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USA, Inc., Tanvex BioPharma, Inc., Tanvex
15 Biologics, Inc., and Tanvex Biologics Corporation

16 UNITED STATES DISTRICT COURT
17 SOUTHERN DISTRICT OF CALIFORNIA

18 GENENTECH, INC.,
19 Plaintiff,
20 vs.

21 TANVEX BIOPHARMA USA, INC.,
22 TANVEX BIOPHARMA, INC.,
23 TANVEX BIOLOGICS, INC., and
TANVEX BIOLOGICS
CORPORATION,
24 Defendants.

25 TANVEX BIOPHARMA USA, INC.,
26 Counter-Claimant,
27 vs.
28 GENENTECH, INC.,
Counterclaim-Defendant.

Case No. 3:22-CV-0809-RBM-JLB

**DEFENDANTS' ANSWER,
AFFIRMATIVE DEFENSES**

DEMAND FOR JURY TRIAL

AND

**TANVEX BIOPHARMA USA,
INC.'S COUNTERCLAIMS**

DEMAND FOR JURY TRIAL

1 **DEFENDANTS’ ANSWER, AFFIRMATIVE DEFENSES, AND**
2 **TANVEX BIOPHARMA USA, INC’S COUNTERCLAIMS**

3 Defendants Tanvex BioPharma USA, Inc., Tanvex BioPharma, Inc., Tanvex
4 Biologics, Inc., and Tanvex Biologics Corporation (“Tanvex”), as their Answer to
5 the numbered paragraphs in the Complaint for Patent Infringement (“Complaint”)
6 of Plaintiff Genentech, Inc. (“Genentech” or “Plaintiff”), respond and allege as
7 follows, based upon Tanvex’s knowledge of its own activities, and upon
8 information and belief as to the activities of others.

9 **ANSWER**

10 **NATURE OF THE ACTION**

11 1. Tanvex admits that the Complaint purports to allege an action for
12 patent infringement of United States Patent Nos. 10,662,237 (“the ’237 patent”),
13 10,808,037 (“the ’037 patent”), and 8,574,869 (“the ’869 patent”) (collectively,
14 “Asserted Patents”) arising under the patent laws of the United States, Title 35,
15 United States Code, including 35 U.S.C. § 271(e)(2)(C), which was enacted in 2010
16 as part of the Biologics Price Competition and Innovation Act of 2009 (“the
17 BPCIA”), Pub. L. No. 111-148, §§ 7001-7003, 124 Stat. 119, 804-21 (2010)
18 (amending, inter alia, 35 U.S.C. § 271 and 42 U.S.C. § 262), but Tanvex denies that
19 the Complaint states such a cause of action and/or that Tanvex has committed or
20 will commit any infringing acts giving rise to such a cause of action. To the extent
21 this paragraph contains any further allegations of fact to which a response is
22 required, denied.

23 2. Tanvex admits that Tanvex BioPharma USA, Inc. is seeking the U.S.
24 Food and Drug Administration’s (“FDA”) approval of TX05, which is trastuzumab
25 injection, powder, lyophilized for solution. Tanvex BioPharma USA, Inc.’s BLA
26 No. 761266 for TX05 identifies Herceptin® as the biological reference product. To
27 the extent this paragraph contains any further allegations of fact to which a response
28 is required, denied.

1 15. Tanvex admits that Tanvex BioPharma USA, Inc. is seeking FDA
2 approval for TX05. Tanvex denies any remaining allegations in paragraph 15.

3 16. To the extent that Genentech purports to characterize a document, the
4 document speaks for itself and no response is required. To the extent this paragraph
5 contains any further allegations of fact to which a response is required, denied.

6 17. This paragraph contains legal conclusions to which no answer is
7 required. Defendants admit that Tanvex BioPharma USA, Inc. is a wholly owned
8 subsidiary of Tanvex BioPharma, Inc. To the extent this paragraph contains any
9 further allegations of fact to which a response is required, denied.

10 **B. Tanvex BioPharma, Inc.**

11 18. This paragraph contains legal conclusions to which no answer is
12 required. To the extent that Genentech purports to characterize a document, the
13 document speaks for itself and no response is required. For purposes of this action
14 only, Tanvex BioPharma, Inc. does not contest personal jurisdiction in this judicial
15 district. To the extent this paragraph contains any further allegations of fact to
16 which a response is required, denied.

17 19. For purposes of this action only, Tanvex BioPharma, Inc. does not
18 contest personal jurisdiction in this judicial district. To the extent this paragraph
19 contains any further allegations of fact to which a response is required, denied.

20 20. To the extent that Genentech purports to characterize a document, the
21 document speaks for itself and no response is required. To the extent this paragraph
22 contains any further allegations of fact to which a response is required, denied.

23 21. To the extent that Genentech purports to characterize a document, the
24 document speaks for itself and no response is required. To the extent this paragraph
25 contains any further allegations of fact to which a response is required, denied.

26 22. To the extent that Genentech purports to characterize a document, the
27 document speaks for itself and no response is required. To the extent this paragraph
28 contains any further allegations of fact to which a response is required, denied.

1 23. To the extent that Genentech purports to characterize a document, the
2 document speaks for itself and no response is required. To the extent this paragraph
3 contains any further allegations of fact to which a response is required, denied.

4 24. Admitted.

5 25. To the extent that Genentech purports to characterize a document, the
6 document speaks for itself and no response is required. To the extent this paragraph
7 contains any further allegations of fact to which a response is required, denied.

8 26. To the extent that Genentech purports to characterize a document, the
9 document speaks for itself and no response is required. To the extent this paragraph
10 contains any further allegations of fact to which a response is required, denied.

11 27. Denied.

12 28. Denied.

