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18 **UNITED STATES DISTRICT COURT**  
19 **FOR THE CENTRAL DISTRICT OF CALIFORNIA**  
20 **(SOUTHERN DIVISION)**

21 CHROMADEX, INC., ) Case No. 8:16-cv-02277-CJC-DFM  
22 )  
23 Plaintiff, ) **FIRST AMENDED**  
24 ) **COUNTERCLAIMS**  
25 v. )  
26 ELYSIUM HEALTH, INC., ) **DEMAND FOR JURY TRIAL**  
27 Defendant. ) Hon. Cormac J. Carney  
28 )

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**COUNTERCLAIMS**

Defendant Elysium Health, Inc. (“Elysium”), by and through its undersigned counsel, files these Counterclaims against ChromaDex, Inc. (“ChromaDex”) and alleges on personal knowledge as to its own acts and on information and belief as to all other matters as follows:

**NATURE OF THE CASE**

1. This is an action for fraud, breach of contract, unfair competition and declaratory judgment. Elysium and ChromaDex are parties to three contracts: (1) the Niagen Supply Agreement, dated February 3, 2014, as amended by the Amendment to Supply Agreement, dated February 19, 2016 (the “NR Supply Agreement”); (2) the pTeroPure Supply Agreement, dated June 26, 2014 (the “PT Supply Agreement,” and, together with the NR Supply Agreement, the “Supply Agreements”); and (3) the Trademark License and Royalty Agreement, dated February 3, 2014 (the “License and Royalty Agreement”) (collectively, “the Agreements”).

2. Elysium sells a dietary supplement, Basis, that combines nicotinamide riboside (sometimes called “NR”) and pterostilbene (sometimes called “PT”).

3. Pursuant to the Supply Agreements, ChromaDex provides Elysium with nicotinamide riboside and pterostilbene. ChromaDex sells nicotinamide riboside under the name NIAGEN®, a federally registered trademark.

4. At the time the NR Supply Agreement and License and Royalty Agreement were executed, ChromaDex had, and still has, market power in the market for supply of nicotinamide riboside in the United States and worldwide. It is currently the sole commercial supplier of nicotinamide riboside.

5. ChromaDex has in-licensed several patents relating to nicotinamide riboside. ChromaDex’s market power comes from, among other things, the patents it has in-licensed. Although the NR Supply Agreement includes no express license to ChromaDex’s patent rights, ChromaDex’s supply of nicotinamide riboside under the

1 NR Supply Agreement necessarily includes an implied sublicense for Elysium to use  
2 ChromaDex’s license under principles of patent exhaustion and other law.

3         6. ChromaDex has committed patent misuse and engaged in unfair  
4 competition by leveraging its market power in the supply of nicotinamide riboside to  
5 impose conditions on its customers that impermissibly broaden the scope of the  
6 patent grant with anticompetitive effect. For example, on multiple occasions  
7 ChromaDex has conditioned its sale of nicotinamide riboside on the purchaser’s  
8 agreement to license ChromaDex’s trademarks and pay ChromaDex substantial  
9 royalties on product sales based on that trademark license. With respect to Elysium,  
10 ChromaDex conditioned its execution of the NR Supply Agreement on Elysium’s  
11 simultaneous execution of the License and Royalty Agreement, which forces  
12 Elysium to pay a substantial royalty to ChromaDex on all Elysium products  
13 containing ingredients supplied by ChromaDex under the NR Supply Agreement,  
14 even if Elysium does not use, and does not want to use, any ChromaDex marks.

15         7. ChromaDex induced Elysium to sign the License and Royalty  
16 Agreement by insisting, falsely, that ChromaDex required all of its nicotinamide  
17 riboside customers to sign similar royalty agreements.

18         8. The NR Supply Agreement also contains multiple covenants that have  
19 been breached by ChromaDex. Under the NR Supply Agreement, Elysium is  
20 entitled to receive pricing on nicotinamide riboside that is at least as favorable as the  
21 price at which ChromaDex supplies nicotinamide riboside or a substantially similar  
22 product to other purchasers, but never more than a certain maximum price (the  
23 “Most Favored Nations Provision” or “MFN Provision”).

24         9. The MFN Provision further provides that ChromaDex must promptly  
25 issue a refund or credit to Elysium in the event that ChromaDex sells nicotinamide  
26 riboside or a substantially similar product to another purchaser for an amount less  
27 than Elysium has paid for nicotinamide riboside.

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1           10. As amended, the NR Supply Agreement prohibits ChromaDex from  
2 selling, or licensing or enabling any third party to manufacture or sell, a product  
3 containing both nicotinamide riboside and either pterostilbene or any ingredient  
4 substantially similar to pterostilbene, either in combination or in separate form but  
5 marketed together (the “Exclusivity Provision”).

6           11. ChromaDex materially breached the MFN Provision and the Exclusivity  
7 Provision of the NR Supply Agreement.

8           12. With respect to the MFN Provision, on June 13, 2016, in response to a  
9 request from Elysium for information regarding ChromaDex’s compliance with the  
10 MFN Provision, ChromaDex’s CEO, Frank Jaksch, provided Elysium with a  
11 manipulated and misleading Excel spreadsheet (the “Fraudulent Spreadsheet”)  
12 purporting to list the prices at which ChromaDex was selling nicotinamide riboside  
13 to purchasers other than Elysium under various supply agreements.

