UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MISSOURI
KANSAS CITY DIVISION

ANDRENELL JOHNSON, Plaintiff, v. BAKER NORTON U.S., INC., f/k/a Baker Norton Pharmaceuticals, Inc.; IVAX L.L.C., f/k/a IVAX CORPORATION; JANSSEN PHARMACEUTICALS, INC., f/k/a Ortho-McNeil-Janssen Pharmaceuticals, Inc., f/k/a Janssen Pharmaceutica Inc.; ORTHO-MCNEIL PHARMACEUTICAL, L.L.C.; JANSSEN RESEARCH & DEVELOPMENT LLC f/k/a Johnson & Johnson Research & Development, L.L.C.; ALZA CORPORATION; JANSSEN ORTHO LLC; JOHNSON & JOHNSON; and, BAYER HEALTHCARE PHARMACEUTICALS, INC. Defendants.	**CIVIL ACTION NO. 20-cv-00544** **COMPLAINT AND JURY DEMAND**

COMPLAINT

ANDRENELL JOHNSON ("Plaintiff") hereby sues BAKER NORTON U.S., INC., f/k/a Baker Norton Pharmaceuticals, Inc.; IVAX L.L.C., f/k/a IVAX CORPORATION; JANSSEN PHARMACEUTICALS, INC., f/k/a Ortho-McNeil-Janssen Pharmaceuticals, Inc., f/k/a Janssen Pharmaceutica Inc.; ORTHO-MCNEIL PHARMACEUTICAL, L.L.C.; JANSSEN RESEARCH & DEVELOPMENT LLC f/k/a Johnson & Johnson Research & Development, L.L.C.; ALZA CORPORATION; JANSSEN ORTHO LLC; JOHNSON & JOHNSON; and BAYER HEALTHCARE PHARMACEUTICALS, INC. (collectively, "Defendants"), and alleges as follows:

INTRODUCTION

1. This is an action for damages related to Defendants' wrongful conduct in connection with the development, design, testing, labeling, packaging, promoting, advertising, marketing, distribution, and selling of pentosan polysulfate sodium ("PPS") as Defendants' prescription drug Elmiron® (hereinafter "Elmiron").

2. Defendants manufacture, promote, and sell Elmiron as a prescription drug that treats interstitial cystitis (also known as "IC" or "bladder pain syndrome"). Elmiron is manufactured as a capsule suitable for oral consumption.

3. Elmiron injured Plaintiff by causing harmful, but latent, retinal damage and maculopathy, which ultimately resulted in impaired vision.

4. Defendants knew or should have known that Elmiron, when taken as prescribed and intended, causes harmful retinal damage and maculopathy.

5. Numerous patient reports, scientific studies, and even alerts by governmental agencies have established that Elmiron causes retinal damage, including Pentosan Polysulfate Sodium Maculopathy (hereinafter "PPS Maculopathy" or "pigmentary maculopathy"), a signature condition caused by Elmiron toxicity.

6. Nevertheless, Defendants failed to warn, instruct, advise, educate, or otherwise inform Elmiron users, Elmiron prescribers, or United States governmental regulators about the risk of pigmentary maculopathy or the need for medical, ophthalmological monitoring. At all relevant times, the U.S. label for Elmiron made no mention of risk to patients' eyes or vision.

7. As a proximate result Defendants' wrongful actions and inactions, Plaintiff was injured and suffered damages from her use of Elmiron.

8. Plaintiff therefore demands judgment against Defendants and requests, among other things, compensatory damages, statutory damages, punitive damages, attorneys' fees, and costs.

PARTY PLAINTIFF

9. Plaintiff Andrenell Johnson is a Missouri citizen residing in Kansas City, Missouri in Jackson County. Plaintiff was diagnosed with interstitial cystitis and took Elmiron as prescribed by her physician from approximately 2017 through 2018.

10. During the relevant time periods, Plaintiff and her physicians were given no warning and had no knowledge of the serious risk of retinal damage and vision loss posed by Elmiron.

11. As a result of her exposure to Elmiron, Plaintiff now suffers from retinal damage, blurred vision, distorted vision, and other visual symptoms.

