APPLICATION NUMBER: 022545Orig1s000

ADMINISTRATIVE and CORRESPONDENCE DOCUMENTS
Patent Certification

Paragraph II Certification

In Novartis' opinion, and to the best of our knowledge, there are no unexpired patents covering amlodipine besylate.

Lori Ann Kneafsey
Associate Director
Drug Regulatory Affairs

Date
1-4-2010
## PATENT INFORMATION SUBMITTED WITH THE FILING OF AN NDA, AMENDMENT, OR SUPPLEMENT

For Each Patent That Claims a Drug Substance (Active Ingredient), Drug Product (Formulation and Composition) and/or Method of Use

The following is provided in accordance with Section 505(b) and (c) of the Federal Food, Drug, and Cosmetic Act.

### TRADE NAME (OR PROPOSED TRADE NAME)
Tekamlo™ (proposed)

### ACTIVE INGREDIENT(S)
aliskiren/amlopidine

### STRENGTH(S)
- 150 mg/5 mg; 150 mg/10 mg; 300 mg/5 mg; 300 mg/10 mg;

### DOSAGE FORM
tablet

This patent declaration form is required to be submitted to the Food and Drug Administration (FDA) with an NDA application, amendment, or supplement as required by 21 CFR 314.53 at the address provided in 21 CFR 314.53(o)(4).

Within thirty (30) days after approval of an NDA or supplement, or within thirty (30) days of issuance of a new patent, a new patent declaration must be submitted pursuant to 21 CFR 314.53(o)(2)(ii) with all of the required information based on the approved NDA or supplement. The information submitted in the declaration form submitted upon or after approval will be the only information relied upon by FDA for listing a patent in the Orange Book.

For hand-written or typewriter versions (only) of this report: If additional space is required for any narrative answer (i.e., one that does not require a “Yes” or “No” response), please attach an additional page referencing the question number.

**FDA will not list patent information if you submit an incomplete patent declaration or the patent declaration indicates the patent is not eligible for listing.**

For each patent submitted for the pending NDA, amendment, or supplement referenced above, you must submit all the information described below. If you are not submitting any patents for this pending NDA, amendment, or supplement, complete above section and sections 5 and 6.

### 1. GENERAL

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5,559,111</td>
<td>September 24, 1996</td>
<td>July 21, 2018</td>
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</table>

<table>
<thead>
<tr>
<th>d. Name of Patent Owner</th>
<th>Address (of Patent Owner)</th>
<th>City/State</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>608 Fifth Avenue</td>
<td>New York, NY</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e. Name of agent or representative who resides or maintains a place of business within the United States authorized to receive notice of patent certification under section 505(c)(3) and (4)(B) of the Federal Food, Drug, and Cosmetic Act and 21 CFR 314.52 and 314.96 (if patent owner or NDA applicant/holder does not reside or have a place of business within the United States)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address (of agent or representative named in 1.e.)</td>
</tr>
<tr>
<td>One Health Plaza</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>f. Is the patent referenced above a patent that has been submitted previously for the approved NDA or supplement referenced above?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes □ No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>g. If the patent referenced above has been submitted previously for listing, is the expiration date a new expiration date?</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Yes □ No</td>
</tr>
</tbody>
</table>
For the patent referenced above, provide the following information on the drug substance, drug product and/or method of use that is the subject of the pending NDA, amendment, or supplement.

### 2. Drug Substance (Active Ingredient)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Does the patent claim the drug substance that is the active ingredient in the drug product described in the pending NDA, amendment, or supplement?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>2.2 Does the patent claim a drug substance that is a different polymorph of the active ingredient described in the pending NDA, amendment, or supplement?</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>2.3 If the answer to question 2.2 is &quot;Yes,&quot; do you certify that, as of the date of this declaration, you have test data demonstrating that a drug product containing the polymorph will perform the same as the drug product described in the NDA? The type of test data required is described at 21 CFR 314.53(b).</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>2.4 Specify the polymorphic form(s) claimed by the patent for which you have the test results described in 2.3.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 Does the patent claim only a metabolite of the active ingredient pending in the NDA or supplement? (Complete the information in section 4 below if the patent claims a pending method of using the pending drug product to administer the metabolite.)</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>2.6 Does the patent claim only an intermediate?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>2.7 If the patent referenced in 2.1 is a product-by-process patent, is the product claimed in the patent novel? (An answer is required only if the patent is a product-by-process patent.)</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

### 3. Drug Product (Composition/Formulation)

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Does the patent claim the drug product, as defined in 21 CFR 314.3, in the pending NDA, amendment, or supplement?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>3.2 Does the patent claim only an intermediate?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>3.3 If the patent referenced in 3.1 is a product-by-process patent, is the product claimed in the patent novel? (An answer is required only if the patent is a product-by-process patent.)</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

### 4. Method of Use

Sponsors must submit the information in section 4 for each method of using the pending drug product for which approval is being sought that is claimed by the patent. For each pending method of use claimed by the patent, provide the following information:

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Does the patent claim one or more methods of use for which approval is being sought in the pending NDA, amendment, or supplement?</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>4.2 Patent Claim Number(s) (as listed in the patent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2a If the answer to 4.2 is &quot;Yes,&quot; identify with specificity the use with reference to the proposed labeling for the drug product.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2a Use: (Submit indication or method of use information as identified specifically in the proposed labeling.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A method of treating hypertension</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Patent Claim Number(s) (as listed in the patent)</td>
<td></td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
<td>A method of treating hypertension</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 5. No Relevant Patents

For this pending NDA, amendment, or supplement, there are no relevant patents that claim the drug substance (active ingredient), drug product (formulation or composition) or method(s) of use, for which the applicant is seeking approval and with respect to which a claim of patent infringement could reasonably be asserted if a person not licensed by the owner of the patent engaged in the manufacture, use, or sale of the drug product. | ☐   | Yes |
6. Declaration Certification

6.1 The undersigned declares that this is an accurate and complete submission of patent information for the NDA, amendment, or supplement pending under section 505 of the Federal Food, Drug, and Cosmetic Act. This time-sensitive patent information is submitted pursuant to 21 CFR 314.53. I attest that I am familiar with 21 CFR 314.53 and this submission complies with the requirements of the regulation. I verify under penalty of perjury that the foregoing is true and correct.

Warning: A willfully and knowingly false statement is a criminal offense under 18 U.S.C. 1001.

6.2 Authorized Signature of NDA Applicant/Holder or Patent Owner: (Attorney, Agent, Representative or other Authorized Official) (Provide information below)

[Signature]

Date Signed

October 15, 2009

NOTE: Only an NDA applicant/holder may submit this declaration directly to the FDA. A patent owner who is not the NDA applicant/holder is authorized to sign the declaration but may not submit it directly to FDA. 21 CFR 314.53(c)(4) and (d)(4).

Check applicable box and provide information below.

☐ NDA Applicant/Holder

☒ NDA Applicant/Holder's Attorney, Agent (Representative) or other Authorized Official

☐ Patent Owner

☐ Patent Owner's Attorney, Agent (Representative) or Other Authorized Official

Name

Lisa M. Matovcik

Address

One Health Plaza

City/State

East Hanover, NJ

ZIP Code

07936

Telephone Number

(862) 778-5442

FAX Number (if available)

(973) 781-8064

E-Mail Address (if available)

lisa.matovcik@novartis.com

The public reporting burden for this collection of information has been estimated to average 20 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

Department of Health and Human Services
Food and Drug Administration
Office of Chief Information Officer (HFA-710)
5600 Fishers Lane
Rockville, MD 20857

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.
EXCLUSIVITY SUMMARY

NDA # 022545 SUPPL # HFD #

Trade Name Tekamlo

Generic Name aliskiren/amlodipine

Applicant Name Novartis

Approval Date, If Known Goal Date 08-27-2010

PART I IS AN EXCLUSIVITY DETERMINATION NEEDED?

1. An exclusivity determination will be made for all original applications, and all efficacy supplements. Complete PARTS II and III of this Exclusivity Summary only if you answer "yes" to one or more of the following questions about the submission.

a) Is it a 505(b)(1), 505(b)(2) or efficacy supplement? YES ☒ NO ☐

If yes, what type? Specify 505(b)(1), 505(b)(2), SE1, SE2, SE3, SE4, SE5, SE6, SE7, SE8

505(b)(2)

c) Did it require the review of clinical data other than to support a safety claim or change in labeling related to safety? (If it required review only of bioavailability or bioequivalence data, answer "no.")

YES ☒ NO ☐

If your answer is "no" because you believe the study is a bioavailability study and, therefore, not eligible for exclusivity, EXPLAIN why it is a bioavailability study, including your reasons for disagreeing with any arguments made by the applicant that the study was not simply a bioavailability study.

If it is a supplement requiring the review of clinical data but it is not an effectiveness supplement, describe the change or claim that is supported by the clinical data:
d) Did the applicant request exclusivity?  
YES ☐  NO ☑

If the answer to (d) is "yes," how many years of exclusivity did the applicant request?

e) Has pediatric exclusivity been granted for this Active Moiety?  
YES ☐  NO ☑

If the answer to the above question in YES, is this approval a result of the studies submitted in response to the Pediatric Written Request?

IF YOU HAVE ANSWERED "NO" TO ALL OF THE ABOVE QUESTIONS, GO DIRECTLY TO THE SIGNATURE BLOCKS AT THE END OF THIS DOCUMENT.

2. Is this drug product or indication a DESI upgrade?  
YES ☐  NO ☑

IF THE ANSWER TO QUESTION 2 IS "YES," GO DIRECTLY TO THE SIGNATURE BLOCKS ON PAGE 8 (even if a study was required for the upgrade).