14           13. The Fraudulent Spreadsheet was described by Mr. Jaksch as a “blinded”  
15 list of the prices at which ChromaDex was selling nicotinamide riboside to other  
16 customers, without revealing those customers’ identities. As part of the Fraudulent  
17 Spreadsheet, however, Jaksch inadvertently neglected to delete two tabs containing  
18 “unblinded” sheets apparently used as a basis for preparing the Fraudulent  
19 Spreadsheet. Those “unblinded” sheets listed additional customers that Jaksch  
20 notably omitted from the “blinded” sheets, and confirm – contrary to Jaksch’s  
21 intended deception – that ChromaDex had agreed to sell nicotinamide riboside to  
22 other purchasers at a price more favorable than the price at which ChromaDex had  
23 sold nicotinamide riboside to Elysium. Moreover, the Fraudulent Spreadsheet  
24 revealed, contrary to what ChromaDex had represented to induce Elysium to execute  
25 the License and Royalty Agreement, that some ChromaDex customers were not  
26 required to sign similar license and royalty agreements. The Fraudulent Spreadsheet  
27 thus revealed not only that ChromaDex had been acting in violation of the MFN  
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1 Provision, but also that it had fraudulently induced Elysium to enter into the License  
2 and Royalty Agreement.

3 14. On a June 30, 2016 phone call with two of Elysium's co-founders, Eric  
4 Marcotulli and Dan Alminana, Jaksch confirmed that other purchasers of  
5 nicotinamide riboside had been paying a price substantially lower than Elysium had  
6 been paying, in violation of the MFN Provision.

7 15. On June 30, 2016, Elysium submitted purchase orders for 3000 kg of  
8 nicotinamide riboside and 580 kg of pterostilbene, with the understanding that  
9 ChromaDex would promptly issue a refund or credit to Elysium on account of  
10 ChromaDex's breach of the MFN Provision (the "June 30 Purchase Orders").

11 16. After submitting the June 30 Purchase Orders, Elysium discovered  
12 another breach of the NR Supply Agreement. With respect to the Exclusivity  
13 Provision, around August 2016, Elysium learned that other products containing both  
14 nicotinamide riboside and pterostilbene or nicotinamide riboside and resveratrol, a  
15 product substantially similar to pterostilbene, were being sold on the market by other  
16 ChromaDex customers.

17 17. Elysium also learned after submitting the June 30 Purchase Orders that  
18 ChromaDex was not only enabling other customers to manufacture and sell products  
19 that combined nicotinamide riboside and pterostilbene or the substantially similar  
20 ingredient resveratrol, but was actively recommending to other customers that they  
21 create such products to compete with Elysium's Basis, in violation of the Exclusivity  
22 Provision.

23 18. In violation of the NR Supply Agreement, ChromaDex has failed to  
24 issue a refund or credit to remedy its breaches of the MFN Provision since filling the  
25 June 30 Purchase Orders. It also has failed adequately to remedy the more recently  
26 discovered violations of the Exclusivity Provision.

27 19. As a result of ChromaDex's breaches of the MFN Provision and  
28 Exclusivity Provision of the NR Supply Agreement, and its fraudulent and coercive

1 conduct in inducing Elysium into executing the License and Royalty Agreement,  
2 Elysium has sustained, and continues to sustain, damages. Because only  
3 ChromaDex knows the full extent of its breaches of the NR Supply Agreement, and  
4 because such breaches are continuing in nature, Elysium cannot yet calculate its  
5 damages with precision.

6 20. Through these Counterclaims, Elysium seeks to rescind the License and  
7 Royalty Agreement, to obtain restitution and to recover for the damages, the full  
8 amount of which is yet unknown, that it has sustained as a result of ChromaDex's  
9 breaches of contract and fraud.

10 **JURISDICTION AND VENUE**

11 21. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1332  
12 in that it is an action between citizens of different states and the matter in  
13 controversy exceeds the sum or value of \$75,000 exclusive of interest and costs.

14 22. Venue is proper in this District because ChromaDex resides within the  
15 District.

16 **THE PARTIES**

17 23. Counterclaimant Elysium is a Delaware corporation with its principal  
18 place of business in New York. Elysium manufactures and sells the dietary  
19 supplement Basis, which combines nicotinamide riboside, pterostilbene and other  
20 ingredients.

21 24. Counterdefendant ChromaDex is a California corporation with its  
22 principal place of business in California. ChromaDex distributes, among other  
23 things, nicotinamide riboside and pterostilbene.

24 **FACTUAL ALLEGATIONS**

25 **ChromaDex Exploits Market Power in the Market For Supply of NR**

26 25. Nicotinamide riboside is a pyridine nucleoside form of Vitamin B<sub>3</sub> that  
27 functions as an efficient precursor to oxidized nicotinamide adenine dinucleotide  
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1 (NAD+). NAD+ is a coenzyme found in all living cells that plays an essential role in  
2 hundreds of metabolic processes.

3 26. Nicotinamide riboside is found in nature, including in milk.  
4 ChromaDex marketing materials admit that nicotinamide riboside is “naturally-  
5 occurring” and state that ChromaDex’s nicotinamide riboside product, Niagen, is  
6 “nature-identical.” Niagen® is the federally registered trademark used by  
7 ChromaDex to market its nicotinamide riboside product.

8 27. Despite the fact that nicotinamide riboside is a naturally-occurring  
9 product, at the time the parties executed the NR Supply Agreement, ChromaDex had,  
10 and still has, market power in the market for supply of nicotinamide riboside in the  
11 United States and worldwide.

12 28. At all relevant times, ChromaDex has had no competitors in the market  
13 for supply of nicotinamide riboside. ChromaDex has been the sole commercial  
14 supplier of nicotinamide riboside, and every nicotinamide riboside product in the  
15 global market today is supplied by ChromaDex. ChromaDex’s website states that  
16 Niagen is “the world’s first and only commercially available nicotinamide riboside.”

17 29. On multiple occasions, Jaksch stated to Elysium that “I am NR,”  
18 referring to nicotinamide riboside.