12. As a result of her injuries, Plaintiff has suffered loss of enjoyment, having to make adjustments and changes to her everyday life. She now avoids driving on highways, the interstates, and at night due to her poor vision.

PARTY DEFENDANTS

13. Defendant BAKER NORTON U.S., INC., f/k/a Baker Norton Pharmaceuticals, Inc. (hereinafter "BAKER NORTON") is a corporation organized under Florida law with its principal place of business in Miami, FL.

14. Nonparty Baker Norton Pharmaceuticals, Inc. (hereinafter "Baker Norton Pharmaceuticals") merged into defendant BAKER NORTON on or about December 26, 2006. As the surviving company, Defendant BAKER NORTON assumed the assets and liabilities of Baker Norton Pharmaceuticals, including those assets and liabilities relating to Elmiron.

15. On approximately June 11, 1991, Baker Norton Pharmaceuticals submitted the original New Drug Application ("NDA") for pentosan polysulfate sodium (NDA: 020193) (hereinafter "original NDA").

16. Baker Norton Pharmaceuticals at the time was a subsidiary of Defendant IVAX L.L.C, f/k/a IVAX CORPORATION (hereinafter, "IVAX"). IVAX and Baker Norton Pharmaceuticals conducted clinical trials on Elmiron that were used to support FDA approval of the drug.

17. From September 26, 1996, until approximately September 1997, Baker Norton Pharmaceuticals held the NDA for Elmiron.

18. From September 26, 1996, until approximately September 1997, Baker Norton Pharmaceuticals manufactured, packaged, tested, labeled, promoted, advertised, marketed, distributed, and sold Elmiron.

19. Defendant IVAX is a corporation organized under Florida law with its principal place of business in Florida.

20. Upon information and belief, Defendant BAKER NORTON is and has been during all relevant time periods a wholly owned subsidiary of Defendant IVAX.

21. Upon information and belief, at all relevant times, Defendant IVAX was actively involved in Defendant BAKER NORTON'S business operations, including the early testing, developing, manufacturing, marketing, distributing, and selling of Elmiron.

22. In September 1997, Defendant IVAX licensed the rights to Elmiron in the United States and Canada to Defendant ALZA CORPORATION (hereinafter "ALZA"), for $75 Million in up-front payments.

23. Defendant ALZA CORPORATION ("ALZA") is a corporation organized under Delaware law with its principal place of business in California.

24. Defendant ALZA held the NDA for Elmiron from approximately April 1998 until August 2002.

25. Upon information and belief, as part of its business, ALZA was involved in the research, development, sales, and marketing of pharmaceutical products including Elmiron.

26. Upon information and belief, and at all relevant times, Defendant ALZA was in the business of and did advertise, promote, market, sell, and distribute the drug Elmiron.

27. Upon information and belief, Defendant ALZA made the $75 Million up-front payment and additional payments required under the agreement to IVAX.

28. Upon information and belief, Defendant IVAX manufactured Elmiron for Defendant ALZA after licensing the rights to Elmiron to ALZA in September 1997.

29. Upon information and belief, Defendant BAKER NORTON and/or Defendant IVAX continued to receive royalty payments for Elmiron from Defendant ALZA.

30. Upon information and belief, Elmiron is a Registered Trademark of nonparties Teva Branded Pharmaceutical Products R&D, Inc., Teva Pharmaceuticals USA, Inc., and/or Teva Pharmaceuticals, Inc., under license to Defendant JANSSEN PHARMACEUTICALS.

31. Defendant JANSSEN PHARMACEUTICALS, INC., f/k/a Ortho-McNeil-Janssen Pharmaceutical, L.L.C., f/k/a Janssen Pharmaceutica Inc., (hereinafter "JANSSEN PHARMA") is a corporation organized under Pennsylvania law with its principal place of business in New Jersey.

32. JANSSEN PHARMA has held the U.S. Food and Drug Administration (FDA) New Drug Application (NDA) for Elmiron since approximately August 2008.

33. As part of its business, JANSSEN PHARMA is involved in the research, development, sales, and marketing of pharmaceutical products including Elmiron.