PART II  FIVE-YEAR EXCLUSIVITY FOR NEW CHEMICAL ENTITIES  
(Answer either #1 or #2 as appropriate)

1. Single active ingredient product.

Has FDA previously approved under section 505 of the Act any drug product containing the same active moiety as the drug under consideration? Answer "yes" if the active moiety (including other esterified forms, salts, complexes, chelates or clathrates) has been previously approved, but this particular form of the active moiety, e.g., this particular ester or salt (including salts with hydrogen or coordination bonding) or other non-covalent derivative (such as a complex, chelate, or clathrate) has not been approved. Answer "no" if the compound requires metabolic conversion (other than deesterification of an esterified form of the drug) to produce an already approved active moiety.  
YES ☐  NO ☑

If "yes," identify the approved drug product(s) containing the active moiety, and, if known, the NDA #(#s).
2. **Combination product.**

If the product contains more than one active moiety (as defined in Part II, #1), has FDA previously approved an application under section 505 containing **any one** of the active moieties in the drug product? If, for example, the combination contains one never-before-approved active moiety and one previously approved active moiety, answer "yes." (An active moiety that is marketed under an OTC monograph, but that was never approved under an NDA, is considered not previously approved.)

YES ☑ NO ☐

If "yes," identify the approved drug product(s) containing the active moiety, and, if known, the NDA #.(s).

NDA# 021985  aliskiren
NDA# 019787  amlodipine

IF THE ANSWER TO QUESTION 1 OR 2 UNDER PART II IS "NO," GO DIRECTLY TO THE SIGNATURE BLOCKS ON PAGE 8. (Caution: The questions in part II of the summary should only be answered "NO" for original approvals of new molecular entities.) IF "YES," GO TO PART III.

**PART III THREE-YEAR EXCLUSIVITY FOR NDAs AND SUPPLEMENTS**

To qualify for three years of exclusivity, an application or supplement must contain "reports of new clinical investigations (other than bioavailability studies) essential to the approval of the application and conducted or sponsored by the applicant." This section should be completed only if the answer to PART II, Question 1 or 2 was "yes."

1. Does the application contain reports of clinical investigations? (The Agency interprets "clinical investigations" to mean investigations conducted on humans other than bioavailability studies.) If the application contains clinical investigations only by virtue of a right of reference to clinical investigations in another application, answer "yes," then skip to question 3(a). If the answer to 3(a) is "yes" for any investigation referred to in another application, do not complete remainder of
summary for that investigation.

YES ☐ NO ☑

IF "NO," GO DIRECTLY TO THE SIGNATURE BLOCKS ON PAGE 8.

2. A clinical investigation is "essential to the approval" if the Agency could not have approved the application or supplement without relying on that investigation. Thus, the investigation is not essential to the approval if 1) no clinical investigation is necessary to support the supplement or application in light of previously approved applications (i.e., information other than clinical trials, such as bioavailability data, would be sufficient to provide a basis for approval as an ANDA or 505(b)(2) application because of what is already known about a previously approved product), or 2) there are published reports of studies (other than those conducted or sponsored by the applicant) or other publicly available data that independently would have been sufficient to support approval of the application, without reference to the clinical investigation submitted in the application.

(a) In light of previously approved applications, is a clinical investigation (either conducted by the applicant or available from some other source, including the published literature) necessary to support approval of the application or supplement?

YES ☐ NO ☑

If "no," state the basis for your conclusion that a clinical trial is not necessary for approval AND GO DIRECTLY TO SIGNATURE BLOCK ON PAGE 8:

(b) Did the applicant submit a list of published studies relevant to the safety and effectiveness of this drug product and a statement that the publicly available data would not independently support approval of the application?

YES ☐ NO ☑

(1) If the answer to 2(b) is "yes," do you personally know of any reason to disagree with the applicant's conclusion? If not applicable, answer NO.

YES ☐ NO ☑

If yes, explain:

(2) If the answer to 2(b) is "no," are you aware of published studies not conducted or sponsored by the applicant or other publicly available data that could independently demonstrate the safety and effectiveness of this drug product?

YES ☐ NO ☑
If yes, explain:

(c) If the answers to (b)(1) and (b)(2) were both "no," identify the clinical investigations submitted in the application that are essential to the approval:

SPA100A2305 - Pivotal Trial
SPA100A2301 - Major Safety

Studies comparing two products with the same ingredient(s) are considered to be bioavailability studies for the purpose of this section.

3. In addition to being essential, investigations must be "new" to support exclusivity. The agency interprets "new clinical investigation" to mean an investigation that 1) has not been relied on by the agency to demonstrate the effectiveness of a previously approved drug for any indication and 2) does not duplicate the results of another investigation that was relied on by the agency to demonstrate the effectiveness of a previously approved drug product, i.e., does not redemonstrate something the agency considers to have been demonstrated in an already approved application.

a) For each investigation identified as "essential to the approval," has the investigation been relied on by the agency to demonstrate the effectiveness of a previously approved drug product? (If the investigation was relied on only to support the safety of a previously approved drug, answer "no.")

Investigation #1
YES □ NO ☒

Investigation #2
YES □ NO ☒

If you have answered "yes" for one or more investigations, identify each such investigation and the NDA in which each was relied upon:

b) For each investigation identified as "essential to the approval", does the investigation duplicate the results of another investigation that was relied on by the agency to support the effectiveness of a previously approved drug product?

Investigation #1
YES □ NO ☒

Investigation #2
YES □ NO ☒
If you have answered "yes" for one or more investigation, identify the NDA in which a similar investigation was relied on:

SPA100A2305
SPA100A2301

4. To be eligible for exclusivity, a new investigation that is essential to approval must also have been conducted or sponsored by the applicant. An investigation was "conducted or sponsored by" the applicant if, before or during the conduct of the investigation, 1) the applicant was the sponsor of the IND named in the form FDA 1571 filed with the Agency, or 2) the applicant (or its predecessor in interest) provided substantial support for the study. Ordinarily, substantial support will mean providing 50 percent or more of the cost of the study.

a) For each investigation identified in response to question 3(c): if the investigation was carried out under an IND, was the applicant identified on the FDA 1571 as the sponsor?

Investigation #1
IND # 072407  YES ☒ ! NO ☐
! Explain:

Investigation #2
IND # 072407  YES ☒ ! NO ☐
! Explain:

(b) For each investigation not carried out under an IND or for which the applicant was not identified as the sponsor, did the applicant certify that it or the applicant's predecessor in interest provided substantial support for the study?
(c) Notwithstanding an answer of "yes" to (a) or (b), are there other reasons to believe that the applicant should not be credited with having "conducted or sponsored" the study? (Purchased studies may not be used as the basis for exclusivity. However, if all rights to the drug are purchased (not just studies on the drug), the applicant may be considered to have sponsored or conducted the studies sponsored or conducted by its predecessor in interest.)

YES ☐ NO ☒

If yes, explain:

Name of person completing form: Michael Monteleone
Title: Regulatory Project Manager
Date: 08/24/2010

Name of Office/Division Director signing form: Norman Stockbridge
Title: Director, Division of Cardiovascular and Renal Products

Form OGD-011347; Revised 05/10/2004; formatted 2/15/05
This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

MICHAEL V MONTELEONE
08/26/2010

NORMAN L STOCKBRIDGE
08/26/2010
NDA 22-545
Aliskiren/amlodipine Tablets
SPA100

Debarment Certification

Novartis Pharmaceuticals Corporation certifies that it did not and will not use in any capacity the services of any person debarred under section 306(a) or 306(b) of the Federal Food, Drug and Cosmetic Act in connection with this application.

Lori Ann Kneassey
Associate Director
Drug Regulatory Affairs

Date
10/13/2009
**DEPARTMENT OF HEALTH AND HUMAN SERVICES**
**PUBLIC HEALTH SERVICE**
**FOOD AND DRUG ADMINISTRATION**

**REQUEST FOR CONSULTATION**

TO (Division/Office): Devi Kozeli, Regulatory Project Manager, Division of Cardiovascular and Renal Products (DCRP)

FROM(Division/Office): Emily Baker, Regulatory Review Officer, Division of Drug Marketing, Advertising, and Communications (DDMAC)

<table>
<thead>
<tr>
<th>DATE: 10/26/10</th>
<th>IND NO.</th>
<th>NDA NO.</th>
<th>TYPE OF DOCUMENT:</th>
<th>DATE OF DOCUMENTS:</th>
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**NAME OF DRUG**
Tekamlo (aliskiren and amlodipine) tablets

**PRIORITY CONSIDERATION**
YES

**CLASSIFICATION OF DRUG:**
YES

**NAME OF FIRM:** Novartis Pharmaceuticals Corporation

**REASON FOR REQUEST**

I. GENERAL

- NEW PROTOCOL
- PROGRESS REPORT
- NEW CORRESPONDENCE
- DRUG ADVERTISING
- ADVERSE REACTION
- REPORT
- MANUFACTURING
- CHANGE/ADDITION
- MEETING PLANNED BY

- PRE–NDA MEETING
- END OF PHASE II MEETING
- RESUBMISSION
- SAFETY
- PAPER NDA
- CONTROL SUPPLEMENT

- RESPONSE TO DEFICIENCY LETTER
- FINAL PRINTED LABELING
- LABELING REVISION
- ORIGINAL NEW
- CORRESPONDENCE
- FORMULATIVE REVIEW
- OTHER (SPECIFY BELOW): □ OTHER (SPECIFY BELOW):

**COMMENTS/SPECIAL INSTRUCTIONS:**

DDMAC is currently reviewing promotional materials for Tekamlo (aliskiren and amlodipine) tablets. Please see questions below, and feel free to comment on any other concerns with the proposed pieces. This consult will be put into DARRTS and the promotional materials and references will be hand delivered to you.