13 29. This paragraph contains legal conclusions to which no answer is
14 required. For purposes of this action only, Tanvex BioPharma, Inc. does not
15 contest personal jurisdiction in this judicial district. To the extent this paragraph
16 contains any further allegations of fact to which a response is required, denied.

17 30. This paragraph contains legal conclusions to which no answer is
18 required. Tanvex admits that Tanvex BioPharma, Inc. is a Cayman Islands
19 corporation, with a registered office in Taiwan. For purposes of this action only,
20 Tanvex BioPharma, Inc. does not contest venue in this judicial district. To the
21 extent this paragraph contains any further allegations of fact to which a response is
22 required, denied.

23 **C. Tanvex Biologics, Inc.**

24 31. This paragraph contains legal conclusions to which no answer is
25 required. To the extent a response is required, Tanvex admits that Tanvex
26 Biologics, Inc. is a California corporation with a place of business at 2030 Main
27 Street, #600, Irvine, California 92614. For purposes of this action only, Tanvex
28 Biologics, Inc. does not contest venue in this judicial district. To the extent this

1 paragraph contains any further allegations of fact to which a response is required,
2 denied.

3 32. This paragraph contains legal conclusions to which no answer is
4 required. To the extent a response is required, Tanvex admits that Tanvex
5 Biologics, Inc. is a California corporation with a place of business at 2030 Main
6 Street, #600, Irvine, California 92614. For purposes of this action only, Tanvex
7 Biologics, Inc. does not contest personal jurisdiction in this judicial district. To the
8 extent this paragraph contains any further allegations of fact to which a response is
9 required, denied.

10 33. To the extent that Genentech purports to characterize a document, the
11 document speaks for itself and no response is required. To the extent this paragraph
12 contains any further allegations of fact to which a response is required, denied.

13 34. Tanvex admits that Tanvex BioPharma USA, Inc. is seeking approval
14 from the FDA for TX05. To the extent this paragraph contains any further
15 allegations of fact to which a response is required, denied.

16 **D. Tanvex Biologics Corporation**

17 35. This paragraph contains legal conclusions to which no answer is
18 required. To the extent a response is required, Tanvex admits that Tanvex
19 Biologics Corporation is a Taiwan corporation. For purposes of this action only,
20 Tanvex Biologics Corporation does not contest venue in this judicial district. To
21 the extent this paragraph contains any further allegations of fact to which a response
22 is required, denied.

23 36. This paragraph contains legal conclusions to which no answer is
24 required. For purposes of this action only, Tanvex does not contest personal
25 jurisdiction in this judicial district. To the extent this paragraph contains any
26 further allegations of fact to which a response is required, denied.

27 37. This paragraph contains legal conclusions to which no answer is
28 required. For purposes of this action only, Tanvex BioPharma, Inc. does not

1 contest personal jurisdiction in this judicial district. To the extent this paragraph
2 contains any further allegations of fact to which a response is required, denied.

3 38. To the extent that Genentech purports to characterize a document, the
4 document speaks for itself and no response is required. To the extent this paragraph
5 contains any further allegations of fact to which a response is required, denied.

6 39. This paragraph contains legal conclusions to which no answer is
7 required. For purposes of this action only, Tanvex Biologics Corporation does not
8 contest personal jurisdiction in this judicial district. To the extent this paragraph
9 contains any further allegations of fact to which a response is required, denied.

10 40. Denied.

11 FACTUAL ALLEGATIONS

12 **A. Genentech & Herceptin®**

13 41. Tanvex is without knowledge or information sufficient to form a belief
14 as to the truth of the allegations in paragraph 41, and therefore denies those
15 allegations.

16 42. Tanvex admits that FDA approved Herceptin® in 1998 and that
17 Herceptin® contains a genetically engineered antibody known as trastuzumab,
18 which works by attaching to receptors to inhibit the growth of human tumor cells
19 that overexpress the receptors. Tanvex is without knowledge or information
20 sufficient to form a belief as to the truth of the remaining allegations in paragraph
21 42, which concern Genentech's clinical testing and sales of Herceptin®, and
22 therefore denies those allegations.

23 43. Denied.

24 **B. Tanvex BioPharma USA, Inc.'s BLA, Manufacture, Importation, 25 and Sale of TX05**

26 44. Tanvex admits that Tanvex BioPharma USA, Inc. submitted BLA No.
27 761266 with the FDA seeking approval to market its TX05 product in the United
28 States. Tanvex admits that Tanvex BioPharma, Inc. announced on October 4, 2021

1 that the FDA had accepted the BLA for review. Tanvex denies any remaining
2 allegations in paragraph 44.

3 45. Tanvex admits that Tanvex BioPharma, Inc. announced on October 4,
4 2021 that the FDA had accepted Tanvex BioPharma USA, Inc.'s BLA for TX05 for
5 review and that the BLA identifies Herceptin® as the biological reference product.
6 To the extent that Genentech purports to characterize a document, the document
7 speaks for itself and no response is required. To the extent this paragraph contains
8 any further allegations of fact to which a response is required, denied.

9 46. Denied.

10 47. Denied.

11 48. To the extent that Genentech purports to characterize a document, the
12 document speaks for itself and no response is required. To the extent a response is
13 required, Tanvex admits that paragraph 48 contains quotes from Tanvex
14 BioPharma, Inc.'s website, but omits context. Tanvex denies any remaining
15 allegations in paragraph 48.

16 49. To the extent that Genentech purports to characterize a document, the
17 document speaks for itself and no response is required. To the extent a response is
18 required, Tanvex admits that Exhibit 8 purports to be a page from Tanvex
19 BioPharma, Inc.'s website. Tanvex denies any remaining allegations in paragraph
20 49.

21 50. Denied.