19 30. ChromaDex does not itself manufacture nicotinamide riboside nor does  
20 it have the manufacturing capabilities to do so. Instead, ChromaDex is solely a  
21 middleman in supplying nicotinamide riboside to the market. ChromaDex obtains its  
22 nicotinamide riboside from a third-party contract manufacturer. ChromaDex’s  
23 contract manufacturer is under an exclusive dealing arrangement, and is prohibited  
24 by ChromaDex from selling nicotinamide riboside to any customer other than  
25 ChromaDex. ChromaDex then resells the nicotinamide riboside at a substantial  
26 markup to the global market.

27 31. As a consequence of its market power, ChromaDex is able to control  
28 output of nicotinamide riboside and to charge prices for nicotinamide riboside that

1 are substantially in excess of ChromaDex’s marginal cost for obtaining it.  
2 ChromaDex is also able to dictate different prices for nicotinamide riboside to its  
3 different customers.

4 32. ChromaDex’s market power comes from, among other things, patents it  
5 has in-licensed relating to nicotinamide riboside. These include U.S. Patent Nos.  
6 8,383,086 (“the ’086 patent”) and 8,197,807 (“the ’807 patent”), which are assigned  
7 to the Trustees of Dartmouth College (“Dartmouth”). ChromaDex has exclusively  
8 licensed the ’086 and ’807 patents from Dartmouth.

9 33. Claim 1 of the ’086 patent, its only independent claim, claims:

10 1. A pharmaceutical composition comprising nicotinamide  
11 riboside in admixture with a carrier, wherein said composition is  
12 formulated for oral administration.

13 34. Claim 1 of the ’807 patent, its only independent claim, claims:

14 1. A composition comprising isolated nicotinamide riboside in  
15 combination with one or more of tryptophan, nicotinic acid, or  
16 nicotinamide, wherein said combination is in admixture with a  
17 carrier comprising a sugar, starch, cellulose, powdered  
18 tragacanth, malt, gelatin, talc, cocoa butter, suppository wax,  
19 oil, glycol, polyol, ester, agar, buffering agent, alginic acid,  
20 isotonic saline, Ringer’s solution, ethyl alcohol, polyester,  
21 polycarbonate, or polyanhydride, wherein said composition is  
22 formulated for oral administration and increases NAD+  
23 biosynthesis upon oral administration.

24 35. ChromaDex’s website lists a number of other patents relating to  
25 nicotinamide riboside and its manufacture, including U.S. Patent Nos. 8,106,184  
26 (“the ’184 patent”), 8,114,626 (“the ’626 patent”) and 7,776,326 (“the ’326 patent”).

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1           36. ChromaDex has exclusively licensed the '184 patent from Cornell  
2 University, the '626 patent from Dartmouth and the '326 patent from Washington  
3 University.

4           37. ChromaDex's website repeatedly publicizes the patents it has obtained  
5 for nicotinamide riboside and its manufacture and the "proprietary" nature of its  
6 asserted rights to a naturally-occurring molecule.

7           38. ChromaDex has leveraged its market power in the supply of  
8 nicotinamide riboside to impose conditions on its customers that impermissibly  
9 broaden the scope of the patent grant with anticompetitive effect. In particular,  
10 ChromaDex has sometimes conditioned its sale of nicotinamide riboside on the  
11 purchaser's agreement to license ChromaDex's trademarks and pay substantial  
12 royalties to ChromaDex based on that trademark license.

13           39. In some instances, ChromaDex has required purchasers not only to  
14 license, but also to use ChromaDex trademarks in order to obtain a supply of  
15 nicotinamide riboside.

16           40. ChromaDex's tying of its patent rights to a trademark license has  
17 substantial anticompetitive effects and secures rights and monopolies that extend  
18 beyond the patent grant. By conditioning access to nicotinamide riboside to payment  
19 of royalties on product sales under a trademark license for ChromaDex's Niagen®  
20 mark, ChromaDex coerces customers into paying for the right to use a mark they do  
21 not need or may not want to use. To the extent customers do use ChromaDex's  
22 licensed marks, the effect is to strengthen the association of nicotinamide riboside  
23 with ChromaDex, thereby further extending ChromaDex's market power in the  
24 supply of nicotinamide riboside even beyond the expiration of ChromaDex's patent  
25 estate.

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1                    **ChromaDex Fraudulently Induces Elysium to Sign the License and**  
2                    **Royalty Agreement and Conditions Its Supply of Nicotinamide**  
3                    **Riboside to Elysium on an Agreement to License and Pay Royalties for**  
4                    **ChromaDex Trademarks that Elysium Does Not Use and Does Not Want to Use**

5                    41. Elysium is a dietary supplement company that currently sells a single  
6 product, Basis, which combines nicotinamide riboside, pterostilbene and certain  
7 inactive ingredients.

8                    42. In the summer and early fall of 2013, Elysium engaged in discussions  
9 with ChromaDex about obtaining a supply of nicotinamide riboside.

10                    43. From the outset, ChromaDex emphasized to Elysium the onerous terms  
11 it had been able to require from its business partners. In an August 26, 2013 e-mail  
12 to Leonard Guarente, one of Elysium’s co-founders, Jaksch said that ChromaDex  
13 sought to require upfront cash payments, minimum purchase commitments, royalties  
14 and even equity positions from businesses seeking to use ChromaDex as a source for  
15 the supply of nicotinamide riboside.

16                    44. In response, Elysium stated its enthusiasm for NAD-related products,  
17 but explained that it had limited resources and likely could not meet all of  
18 ChromaDex’s onerous requirements. However, Elysium expressed interest in  
19 exploring solutions that would benefit ChromaDex, Elysium and consumers through  
20 increased access to NAD-based products.