Please note that I will be out of the office from November 8-19, so please carbon copy Sheila Ryan (Sheila.Ryan@fda.hhs.gov) when you send your response.

Thank you,
Emily Baker
6-7524

**SIGNATURE OF REQUESTER**

**METHOD OF DELIVERY (Check one)**

- DARRTS and hand deliver

**SIGNATURE OF RECEIVER**

**SIGNATURE OF DELIVERER**
MEMORANDUM

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Food and Drug Administration
Center for Drug Evaluation and Research
Division of Drug Marketing, Advertising, and Communications

Date: October 26, 2010

From: Emily Baker, Pharm.D.
Regulatory Review Officer
Division of Drug Advertising, Marketing, and Communications (DDMAC)

To: Devi Kozeli
Regulatory Project Manager
Division of Cardiovascular and Renal Products (DCRP)

Re: Consult request for Tekamlo (aliskiren and amlodipine) tablets
NDA 022545

DDMAC is currently reviewing professional launch promotional materials for advisory comments for Tekamlo (aliskiren and amlodipine) tablets in the form of a proposed visual aid and journal advertisement. Please feel free to provide any additional comments on claims or presentations within the promotional materials.

Please note that I will be out of the office from November 8-19, so please carbon copy Sheila Ryan (Sheila.Ryan@fda.hhs.gov) when you send your response.

Thank you in advance for your comments.
This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

EMILY K BAKER
10/26/2010
Dear Dr. Gruber:

Thank you for your letter, dated August 31, 2010, in which you requested under 21 CFR 314.90(a), a waiver from the requirement under 21 CFR 314.80 to submit to the Food and Drug Administration (FDA), as part of your post-marketing periodic safety reporting responsibilities, FDA Form 3500A for each adverse experience that is determined to be both non-serious and labeled. This waiver applies to the specific approved new drug application (NDA) listed below.

I note the written commitments in your letter: (1) to hold in your corporate drug product safety files the individual case reports of adverse experiences that are both non-serious and labeled; (2) to submit these individual case reports to FDA within five (5) calendar days after receipt of a request by FDA to do so; and (3) to continue to include the non-serious, labeled adverse experiences in each periodic safety report you submit to FDA for this NDA, in the section that includes a summary tabulation by body system of all adverse experience terms and counts of occurrences submitted during the reporting period.

Provided you continue to abide by the commitments in paragraph two of this letter, your requested waiver is hereby granted, as per 21 CFR 314.90(b), for the following approved NDA:

NDA 22-545  Tekamlo (aliskiren and amlodipine) tablets

The waiver outlined in this letter will be in effect until you are notified in writing that it has been discontinued. Also, please note that this waiver in no way affects your other reporting responsibilities under our regulations except as specifically outlined in this letter (e.g., this waiver does not affect your expedited reporting responsibilities for adverse experiences that are both serious and unlabeled).
If you have any questions about this waiver, please contact Ms. Jean Chung, Regulatory Analyst, at (301) 796-2380.

Sincerely,

[See appended electronic signature page]

Gerald Dal Pan, M.D., M.H.S.
Director
Office of Surveillance and Epidemiology
Center for Drug Evaluation and Research
<table>
<thead>
<tr>
<th>Application Type/Number</th>
<th>Submission Type/Number</th>
<th>Submitter Name</th>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA-22545</td>
<td>GI-1</td>
<td>NOVARTIS PHARMACEUTICALS Corp</td>
<td>ALISKIREN/AMLODIPINE(SPA 100A) FIXED COMBO</td>
</tr>
</tbody>
</table>

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

GERALD J DALPAN
09/13/2010
# ACTION PACKAGE CHECKLIST

## APPLICATION INFORMATION

<table>
<thead>
<tr>
<th>NDA # 022545</th>
<th>NDA Supplement #</th>
<th>BLA STN #</th>
<th>If NDA, Efficacy Supplement Type:</th>
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</thead>
<tbody>
<tr>
<td>Proprietary Name: Tekamlo</td>
<td>Applicant: Novartis</td>
<td>Agent for Applicant (if applicable):</td>
<td></td>
</tr>
<tr>
<td>Established/Proper Name: aliskiren/amlopidine</td>
<td>RPM: Michael Monteleone</td>
<td>Division: Cardiovascular and Renal Products</td>
<td></td>
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<tr>
<td>Dosage Form: Tablets</td>
<td>NDAs:</td>
<td>505(b)(2) Original NDAs and 505(b)(2) NDA supplements:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NDA Application Type: □ 505(b)(1) ✔ 505(b)(2)</td>
<td>Listed drug(s) referred to in 505(b)(2) application (include NDA/ANDA #(s) and drug name(s)):</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Efficacy Supplement: □ 505(b)(1) □ 505(b)(2)</td>
<td>NDA 019787 amlodipine besylate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(A supplement can be either a (b)(1) or a (b)(2) regardless of whether the original NDA was a (b)(1) or a (b)(2). Consult page 1 of the NDA Regulatory Filing Review for this application or Appendix A to this Action Package Checklist.)</td>
<td>NDA 021985 aliskiren</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Provide a brief explanation of how this product is different from the listed drug.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>This is a combination of aliskiren and amlodipine.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>□ If no listed drug, check here and explain:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prior to approval, review and confirm the information previously provided in Appendix B to the Regulatory Filing Review by re-checking the Orange Book for any new patents and pediatric exclusivity. If there are any changes in patents or exclusivity, notify the OND ADRA immediately and complete a new Appendix B of the Regulatory Filing Review.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No changes □ Updated</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Date of check:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If pediatric exclusivity has been granted or the pediatric information in the labeling of the listed drug changed, determine whether pediatric information needs to be added to or deleted from the labeling of this drug.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>On the day of approval, check the Orange Book again for any new patents or pediatric exclusivity.</td>
<td></td>
</tr>
</tbody>
</table>

**Actions**

- Proposed action ✔ AP □ TA □ CR
- User Fee Goal Date is 08-29-2010
- Previous actions (specify type and date for each action taken) ✔ None

---

1 The Application Information section is (only) a checklist. The Contents of Action Package section (beginning on page 5) lists the documents to be included in the Action Package.

Version: 12/4/09
If accelerated approval, were promotional materials received?

Note: For accelerated approval (21 CFR 314.510/601.41), promotional materials to be used within 120 days after approval must have been submitted (for exceptions, see http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/ucm069965.pdf). If not submitted, explain ____

<table>
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<th>Review priority:</th>
<th>Standard</th>
<th>Priority</th>
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<tr>
<td>Chemical classification (new NDAs only):</td>
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<tr>
<td>□ Fast Track</td>
<td>□ Rx-to-OTC full switch</td>
<td></td>
</tr>
<tr>
<td>□ Rolling Review</td>
<td>□ Rx-to-OTC partial switch</td>
<td></td>
</tr>
<tr>
<td>□ Orphan drug designation</td>
<td>□ Direct-to-OTC</td>
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</table>

NDAs: Subpart H
BLAs: Subpart E

<table>
<thead>
<tr>
<th>Subpart I</th>
<th>Subpart H</th>
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<tbody>
<tr>
<td>□ Accelerated approval (21 CFR 314.510)</td>
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</tr>
<tr>
<td>□ Restricted distribution (21 CFR 314.520)</td>
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<tr>
<td>□ Approval based on animal studies</td>
<td></td>
</tr>
<tr>
<td>□ Accelerated approval (21 CFR 601.41)</td>
<td></td>
</tr>
<tr>
<td>□ Restricted distribution (21 CFR 601.42)</td>
<td></td>
</tr>
<tr>
<td>□ Approval based on animal studies</td>
<td></td>
</tr>
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</table>

Submitted in response to a PMR
Submitted in response to a PMC
Submitted in response to a Pediatric Written Request

Comments:

BLAs only: RMS-BLA Product Information Sheet for TBP has been completed and forwarded to OBPS/DRM (approvals only)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
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BLAs only: is the product subject to official FDA lot release per 21 CFR 610.2 (approvals only)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</thead>
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Public communications (approvals only)

- Office of Executive Programs (OEP) liaison has been notified of action
- Press Office notified of action (by OEP)
- Indicate what types (if any) of information dissemination are anticipated

<table>
<thead>
<tr>
<th>None</th>
<th>HHS Press Release</th>
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</thead>
<tbody>
<tr>
<td>FDA Talk Paper</td>
<td>CDER Q&amp;As</td>
</tr>
<tr>
<td>Other</td>
<td></td>
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</table>

2 Answer all questions in all sections in relation to the pending application, i.e., if the pending application is an NDA or BLA supplement, then the questions should be answered in relation to that supplement, not in relation to the original NDA or BLA. For example, if the application is a pending BLA supplement, then a new RMS-BLA Product Information Sheet for TBP must be completed.
### Exclusivity

- **Is approval of this application blocked by any type of exclusivity?**
  - No □ Yes □

- **NDAs and BLAs: Is there existing orphan drug exclusivity for the “same” drug or biologic for the proposed indication(s)? Refer to 21 CFR 316.3(b)(13) for the definition of “same drug” for an orphan drug (i.e., active moiety). This definition is NOT the same as that used for NDA chemical classification.**
  - No □ Yes □
  - If, yes, NDA/BLA # and date exclusivity expires:

- **(b)(2) NDAs only: Is there remaining 5-year exclusivity that would bar effective approval of a 505(b)(2) application? (Note that, even if exclusivity remains, the application may be tentatively approved if it is otherwise ready for approval.)**
  - No □ Yes □
  - If yes, NDA # and date exclusivity expires:

- **(b)(2) NDAs only: Is there remaining 3-year exclusivity that would bar effective approval of a 505(b)(2) application? (Note that, even if exclusivity remains, the application may be tentatively approved if it is otherwise ready for approval.)**
  - No □ Yes □
  - If yes, NDA # and date exclusivity expires:

- **(b)(2) NDAs only: Is there remaining 6-month pediatric exclusivity that would bar effective approval of a 505(b)(2) application? (Note that, even if exclusivity remains, the application may be tentatively approved if it is otherwise ready for approval.)**
  - No □ Yes □
  - If yes, NDA # and date exclusivity expires:

- **NDAs only: Is this a single enantiomer that falls under the 10-year approval limitation of 505(u)? (Note that, even if the 10-year approval limitation period has not expired, the application may be tentatively approved if it is otherwise ready for approval.)**
  - No □ Yes □
  - If yes, NDA # and date 10-year limitation expires:

### Patent Information (NDAs only)

- **Patent Information:** Verify that form FDA-3542a was submitted for patents that claim the drug for which approval is sought. If the drug is an old antibiotic, skip the Patent Certification questions.
  - Yes □ No □
  - Not applicable because drug is an old antibiotic.
  - 21 CFR 314.50(i)(1)(i)(A) □
  - 21 CFR 314.50(i)(1) (ii) □ (iii) □

- **Patent Certification [505(b)(2) applications]:** Verify that a certification was submitted for each patent for the listed drug(s) in the Orange Book and identify the type of certification submitted for each patent.
  - □
  - 21 CFR 314.50(i)(1) (ii) □ (iii) □

- **[505(b)(2) applications] If the application includes a paragraph III certification, it cannot be approved until the date that the patent to which the certification pertains expires (but may be tentatively approved if it is otherwise ready for approval).**
  - No paragraph III certification
  - Date patent will expire

- **[505(b)(2) applications] For each paragraph IV certification, verify that the applicant notified the NDA holder and patent owner(s) of its certification that the patent(s) is invalid, unenforceable, or will not be infringed (review documentation of notification by applicant and documentation of receipt of notice by patent owner and NDA holder). (If the application does not include any paragraph IV certifications, mark “N/A” and skip to the next section below (Summary Reviews)).**
  - □
  - N/A (no paragraph IV certification) □
  - Verified
• [505(b)(2) applications] For each paragraph IV certification, based on the questions below, determine whether a 30-month stay of approval is in effect due to patent infringement litigation.

Answer the following questions for each paragraph IV certification:

(1) Have 45 days passed since the patent owner’s receipt of the applicant’s notice of certification?

(Note: The date that the patent owner received the applicant’s notice of certification can be determined by checking the application. The applicant is required to amend its 505(b)(2) application to include documentation of this date (e.g., copy of return receipt or letter from recipient acknowledging its receipt of the notice) (see 21 CFR 314.52(e)).

If “Yes,” skip to question (4) below. If “No,” continue with question (2).

(2) Has the patent owner (or NDA holder, if it is an exclusive patent licensee) submitted a written waiver of its right to file a legal action for patent infringement after receiving the applicant’s notice of certification, as provided for by 21 CFR 314.107(f)(3)?

If “Yes,” there is no stay of approval based on this certification. Analyze the next paragraph IV certification in the application, if any. If there are no other paragraph IV certifications, skip the rest of the patent questions.

If “No,” continue with question (3).

(3) Has the patent owner, its representative, or the exclusive patent licensee filed a lawsuit for patent infringement against the applicant?

(Note: This can be determined by confirming whether the Division has received a written notice from the (b)(2) applicant (or the patent owner or its representative) stating that a legal action was filed within 45 days of receipt of its notice of certification. The applicant is required to notify the Division in writing whenever an action has been filed within this 45-day period (see 21 CFR 314.107(f)(2)).

If “No,” the patent owner (or NDA holder, if it is an exclusive patent licensee) has until the expiration of the 45-day period described in question (1) to waive its right to bring a patent infringement action or to bring such an action. After the 45-day period expires, continue with question (4) below.

(4) Did the patent owner (or NDA holder, if it is an exclusive patent licensee) submit a written waiver of its right to file a legal action for patent infringement within the 45-day period described in question (1), as provided for by 21 CFR 314.107(f)(3)?

If “Yes,” there is no stay of approval based on this certification. Analyze the next paragraph IV certification in the application, if any. If there are no other paragraph IV certifications, skip to the next section below (Summary Reviews).

If “No,” continue with question (5).
(5) Did the patent owner, its representative, or the exclusive patent licensee bring suit against the (b)(2) applicant for patent infringement within 45 days of the patent owner’s receipt of the applicant’s notice of certification?

(Note: This can be determined by confirming whether the Division has received a written notice from the (b)(2) applicant (or the patent owner or its representative) stating that a legal action was filed within 45 days of receipt of its notice of certification. The applicant is required to notify the Division in writing whenever an action has been filed within this 45-day period (see 21 CFR 314.107(f)(2)). If no written notice appears in the NDA file, confirm with the applicant whether a lawsuit was commenced within the 45-day period).

If “No,” there is no stay of approval based on this certification. Analyze the next paragraph IV certification in the application, if any. If there are no other paragraph IV certifications, skip to the next section below (Summary Reviews).

If “Yes,” a stay of approval may be in effect. To determine if a 30-month stay is in effect, consult with the OND ADRA and attach a summary of the response.

CONTENTS OF ACTION PACKAGE

- Copy of this Action Package Checklist

Officer/Employee List

- List of officers/employees who participated in the decision to approve this application and consented to be identified on this list (approvals only)
  - Included

  Documentation of consent/non-consent by officers/employees
  - Included

Action Letters

- Copies of all action letters (including approval letter with final labeling)
  - Action(s) and date(s)
    Approval 08-26-2010

Labeling

- Package Insert (write submission/communication date at upper right of first page of PI)
  - Most recent draft labeling. If it is division-proposed labeling, it should be in track-changes format.
    08-19-2010
  - Original applicant-proposed labeling
    10-29-2009
  - Example of class labeling, if applicable

3 Fill in blanks with dates of reviews, letters, etc.
Version: 12/4/09
<table>
<thead>
<tr>
<th>Medication Guide/Patient Package Insert/Instructions for Use (write submission/communication date at upper right of first page of each piece)</th>
<th>None</th>
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<tr>
<td>• Most-recent draft labeling. If it is division-proposed labeling, it should be in track-changes format.</td>
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<tr>
<td>• Original applicant-proposed labeling</td>
<td>10-29-2009</td>
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<td>• Example of class labeling, if applicable</td>
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<tr>
<td><img src="image" alt="Proprietary Name" /></td>
<td>Acceptable 02/02/2010 Review 02/02/2010; 08-12-2010</td>
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<tr>
<td><img src="image" alt="Labeling reviews (indicate dates of reviews and meetings)" /></td>
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**Administrative / Regulatory Documents**

| Administrative Reviews (e.g., RPM Filing Review/Memo of Filing Meeting) (indicate date of each review) | 12/23/2009 |
| NDAs only: Exclusivity Summary (signed by Division Director) | Included |
| Application Integrity Policy (AIP) Status and Related Documents http://www.fda.gov/ICECI/EnforcementActions/ApplicationIntegrityPolicy/default.htm | |
| • Applicant in on the AIP | |
| | Yes | No |
| o If yes, Center Director’s Exception for Review memo (indicate date) | |
| o If yes, OC clearance for approval (indicate date of clearance communication) | |
| Pediatrics (approvals only) | |
| o Date reviewed by PeRC 06/30/2010 | |
| If PeRC review not necessary, explain: | |
| o Pediatric Page (approvals only, must be reviewed by PERC before finalized) | Included |
| Debarment certification (original applications only): verified that qualifying language was not used in certification and that certifications from foreign applicants are cosigned by U.S. agent (include certification) | Verified, statement is acceptable |
| Outgoing communications (letters (except action letters), emails, faxes, telecons) | |
| Internal memoranda, telecons, etc. | |
### Minutes of Meetings

- Pre-Approval Safety Conference *(indicate date of mtg; approvals only)* : Not applicable
- Regulatory Briefing *(indicate date of mtg)* : No mtg
- If not the first review cycle, any end-of-review meeting *(indicate date of mtg)* : N/A or no mtg
- Pre-NDA/BLA meeting *(indicate date of mtg)* : No mtg
- EOP2 meeting *(indicate date of mtg)* : No mtg
- Other milestone meetings (e.g., EOP2a, CMC pilot programs) *(indicates dates)* :

### Advisory Committee Meeting(s)

- Date(s) of Meeting(s) : No AC meeting
- 48-hour alert or minutes, if available *(do not include transcript)* :

### Decisional and Summary Memos

- Office Director Decisional Memo *(indicate date for each review)* : None
- Division Director Summary Review *(indicate date for each review)* : None 08/16/2010
- Cross-Discipline Team Leader Review *(indicate date for each review)* : None 08/09/2010
- PMR/PMC Development Templates *(indicate total number)* : None