22 51. Tanvex admits that Tanvex BioPharma USA, Inc. submitted a BLA to
23 FDA through which it is seeking approval from the FDA for TX05. Tanvex denies
24 any remaining allegations in paragraph 51.

25 52. Denied.

26 **C. The Parties' Exchanges Under the BPCIA**

27 53. Tanvex admits that on October 4, 2021, Tanvex BioPharma, Inc.
28 announced that the FDA had accepted Tanvex BioPharma USA, Inc.'s BLA for

1 TX05 for review. The BLA was assigned No. 761266. Tanvex denies any
2 remaining allegations in paragraph 53.

3 54. Tanvex admits that on October 27, 2021, Tanvex BioPharma USA,
4 Inc. provided Genentech with a copy of its BLA. Tanvex denies any remaining
5 allegations in paragraph 54.

6 55. To the extent that Genentech purports to characterize a document, the
7 document speaks for itself and no response is required. To the extent a response is
8 required, Tanvex admits that via a letter dated November 12, 2021, Genentech
9 purportedly identified deficiencies in Tanvex BioPharma USA, Inc.'s production of
10 manufacturing information and requested additional information concerning the
11 manufacturing of TX05. Tanvex denies any remaining allegations in paragraph 55.

12 56. Denied.

13 57. To the extent that Genentech purports to characterize a document, the
14 document speaks for itself and no response is required. To the extent a response is
15 required, Tanvex admits that Genentech provided a list of seven patents pursuant to
16 42 U.S.C. § 262(l)(3)(A) on December 24, 2021. Tanvex denies any remaining
17 allegations in paragraph 57.

18 58. To the extent that Genentech purports to characterize a document, the
19 document speaks for itself and no response is required. To the extent a response is
20 required, Tanvex admits that Tanvex BioPharma USA, Inc. timely provided its
21 detailed statement pursuant to 42 U.S.C. § 262(l)(3)(B) on February 22, 2022 ("3B
22 Statement"). Tanvex denies any remaining allegations in paragraph 58.

23 59. To the extent that Genentech purports to characterize a document, the
24 document speaks for itself and no response is required. To the extent a response is
25 required, Tanvex admits that, on April 21, 2022, Genentech responded to Tanvex
26 BioPharma USA, Inc.'s 3B Statement pursuant to 42 U.S.C. § 262(l)(3)(C) ("3C
27 Statement"). Tanvex denies the allegations made in Genentech's response and any
28 remaining allegations in paragraph 59.

1 60. To the extent that Genentech purports to characterize a document, the
2 document speaks for itself and no response is required. To the extent a response is
3 required, Tanvex admits that, on April 21, 2022, Genentech provided a 3C
4 Statement along with a cover letter. The cover letter stated, “We propose agreeing
5 that the three patents addressed in Genentech’s 3C Statement be included in the
6 infringement action under § 262(1)(6) – *i.e.*, U.S. Patent Nos. 8,574,869,
7 10,662,237, and 10,808,037.” Tanvex denies any remaining allegations in
8 paragraph 60.

9 61. Tanvex admits that on May 3, 2022, Tanvex BioPharma USA, Inc.
10 sent correspondence in which it agreed to Genentech’s proposal that the three
11 patents addressed in Genentech’s 3C Statement “be include[d] in the infringement
12 action” Tanvex denies any remaining allegations in paragraph 61.

13 62. This paragraph contains legal conclusions to which no answer is
14 required. To the extent a response is required, Tanvex admits that Genentech filed
15 the present litigation on June 2, 2022, which is within 30 days of May 3, 2022.
16 Tanvex denies any remaining allegations in paragraph 62.

17 **D. Genentech’s Patents-in-Suit**

18 63. Denied.

19 64. Tanvex admits that Exhibit 1 purports to be a copy of U.S. Patent No.
20 10,662,237 (“the ’237 patent”), titled “Method to Improve Virus Filtration
21 Capacity.” Tanvex admits that the ’237 patent lists on its face an issue date of May
22 26, 2020 and purports to relate to methods of viral filtration. To the extent that
23 Genentech purports to characterize a document, the document speaks for itself and
24 no response is required. Tanvex lacks knowledge or information sufficient to form
25 a belief as to the truth of the remaining allegations in paragraph 64 and thus denies
26 the same.

27 65. Tanvex admits that Exhibit 2 purports to be a copy of U.S. Patent No.
28 10,808,037 (“the ’037 patent”), titled “Prevention of Disulfide Bond Reduction

1 During Recombinant Production of Polypeptides.” Tanvex admits that the ’037
2 patent lists on its face an issue date of October 20, 2020 and purports to relate
3 generally to methods for producing an antibody. To the extent that Genentech
4 purports to characterize a document, the document speaks for itself and no response
5 is required. Tanvex lacks knowledge or information sufficient to form a belief as to
6 the truth of the remaining allegations in paragraph 65 and thus denies the same.

7 66. Tanvex admits that Exhibit 3 purports to be a copy of U.S. Patent No.
8 8,574,869 (“the ’869 patent”), titled “Prevention of Disulfide Bond Reduction
9 During Recombinant Production of Polypeptides.” Tanvex admits that the ’869
10 patent lists on its face an issue date of November 5, 2013 and purports to relate
11 generally to a method for the prevention of the reduction of a disulfide bond in an
12 antibody expressed in a recombinant host cell. To the extent that Genentech
13 purports to characterize a document, the document speaks for itself and no response
14 is required. Tanvex lacks knowledge or information sufficient to form a belief as to
15 the truth of the remaining allegations in paragraph 66 and thus denies the same.

16 **GENENTECH’S FIRST CLAIM FOR RELIEF**

17 **(ALLEGED INFRINGEMENT OF THE ’237 PATENT)**

18 67. Tanvex repeats and realleges the responses in the foregoing paragraphs
19 of this Answer, as set forth above, and incorporates them by reference as if fully set
20 forth herein.

