be excluded from the study if 1 or more of the following criteria are applicable:
1. Inability to comply with protocol procedures.
2. Participation in another clinical trial or treatment with another investigational agent within 4 weeks or 5 half-lives of investigational agent before
randomization, whichever is longer.
3. Subjects previously treated with monoclonal antibodies or small molecule inhibitors against VEGF or VEGF receptors, including Avastin®.
4. Subjects who have received previous chemotherapy, immunotherapy, targeted therapy, or biological therapy for their lung cancer. Note: Adjuvant and neoadjuvant therapy are permitted (see: inclusion criterion 3).
5. Subjects who have known central nervous system disease, with the exception of subjects with treated brain metastases who have completed treatment (radiation, surgery or stereotactic surgery) and have not received steroids for at least 4 weeks before randomization. Subjects with central nervous system metastases treated by neurosurgical resection or brain biopsy performed within 8 weeks before randomization will be excluded. Subjects with known or history of brain metastases must undergo brain imaging during screening.
6. Current or recent (within 10 days of the first dose of study treatment) use of aspirin (at least 325 mg/day) or other nonsteroidal anti-inflammatory drugs with antiplatelet activity or treatment with dipyridamole (Persantine®), ticlopidine (Ticlid®), clopidogrel (Plavix®), or cilostazol (Pletal®).
7. Current or recent (within 5 days) use of therapeutic anticoagulation or use of thrombolytic agent. Prophylactic use of low molecular weight heparin is allowed.
8. Subjects with an INR >2, unless receiving active anticoagulation treatment, will be excluded.
9. Subjects who have a diagnosis of small cell carcinoma of the lung or squamous cell carcinoma of the lung. Mixed tumors should be categorized according to the predominant histology. If small cell elements are present, the subject will be excluded.
10. Subjects with known tumors that harbor activating epidermal growth factor receptor and anaplastic lymphoma receptor tyrosine kinase (assessed locally).
11. Subjects who have a history of hypersensitivity to the active substance (bevacizumab, carboplatin, and/or paclitaxel) or any of the excipients (such as trehalose dehydrate, sodium phosphate, or polysorbate 20).
12. Subjects with known active viral infection: hepatitis B, hepatitis C, or HIV.
13. Subjects who are pregnant or breastfeeding. Women of child-bearing potential must have a negative pregnancy test at Screening.
14. Subjects with previous major surgery, open biopsy, open pleurodesis, or significant traumatic injury within 4 weeks before randomization or those
anticipated to require major surgery during the study.
15. Subjects who have had a core biopsy taken or have had another minor surgical procedure, excluding placement of vascular access device, closed pleurodesis, thoracentesis, and mediastinoscopy, within 1 week of randomization.
16. Subjects with a history of abdominal fistula, GI perforation, intra-abdominal abscess within 6 months of randomization.
17. Subjects with a nonhealing wound, active ulcer, or untreated bone fracture.
18. Subjects with previous history of hypertensive crisis or hypertensive encephalopathy.
19. Subjects with New York Heart Association Grade II or greater congestive heart failure, or angina, myocardial infarction within 6 months before randomization; symptomatic arrhythmia or serious cardiac arrhythmia requiring medication; abnormal left ventricular ejection fraction < 50% assessed by ultrasound or multigated acquisition scan.
20. Subjects with a previous malignancy within 3 years of randomization (other than superficial basal cell and superficial squamous (skin) cell carcinoma, or carcinoma in situ of the uterine cervix, bladder, or prostate).
21. Subjects with history of a significant vascular event within 6 months before randomization (including, but not limited to myocardial infarction and stroke or transient ischemic attack).

22. Subjects with known bleeding diathesis or significant coagulopathy within 3 months before randomization.
23. Subjects with history of grade ≥2 hemoptysis within 6 months before randomization (≥0.5 teaspoons of bright red blood per event).
24. Subjects with a tumor(s) invading or compressing major blood vessels.

Type of study

Interventional

Type of intervention

Pharmaceutical

Type of intervention: Specify type

N/A

Trial scope

Therapy

Trial scope: Specify scope

N/A

Study design: Allocation

Randomized controlled trial

Study design: Masking

Blinded (masking used)

Study design: Control

Active

Study phase

3

Study design: Purpose

Treatment

Study design: Specify purpose

N/A

Study design: Assignment

Parallel

Study design: Specify assignment

N/A

IMP has market authorization

No

IMP has market authorization: Specify

Name of IMP

MB02

Year of authorization

Month of authorization

Type of IMP

Others

Pharmaceutical class

Monoclonal immunoglobulin G1 antibody

Therapeutic indication

Stage IIIB/IV Non-squamous Non-Small Cell Lung Cancer

Therapeutic benefit

The study population will comprise subjects with Stage IIIB/IV non-squamous NSCLC not amenable to curative intent surgery and, who have not received any systemic therapy for advanced disease.