34. Upon information and belief, and at all relevant times, Defendant JANSSEN PHARMA was in the business of and did advertise, promote, market, sell, and distribute the drug Elmiron.

35. Defendant ORTHO-MCNEIL PHARMACEUTICAL, L.L.C. (hereinafter "ORTHO PHARMA") is a corporation organized under Delaware law with its principal place of business in New Jersey.

36. ORTHO PHARMA held the NDA for Elmiron from approximately July 2004 until August 2008.

37. As part of its business, ORTHO PHARMA is involved in the research, development, sales, and marketing of pharmaceutical products including Elmiron.

38. Upon information and belief, and at all relevant times, Defendant ORTHO PHARMA was in the business of and did advertise, promote, market, sell, and distribute the drug Elmiron.

39. Defendant JANSSEN RESEARCH & DEVELOPMENT LLC, f/k/a Johnson & Johnson Research & Development, L.L.C. (hereinafter "JANSSEN R&D") is a limited liability company organized under the laws of New Jersey with its principal place of business in New Jersey. JANSSEN R&D's sole member is Centocor Research & Development, Inc., a Pennsylvania corporation with its principal place of business in Pennsylvania.

40. JANSSEN R&D held the NDA for Elmiron from approximately August 2002 until August 2004.

41. As part of its business, JANSSEN R&D is involved in the research, development, sales, and marketing of pharmaceutical products including Elmiron.

42. Upon information and belief, and at all relevant times, Defendant JANSSEN R&D was in the business of and did advertise, promote, market, sell, and distribute the drug Elmiron.

43. Defendant JANSSEN ORTHO, LLC (hereinafter "JANSSEN ORTHO") is a limited liability company organized under Delaware law with its principal place of business in Puerto Rico. JANSSEN ORTHO's sole member is OMJ PR Holdings, a corporation incorporated in Ireland with a principal place of business in Puerto Rico. JANSSEN ORTHO manufacturers and packages Elmiron for Janssen Pharmaceuticals, Inc.

44. As part of its business, JANSSEN ORTHO is involved in the research, development, sales, and marketing of pharmaceutical products including Elmiron.

45. Upon information and belief, and at all relevant times, Defendant JANSSEN ORTHO was in the business of and did advertise, promote, market, sell, distribute, and report adverse events for, the drug Elmiron.

46. Defendant JOHNSON & JOHNSON is a corporation organized under New Jersey law with its principal place of business in New Jersey.

47. Upon information and belief, at all relevant times, JANSSEN PHARMA, ORTHO PHARMA, JANSSEN R&D, ALZA, and JANSSEN ORTHO have been wholly owned subsidiaries of JOHNSON & JOHNSON with their profits inuring to JOHNSON & JOHNSON'S benefit.

48. Defendant BAYER HEALTHCARE PHARMACEUTICALS, INC. (hereinafter "BAYER"), a U.S. subsidiary of Bayer Healthcare AG (hereinafter "Bayer AG") is a corporation organized under Delaware law with its principal place of business in New Jersey.

49. Bayer Pharmaceuticals Corporation (hereinafter "Bayer Pharmaceuticals"), a U.S. subsidiary of Bayer AG, merged into Defendant BAYER on January 1, 2008. As the surviving company, Defendant BAYER assumed the assets and liabilities of Bayer Pharmaceuticals, including those assets and liabilities related to Elmiron.

50. Upon information and belief, in or around 2005, Bayer Pharmaceuticals contracted on a co-exclusive basis with defendant JOHNSON & JOHNSON to advertise, promote, market, sell, distribute, and report adverse events for, the drug Elmiron to urologists in the United States under a co-promotion agreement (hereinafter the "Co-Promotion Agreement").[1]

51. Under the terms of the Co-Promotion Agreement, Bayer Pharmaceuticals received the rights to co-promote Elmiron to urologists in the United States and receive full profit for prescription sales of Elmiron in the urology sector in the United States.[2]

52. Upon information and belief, Bayer Pharmaceuticals promoted Elmiron through its network of pharmaceutical sales representatives, and would have been in direct contact with prescribing physicians and have access to adverse reaction information from those health care providers.