21 68. Tanvex admits that Genentech included the ’237 patent in its
22 disclosure of patents pursuant to 42 U.S.C. § 262(l)(3)(A) and provided a 3C
23 Statement with respect to the ’237 patent. To the extent that Genentech purports to
24 characterize those documents, the documents speak for themselves and no response
25 is required. To the extent a response is required, Tanvex denies the allegations of
26 patent infringement made in Genentech’s 3C Statement concerning the ’237 patent.
27 Tanvex is without knowledge or information sufficient to form a belief as to the
28

1 truth of the allegations regarding Genentech's beliefs in paragraph 68, and therefore
2 denies them. Tanvex denies any remaining allegations in paragraph 68.

3 69. Tanvex admits that Tanvex BioPharma USA, Inc. submitted a BLA to
4 FDA through which it is seeking approval from FDA for TX05. Tanvex denies any
5 remaining allegations in paragraph 69.

6 70. Denied.

7 71. Tanvex admits that paragraph 71 contains the text of claim 1 of the
8 '237 patent. Tanvex denies any remaining allegations in paragraph 71.

9 72. Denied.

10 73. Denied.

11 74. Tanvex admits that on or about December 24, 2021, Genentech sent a
12 letter listing the '237 patent. Tanvex denies any remaining allegations in paragraph
13 74.

14 75. Denied.

15 76. Denied.

16 **GENENTECH'S SECOND CLAIM FOR RELIEF**

17 **(ALLEGED INFRINGEMENT OF THE '037 PATENT)**

18 77. Tanvex repeats and realleges the responses in the foregoing paragraphs
19 of this Answer, as set forth above, and incorporates them by reference as if fully set
20 forth herein.

21 78. Tanvex admits that Genentech included the '037 patent in its
22 disclosure of patents pursuant to 42 U.S.C. § 262(l)(3)(A) and provided a 3C
23 Statement with respect to the '037 patent. To the extent that Genentech purports to
24 characterize those documents, the documents speak for themselves and no response
25 is required. To the extent a response is required, Tanvex denies the allegations of
26 patent infringement made in Genentech's 3C Statement concerning the '037 patent.
27 Tanvex is without knowledge or information sufficient to form a belief as to the
28

1 truth of the allegations regarding Genentech's beliefs in paragraph 78, and therefore
2 denies them. Tanvex denies any remaining allegations in paragraph 78.

3 79. Tanvex admits that Tanvex BioPharma USA, Inc. submitted a BLA to
4 FDA through which it is seeking approval from FDA for TX05. Tanvex denies any
5 remaining allegations in paragraph 79.

6 80. Denied.

7 81. Tanvex admits that paragraph 81 contains the text of claim 1 of the
8 '037 patent. Tanvex denies any remaining allegations in paragraph 81.

9 82. Denied.

10 83. Denied.

11 84. Tanvex admits that on or about December 24, 2021, it received a letter
12 from Genentech listing the '037 patent. Tanvex denies any remaining allegations in
13 paragraph 84.

14 85. Denied.

15 86. Denied.

16 **GENENTECH'S THIRD CLAIM FOR RELIEF**

17 **(ALLEGED INFRINGEMENT OF THE '869 PATENT)**

18 87. Tanvex repeats and realleges the responses in the foregoing paragraphs
19 of this Answer, as set forth above, and incorporates them by reference as if fully set
20 forth herein.

21 88. Tanvex admits that Genentech included the '869 patent in its
22 disclosure of patents pursuant to 42 U.S.C. § 262(l)(3)(A) and provided a 3C
23 Statement with respect to the '869 patent. To the extent that Genentech purports to
24 characterize those documents, the documents speak for themselves and no response
25 is required. To the extent a response is required, Tanvex denies the allegations of
26 patent infringement made in Genentech's 3C Statement concerning the '869 patent.
27 Tanvex is without knowledge or information sufficient to form a belief as to the
28

1 truth of the allegations regarding Genentech's beliefs in paragraph 88, and therefore
2 denies them. Tanvex denies any remaining allegations of paragraph 88.

3 89. Tanvex admits that Tanvex BioPharma USA, Inc. submitted a BLA to
4 FDA through which it is seeking approval from the FDA for TX05. Tanvex denies
5 any remaining allegations in paragraph 89.

6 90. Denied.

7 91. Tanvex admits that paragraph 91 contains the text of claim 1 of the
8 '869 patent. Tanvex denies any remaining allegations in paragraph 91.

9 92. Denied.

10 93. Denied.

11 94. Tanvex admits that on or about December 24, 2021, it received a letter
12 from Genentech listing the '869 patent. Tanvex denies any remaining allegations in
13 paragraph 94.

14 95. Denied.

15 96. Denied.

16 * * *

17 Tanvex denies any remaining allegations not expressly admitted or
18 responded to herein. Tanvex further denies that Genentech is entitled to any relief
19 whatsoever, including the relief sought in paragraphs 1-6 of the Prayer for Relief.
20 Tanvex respectfully requests that the Court:

- 21 (a) deny all relief requested by Genentech;
22 (b) enter judgment in favor of Tanvex;
23 (c) award Tanvex its reasonable attorneys' fees and costs of defending this
24 action pursuant to 35 U.S.C. § 285; and
25 (d) award Tanvex such further relief as the Court deems just and
26 appropriate.

1 **AFFIRMATIVE DEFENSES**

2 97. Without prejudice to the denials set forth in the Answer, without
3 admitting any averments in the Complaint not otherwise admitted, and without
4 assuming any burden other than that imposed by operation of law or admitting that
5 it bears the burden of proof with respect to any of the following, Tanvex states the
6 following defenses to the allegations of the Complaint.