21                    45. On November 8, 2013, Marcotulli sent a draft patent license and supply  
22 agreement under which ChromaDex agreed to supply nicotinamide riboside to  
23 Elysium for a maximum price. The draft also included a patent and know-how  
24 license permitting Elysium to make, use, sell, offer to sell or import products  
25 containing nicotinamide riboside, including a license granting Elysium the right to  
26 manufacture nicotinamide riboside on its own if it wished. The agreement did not  
27 contain a trademark license.

28                    46. ChromaDex, through Jaksch, responded by email on December 13,  
2013, attaching a revised draft supply agreement and stating that ChromaDex would

1 require Elysium not only to enter into a supply agreement, but also a brand license  
2 agreement, which Jaksch would send later. Jaksch explained that this forthcoming  
3 agreement would include royalty obligations.

4 47. In its December 13, 2013 draft of the supply agreement, apparently  
5 trying to avoid an obligation to pay patent sublicensing fees to its licensors,  
6 ChromaDex removed all references to a patent license. In sending the revised draft  
7 to Elysium, ChromaDex included a note that it “will include licensing rights in the  
8 Niagen [trademark] in a separate agreement which will also contain the Royalty  
9 Payments.”

10 48. On December 16, 2013, on a phone call between Jaksch, Marcotulli and  
11 Alminana, Jaksch falsely represented that all of ChromaDex’s customers who signed  
12 purchase agreements to obtain nicotinamide riboside were also required to sign  
13 separate trademark license and royalty agreements, whether they wanted to or  
14 intended to use ChromaDex marks or not.

15 49. Four days later, on December 20, 2013, Jaksch sent another e-mail  
16 reemphasizing that ChromaDex would require a “Niagen TM Agreement” that  
17 would include royalty requirements.

18 50. On December 27, 2013, Jaksch sent a draft trademark license agreement  
19 along with a revised supply agreement. The draft trademark license, like the supply  
20 agreement, omitted any express patent license.

21 51. In reliance on ChromaDex’s false representation that it required all of  
22 its customers to execute trademark license and royalty agreements, Elysium  
23 concluded that the issue was non-negotiable, and instead focused its efforts on  
24 negotiating the other provisions of the NR Supply Agreement.

25 52. Ultimately, given ChromaDex’s position at the time as the sole  
26 commercial supplier of nicotinamide riboside, and given ChromaDex’s  
27 representation that all customers who obtained nicotinamide riboside were required  
28 to pay royalties on sales under a trademark license agreement, Elysium determined it

1 had no choice but to agree to ChromaDex's requirement that it also license  
2 ChromaDex's trademarks, and agree to pay substantial royalties on Elysium product  
3 sales under the trademark license if it wished to obtain access to nicotinamide  
4 riboside.

5 53. The parties executed the NR Supply Agreement and License and  
6 Royalty Agreement on February 3, 2014. Under the NR Supply Agreement,  
7 ChromaDex agreed to supply Elysium with nicotinamide riboside at or below a  
8 designated maximum price. That maximum price, and the price that Elysium in fact  
9 has paid ChromaDex for nicotinamide riboside, is substantially higher than  
10 ChromaDex's marginal cost for obtaining nicotinamide riboside.

11 **ChromaDex Unlawfully Ties Royalty Payments Under**  
12 **the License and Royalty Agreement to the Price of ChromaDex's Supply**

13 54. As noted, the NR Supply Agreement contains no express license to  
14 ChromaDex's patent rights. However, because ChromaDex itself was supplying  
15 nicotinamide riboside under the agreement for use in Elysium's products, its supply  
16 of that ingredient includes an implied sublicense to ChromaDex's patents under  
17 principles of patent exhaustion and other applicable law. ChromaDex's sale of  
18 nicotinamide riboside to Elysium is an authorized sale of nicotinamide riboside and  
19 constitutes ChromaDex's compensation for its nicotinamide riboside product.

20 55. The License and Royalty Agreement grants Elysium a license to use  
21 ChromaDex's trademarks, including Niagen®. The License and Royalty Agreement  
22 is expressly tied to ChromaDex's supply of nicotinamide riboside. It cannot be  
23 terminated by Elysium without ChromaDex's consent, unless the NR Supply  
24 Agreement also is terminated.

25 56. In exchange for the trademark license, Elysium is required to pay a  
26 substantial royalty on all products containing any ingredients supplied by  
27 ChromaDex under the NR Supply Agreement upon any sale of those products. This  
28 is true whether or not Elysium uses any ChromaDex marks at all.

1 57. Not only is the royalty obligation unconnected to use of ChromaDex’s  
2 trademarks, but the royalty rate also changes for reasons unrelated to use of any  
3 trademarks. Instead, for example, the royalty rate increases as Elysium’s annual  
4 worldwide net sales of products containing ingredients supplied by ChromaDex  
5 increases.

6 58. The License and Royalty Agreement also provides that the royalty rate  
7 for access to ChromaDex’s trademarks increases, by as much as 50%, as Elysium’s  
8 per-kilogram price under the NR Supply Agreement drops. This forced royalty step-  
9 up has the effect of increasing Elysium’s royalty burden even as ChromaDex’s  
10 ability to extract higher prices diminishes – such as, for example, when its patent  
11 rights expire and its market power diminishes. It also insulates ChromaDex from the  
12 effects of patent expiration and invalidity, eventually providing ChromaDex with  
13 unlawful post-expiration royalties for sales of unpatented products.

14 59. By tying payments of royalties under the trademark license (which must  
15 be paid even if the trademarks are not used) inversely to the price of ChromaDex’s  
16 supply, the agreement provided additional means for ChromaDex to protect its  
17 market power in nicotinamide riboside, unlawfully extend ChromaDex’s patent  
18 monopoly, and adversely affect competition.