53. As part of its business, BAYER HEALTHCARE PHARMACEUTICALS, INC. is involved in the research, development, sales, and marketing of pharmaceutical products including Elmiron.

54. Upon information and belief, and at all relevant times, Defendant BAYER HEALTHCARE PHARMACEUTICALS, INC. was in the business of and did advertise, promote, market, sell, distribute, and report adverse events for, the drug Elmiron.

---

[1] *See* Bayer Stockholders' Newsletter 2005, Interim Report as of Sept. 30, 2005 (2005), at 22.

[2] *Id.*

55. Defendants were jointly engaged in the business of designing, developing, manufacturing, testing, packaging, promoting, marketing, distributing, labeling, and/or selling Elmiron, and controlling the Elmiron NDA.

JURISDICTION & VENUE

56. This Court has jurisdiction pursuant to 28 U.S.C. § 1332(a) because the parties are citizens of different States and the amount in controversy exceeds $75,000.00, exclusive of interest and costs.

57. Venue is proper in this forum pursuant to 28 U.S.C. § 1391 because the Defendants transact business in this District, and a substantial portion of the practices, events, and omissions complained of herein occurred in this judicial district. Further, the named Plaintiff resides in this judicial district and was prescribed, purchased, and ingested Elmiron in this district.

58. All conditions precedent to this action have occurred, been performed, or have been waived.

FACTUAL ALLEGATIONS

A. Brief History of Elmiron

59. In September of 1996, the FDA approved Elmiron for treatment of interstitial cystitis ("IC"), also known as bladder pain syndrome.

60. IC is a diagnosis that applies to patients with chronic bladder pain in the absence of other explanatory etiologies (or causes). The symptoms associated with IC range from discomfort to severe pain, and can include increased frequency and urgency of urination.

61. Under the IC treatment guidelines established by the American Urological Association (AUA), there are six lines of treatment for IC. According to the AUA, "first-line

treatments" should be suggested to all patients and "sixth-line treatments" should be reserved for the most severe cases, with the remaining treatment options falling in between.

62. Elmiron is not a first-line treatment for IC. Rather, Elmiron is one of ten suggested second-line treatments, including three other oral medications: amitriptyline, cimetidine, and hydroxyzine.

63. The guidelines further include numerous third-, fourth-, fifth-, and sixth-line treatments. When first- and second-line treatments fail to provide relief, the third-, fourth-, fifth-, and sixth-line treatments involve more invasive procedures such as the use of a catheter to deliver medicated solutions directly to the bladder; Botox injections to the muscle wall of the bladder; implantation of neurostimulation devices to control muscle contractions in the bladder; or, in rare cases, surgery to remove ulcers from the bladder or augment the bladder wall with an intestinal patch.

64. Defendants market Elmiron as "The Only Oral Medication FDA Approved to Treat the Bladder Pain or Discomfort of Interstitial Cystitis (IC)."[3] However, while Elmiron is the only oral medication approved by the FDA *specifically* for the purpose of treating IC, that statement is misleading in that ***it is not the only oral medication approved by the FDA that can be used to treat IC, and it is not the only IC treatment option.***

65. Rather, Elmiron is in fact one of *five* oral medications approved by the AUA Guidelines for use in treating IC, all of which are FDA-approved oral medications. Furthermore, the AUA Guidelines list *six lines* of treatment for IC, each of which contain multiple treatment options within a line.

[3] https://www.orthoelmiron.com/patient/about-elmiron.

B. Poor Bioavailability and Efficacy of Elmiron

66. Though Defendants admit that the mechanism of action for Elmiron is unknown, Elmiron is thought to be a "chemical bandaid" that coats the epithelial cells of the bladder to provide pain relief. The drug has poor oral bioavailability and absorption, requiring users to take long-term high doses of the drug, resulting in accumulation and ultimate toxicity over time.

67. Typical users take 100mg doses, 3 times per day, because only about 6% of the drug is absorbed to the epithelial cells of the bladder; the majority of the drug is excreted. However, the drug is also absorbed into retinal epithelial cells, which can result in retinal toxicity.