7 **FIRST AFFIRMATIVE DEFENSE**

8 **NONINFRINGEMENT OF U.S. PATENT NO. 10,662,237**

9 98. Tanvex has not infringed and does not infringe, under any theory of
10 infringement, including directly, indirectly, contributorily, or by inducement, and
11 either literally or under the doctrine of equivalents, any valid and enforceable claim
12 of the '237 patent.

13 **SECOND AFFIRMATIVE DEFENSE**

14 **INVALIDITY OF U.S. PATENT NO. 10,662,237**

15 99. Each claim of the '237 patent is invalid for failure to satisfy one or
16 more requirements for patentability set forth in the patent laws of the United States,
17 Title 35, United States Code, including, without limitation, 35 U.S.C. §§ 101, 102,
18 103, 112, and/or the doctrine of obviousness-type double patenting.

19 **THIRD AFFIRMATIVE DEFENSE**

20 **NONINFRINGEMENT OF U.S. PATENT NO. 10,808,037**

21 100. Tanvex has not infringed and does not infringe, under any theory of
22 infringement, including directly, indirectly, contributorily, or by inducement, and
23 either literally or under the doctrine of equivalents, any valid and enforceable claim
24 of the '037 patent.

25 **FOURTH AFFIRMATIVE DEFENSE**

26 **INVALIDITY OF U.S. PATENT NO. 10,080,037**

27 101. Each claim of the '037 patent is invalid for failure to satisfy one or
28 more requirements for patentability set forth in the patent laws of the United States,

1 Title 35, United States Code, including, without limitation, 35 U.S.C. §§ 101, 102,
2 103, 112, and/or the doctrine of obviousness-type double patenting.

3 **FIFTH AFFIRMATIVE DEFENSE**

4 **NONINFRINGEMENT OF U.S. PATENT NO. 8,574,869**

5 102. Tanvex has not infringed and does not infringe, under any theory of
6 infringement, including directly, indirectly, contributorily, or by inducement, and
7 either literally or under the doctrine of equivalents, any valid and enforceable claim
8 of the '869 patent.

9 **SIXTH AFFIRMATIVE DEFENSE**

10 **INVALIDITY OF U.S. PATENT NO. 8,574,869**

11 103. Each claim of the '869 patent is invalid for failure to satisfy one or
12 more requirements for patentability set forth in the patent laws of the United States,
13 Title 35, United States Code, including, without limitation, 35 U.S.C. §§ 101, 102,
14 103, 112, and/or the doctrine of obviousness-type double patenting.

15 **SEVENTH AFFIRMATIVE DEFENSE**

16 **FAILURE TO STATE A CLAIM**

17 104. Genentech has failed to state a claim upon which relief can be granted.

18 **EIGHTH AFFIRMATIVE DEFENSE**

19 **PROSECUTION HISTORY ESTOPPEL**

20 105. Genentech's infringement claims are barred as a result of prosecution
21 history estoppel, prosecution disclaimer, and/or due to statements or amendments
22 made during prosecution of the applications that issued as the Asserted Patents, or
23 related patents and applications, or during any other proceedings in the U.S. Patent
24 and Trademark Office or in any court.

1 (“Genentech”) under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, and
2 the Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, to obtain a declaratory
3 judgment that each and every claim of the ’237, ’037, and ’869 patents is invalid
4 and/or not infringed.

5 **THE PARTIES**

6 1. Counterclaim-Plaintiff Tanvex BioPharma USA, Inc. is a California
7 corporation with a place of business at 10421 Pacific Center Court, Suite 100, San
8 Diego, California 92121.

9 2. Counterclaim-Defendant Genentech Inc. purports to be a company
10 organized and existing under the laws of Delaware, with its corporate headquarters
11 at 1 DNA Way, South San Francisco, California 94080.

12 **JURISDICTION AND VENUE**

13 3. The Court has subject matter jurisdiction over these Counterclaims
14 under the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202, and the patent
15 laws of the United States 35 U.S.C. § 101 *et seq.*, including 28 U.S.C. §§ 1331 and
16 1338(a).

17 4. This Court has personal jurisdiction over Genentech because
18 Genentech commenced this action and continues to maintain it against Tanvex
19 BioPharma USA, Inc. in this judicial district, thus availing itself of the rights and
20 privileges and subjecting itself to jurisdiction in this forum.

21 5. The Court has personal jurisdiction over Genentech for the additional
22 reason that Genentech also regularly conducts business in this judicial district.

23 6. Venue is proper in this judicial district pursuant to, without limitation,
24 28 U.S.C. § 1400(b) and 28 U.S.C. §§ 1391(b) and (c), because this suit was filed
25 in this district by Genentech.

26 **PATENTS AT ISSUE**

27 7. U.S. Patent No. 10,662,237 (“the ’237 patent”) lists on its face an issue
28 date of May 26, 2020, and is entitled “Method to Improve Virus Filtration

1 Capacity.” Upon information and belief, Genentech purports to be the owner of all
2 title, right, and interest in and to the ’237 patent.

3 8. U.S. Patent No. 10,808,037 (“the ’037 patent”) lists on its face an issue
4 date of October 20, 2020, and is entitled “Prevention of Disulfide Bond Reduction
5 During Recombinant Production of Polypeptides.” Upon information and belief,
6 Genentech purports to be the owner of all title, right, and interest in and to the ’037
7 patent.

8 9. U.S. Patent No. 8,574,869 (“the ’869 patent”) lists on its face an issue
9 date of November 5, 2013, and is entitled “Prevention of Disulfide Bond Reduction
10 During Recombinant Production of Polypeptides.” Upon information and belief,
11 Genentech purports to be the owner of all title, right, and interest in and to the ’869
12 patent.