19 **The MFN and Exclusivity Provisions**

20 60. Under the NR Supply Agreement’s MFN Provision, Elysium agreed to  
21 pay to ChromaDex a specified maximum price for nicotinamide riboside. However,  
22 if “ChromaDex supplies [nicotinamide riboside] (or a substantially similar product)  
23 to a Third Party at a price that is lower than that at which [nicotinamide riboside] is  
24 supplied to Elysium under this Agreement, then the price of [nicotinamide riboside]  
25 supplied under this Agreement shall be revised to such Third Party price with effect  
26 from the date of the applicable sale to such Third Party.”

27 61. The MFN Provision further provides that “ChromaDex shall promptly  
28 provide Elysium Health with any refund or credits thereby created [by virtue of

1 ChromaDex’s sale of nicotinamide riboside to a third party for a lesser price],  
2 provided Elysium Health purchases equal volumes or higher volumes than the Third  
3 Party.”

4 62. The parties amended the NR Supply Agreement on February 19, 2016.  
5 The amendment provides that “ChromaDex shall not, directly or indirectly, sell,  
6 transfer or otherwise provide to any Third Party, or license or otherwise enable any  
7 Third Party to make, any products containing” nicotinamide riboside and either  
8 pterostilbene or any other ingredient “substantially similar” to pterostilbene,  
9 “whether in the same delivery mechanism . . . or packaging or in separate form or  
10 packaging but marketed together.”

11 63. ChromaDex and Elysium knew that, if another ChromaDex customer  
12 were permitted to manufacture a substantially similar combination to Basis,  
13 Elysium’s business – which involves selling that single combination as its only  
14 currently marketed product – could be irreparably damaged.

15 **ChromaDex Breaches the NR Supply Agreement And Inadvertently**  
16 **Discloses Its Own Breach in Another Attempt to Defraud Elysium**

17 64. On May 29, 2016, Alminana requested from Jaksch data listing the  
18 prices at which ChromaDex was selling nicotinamide riboside to other customers.  
19 At the time Alminana made this request, Elysium recognized that it was an  
20 exemplary customer of ChromaDex, even “self-policing” the parties’ contracts to  
21 ensure that ChromaDex was receiving the payments prescribed by the contracts.  
22 Alminana’s friendly request was intended to confirm that, in light of Elysium’s  
23 orders of substantial volumes of nicotinamide riboside and its full performance under  
24 the contracts, ChromaDex was similarly upholding its end of the bargain by  
25 providing Elysium with the lowest price.

26 65. On June 13, 2016, in response to that request, Jaksch sought to defraud  
27 Elysium by transmitting the Fraudulent Spreadsheet, which purported to list in  
28 “blinded” form the prices at which ChromaDex was selling nicotinamide riboside to

1 purchasers other than Elysium, without identifying those other purchasers by name.  
2 Jaksch apparently meant to provide Elysium with only his blinded spreadsheet, as he  
3 indicated in the text of his e-mail: “Attached is a blinded summary of supply  
4 agreements for NR.”

5 66. The “blinded” sheet of the Fraudulent Spreadsheet purported to list all  
6 of ChromaDex’s customers who purchased nicotinamide riboside along with the per-  
7 kilogram price and royalty rates of each. The “blinded” sheet plainly was intended  
8 to convince Elysium that it was receiving the lowest price ChromaDex charged for  
9 nicotinamide riboside and that ChromaDex was in compliance with the MFN  
10 Provision.

11 67. ChromaDex might have succeeded in deceiving Elysium had Jaksch not  
12 inadvertently neglected to delete two “unblinded” sheets contained in the Excel  
13 spreadsheet that apparently provided the information from which ChromaDex  
14 concocted the “blinded” sheet. The “unblinded” sheets list additional customers that  
15 Jaksch notably omitted from the “blinded” sheet. The list of omitted customers  
16 confirms that ChromaDex had, in fact, agreed to sell nicotinamide riboside to other  
17 purchasers at a price far more favorable than the price at which ChromaDex had sold  
18 nicotinamide riboside to Elysium.

19 68. The “unblinded” sheets of the Fraudulent Spreadsheet also confirm,  
20 contrary to what Jaksch had represented to Marcotulli and Alminana by phone on  
21 December 16, 2013 to induce them to sign the License and Royalty Agreement, that  
22 some purchasers of nicotinamide riboside were not required to sign license and  
23 royalty agreements or pay royalties. The Fraudulent Spreadsheet further disclosed  
24 that at least one of these customers, in ChromaDex’s own words, “pre-dates  
25 Elysium,” thus confirming that Jaksch’s representation was false when made.

26 69. The Fraudulent Spreadsheet, while sent to convince Elysium falsely that  
27 ChromaDex was complying with the NR Supply Agreement, thus revealed not only  
28

1 that ChromaDex had been acting in violation of the MFN Provision, but also that it  
2 had fraudulently induced Elysium to enter into the License and Royalty Agreement.

3 70. When pressed for an explanation, Jaksch sent a follow-up email on June  
4 14, 2016 conceding that at least one ChromaDex customer had paid less per  
5 kilogram for nicotinamide riboside than Elysium had paid – and that this customer  
6 did not have a royalty agreement in place. Jaksch’s admission – made just one day  
7 after he sent the Fraudulent Spreadsheet to Elysium – only serves to confirm  
8 ChromaDex’s intent to deceive Elysium, because this customer, which Jaksch  
9 obviously knew about, was not included on the “blinded” sheet.

10 71. On a June 30, 2016 phone call with Marcotulli and Alminana, Jaksch  
11 further confessed that other purchasers had been paying far less per kilogram for  
12 nicotinamide riboside than Elysium had been paying, in violation of the MFN  
13 Provision.