### Clinical Information

- Clinical Team Leader Review(s) *(indicate date for each review)* : 07/07/2010
- Clinical review(s) *(indicate date for each review)* : None
- Social scientist review(s) (if OTC drug) *(indicate date for each review)* : None
- Financial Disclosure reviews(s) or location/date if addressed in another review OR
  - If no financial disclosure information was required, check here : Clinical Review 07/07/2010, pg 16
  - Include a review/memo explaining why not *(indicate date of review/memo)*
- Clinical reviews from immunology and other clinical areas/divisions/Centers *(indicate date of each review)* : None
- Controlled Substance Staff review(s) and Scheduling Recommendation *(indicate date of each review)* : Not applicable
- Risk Management
  - REMS Document and Supporting Statement *(indicate date(s) of submission(s))* : None
  - REMS Memo *(indicate date)* : None
  - Risk management review(s) and recommendations (including those by OSE and CSS) *(indicate date of each review and indicate location/date if incorporated into another review)* : None
- DSI Clinical Inspection Review Summary(ies) *(include copies of DSI letters to investigators)* : None requested

---

5 Filing reviews should be filed with the discipline reviews.

Version: 12/4/09
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<thead>
<tr>
<th>Clinical Microbiology</th>
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<tr>
<td>DSI Clinical Pharmacology Inspection Review Summary <em>(include copies of DSI letters)</em></td>
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<td>ADP/T Review(s) <em>(indicate date for each review)</em></td>
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<td>Supervisory Review(s) <em>(indicate date for each review)</em></td>
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<td>Statistical review(s) of carcinogenicity studies <em>(indicate date for each review)</em></td>
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<tr>
<td>ECAC/CAC report/memo of meeting</td>
<td>☐ None Included in P/T review, page</td>
</tr>
<tr>
<td>DSI Nonclinical Inspection Review Summary <em>(include copies of DSI letters)</em></td>
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<td>Branch Chief/Team Leader Review(s) <em>(indicate date for each review)</em></td>
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</tr>
<tr>
<td>BLAs: Sterility assurance, microbiology, facilities reviews <em>(DMPQ/MAPCB/BMT) (indicate date of each review)</em></td>
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<tr>
<td>✓ Review &amp; FONSI <em>(indicate date of review)</em></td>
<td></td>
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<tr>
<td>□ Review &amp; Environmental Impact Statement <em>(indicate date of each review)</em></td>
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<tbody>
<tr>
<td>✓ NDAs: Facilities inspections (include EER printout) <em>(date completed must be within 2 years of action date)</em></td>
</tr>
<tr>
<td>□ BLAs: TB-EER <em>(date of most recent TB-EER must be within 30 days of action date)</em></td>
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<tbody>
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</tr>
<tr>
<td>□ Requested</td>
</tr>
<tr>
<td>□ Not yet requested</td>
</tr>
<tr>
<td>□ Not needed</td>
</tr>
</tbody>
</table>
Appendix A to Action Package Checklist

An NDA or NDA supplemental application is likely to be a 505(b)(2) application if:

1. It relies on published literature to meet any of the approval requirements, and the applicant does not have a written right of reference to the underlying data. If published literature is cited in the NDA but is not necessary for approval, the inclusion of such literature will not, in itself, make the application a 505(b)(2) application.
2. Or it relies for approval on the Agency's previous findings of safety and efficacy for a listed drug product and the applicant does not own or have right to reference the data supporting that approval.
3. Or it relies on what is "generally known" or "scientifically accepted" about a class of products to support the safety or effectiveness of the particular drug for which the applicant is seeking approval. (Note, however, that this does not mean any reference to general information or knowledge (e.g., about disease etiology, support for particular endpoints, methods of analysis) causes the application to be a 505(b)(2) application.)

Types of products for which 505(b)(2) applications are likely to be submitted include: fixed-dose combination drug products (e.g., heart drug and diuretic (hydrochlorothiazide) combinations); OTC monograph deviations (see 21 CFR 330.11); new dosage forms; new indications; and, new salts.

An efficacy supplement can be either a (b)(1) or a (b)(2) regardless of whether the original NDA was a (b)(1) or a (b)(2).

An efficacy supplement is a 505(b)(1) supplement if the supplement contains all of the information needed to support the approval of the change proposed in the supplement. For example, if the supplemental application is for a new indication, the supplement is a 505(b)(1) if:

1. The applicant has conducted its own studies to support the new indication (or otherwise owns or has right of reference to the data/studies).
2. And no additional information beyond what is included in the supplement or was embodied in the finding of safety and effectiveness for the original application or previously approved supplements is needed to support the change. For example, this would likely be the case with respect to safety considerations if the dose(s) was/were the same as (or lower than) the original application.
3. And all other "criteria" are met (e.g., the applicant owns or has right of reference to the data relied upon for approval of the supplement, the application does not rely for approval on published literature based on data to which the applicant does not have a right of reference).

An efficacy supplement is a 505(b)(2) supplement if:

1. Approval of the change proposed in the supplemental application would require data beyond that needed to support our previous finding of safety and efficacy in the approval of the original application (or earlier supplement), and the applicant has not conducted all of its own studies for approval of the change, or obtained a right to reference studies it does not own. For example, if the change were for a new indication AND a higher dose, we would likely require clinical efficacy data and preclinical safety data to approve the higher dose. If the applicant provided the effectiveness data, but had to rely on a different listed drug, or a new aspect of a previously cited listed drug, to support the safety of the new dose, the supplement would be a 505(b)(2).
2. Or the applicant relies for approval of the supplement on published literature that is based on data that the applicant does not own or have a right to reference. If published literature is cited in the supplement but is not necessary for approval, the inclusion of such literature will not, in itself, make the supplement a 505(b)(2) supplement.
3. Or the applicant is relying upon any data they do not own or to which they do not have right of reference.

If you have questions about whether an application is a 505(b)(1) or 505(b)(2) application, consult with your ODE’s ADRA.
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/s/

MICHAEL V MONTELEONE
08/26/2010
NDA 022545

Novartis Pharmaceuticals Corporation
Attention: Lori Kneafsey
Associate Director, Drug Regulatory Affairs
One Health Plaza
East Hanover, NJ 07936

Dear Ms. Kneafsey:

Please refer to your new drug application (NDA) dated October 28, 2009, received October 29, 2009, submitted pursuant to section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act, for Tekamlo, (aliskiren/amlodipine) 150/5mg, 150/10mg, 300/5mg and 300/10mg Tablets.

We are reviewing the carton and container labeling of your submission and have the following comments and information requests. We request a prompt written response in order to continue our evaluation of your NDA. Please note that these comments are in addition to the CMC comments conveyed in letters dated April 8 and May 28, 2010.

1. **General Comments**
   a. We note the color purple is used for the tradename across the Aliskerin product line (i.e. Tekturna, Tekturna HCT, and Tekamlo). Additionally, the same circle graphic is used across the product line. In order to differentiate Tekamlo from the remaining Aliskerin products we recommend a different color be used for the tradename and the circle graphic be revised so that it is not the same across the product line.
   b. Present the entire proprietary name in a single font color. As currently presented, portions of the proprietary name make the name difficult to read.

2. **Container Labels (30 count and 90 count)**
   a. See comments 1-A and 1-B.

3. **Blister Labels**
   a. Differentiate the product strengths through the use of color, boxing, reverse-blocking, or some other means.
   b. Include an asterisk at the beginning of the qualifying statement “each tablet contains… XX mg of amlodipine besylate” so that it is clear to what the asterisk at the end of the product strength is referring.

4. **Unit-Dose Carton Labeling**
   a. See comments 1-A and 1-B.
b. We note different colors are used to differentiate the product strengths (e.g. yellow for 150 mg/5 mg strength, orange for 150 mg/10 mg strength), however, the color blue is still used predominantly in the labels and labeling thereby diminishing any differentiation offered by the differing colors. We recommend using the same colors used to differentiate the product strengths in place of where the color blue is used (e.g. the color band across the top of the carton labeling that contains the NDC number) as is used on the 30-count and 90-count trade container labels.

c. Remove the [REDACTED] statement. The [REDACTED] statement is a more accurate reflection of the contents of the carton.

If you have any questions, please call Michael Monteleone, Regulatory Project Manager, at (301) 796.1952.

Sincerely,

{See appended electronic signature page}

Norman Stockbridge, MD, PhD
Director
Division of Cardiovascular and Renal Products
Office of Drug Evaluation I
Center for Drug Evaluation and Research
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/s/

NORMAN L STOCKBRIDGE
08/16/2010
Pediatric Research Equity Act (PREA) Waiver Request, Deferral Request/Pediatric Plan and Assessment Template(s)

BACKGROUND
Please check all that apply: ☑ Full Waiver ☐ Partial Waiver ☐ Pediatric Assessment ☐ Deferral/Pediatric Plan

BLA/NDA#: NDA 022545

PRODUCT PROPRIETARY NAME: TEKAMLO

APPLICANT/SPONSOR: Novartis Pharmaceuticals Corporation

PREVIOUSLY APPROVED INDICATION/S:
(1) N/A
(2) ________________________________
(3) ________________________________
(4) ________________________________

PROPOSED INDICATION/S:
(1) Treatment of hypertension: As initial therapy in patients likely to need multiple drugs to achieve their blood pressure goals; in patients not adequately controlled with monotherapy; May be substituted for titrated components.
(2) ________________________________
(3) ________________________________
(4) ________________________________

BLA/NDA STAMP DATE: 10/29/2009

SUPPLEMENT TYPE: NA

SUPPLEMENT NUMBER: NA

ESTABLISHED/Generic NAME: aliskiren/amlodipine
Does this application provide for (If yes, please check all categories that apply and proceed to the next question):

NEW ☒ active ingredient(s) (includes new combination); ☐ indication(s); ☐ dosage form; ☐ dosing regimen; or ☐ route of administration?