68. Users must ingest Elmiron for at least 3 to 6 months—and often longer—to achieve any benefit. One cohort reported that pain relief occurred in only 40% to 60% of patients.[4] Populations of patients receiving extended treatment (>2 years) showed no further improvement or worsening of symptoms, yet users often continue the drug for years.[5] In other trials, the improvement of certain IC symptoms with Elmiron was significant compared to Placebo (28% of treated subjects versus 13% of placebo controls), but the overall degree of improvement was not dramatic from a clinical standpoint.

69. In a March 2012 Citizen's Petition to the FDA requesting a bioequivalence study for any new generics coming to market—an effort to maintain its market position and block generics from coming to market—Defendant JANSSEN PHARMA admitted that "***the drug has***

[4] Philip M. Hanno, *Analysis of Long-Term Elmiron Therapy for Interstitial Cystitis*, Vol. 49, Issue 5, Supplement 1 UROLOGY 93–99 (1997).

[5] *Id.*

low bioavailability, is poorly absorbed from the gastrointestinal tract, and cannot be reliably assayed by determining serum levels."[6] (emphasis added)

70. JANSSEN PHARMA further elaborated:

> ***ELMIRON has not yet been fully characterized***. ELMIRON contains a mix of many components, which vary in chain length (molecular weight), number and location of glucuronic acid sidechains, and number of location of sodium sulfate groups. ***Moreover, no definitive information exists to identify which of the components are active (i.e., responsible for the safety and efficacy of ELMIRON)*** . . . The information presented above demonstrates that due to the ***unknown etiology of IC, the inability to characterize ELMIRON and understand how it works in the body, the difficulty of measuring PPS in plasma, blood, or urine, and the lack of a reliable bioassay to measure the product's effects***, conventional methods of determining bioequivalence are inadequate."[7]

71. The low efficacy and bioavailability of Elmiron are even more troubling in light of the significant risks of permanent vision loss and retinal issues caused by the drug. These design defects render Elmiron more dangerous than other drugs and treatment options designed to treat IC and cause an unreasonable increased risk of injury, including but not limited to permanent vision and retinal injuries.

C. Defendants' Failure to Test Elmiron

72. Defendants admit that "the mechanism of action of pentosan polysulfate sodium in interstitial cystitis is not known," and Defendants have failed to conduct tests to determine the mechanism of action of the drug.

73. In the Elmiron NDA file, the FDA noted that: "Elmiron works by binding to exposed epithelium," which may explain its apparent effect on the urinary bladder epithelium.

---

[6] March 26, 2020 Janssen Citizen Petition requesting FDA adoption of appropriate bioequivalence requirements to govern approval of any abbreviated new drug application ("ANDA") relying on ELMIRON (pentosan polysulfate sodium) as its reference product (hereinafter "Janssen Citizen Petition") (emphasis added).

[7] *Id.* (emphasis added).

74. Defendants knew or should have known of the potential impact of the drug on other epithelial cells—particularly the retinal epithelial cells of the eye—but failed to adequately test for these adverse effects.

75. Defendants acknowledged that their Phase III testing of Elmiron was "subjective" and that "an objective measure" may be more appropriate. JANSSEN PHARMA stated:

> The Phase III studies on which the ELMIRON approval was initially based assessed the effect of the drug on subjects' pain and discomfort levels, as measured by the subjects' individual assessments. Pain and discomfort, while key symptoms of the IC diagnosis, are inherently subjective elements. Therefore, while patients' individual assessments based on these subjective impressions were useful in the Phase III ELMIRON trials to demonstrate a clinical benefit as compared to placebo, ***an objective measure is more appropriate*** for studies with clinical endpoints to assess bioequivalence.[8]

76. Furthermore, JANSSEN PHARMA not only failed to conduct pharmacokinetic ("PK") and pharmacodynamic ("PD") testing on the drug, but in fact advocated *against* such testing, stating:

> ***A PK study, while generally appropriate for drugs that are systemically absorbed, is inappropriate*** for determining bioequivalence of an oral dosage form of PPS. Although PPS is systemically absorbed and distributed to the bladder, it has extremely low bioavailability; even with the use of radioactive drug, PPS is difficult to detect in blood or plasma. Due to low serum concentration and the inherent complexity of the product, attempts by the manufacturer of the product, bene, to develop a sensitive and reliable bioassay have been futile. ***Indeed, Janssen is not aware of any analytical techniques presently available to predict or measure systemic concentration of PPS*** . . . Finally, because the mechanism of action of PPS and the pathophysiology of IC is unknown, ***there is no known pharmacodynamic marker other than clinical effect measured as reduction of pain***.[9]

77. To be clear, PK and PD testing is not "inappropriate." To the contrary, an understanding of pharmacokinetics of a drug—including absorption, distribution, metabolism, and

[8] Janssen Citizen Petition (emphasis added).

[9] *Id.* (emphasis added).

excretion—is a critical aspect of drug design and is crucial to understanding how the drug interacts with the human body and evaluate potential risks associated with the drug.

D. The Dangers of Elmiron

78. Despite study after study providing clear evidence of the dangers of PPS, Defendants failed to adequately investigate the threat that PPS poses to patients' eyes and vision or warn patients of the risk that they would suffer retinal injury and vision impairment.

79. A physician's usage study of PPS conducted in the late 1980s and early 1990s noted adverse events affecting vision, including optic neuritis and retinal hemorrhage. Defendants relied upon this very study when seeking FDA approval for Elmiron and therefore had direct notice of the potential adverse effects.[10]

80. Reported adverse effects on vision included:

a. ***Blurred Vision. Left Central Optic Vein Occlusion***: A 32 year old white female without a prior history of eye trauma, hypertension, diabetes or previous significant ophthalmologic history complained of experiencing blurred vision.

b. "***Filmy Sensation Over Left Eye" Possible Left Optic Neuritis***: A 21 year old white female without any history of ophthalmological problems, head trauma, diabetes, or any previous neurological symptoms experienced a "filmy sensation over the left eye."[11]

81. As early as 1991, available medical research also identified that PPS inhibits regrowth and proliferation of retinal pigment epithelial (RPE) cells,[12] and could thereby impair an important physiological pathway for retinal health.

[10] A Statistical and Medical Review of an Amendment to the New Drug Application for Elmiron ® (Pentosan Polysulfate), NDA #20193, Appendix D (January 1996).

[11] *Id*. (emphasis added).

[12] Katrinka H. Leschey, John Hines, Jeff H. Singer, Sean F. Hackett, and Peter A. Campochiaro, *Inhibition of Growth Factor Effects in Retinal Pigment Epithelial Cells*, 32 INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE 1770–1778 (1991).

82. Indeed, as set forth above, Defendants were on notice from the FDA of the possible effect on other epithelial cells, corroborating the risk Elmiron posed specifically to the RPE cells of the eye.

83. In fact, by 1992, PPS was also in Phase I trials for certain cancer treatments because of its "potent inhibition of cell motility," which further corroborates the role of PPS inhibiting cell regrowth and proliferation.

84. The FDA had serious concerns about Elmiron and rejected several applications for its approval, finding the conduct of some the clinical trials "worrisome."

85. Nevertheless, the FDA ultimately approved Elmiron in September of 1996. After that, new information continued to reveal the serious risk of eye and vision injuries related to Elmiron use.

86. Almost immediately after the FDA approved Elmiron, patients and doctors began reporting serious complications relating to eye and vision problems in patients taking Elmiron.[13]

87. From January 1997 through March 2020, 164 cases of eye disorders were reported to the FDA as adverse effects of Elmiron, ranging from blurred vision to maculopathy and blindness. Other reported symptoms include visual impairment, halo vision, and reduced visual acuity.[14]

[13] According to the FDA Adverse Events Reporting System (FAERS) Public Dashboard, eight patients taking Elmiron reported serious adverse effects to their vision in the 1997 calendar year: https://fis.fda.gov/sense/app/d10be6bb-494e-4cd2-82e4-0135608ddc13/sheet/6b5a135f-f451-45be-893d-20aaee34e28e/state/analysis.

[14] To date, at least 123 patients have reported "serious" adverse effects to their vision. *Id*.