13 10. Hereinafter, the ’237 patent, ’037 patent, and ’869 patent, shall be
14 collectively referred to as the “Asserted Patents.”

15 NATURE OF THE ACTION

16 11. Tanvex BioPharma USA, Inc. asserts counterclaims under the Federal
17 Declaratory Judgment Act, seeking declaratory judgments under the patent laws of
18 the United States, United States Code Title 35, that each claim of the Asserted
19 Patents is invalid and/or not infringed.

20 THE PARTIES’ BPCIA INFORMATION EXCHANGES

21 12. The Biologics Price Competition and Innovation Act of 2009
22 (“BPCIA”) sets forth a process whereby the reference product sponsor and the
23 biosimilar applicant exchange information in advance of a specific and statutorily
24 prescribed action for patent infringement.

25 13. On or about July 21, 2021, Tanvex BioPharma USA, Inc. submitted to
26 FDA its Biologics License Application (“BLA”) No. 761266 for its trastuzumab
27 product known as TX05. BLA No. 761266 lists Genentech’s Herceptin® as the
28 biological reference product.

1 14. Pursuant to the BPCIA information exchange process, on October 20,
2 2021, Tanvex BioPharma USA, Inc. notified Genentech that it had been notified by
3 FDA on September 30, 2021 that its BLA for TX05 had been accepted for review.

4 15. On October 27, 2021, Tanvex BioPharma USA, Inc. timely sent to
5 Genentech its disclosure under 42 U.S.C. § 262(l)(2)(A).

6 16. Tanvex BioPharma USA, Inc.’s October 27, 2021 disclosure included
7 a complete copy of BLA No. 761266.

8 17. Tanvex BioPharma USA, Inc.’s § 262(l)(2)(A) disclosure contained,
9 among other things, extensive information regarding the manufacturing processes
10 used to make TX05. The copy of BLA No. 761266 contains extensive technical
11 details describing the manufacture of TX05. Tanvex BioPharma USA, Inc.’s
12 production contained sufficiently detailed information regarding its biosimilar
13 product and manufacturing processes, in compliance with 42 U.S.C. § 262(l)(2)(A)-
14 (B), which enabled Genentech to undertake its obligations under 42 U.S.C.
15 § 262(l)(3)(A).

16 18. Despite the fact that Tanvex BioPharma USA, Inc.’s October 27, 2021
17 disclosure fully met the requirements of 42 U.S.C. § 262(l)(2)(A), Tanvex
18 BioPharma USA, Inc. nonetheless produced thousands of pages of additional
19 documents on December 15, 2022.

20 19. On December 24, 2021, Genentech provided Tanvex BioPharma USA,
21 Inc. with its list of patents purporting to comply with 42 U.S.C. § 262(l)(3)(A) that
22 “it believe[d] reasonably could be asserted against Tanvex’s proposed TX05
23 product” (“(3)(A) List”). Genentech’s (3)(A) List included the Asserted Patents.

24 20. On February 22, 2022, Tanvex BioPharma USA, Inc. responded to
25 Genentech’s (3)(A) List by timely providing Genentech a statement under 42
26 U.S.C. § 262(l)(3)(B)(ii) (“3B Statement”) that describes on a claim-by-claim basis
27 the factual and legal bases for Tanvex BioPharma USA, Inc.’s opinion that all of
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1 the patents on Genentech’s (3)(A) List, including the Asserted Patents, are not
2 infringed, invalid, and/or unenforceable.

3 21. On April 21, 2022, and subject to its objections, Genentech provided
4 its response pursuant to 42 U.S.C. § 262(l)(3)(C) (“3C Statement”). With
5 Genentech’s 3C Statement, Genentech proposed that Tanvex BioPharma USA, Inc.
6 agree that all three of the Asserted Patents be included in a first-phase infringement
7 action under § 262(l)(6).

8 22. Although Tanvex BioPharma USA, Inc. believed – and continues to
9 believe – that the Asserted Patents are not infringed and/or are invalid or
10 unenforceable, on May 3, 2022, Tanvex BioPharma USA, Inc. sent correspondence
11 to Genentech stating that it agreed to Genentech’s inclusion of the Asserted Patents
12 in an infringement action.

13 23. On June 2, 2022, Genentech filed suit against Tanvex BioPharma
14 USA, Inc. alleging that Tanvex BioPharma USA, Inc.’s manufacture, importation,
15 sale, offer for sale, use, and promotion of the use of TX05 will infringe, directly
16 and/or indirectly, one or more claims of each of the Asserted Patents.

17 **COUNTERCLAIM I**

18 **Declaratory Judgment of Non-Infringement of** 19 **U.S. Patent No. 10,662,237**

20 24. Tanvex BioPharma USA, Inc. incorporates by reference and realleges
21 each of the allegations set forth in the foregoing paragraphs of these Counterclaims.

22 25. By virtue of Genentech’s June 2, 2022 complaint for patent
23 infringement, there is an actual, substantial, continuing, and justiciable controversy
24 between the parties regarding whether the submission of BLA No. 761266 and/or
25 the manufacture, use, offer to sell, sale, and/or importation into the United States of
26 TX05 prior to the expiration of the ’237 patent will infringe any valid and
27 enforceable claim of the ’237 patent.
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1 32. The claims of the '237 patent are invalid for failure to satisfy the
2 requirements of patentability under 35 U.S.C. § 101 et seq., including but not
3 limited to 35 U.S.C. §§ 101, 102, 103, 112, and/or the doctrine of obviousness-type
4 double patenting.