Has the sponsor submitted a Proposed Pediatric Study Request (PPSR) or does the Division believe there is an additional public health benefit to issuing a Written Request for this product, even if the plan is to grant a waiver for this indication? (Please note, Written Requests may include approved and unapproved indications and may apply to the entire moiety, not just this product.)

Yes ☐ No ☒

Is this application in response to a PREA (Postmarketing Requirement) PMR? Yes ☐ No ☒

If Yes, PMR # __________ NDA # __________

Does the division agree that this is a complete response to the PMR? Yes ☐ No ☒

If Yes, to either question Please complete the Pediatric Assessment Template.

If No, complete all appropriate portions of the template, including the assessment template if the division believes this application constitutes an assessment for any particular age group.
WAIVER REQUEST

Please attach:

☒ Draft Labeling (If Waiving for Safety and/or Efficacy) from the sponsor unless the Division plans to change. If changing the sponsor’s proposed language, include the appropriate language under Question 4 in this form.
☐ Pediatric Record

1. Pediatric age group(s) to be waived.

FULL WAIVER

2. Reason(s) for waiving pediatric assessment requirements (Choose one. If there are different reasons for different age groups or indications, please choose the appropriate reason for each age group or indication. This section should reflect the Division’s thinking.)

☐ Studies are impossible or highly impractical (e.g. the number of pediatric patients is so small or is geographically dispersed). (Please note that in the DARRTS record, this reason is captured as “Not Feasible.”) If applicable, chose from adult-related conditions on the next page

☐ The product would be ineffective and/or unsafe in one or more of the pediatric group(s) for which a waiver is being requested. Note: If this is the reason the studies are being waived, this information MUST be included in the pediatric use section of labeling. Please provide the draft language you intend to include in the label. The language must be included in section 8.4 and describe the safety or efficacy concerns in detail.

☒ The product fails to represent a meaningful therapeutic benefit over existing therapies for pediatric patients and is unlikely to be used in a substantial number of all pediatric age groups or the pediatric age group(s) for which a waiver is being requested.

☐ Reasonable attempts to produce a pediatric formulation for one or more of the pediatric age group(s) for which the waiver is being requested have failed. (Provide documentation from Sponsor) Note: Sponsor must provide data to support this claim for review by the Division, and this data will be publicly posted. (This reason is for Partial Waivers Only)
3. **Provide justification for Waiver:**

Tekamlo is a combination antihypertensive agent. There are single agent products studied and labeled for use in pediatrics, and most pediatric patients are not treated with combination antihypertensives (supported by *The Fourth Report on the Diagnosis, Evaluation, and Treatment of High Blood Pressure in Children and Adolescents*, Pediatrics 2004;114;555-576).

4. **Provide language Review Division is proposing for Section 8.4 of the label if different from sponsor’s proposed language:**
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/s/

MICHAEL V MONTELEONE
08/11/2010
# REQUEST FOR CONSULTATION

**TO (Office/Division):** PMHS  
**FROM (Name, Office/Division, and Phone Number of Requestor):** Michael Monteleone, Division of Cardiorenal, x61952

<table>
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<th>NDA NO.</th>
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<tr>
<td>Tekamlo</td>
<td>Standard</td>
<td>combination</td>
<td>July 19, 2010</td>
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| NAME OF FIRM: Novartis |

## REASON FOR REQUEST

### I. GENERAL

- NEW PROTOCOL
- PROGRESS REPORT
- NEW CORRESPONDENCE
- DRUG ADVERTISING
- ADVERSE REACTION REPORT
- MANUFACTURING CHANGE / ADDITION
- MEETING PLANNED BY

### II. BIOMETRICS

- PRIORITY P NDA REVIEW
- END-OF-PHASE 2 MEETING
- CONTROLLED STUDIES
- PROTOCOL REVIEW
- OTHER (SPECIFY BELOW):

### III. BIOPHARMACEUTICS

- DISSOLUTION
- BIOAVAILABILITY STUDIES
- PHASE 4 STUDIES

### IV. DRUG SAFETY

- PHASE 4 SURVEILLANCE/EPIDEmiOLOGY PROTOCOL
- DRUG USE, e.g. POPULATION EXPOSURE, ASSOCIATED DIAGNOSES
- CASE REPORTS OF SPECIFIC REACTIONS (List below)
- COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP

### V. SCIENTIFIC INVESTIGATIONS

- CLINICAL
- NONCLINICAL

**COMMENTS / SPECIAL INSTRUCTIONS:** Please review substantially complete PI for new NDA 022545, Tekamlo (aliskiren/amlodipine) combination. All primary reviews are in DARRTS, word labeling will be sent via email to Tammy Brent Howard.

**SIGNATURE OF REQUESTOR**  
Mike Monteleone

**METHOD OF DELIVERY (Check one)**  
- DFS  
- EMAIL  
- MAIL  
- HAND

**PRINTED NAME AND SIGNATURE OF RECEIVER**
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/s/

MICHAEL V MONTELEONE
07/09/2010
NDA 22-545

Novartis Pharmaceuticals Corporation
Attention: Lori Ann Kneafsey
Associate Director, Drug Regulatory Affairs
One Health Plaza
East Hanover, NJ 07936-1080

Dear Ms. Kneafsey:

Please refer to your New Drug Application (NDA) submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for SPA100 (aliskiren and amlodipine) film-coated tablets.

We are reviewing the Chemistry, Manufacturing, and Controls sections of your submission and have the following comments and information requests. We request a prompt written response in order to continue our evaluation of your NDA.

1. Provide an updated amlodipine besylate drug substance specification that will include a limit for total amlodipine besylate not to exceed \( \text{ppm} \).
2. Based on the review of the overall dissolution information provided in Amendment dated April 26, 2010, we consider that your proposal for the dissolution acceptance criteria of your drug product is acceptable, as follows:
   - Amlodipine: Q-value of \( \text{in 30 minutes for SPA100 tablets of all strengths} \).
   - Aliskiren: Q-value of \( \text{in 30 minutes for SPA100 tablets of all strengths} \).
3. Provide updated drug product specification that includes all revisions made according to FDA comments (i.e. revised Description and Dissolution of SPA 100 tablets).
4. Carton labels for 30 count and 90 count trade HDPE bottles are not provided. Clarify why.
5. Include a reference in the text of the labels for 150 mg aliskiren as follows, and respective reference for 300 mg aliskiren:
6. Revise containers labels to include the following statement:
If you have any questions, call Don Henry, Regulatory Project Manager, at (301) 796-4227.

Sincerely,

{See appended electronic signature page}

Ramesh Sood, Ph.D.
Branch Chief
Division of New Drug Quality Assessment I
Office of New Drug Quality Assessment
Center for Drug Evaluation and Research
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/s/

RAMESH K SOOD
05/28/2010
**REQUEST FOR DDMAC LABELING REVIEW CONSULTATION**

**Please send immediately following the Filing/Planning meeting**

<table>
<thead>
<tr>
<th>TO:</th>
<th>FROM: (Name/Title, Office/Division/Phone number of requestor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDER-DDMAC-RPM</td>
<td>Mike Monteleone, RPM DCRP x61952</td>
</tr>
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<td>Tekamlo (aliskiren/amlodipine)</td>
<td>Standard</td>
<td></td>
<td>(Generally 1 week before the wrap-up meeting)</td>
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<th>NAME OF FIRM:</th>
<th>PDUFA Date: August 29, 2010</th>
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<td>Novartis</td>
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**NAME OF DRUG**: Tekamlo (aliskiren/amlodipine)

**PRIORITY CONSIDERATION**: Standard

**CLASSIFICATION OF DRUG**: Standard

**DESIRED COMPLETION DATE**: July 01, 2010

**NAME OF FIRM**: Novartis

**PDUFA Date**: August 29, 2010

**TYPE OF LABEL TO REVIEW**

- □ PACKAGE INSERT (PI)
- □ PATIENT PACKAGE INSERT (PPI)
- □ CARTON/CONTAINER LABELING
- □ MEDICATION GUIDE
- □ INSTRUCTIONS FOR USE (IFU)

**TYPE OF LABELING**: (Check all that apply)

**TYPE OF APPLICATION/SUBMISSION**

- □ ORIGINAL NDA/BLA
- □ IND
- □ EFFICACY SUPPLEMENT
- □ SAFETY SUPPLEMENT
- □ LABELING SUPPLEMENT
- □ PLR CONVERSION

**REASON FOR LABELING CONSULT**

- □ INITIAL PROPOSED LABELING
- □ LABELING REVISION

**EDR link to submission:**

**In DARRTS**

Please Note: There is no need to send labeling at this time. DDMAC reviews substantially complete labeling, which has already been marked up by the CDER Review Team. The DDMAC reviewer will contact you at a later date to obtain the substantially complete labeling for review.

**COMMENTS/SPECIAL INSTRUCTIONS:**

- Mid-Cycle Meeting: [April 7, 2010]
- Wrap-Up Meeting: [July 7, 2010]

**SIGNATURE OF REQUESTER**

Michael Monteleone

**SIGNATURE OF RECEIVER**

**METHOD OF DELIVERY (Check one)**

- □ eMAIL
- □ DARRTS
- □ HAND
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/s/

MICHAEL V MONTELEONE
04/19/2010
INFORMATION REQUEST

Novartis Pharmaceuticals Corporation
Attention: Lori Ann Kneafsey
Associate Director, Drug Regulatory Affairs
One Health Plaza
East Hanover, NJ 07936-1080

Dear Ms. Kneafsey:

Please refer to your New Drug Application (NDA) submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for SPA100 (aliskiren and amlodipine) film-coated tablets.