88. In 2018, researchers from the Emory Eye Center published their concerns about the presentation of a unique eye disease they were seeing in patients taking Elmiron in the Journal of Ophthalmology.[15]

89. The researchers also summarized their findings in a letter to the editor of the Journal of Urology:

> We wish to alert readers to a concerning new observation of ***vision threatening retinal changes associated with long-term exposure to [Elmiron]***. We recently reported our findings of retinal pigmentary changes in six patients undergoing long-term therapy with [Elmiron]. These patients primarily described difficulty reading and/or trouble adjusting to dim lighting. Each patient had received a standard dosage of [Elmiron], ranging from 200 to 400 mg daily, for a median duration of 15.5 years. . . . ***Examination findings in patients with this condition are suggestive of injury to the retina and the underlying retinal pigment epithelium***. . . . After extensive investigations, which included molecular testing for hereditary retinal disease, ***we found these cases to resemble no other retinal disease***.[16]

90. The study, "Pigmentary Maculopathy Associated with Chronic Exposure to Pentosan Polysulfate Sodium [Elmiron]," focused on six women with IC who presented to the Emory Eye Center between May 2015 and October 2017 with pigmentary maculopathy.[17] Maculopathy is a general term referring to any pathological condition that affects the macula, the central portion of the retina upon which visual acuity and sensitivity depend.

91. Most of these patients had difficulty reading and difficulty seeing in darkness. Two patients experienced a generalized dimming of their vision as the first symptom. Two others had

---

[15] William A. Pearce, Rui Chen, and Nieraj Jain, *Pigmentary Maculopathy Associated with Chronic Exposure to Pentosan Polysulfate Sodium*, 125 OPHTHALMOLOGY 1793–1802 (2018), https://www.ncbi.nlm.nih.gov/pubmed/29801663.

[16] William A. Pearce, Adam M. Hanif, and Nieraj Jain, Letter to the Editor Re: *FDA BRUDAC 2018 Criteria for Interstitial Cystitis/Bladder Pain Syndrome Clinical Trials*, 200 UROLOGY 1122 (2018) (emphasis added).

[17] William A. Pearce, Rui Chen, and Nieraj Jain, *Pigmentary Maculopathy Associated with Chronic Exposure to Pentosan Polysulfate Sodium*, 125 OPHTHALMOLOGY 1793–1802 (2018), https://www.ncbi.nlm.nih.gov/pubmed/29801663

difficulty with near vision: one had paracentral scotomas (vision loss) in part of her eye, while the other had metamorphopsia (distorted vision where straight lines become wavy).

92. All six patients underwent rigorous diagnostic imaging and DNA testing to determine if they had any genes associated with hereditary retinal loss. None had a family history of retinal disease or the discovery of any pathogenic process.

93. What they had in common was the use of Elmiron.

94. Examinations of their eyes showed clear changes to the retinal pigment epithelium: "Nearly all eyes (10 eyes of 5 patients) showed subtle parafoveal pigmented deposits at the level of the retinal pigment epithelium (RPE)."[18]

95. All eyes "showed subtle vitelliform deposits that increased in number and extended beyond the major arcade of vessels" in cases judged to be more severe.[19]

96. All eyes of two patients showed RPE atrophy that was noted to "increase in area and encroach on the central fovea over time."[20] Retinal imaging also found clear diseased regions, atrophy, or both.[21]

97. The youngest patient in the study was 37 years old. Diagnosed with IC at the age of 23 and on a steady dosage of Elmiron, she began showing visual symptoms (difficulty with near vision and difficulty reading) at the age of 30—just six years after she was diagnosed with IC. She had the most severe damage in the study with deep scotomas of both eyes.[22]

---

[18] *Id*. at 1798.

[19] *Id.*

[20] *Id.*

[21] *Id*.

[22] *Id*. at 1795, Table 2.