5 33. One non-limiting example of how one or more claims of the '237
6 patent is invalid includes that the claims are invalid for failure to meet the
7 definiteness requirement of 35 U.S.C. § 112, ¶ 2 because they fail to inform the
8 person of ordinary skill in the art about the scope of the invention with reasonable
9 certainty based on at least the claim term reciting “having or suspected of having a
10 parvovirus contaminant.”

11 34. Another non-limiting example of how one or more claims of the '237
12 patent is invalid includes that the claims are invalid due to anticipation and/or
13 obviousness under 35 U.S.C. §§ 102 and/or 103 in view of prior art disclosing
14 processes for methods of for the production and purification of recombinant
15 proteins, including, but not limited to: Amit Mehta, et al., *Purifying Therapeutic*
16 *Monoclonal Antibodies*, 104(5), Chem. Eng'g. Prog. (CEP) S14-S20 (2008); Kenji
17 Furuya, et al., *Implementation of a 20-nm Pore-Size Filter in the Plasma Derived*
18 *Factor VIII Manufacturing Process*, 91 Vox Sanguinis, 119-25 (2006); Barbra
19 Tipton, et al., *Retrovirus and Parvovirus Clearance from an Affinity Column*
20 *Product Using Adsorptive Depth Filtration*, 15(9) BioPharm 43-50 (2002); H. Abe,
21 et al., *Removal of Parvovirus B19 from Hemoglobin Solution by Nanofiltration*,
22 28(5) Artificial Cells, Blood Subs. and Biotech. 375-83 (2000); and/or U.S. Patent
23 Publication No. 2007/0014724. The alleged invention of the '237 patent does no
24 more than combine familiar elements according to known methods to yield
25 predictable results. Any alleged improvement over the prior art set forth in the '237
26 patent is no more than the predictable use of prior art elements according to their
27 established functions. A person of skill in the art would have been motivated to
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1 combine the teachings of the prior art to achieve the alleged invention of the '237
2 patent and would have had a reasonable expectation of success in doing so.

3 35. Tanvex BioPharma USA, Inc. is entitled to a judgment that the claims
4 of the '237 patent are invalid under one or more of 35 U.S.C. §§ 101, 102, 103,
5 112, and/or the doctrine of obviousness-type double patenting.

6 **COUNTERCLAIM III**

7 **Declaratory Judgment of Non-Infringement of** 8 **U.S. Patent No. 10,808,037**

9 36. Tanvex BioPharma USA, Inc. incorporates by reference and realleges
10 each of the allegations set forth in the foregoing paragraphs of these Counterclaims.

11 37. By virtue of Genentech's June 2, 2022 complaint for patent
12 infringement, there is an actual, substantial, continuing, and justiciable controversy
13 between the parties regarding whether the submission of BLA No. 761266 and/or
14 the manufacture, use, offer to sell, sale, and/or importation into the United States of
15 TX05 prior to the expiration of the '037 patent will infringe any valid and
16 enforceable claim of the '037 patent.

17 38. Tanvex BioPharma USA, Inc. has not infringed, contributed to the
18 infringement of, or induced the infringement of any valid and enforceable claim of
19 the '037 patent either literally or under the doctrine of equivalents and is not liable
20 for such infringement, for at least the reasons set forth in Tanvex BioPharma USA,
21 Inc.'s 3B Statement.

22 39. Under 35 U.S.C. § 271(e)(1), Tanvex BioPharma USA, Inc. has not
23 directly or indirectly infringed, and will not directly or indirectly infringe, any
24 claim of the '037 patent because particular activities related to TX05, such as the
25 manufacture and testing of TX05 related to the submission of BLA No. 761266,
26 were and will be solely for uses reasonably related to the development and
27 submission of information under a federal law that regulates the manufacture, use,
28 or sale of drugs.

1 processes for methods of preventing the reduction of disulfide bonds via air
2 sparging, including, but not limited to: U.S. Patent Publication No. 2004/0029229;
3 S.H. de Kock, et al. *Oxygen and Carbon Dioxide Kinetic Challenges for*
4 *Thermophilic Mineral Bioleaching Processes*, 32(2) *Biochem. Soc. Trans.* 273-75
5 (2004); and Jason Christiansen, et al., *Catalytic and Biophysical Properties of a*
6 *Nitrogenase Apo-MoFe Protein Produced by a nifB-Deletion Mutant of*
7 *Azotobacter vinelandii*, 37 *Biochem.* 12611-23 (1998); Alvin W. Nienow, *Reactor*
8 *Engineering in Large Scale Animal Cell Culture*, 50 *Cytotech.* 9-33 (2006); and
9 John R. Birch & Andrew J. Racher, *Antibody Production*, 58 *Adv. Drug Del. Rev.'s.*
10 671-85 (2006). The alleged invention of the '037 patent does no more than
11 combine familiar elements according to known methods to yield predictable results.
12 Any alleged improvement over the prior art set forth in the '037 patent is no more
13 than the predictable use of prior art elements according to their established
14 functions. A person of skill in the art would have been motivated to combine the
15 teachings of the prior art to achieve the alleged invention of the '037 patent and
16 would have had a reasonable expectation of success in doing so.

17 47. Tanvex BioPharma USA, Inc. is entitled to a judgment that the claims
18 of the '037 patent are invalid under one or more of 35 U.S.C. §§ 101, 102, 103,
19 112, and/or the doctrine of obviousness-type double patenting.

20 COUNTERCLAIM V

21 **Declaratory Judgment of Non-Infringement of** 22 **U.S. Patent No. 8,574,869**

23 48. Tanvex BioPharma USA, Inc. incorporates by reference and realleges
24 each of the allegations set forth in the foregoing paragraphs of these Counterclaims.