14 72. ChromaDex explained on the June 30 phone call that it also promised  
15 one customer that it would provide nicotinamide riboside for an even more  
16 substantial discount, also in violation of the MFN Provision.

17 73. At the time Elysium discovered ChromaDex’s breaches of the MFN  
18 Provision, it had fully performed all of its obligations under the Agreements. In fact,  
19 Elysium had been an exemplary customer, even “self-policing” its contracts with  
20 ChromaDex to ensure that it had been paying all that it had agreed to pay under the  
21 Agreements.

22 74. Acting under the assumption that ChromaDex would provide a prompt  
23 credit or refund for its breach of the MFN Provision, as it was required to do under  
24 the contract, Elysium submitted the June 30 Purchase Orders for both nicotinamide  
25 riboside and pterostilbene.

26 75. After it submitted the June 30 Purchase Orders, Elysium discovered that  
27 ChromaDex’s breach of the NR Supply Agreement was not limited to the breach of  
28 the MFN Provision. With respect to the Exclusivity Provision, Elysium learned,

1 after the June 30 Purchase Orders were submitted, that other products containing  
2 both nicotinamide riboside and pterostilbene or resveratrol were being sold on the  
3 market by other ChromaDex customers.

4 76. Resveratrol is substantially similar to pterostilbene. ChromaDex’s own  
5 website refers to pterostilbene as “closely related to resveratrol,” an “analog of  
6 resveratrol,” and a “derivative of resveratrol.” And, in an April 27, 2010 press  
7 release, ChromaDex called pterostilbene a “next generation resveratrol.”

8 77. During negotiations for the NR Supply Agreement, ChromaDex  
9 acknowledged that resveratrol was among those ingredients that would be considered  
10 “substantially similar” to pterostilbene. In fact, ChromaDex never disputed the  
11 substantial similarity between pterostilbene and resveratrol until it became  
12 advantageous for it to do so – that is, when ChromaDex was confronted with its  
13 breaches of the Exclusivity Provision. Only when Elysium advised ChromaDex that  
14 it had learned ChromaDex was violating the Exclusivity Provision did ChromaDex  
15 abruptly change its tune and begin to deny that pterostilbene and resveratrol are  
16 substantially similar, despite ChromaDex’s many prior statements to the contrary.  
17 ChromaDex did, however, admit that it was, and had been, selling NR and  
18 resveratrol in combination.

19 78. Elysium also learned after submitting the June 30 Purchase Orders that  
20 ChromaDex was not only enabling other customers to manufacture and sell products  
21 that combined nicotinamide riboside and pterostilbene or the substantially similar  
22 ingredient resveratrol, but was actively recommending to other customers that they  
23 create such products to compete with Elysium’s Basis, in further violation of the  
24 Exclusivity Provision.

25 79. ChromaDex’s breaches of the MFN Provision and Exclusivity Provision  
26 have caused Elysium substantial damages, including, but not limited to,  
27 consequential damages. Had Elysium in fact been paying the lowest price for  
28 nicotinamide riboside, it would have had more cash on hand to purchase more new

1 inventory and to market or create new products. And, because had Elysium was not  
2 the exclusive producer of a combination of nicotinamide and pterostilbene (or a  
3 substantially similar ingredient) as a result of the breach of the Exclusivity Provision,  
4 other customers likely bought competitors' products and compromised Elysium's  
5 market share.

6 **ChromaDex Fails to Remedy Its Breaches, Despite**  
7 **Elysium's Best Efforts to Resolve the Parties' Disputes**

8 80. Elysium expended significant effort attempting to resolve this dispute  
9 amicably. Elysium had several conversations with ChromaDex officers and  
10 directors, including Jaksch, Will Black (ChromaDex's Vice President of Sales and  
11 Marketing) and Rob Fried (a ChromaDex director), an in-person meeting with  
12 Jaksch and Fried in California and a subsequent follow-up call with Jaksch and Steve  
13 Block (a ChromaDex director). Those discussions led to the exchange of proposals  
14 between ChromaDex and Elysium, but were hampered by ChromaDex's refusal to  
15 provide information to Elysium necessary to calculate the credit due for  
16 ChromaDex's breach of the MFN Provision.

17 81. Despite knowing that it was in material breach of the Agreements,  
18 ChromaDex failed to provide Elysium with the credit to which it is entitled, or even  
19 to engage in good faith discussions with Elysium to remedy the breaches.

20 82. Indeed, rather than simply provide the information Elysium sought,  
21 Block's proposal was for Elysium to conduct an audit to determine the credit to  
22 which it is entitled.

23 83. On December 7, 2016, Elysium requested such an audit from Tom  
24 Varvaro, ChromaDex's Chief Financial Officer.

25 84. Elysium's request for an audit was ignored. Instead, ChromaDex  
26 responded by issuing a "non-renewal" notice purporting to terminate the NR Supply  
27 Agreement as of February 2, 2017.

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1 85. After Elysium requested the audit Block had offered, ChromaDex  
2 ceased communicating with Elysium through its officers and directors, and tasked  
3 Michael Brauser, one of its former directors who has, to Elysium’s knowledge, no  
4 position within ChromaDex, to make a series of increasingly hostile and threatening  
5 calls to Elysium and one of its investors in an attempt to intimidate Elysium into  
6 forfeiting its rights and capitulating to ChromaDex’s demands. When Elysium told  
7 Jaksch it would be pleased to continue discussions with ChromaDex management  
8 but found Brauser’s behavior counterproductive, ChromaDex responded with this  
9 lawsuit.