We are reviewing the Chemistry, Manufacturing, and Controls sections of your submission and have the following comments and information requests. We request a prompt written response in order to continue our evaluation of your NDA.

Drug Substance

1. The DMF, which you are referencing for drug substance Amlodipine Besylate, is currently inadequate. A deficiency letter was sent to the DMF holder. Please be advised that satisfactory resolution of these deficiencies will be necessary before your NDA may be approved.

2. Besides the individual limits for in the amlodipine besylate drug substance specification, include a limit for total of ppm [refer to the Test Specification (Test 30001.01) “Impurities by HPLC” of the Novartis’s Test Specification for Amlodipine Besylate from since it has been modified to include additional specified impurities as compared to HPLC Test 54001.01.

3. Provide validation of the HPLC Test 53001.01 (Impurities by HPLC) included in the Test Specification for Amlodipine Besylate from , since it has been modified to include additional specified impurities as compared to HPLC Test 54001.01.

4. Provide exact numerical values for the total combined yeasts /moulds count in the Microbial Enumeration test for three batches of amlodipine besylate manufactured by and for three drug substance batches manufactured by using . We note that your batch analysis data show whereas the specification limit is

Drug Product

1. Include “non-scored” in the Description of SPA100 tablets in the drug product specification for each dosage strength.
2. Provide confirmation that all excipients of the drug product comply with the USP<467> for residual solvents.

3. The aliskiren degradation impurity (b)(4) was qualified at the level of (b)(4) in the previous NDA 22-217 (Valturna). Provide toxicology data that qualifies impurity (b)(4) at the limit of (b)(4) in the drug product specification.

4. Provide toxicology studies supporting qualification of the aliskiren impurity (b)(4) at level of (b)(4) in the drug product specification.

5. Since the 12-month stability data at long-term and intermediate conditions do not justify the proposed limits, tighten the shelf-life limit of (b)(4) for impurity (b)(4) and limit of (b)(4) for sum of the degradation products in the drug product specification.

6. Clarify your conclusion in the validation report for test method AM38011C(AS6220) that this method is judged to be suitable for determination only of (b)(4), even though the method is intended to control the sum of (b)(4) at the limit of (b)(4) ppm. Provide a rationale for developing a limit test for these impurities instead of a regular numerical test.

7. Provide structural characterization of the reference standard for specified degradation product (b)(4) originating from amlodipine besylate, and for aliskiren specified impurity (b)(4). Provide a source and additional purification steps, if applicable, for these reference standards.

8. To support the bracketing design for stability studies, provide data on head space volume for each bottle/count configuration and results of the USP Container Test <671> for (b)(4) for each combination of bottle and cap intended for commercial and sample use.

9. Based on the results of the comparative dissolution testing, we recommend the following revision to the drug product dissolution specification. Provide updated drug product specifications according to this revision:
   a. the Q-value for amlodipine should be (b)(4) release of amlodipine at 20 minutes for SPA100 tablets of all strengths.
   b. the Q-value for aliskiren should be (b)(4) release of aliskiren at 20 minutes for SPA100 tablets of all strengths.

   Provide Q-value data at 20 minutes at release and on stability for 150/5 mg, 150/10 mg, 300/5 mg and 300/10 mg strengths tablets.

Labeling & Package Insert

Container/Carton Labels

1. Provide full representation in color of the updated container/carton labels (not the drafts) since the trade name is approved.

2. Include a reference on the text of the labels for 5 mg amlodipine as follows: “each tablet contains (b)(4) of amlodipine besylate”, and the corresponding reference for (b)(4) amlodipine.

3. Explain why carton and bottle labels for HDPE bottles of 100 counts and of 14 counts are not provided.

4. Provide carton labels for HDPE bottles if applicable.

5. Delete the USP designation for amlodipine from the text of labels since the USP monograph is for amlodipine besylate not amlodipine.
Package Insert
6. Include the full description of the individual dosage strengths with the NDC codes in the HOW SUPPLIED/STORAGE AND HANDLING section of Package Insert.
7. Explain why the HOW SUPPLIED/STORAGE AND HANDLING section of the Package Insert lists only HDPE bottles of 30 counts and 90 counts tablets, and not HDPE bottles of 100 counts.

If you have any questions, call Don Henry, Regulatory Project Manager, at (301) 796-4227.

Sincerely,

{See appended electronic signature page}

Ramesh Sood, Ph.D.
Branch Chief
Division of Pre-Marketing Assessment I
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/s/

KASTURI SRINIVASACHAR
04/08/2010
**REQUEST FOR CONSULTATION**

**TO (Division/Office):** OSE  
**Mail:** OSE

**FROM:** Michael Monteleone (x61952), OND / ODE1 / DCRP

**DATE**  
4-8-10

**IND NO.**  
NDA NO. 022545

**TYPE OF DOCUMENT**  
Risk Management Plan

**DATE OF DOCUMENT**  
10-29-09

**NAME OF DRUG**  
Tekamlo (aliskiren/amlodipine)

**PRIORITY CONSIDERATION**  
Standard

**CLASSIFICATION OF DRUG**  
Combination (aliskiren/amlodipine)

**DESIRED COMPLETION DATE**  
5-8-10

**NAME OF FIRM:** Novartis

**REASON FOR REQUEST**

**I. GENERAL**

- [ ] NEW PROTOCOL
- [ ] PROGRESS REPORT
- [ ] NEW CORRESPONDENCE
- [ ] DRUG ADVERTISING
- [ ] ADVERSE REACTION REPORT
- [ ] MANUFACTURING CHANGE/ADDITION
- [ ] MEETING PLANNED BY
- [ ] PRE–NDA MEETING
- [ ] END OF PHASE II MEETING
- [ ] RESUBMISSION
- [ ] SAFETY/EFFICACY
- [ ] PAPER NDA
- [ ] CONTROL SUPPLEMENT
- [ ] RESPONSE TO DEFICIENCY LETTER
- [ ] FINAL PRINTED LABELING
- [ ] LABELING REVISION
- [ ] ORIGINAL NEW CORRESPONDENCE
- [ ] FORMULATIVE REVIEW
- [ ] OTHER (SPECIFY BELOW):

**II. BIOMETRICS**

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<td>[ ] CHEMISTRY REVIEW</td>
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<td>[ ] OTHER (SPECIFY BELOW):</td>
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**III. BIOPHARMACEUTICS**

- [ ] DISSOLUTION
- [ ] BIOAVAILABILITY STUDIES
- [ ] PHASE IV STUDIES
- [ ] DEFICIENCY LETTER RESPONSE
- [ ] PROTOCOL-BIOPHARMACEUTICS
- [ ] IN-VIVO WAIVER REQUEST

**IV. DRUG EXPERIENCE**

- [ ] PHASE IV SURVEILLANCE/EPIEMIOLOGY PROTOCOL
- [ ] DRUG USE e.g. POPULATION EXPOSURE, ASSOCIATED DIAGNOSES
- [ ] CASE REPORTS OF SPECIFIC REACTIONS (List below)
- [ ] COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP
- [ ] REVIEW OF MARKETING EXPERIENCE, DRUG USE AND SAFETY
- [ ] SUMMARY OF ADVERSE EXPERIENCE
- [ ] POISON RISK ANALYSIS

**V. SCIENTIFIC INVESTIGATIONS**

- [ ] CLINICAL
- [ ] PRECLINICAL

**COMMENTS/SPECIAL INSTRUCTIONS:**

DRISK, please review the sponsor’s Risk Management Plan, they propose routine pharmacovigilance and post marketing studies. Application is in DARRTS.

**SIGNATURE OF REQUESTER**  
Michael Monteleone

**METHOD OF DELIVERY (Check one)**

- [ ] MAIL
- [ ] DARRTS
- [ ] HAND

**SIGNATURE OF RECEIVER**

**SIGNATURE OF DELIVERER**
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/s/

MICHAEL V MONTELEONE

04/08/2010
NDA 22-545

Novartis Pharmaceuticals Corporation
Attention: Lori Ann Kneafsey
   Associate Director, Drug Regulatory Affairs
   One Health Plaza
   East Hanover, NJ 07936-1080

Dear Ms. Kneafsey:

Please refer to your New Drug Application (NDA) submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for aliskiren-amlodipine tablets.

We are reviewing the Chemistry, Manufacturing, and Controls sections of your submission and have the following comments and information requests. We request a prompt written response in order to continue our evaluation of your NDA.

Your dissolution data on the 150/10 mg strength could not be located in the submission. Before the dissolution data and the proposed dissolution methodology and specifications can be reviewed thoroughly, you need to submit the mean and individual dissolution data on the 150/10 mg strength (biobatch No. AEUS/2008/0183) using the above proposed methodology. If you already submitted the data, please provide the location (i.e., Module, Section, Volume, and Page Nos.).

If you have any questions, call Don Henry, Regulatory Project Manager, at (301) 796-4227.

Sincerely,

{See appended electronic signature page}

Ramesh Sood, Ph.D.
Branch Chief
Division of Pre-Marketing Assessment I
Office of New Drug Quality Assessment
Center for Drug Evaluation and Research
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/s/
RAMESH K SOOD
02/26/2010
NDA 022545

PROPRIETARY NAME REQUEST CONDITIONALLY ACCEPTABLE

Novartis Pharmaceuticals Corporation
One Health Plaza
East Hanover, New Jersey 07936

Attention: Lori Ann Kneafsey
Associate Director, Drug Regulatory Affairs

Dear Ms. Kneafsey:

Please refer to your New Drug Application (NDA) dated October 28, 2009, received October 29, 2009, submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Aliskiren and Amlodipine Tablets, 150 mg/5 mg, 150 mg/10 mg, 300 mg/5 mg, and 300 mg/10 mg.