25 49. By virtue of Genentech's June 2, 2022 complaint for patent
26 infringement, there is an actual, substantial, continuing, and justiciable controversy
27 between the parties regarding whether the submission of BLA No. 261266 and/or
28 the manufacture, use, offer to sell, sale, and/or importation into the United States of

1 TX05 prior to the expiration of the '869 patent will infringe any valid and
2 enforceable claim of the '869 patent.

3 50. Tanvex BioPharma USA, Inc. has not infringed, contributed to the
4 infringement of, or induced the infringement of any valid and enforceable claim of
5 the '869 patent either literally or under the doctrine of equivalents, for at least the
6 reasons set forth in Tanvex BioPharma USA, Inc.'s 3B Statement and is not liable
7 for such infringement.

8 51. Under 35 U.S.C. § 271(e)(1), Tanvex BioPharma USA, Inc. has not
9 directly or indirectly infringed, and will not directly or indirectly infringe, any
10 claim of the '869 patent because particular activities related to TX05, such as the
11 manufacture and testing of TX05 related to the submission of BLA No. 761266,
12 were and will be solely for uses reasonably related to the development and
13 submission of information under a federal law that regulates the manufacture, use,
14 or sale of drugs.

15 52. The commercial manufacture, use, sale, offer for sale, and importation
16 of TX05 prior to the expiration of the '869 patent will not infringe the '869 patent
17 directly or indirectly, literally or under the doctrine of equivalents, for at least the
18 reasons set forth in Tanvex BioPharma USA, Inc.'s 3B Statement.

19 53. Tanvex BioPharma USA, Inc. is entitled to a judgment that the
20 manufacture, use, sale, offer for sale, and importation of TX05 that is the subject of
21 BLA No. 761266 has not infringed, does not infringe, and will not infringe any
22 valid and enforceable claim of the '869 patent.

23 **COUNTERCLAIM VI**

24 **Declaratory Judgment of Invalidity of U.S. Patent No. 8,574,869**

25 54. Tanvex BioPharma USA, Inc. incorporates by reference and realleges
26 each of the allegations set forth in the foregoing paragraphs of these Counterclaims.
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1 55. By virtue of Genentech’s June 2, 2022 complaint for patent
2 infringement, there is an actual, substantial, continuing, and justiciable controversy
3 between the parties regarding the invalidity of the ’869 patent.

4 56. The claims of the ’869 patent are invalid for failure to satisfy the
5 requirements of patentability under 35 U.S.C. § 101 et seq., including but not
6 limited to 35 U.S.C. §§ 101, 102, 103, and/or 112, and/or the doctrine of
7 obviousness-type double patenting.

8 57. One non-limiting example of how one or more claims of the ’869
9 patent is invalid includes that the claims are invalid for failure to meet the written
10 description requirement of 35 U.S.C. § 112, ¶ 1 based on at least the claim term
11 “following fermentation, sparging the preharvest or harvested culture fluid” as the
12 patent is silent concerning any air sparging of a pre-harvest cell culture fluid, let
13 alone a post-fermentation, pre-harvest solution.

14 58. Another non-limiting example of how one or more claims of the ’869
15 patent is invalid includes that the claims are invalid due to anticipation and/or
16 obviousness under 35 U.S.C. §§ 102 and/or 103 in view of prior art disclosing
17 processes for methods of preventing the reduction of disulfide bonds via air
18 sparging, including, but not limited to: U.S. Patent Publication No. 2004/0029229;
19 S.H. de Kock, et al. *Oxygen and Carbon Dioxide Kinetic Challenges for*
20 *Thermophilic Mineral Bioleaching Processes*, 32(2) *Biochem. Soc. Trans.* 273-75
21 (2004); Jason Christiansen, et al., *Catalytic and Biophysical Properties of a*
22 *Nitrogenase Apo-MoFe Protein Produced by a nifB-Deletion Mutant of*
23 *Azotobacter vinelandii*, 37 *Biochem.* 12611-23 (1998); Alvin W. Nienow, *Reactor*
24 *Engineering in Large Scale Animal Cell Culture*, 50 *Cytotech.* 9-33 (2006); and
25 John R. Birch & Andrew J. Racher, *Antibody Production*, 58 *Adv. Drug Del. Rev.’s.*
26 671-85 (2006). The alleged invention of the ’869 patent does no more than combine
27 familiar elements according to known methods to yield predictable results. Any
28 alleged improvement over the prior art set forth in the ’869 patent is no more than

1 the predictable use of prior art elements according to their established functions. A
2 person of skill in the art would have been motivated to combine the teachings of the
3 prior art to achieve the alleged invention of the '869 patent and would have had a
4 reasonable expectation of success in doing so.

5 59. Tanvex BioPharma USA, Inc. is entitled to a judgment that the claims
6 of the '869 patent are invalid under one or more of 35 U.S.C. §§ 101, 102, 103,
7 112, and/or the doctrine of obviousness-type double patenting.

8 **PRAYER FOR RELIEF**

9 WHEREFORE, Tanvex BioPharma USA, Inc. respectfully requests that the
10 Court enter judgment as follows:

11 a That the Complaint be dismissed with prejudice, and that all relief
12 requested by Genentech therein be denied;

13 b That Tanvex BioPharma USA, Inc. does not infringe, directly or
14 indirectly, and has not infringed, directly or indirectly, any valid and enforceable
15 claim of the '237, '037, and '869 patents;

16 c That each claim of the '237, '037, and '869 patents is invalid;

17 d That this is an exceptional case pursuant to 35 U.S.C. § 285, and
18 therefore that Tanvex BioPharma USA, Inc. is entitled to an award of attorneys'
19 fees, costs, and expenses in this action; and

20 e That Tanvex BioPharma USA, Inc. be awarded such other and further
21 relief that the Court may deem just and proper.

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DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Tanvex demands a trial by jury of all issues so triable.

Dated: September 1, 2022 CROWELL & MORING LLP

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