10 86. ChromaDex’s breaches not only damaged Elysium to an unknown  
11 extent, but also excused Elysium’s further performance under the Agreements.

12 87. Only ChromaDex can know the full extent of its breaches of the Supply  
13 Agreements. Those breaches injured Elysium and caused it to sustain damages in an  
14 amount to be proven at trial.

15 88. Furthermore, ChromaDex fraudulently induced Elysium to execute the  
16 License and Royalty Agreement and to make substantial royalty payments under that  
17 contract. Elysium is entitled to recover those royalty payments and/or any further  
18 damages, in an amount to be proven at trial.

19 **FIRST COUNTERCLAIM FOR RELIEF**

20 **(Breach of Contract – NR Supply Agreement)**

21 89. Elysium incorporates and re-alleges each and every allegation in  
22 paragraphs 1 to 88 above as if fully set forth herein.

23 90. The parties entered into the NR Supply Agreement on February 2, 2014.

24 91. Elysium performed all of its obligations under the NR Supply  
25 Agreement, or its performance was excused by ChromaDex’s breaches.

26 92. The NR Supply Agreement unambiguously requires that ChromaDex  
27 issue a refund or credit to Elysium in the event that ChromaDex sells nicotinamide  
28

1 riboside or a substantially similar product to another purchaser for a lesser amount  
2 than Elysium paid for nicotinamide riboside. (NR Supply Agreement § 3.1.)

3 93. ChromaDex sold nicotinamide riboside to other companies for a price  
4 less than the price at which ChromaDex sold nicotinamide riboside to Elysium but  
5 has not issued a refund or credit to Elysium, in breach of the NR Supply Agreement.

6 94. The NR Supply Agreement, as amended by the Amendment to Supply  
7 Agreement, unambiguously covenants that ChromaDex will not sell, transfer or  
8 otherwise provide to any third party, or license or otherwise enable any third party to  
9 produce, both nicotinamide riboside and pterostilbene or any ingredient substantially  
10 similar to pterostilbene, either in combination or in separate form but marketed  
11 together. (NR Supply Agreement § 3.11.3.)

12 95. ChromaDex has created or sold products containing both nicotinamide  
13 riboside and pterostilbene (or the substantially similar analog resveratrol) in  
14 combination or has enabled third parties, including its other customers, to create such  
15 products, in breach of the NR Supply Agreement.

16 96. By failing to issue a refund or credit to Elysium, and by creating or  
17 selling, or permitting the creation or sale of, products other than Basis that contain  
18 both nicotinamide riboside and pterostilbene (or closely related analogs),  
19 ChromaDex has materially breached the NR Supply Agreement and denied Elysium  
20 the benefit of its bargain.

21 97. Elysium has suffered damages and continues to be damaged as a result  
22 of ChromaDex's breaches, in an amount to be determined at trial.

23 **SECOND COUNTERCLAIM FOR RELIEF**

24 **(Breach of the Implied Covenant of Good**  
25 **Faith and Fair Dealing – NR Supply Agreement)**

26 98. Elysium incorporates and re-alleges each and every allegation in  
27 paragraphs 1 to 97 above as if fully set forth herein.

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1 99. The NR Supply Agreement contains an implied covenant of good faith  
2 and fair dealing (the “Implied Covenant”), which forbids either party from doing  
3 anything to defeat the reasonable expectations of the other.

4 100. Elysium had the reasonable expectation that ChromaDex would not  
5 enable or encourage other companies to manufacture, sell or distribute products  
6 containing both nicotinamide riboside and pterostilbene or any substantially similar  
7 ingredient.

8 101. ChromaDex violated the Implied Covenant by recommending to other  
9 customers that they create products containing both nicotinamide riboside and either  
10 pterostilbene or a substantially similar ingredient, which unfairly interfered with  
11 Elysium’s right to receive the benefits of exclusivity under the NR Supply  
12 Agreement.

13 102. Elysium has suffered damages and continues to be damaged as a result  
14 of ChromaDex’s breach of the Implied Covenant.

15 **THIRD COUNTERCLAIM FOR RELIEF**

16 **(Fraudulent Inducement – License and Royalty Agreement)**

17 103. Elysium incorporates and re-alleges each and every allegation in  
18 paragraphs 1 to 102 above as if fully set forth herein.

19 104. The parties entered into both the NR Supply Agreement and License  
20 and Royalty Agreement on February 2, 2014.

21 105. During negotiations, ChromaDex falsely represented to Elysium that it  
22 required all of its customers who signed nicotinamide riboside supply agreements  
23 also to execute license and royalty agreements, under which customers agreed to pay  
24 royalties on product sales for use of ChromaDex marks, in addition to whatever  
25 amount they paid per kilogram for nicotinamide riboside.

26 106. During a December 16, 2013 telephone call, Jaksch falsely represented  
27 to Marcotulli and Alminana that ChromaDex required all of its customers who  
28 purchased nicotinamide riboside to sign trademark license and royalty agreements,

1 without regard to whether the customers wished or intended to use ChromaDex  
2 marks.

3 107. This representation was knowingly false when made. The Fraudulent  
4 Spreadsheet confirms that at least one purchaser of nicotinamide riboside that  
5 contracted with ChromaDex before Elysium did was not required to sign a license  
6 and royalty agreement or pay royalties.

7 108. Elysium justifiably relied on this misrepresentation because it believed  
8 ChromaDex's demand for a license and royalty agreement was non-negotiable, in  
9 view of ChromaDex's false claim that it required an agreement of this nature from  
10 each and every one of its customers. Elysium therefore forwent the opportunity to  
11 negotiate an agreement with ChromaDex that did not require the payment of  
12 royalties, and instead focused its efforts in negotiations on other aspects of the NR  
13 agreement. At the time ChromaDex made the misrepresentation, Elysium was  
14 ignorant of its falsity and believed it to be true and could not have reasonably  
15 discovered the true facts.