We also refer to your October 30, 2009, correspondence, received November 4, 2009, requesting review of your proposed proprietary name, Tekamlo. We have completed our review of the proposed proprietary name, Tekamlo and have concluded that it is acceptable.

The proposed proprietary name, Tekamlo, will be re-reviewed 90 days prior to the approval of the NDA. If we find the name unacceptable following the re-review, we will notify you.

If any of the proposed product characteristics as stated in your October 30, 2009 submission are altered prior to approval of the marketing application, the proprietary name should be resubmitted for review.

If you have any questions regarding the contents of this letter or any other aspects of the proprietary name review process, contact Nina Ton, Safety Regulatory Project Manager in the Office of Surveillance and Epidemiology, at 301-796-1648. For any other information regarding this application contact the Office of New Drugs (OND) Regulatory Project Manager, Michael Monteleone at 301-796-1952.

Sincerely,

{See appended electronic signature page}

Denise Toyer, Pharm.D.
Deputy Director
Division of Medication Error Prevention and Analysis
Office of Surveillance and Epidemiology
Center for Drug Evaluation and Research
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/s/

DENISE P TOYER
02/02/2010
Dear Ms. Kneafsey:

Please refer to your new drug application (NDA) dated October 28, 2009, received October 29, 2009, submitted pursuant to section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act, for Tekamlo, (aliskiren/amlodipine) 150/5mg, 150/10mg, 300/5mg and 300/10mg Tablets.

We also refer to your submissions dated October 4, 16 and December 7, 2009.

We have completed our filing review and have determined that your application is sufficiently complete to permit a substantive review. Therefore, this application is considered filed 60 days after the date we received your application in accordance with 21 CFR 314.101(a). The review classification for this application is **Standard**. Therefore, the user fee goal date is August 29, 2010.

We are reviewing your application according to the processes described in the Guidance for Review Staff and Industry: Good Review Management Principles and Practices for PDUFA Products. Therefore, we have established internal review timelines as described in the guidance, which includes the timeframes for FDA internal milestone meetings (e.g., filing, planning, mid-cycle, team and wrap-up meetings). Please be aware that the timelines described in the guidance are flexible and subject to change based on workload and other potential review issues (e.g., submission of amendments). We will inform you of any necessary information requests or status updates following the milestone meetings or at other times, as needed, during the process. If major deficiencies are not identified during the review, we plan to communicate proposed labeling and, if necessary, any postmarketing commitment requests by June 29, 2010.

At this time, we are notifying you that, we have not identified any potential review issues. Please note that our filing review is only a preliminary evaluation of the application and is not indicative of deficiencies that may be identified during our review.

Under the Pediatric Research Equity Act (PREA) (21 U.S.C. 355c), all applications for new active ingredients, new indications, new dosage forms, new dosing regimens, or new routes of administration are required to contain an assessment of the safety and effectiveness of the
product for the claimed indication(s) in pediatric patients unless this requirement is waived, deferred, or inapplicable.

We acknowledge receipt of your request for a full waiver of pediatric studies for this application. Once we have reviewed your request, we will notify you if the full waiver request is denied and a pediatric drug development plan is required.

If you have any questions, please call Michael Monteleone, Regulatory Project Manager, at (301) 796-1952.

Sincerely,

{See appended electronic signature page}

Norman Stockbridge, M.D., Ph.D
Director
Division of Cardiovascular and Renal Products
Office of Drug Evaluation I
Center for Drug Evaluation and Research
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/s/

NORMAN L STOCKBRIDGE
12/23/2009
TO (Office/Division): Raanan Bloom, OPS/PARS, (301)796-2185
FROM (Name, Office/Division, and Phone Number of Requestor):
Don Henry Project Manager, ONDQA, 301-796-4227 on behalf of L. Soldatova/K. Srinivasachar

DATE
12/8/2009

IND NO.

NDA NO.
22-545

TYPE OF DOCUMENT
original submission

DATE OF DOCUMENT
10/29/2009

NAME OF DRUG
Tekamlo (aliskiren-amlodipine)

PRIORITY CONSIDERATION
standard

CLASSIFICATION OF DRUG
cardio-renal

DESIRED COMPLETION DATE
3/30/2010

NAME OF FIRM:
Novartis Pharmaceuticals

REASON FOR REQUEST

I. GENERAL

☐ NEW PROTOCOL
☐ PROGRESS REPORT
☐ NEW CORRESPONDENCE
☐ DRUG ADVERTISING
☐ ADVERSE REACTION REPORT
☐ MANUFACTURING CHANGE / ADDITION
☐ MEETING PLANNED BY
☐ PRE-NDA MEETING
☐ END-OF-PHASE 2a MEETING
☐ END-OF-PHASE 2 MEETING
☐ RESUBMISSION
☐ SAFETY / EFFICACY
☐ PAPER NDA
☐ CONTROL SUPPLEMENT
☐ RESPONSE TO DEFICIENCY LETTER
☐ FINAL PRINTED LABELING
☐ LABELING REVISION
☐ ORIGINAL NEW CORRESPONDENCE
☐ FORMULATIVE REVIEW
☐ OTHER (SPECIFY BELOW):

II. BIOMETRICS

☐ PRIORITY P NDA REVIEW
☐ END-OF-PHASE 2 MEETING
☐ CONTROLLED STUDIES
☐ PROTOCOL REVIEW
☐ OTHER (SPECIFY BELOW):

☐ CHEMISTRY REVIEW
☐ PHARMACOLOGY
☐ BIOPHARMACEUTICS
☐ OTHER (SPECIFY BELOW):

III. BIOPHARMACEUTICS

☐ DISSOLUTION
☐ BIOAVAILABILITY STUDIES
☐ PHASE 4 STUDIES

☐ DEFICIENCY LETTER RESPONSE
☐ PROTOCOL - BIOPHARMACEUTICS
☐ IN-VIVO WAIVER REQUEST

IV. DRUG SAFETY

☐ PHASE 4 SURVEILLANCE/EPIDEMIOLOGY PROTOCOL
☐ DRUG USE, e.g., POPULATION EXPOSURE, ASSOCIATED DIAGNOSES
☐ CASE REPORTS OF SPECIFIC REACTIONS (List below)
☐ COMPARATIVE RISK ASSESSMENT ON GENERIC DRUG GROUP

☐ REVIEW OF MARKETING EXPERIENCE, DRUG USE AND SAFETY
☐ SUMMARY OF ADVERSE EXPERIENCE
☐ POISON RISK ANALYSIS

V. SCIENTIFIC INVESTIGATIONS

☐ CLINICAL
☐ NONCLINICAL

COMMENTS / SPECIAL INSTRUCTIONS: The expected introduction concentration for one of the active moieties, amlodipine besylate, is less that 1 ppb. The expected introduction concentration for the second active moiety, aliskiren hemifumarate, exceeds the acceptable limit of 1 ppb and therefore, the Environmental Assessment requires evaluation.

This is an electronic submission.

SIGNATURE OF REQUESTOR
{See appended electronic signature page}

METHOD OF DELIVERY (Check one)
☐ DFS ☑ EMAIL ☐ MAIL ☐ HAND

PRINTED NAME AND SIGNATURE OF RECEIVER

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/s/

DON L HENRY
12/08/2009

RAMESH K SOOD
12/08/2009
Dear Ms. Kneafsey:

We have received your new drug application (NDA) submitted section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act (FDCA) for the following:

Name of Drug Product: Tekamlo™ (aliskiren-amlodipine) Tablets
Date of Application: October 28, 2009
Date of Receipt: October 29, 2009
Our Reference Number: NDA 022545

Unless we notify you within 60 days of the receipt date that the application is not sufficiently complete to permit a substantive review, we will file the application on December 28, 2009 in accordance with 21 CFR 314.101(a).

If you have not already done so, promptly submit the content of labeling [21 CFR 314.50(l)(1)(i)] in structured product labeling (SPL) format as described at http://www.fda.gov/oc/datacouncil/spl.html. Failure to submit the content of labeling in SPL format may result in a refusal-to-file action under 21 CFR 314.101(d)(3). The content of labeling must conform to the content and format requirements of revised 21 CFR 201.56-57.

The NDA number provided above should be cited at the top of the first page of all submissions to this application. Send all submissions, electronic or paper, including those sent by overnight mail or courier, to the following address:

Food and Drug Administration
Center for Drug Evaluation and Research
Division of Cardiovascular and Renal Products
5901-B Ammendale Road
Beltsville, MD 20705-1266
All regulatory documents submitted in paper should be three-hole punched on the left side of the page and bound. The left margin should be at least three-fourths of an inch to assure text is not obscured in the fastened area. Standard paper size (8-1/2 by 11 inches) should be used; however, it may occasionally be necessary to use individual pages larger than standard paper size. Non-standard, large pages should be folded and mounted to allow the page to be opened for review without disassembling the jacket and refolded without damage when the volume is shelved. Shipping unbound documents may result in the loss of portions of the submission or an unnecessary delay in processing which could have an adverse impact on the review of the submission. For additional information, please see http://www.fda.gov/cder/ddms/binders.htm.

If you have any questions, please contact:

Mr. Michael Monteleone, M.S.
Regulatory Health Project Manager
(301) 796-1952

Sincerely,

Edward Fromm, R.Ph., RAC
Chief, Project Management Staff
Division of Cardiovascular and Renal Products
Office of Drug Evaluation I
Center for Drug Evaluation and Research
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/s/

EDWARD J FROMM
11/03/2009