Study model

N/A

Study model: Explain model

N/A

Study model: Specify model

N/A

Time perspective

N/A

Time perspective: Explain time perspective

Time perspective: Specify perspective

N/A

N/A

Target follow-up duration

Target follow-up duration: Unit

Number of groups/cohorts

Biospecimen retention

None retained

Biospecimen description

Hematology, clinical chemistry, coagulation and urine laboratory analyses will be performed at a central laboratory.
Blood samples will be taken to determine serum biomarkers (antidrug antibodies) through 52 weeks after first study drug administration. Analysis of immunogenicity endpoints will be conducted by an external provider.

Target sample size

576

Actual enrollment target size

576

Date of first enrollment: Type

Actual

Date of first enrollment: Date

06/02/2018

Date of study closure: Type

Actual

Date of study closure: Date

03/06/2020

Recruitment status

Complete

Recruitment status: Specify

Date of completion

14/07/2020

IPD sharing statement plan

No

IPD sharing statement description

Not Applicable

Additional data URL

https://clinicaltrials.gov/ct2/show/NCT03296163

Admin comments

Trial status

Approved

Secondary Identifying Numbers

No Numbers

Sources of Monetary or Material Support

Name
mAbxience

Secondary Sponsors

Name
One sponsor only

Contact for Public/Scientific Queries

Contact type	Contact full name	Address	Country	Telephone	Email	Affiliation
Public	Dr. Pavel Tyan	Germany	Germany	+4989993913302	pavel.tyan2@syn	INC Research
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Scientific	Dr. Paul Khoueiry	Jbeil	Lebanon	009613887995	drpaulkhoueiry@yahoo.com	Centre Hospitalier Universitaire Notre Dame de Secours

Centers/Hospitals Involved in the Study

Center/Hospital name	Name of principles investigator	Principles investigator speciality	Ethical approval
Hammoud Hospital University Medical Center	Dr. Fadi Farhat	on	Approved
Lebanese American University- University Medical Center Rizk Hospital	Dr. Hady Ghanem	on	Approved
Ain w Zein Medical Village	Dr. Jawad Makarem	on	Approved
Notre Dame des Secours Centre Hospitalier Universitaire	Dr. Paul Khouery	on	Approved

Ethics Review

Ethics approval obtained	Approval date	Contact name	Contact email	Contact phone
Hammoud Hospital University Medical Center	25/09/2017	Ghada Aoun	medical@hammoudhospital.org	009613408947
Lebanese American University- University Medical Center Rizk Hospital	09/01/2018	Christine Chalhoub	christine.chalhoub@lau.edu.lb	009613212 327
Ain w Zein Medical Village	23/12/2017	Hayat Kamaleddine	Hayat Kamaleddine	009613853 017
Notre Dame des Secours Centre Hospitalier Universitaire	19/02/2018	Sally Nassour	dm@chu-nds.org	009619940 413

Countries of Recruitment

Name
Ukraine
Thailand
Republic of Serbia
Russian Federation
Philippines
Mexico
Malaysia
Lebanon
India
Hungary
Greece
Georgia
Chile
Bulgaria
Brazil
Peru
South Africa
Spain
Turkey

Health Conditions or Problems Studied

Condition	Code	Keyword
Stage IIIB/IV Non-squamous Non-Small Cell Lung Cancer	Malignant neoplasm of bronchus and lung (C34)	Lung Cancer

Interventions

Intervention	Description	Keyword
Arm 1	MB02 + Paclitaxel + Carboplatin	MB02
Arm 2	Avastin + Paclitaxel + Carboplatin	Avastin

Primary Outcomes

Name	Time Points	Measure
Objective Response Rate	Week 18 after intiation of treatment	Recist 1.1 tumor assessment

Key Secondary Outcomes

Name	Time Points	Measure
Safety profile of MB02 compared with Avastin®	During study	NCI-CTCAE; v4.03
Potential immunogenicity of MB02 compared with that of Avastin®	During study	Antidrug antibodies
Progression-free survival and Overall survival	Week 18 and Week 52	Recist 1.1 tumor assessment

Trial Results

Summary results

Study results globally

Date of posting of results summaries

Date of first journal publication of results

Results URL link

Baseline characteristics

Participant flow

Adverse events

Outcome measures

URL to protocol files