16 109. The representation was made with the intent to deceive Elysium and  
17 induce it to enter into the License and Royalty Agreement and did, in fact, deceive  
18 and induce Elysium to enter into License and Royalty Agreement.

19 110. As a result of ChromaDex's fraud, Elysium is entitled to rescission of  
20 the License and Royalty Agreement and the return of all royalties paid under that  
21 contract or, in the alternative, damages in an amount to be proven at trial.

22 **FOURTH COUNTERCLAIM FOR RELIEF**

23 **(Declaratory Judgment of Patent Misuse)**

24 111. Elysium incorporates and re-alleges each and every allegation in  
25 paragraphs 1 to 110 above as if fully set forth herein.

26 112. ChromaDex has conditioned its supply of nicotinamide riboside, and  
27 access to patent rights accompanying such supply, on purchasers' (including  
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1 Elysium’s) agreement to license ChromaDex’s trademarks, whether the purchasers  
2 want such a license or not.

3 113. ChromaDex has market power in the supply of nicotinamide riboside,  
4 and its tying of access to its patent rights to a royalty-bearing trademark license  
5 impermissibly broadens the scope of those patent rights, with anticompetitive effect.

6 114. ChromaDex’s conduct constitutes misuse of its patent rights, including  
7 the ’086 patent, the ’807 patent and other patents asserted by ChromaDex as  
8 covering nicotinamide riboside or its use or manufacture.

9 115. The ’086 patent, the ’807 patent and other patents asserted by  
10 ChromaDex as covering nicotinamide riboside or its use or manufacture are  
11 unenforceable by ChromaDex as a consequence of ChromaDex’s misconduct.

12 **FIFTH COUNTERCLAIM FOR RELIEF**

13 **(Unlawful and Unfair Business Practices –**  
14 **California Business and Professions Code § 17200)**

15 116. Elysium incorporates and re-alleges each and every allegation in  
16 paragraphs 1 to 115 above as if fully set forth herein.

17 117. ChromaDex’s practice of conditioning its supply of nicotinamide  
18 riboside on the purchaser’s agreement to license ChromaDex’s trademarks is a  
19 business act or practice under California’s state law of unfair competition.

20 118. ChromaDex’s practice of stepping up the royalty rates tied to its supply  
21 of nicotinamide riboside as its patent and market power decreases also constitutes a  
22 business act or practice under California’s state law of unfair competition.

23 119. ChromaDex’s breaches of the NR Supply Agreement, its active and  
24 deliberate concealment of those breaches from Elysium, and its attempt to defraud  
25 Elysium by its presentation to Elysium of the Fraudulent Spreadsheet constitute  
26 business acts or practices under California’s state law of unfair competition.

27 120. ChromaDex has violated patent law and policy by committing patent  
28 misuse as a consequence of one or more of these acts or practices.

1 121. These acts or practices constitute unlawful and/or unfair acts or  
2 practices under California's state law of unfair competition.

3 122. Elysium has suffered injury in fact and has lost money or property as a  
4 result of ChromaDex's unfair competition. In order to obtain a supply of  
5 nicotinamide riboside, Elysium has been required to pay substantial royalties for a  
6 license of ChromaDex's trademark rights, which Elysium did not want and has not  
7 used.

8 **WHEREFORE**, Counterclaimant Elysium prays for judgment:

9 (1) For all damages available by reason of ChromaDex's breaches of the NR  
10 Supply Agreement including, without limitation, offset of the amount, if any,  
11 Elysium may owe to ChromaDex;

12 (2) For all damages available by reason of ChromaDex's breaches of the  
13 implied covenant of good faith and fair dealing;

14 (3) For all remedies available by reason of ChromaDex's fraudulent  
15 inducement of Elysium to enter into the License and Royalty Agreement, including,  
16 without limitation, compensatory damages, punitive damages and/or rescission of the  
17 agreement and restitution of any royalty payments conveyed by Elysium pursuant to  
18 the agreement;

19 (4) Declaring that ChromaDex has misused and is misusing the '086 and '807  
20 patents and other patents asserted by ChromaDex as covering nicotinamide riboside  
21 or its use or manufacture;

22 (5) Declaring that the '086 patent, the '807 patent and other patents asserted  
23 by ChromaDex as covering nicotinamide riboside or its use or manufacture are  
24 unenforceable by ChromaDex as a consequence of ChromaDex's misconduct;

25 (6) Declaring that ChromaDex has engaged in unlawful or unfair competition  
26 under Cal. Bus. & Prof. Code. § 17200 et seq.;

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1 (7) For restitution of monies received by ChromaDex because of its unlawful  
2 and unfair practices, including restitution of all royalties paid to ChromaDex by  
3 Elysium pursuant to the License and Royalty Agreement;

4 (8) Enjoining ChromaDex from enforcing the License and Royalty Agreement  
5 or any other agreements conditioning the supply of nicotinamide riboside or other  
6 access to ChromaDex’s patent rights on a license to ChromaDex’s trademarks and  
7 payment of royalties under such license; and

8 (9) For such other and further relief as the Court may deem just and proper.

9 **DEMAND FOR JURY TRIAL**

10 Defendant/Counterclaimant Elysium respectfully requests a trial by jury on all  
11 issues so triable.

12  
13 DATED: March 6, 2017

14  
15 SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP  
16 FOLEY HOAG LLP

17 By: /s/ Joseph N. Sacca \_\_\_\_\_  
18 JOSEPH N. SACCA  
19 Attorneys for Defendant and  
20 Counterclaimant Elysium Health, Inc.

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