98. The authors expressed concern that "the region of affected tissue may expand centrifugally over time."[23]

99. They concluded that "[c]linicians should be aware of this condition because it can be mistaken for other well-known macular disorders such as pattern dystrophy and age-related macular degeneration."[24]

100. They also encouraged "drug cessation in affected patients," and "recommend[ed] that any patient with suggestive visual symptoms undergo a comprehensive ophthalmic examination."[25]

101. IC experts Robert Moldwin and Curtis Nickel responded to the Emory findings with concern: "***It is quite unlikely that urologists treating patients with [IC] ever would have made this association***."[26]

102. At the American Urology Association 2019 Annual Meeting in May 2019, the Emory team submitted another study of ten IC patients who had taken Elmiron and experienced macular disease.[27]

103. The patients in that study had a median age of 59 years (range 38–68), and median time since IC diagnosis of 19 years (range 4–40). The most commonly reported symptoms were difficulty reading and difficulty adapting to dim lighting.

---

[23] *Id*. at 1800.

[24] *Id*. at 1801.

[25] William A. Pearce, Adam M. Hanif, and Nieraj Jain, Letter to the Editor Re: *FDA BRUDAC 2018 Criteria for Interstitial Cystitis/Bladder Pain Syndrome Clinical Trials*, 200 UROLOGY 1122 (2018).

[26] J.C. Nickel and R. Moldwin, Reply to Letter to the Editor Re: *FDA BRUDAC 2018 Criteria for Interstitial Cystitis/Bladder Pain Syndrome Clinical Trials*, 200 UROLOGY 1122, 1123 (2018) (emphasis added).

[27] Jenelle Foote, Adam Hanif, and Nieraj Jain, *Chronic Exposure to Pentosan Polysulfate Sodium is Associated with Retinal Pigmentary Changes and Vision Loss*, 201 UROLOGY e688 (2019), https://www.auajournals.org/doi/10.1097/01.JU.0000556315.46806.ca

104. Eye examinations showed symmetric pigmentary changes in the retina. Retinal imaging demonstrated that the abnormalities were primarily in the retinal pigment epithelium. They noted that their clinic has seen 156 patients with IC who did not have any Elmiron exposure — *and these patients showed no pigmentary maculopathy*.

105. The Emory team concluded that structural changes of the retina are occurring in patients taking Elmiron, and they were unclear if stopping the medication would alter or reverse the course of the damage. They encouraged affected patients to discontinue the use of medications and to undergo comprehensive ophthalmic examinations.

106. The Emory team most recently published a July 2019 study in the Review of Ophthalmology.[28]

107. "Our subsequent investigations," the team wrote, "demonstrated that this unique maculopathy is strongly associated with chronic [Elmiron] exposure, not IC itself or its other therapies. In fact, ***this characteristic maculopathy has, to date, been exclusively diagnosed in patients reporting prior [Elmiron] exposure***."[29]

108. The team further observed that claims data from a nationally-present U.S. insurance company suggested that hundreds of thousands of individuals have likely been exposed to Elmiron in the US. The team also recognized a study finding that Elmiron-exposed patients had a significantly increased risk of being diagnosed with a new macular disease after seven years.

109. In September 2019, the Emory team published further research in the Journal of American Medical Association Ophthalmology ("JAMA Ophthalmology"), concluding that PPS

---

[28] Adam M. Hanif and Nieraj Jain, *Clinical Pearls for a New Condition. Pentosan Polysulfate Therapy, a Common Treatment for Interstitial Cystitis, Has Been Associated with a Maculopathy*, REVIEW OF OPHTHALMOLOGY July 10, 2019, https://www.reviewofophthalmology.com/article/clinical-pearls-for-a-new-condition.

[29] *Id*. (emphasis added).

maculopathy "is a vision-threatening condition that can manifest in the setting of long-term exposure to the drug."[30]

110. In November of 2019, a team from Emory and the University of Pennsylvania published an epidemiological study in the British Journal of Ophthalmology which concluded that "PPS [Elmiron] users had significantly increased odds of having [maculopathy]."[31]

111. Also in 2019, a team from Kaiser Permanente Northern California treated a patient who was previously misdiagnosed with Stargardt disease, but was actually suffering from Elmiron-related maculopathy.[32] In their case report, the ophthalmologists stressed that "***failure to diagnose a medication toxicity in a timely fashion may lead to preventable irreversible vision loss***."[33]

112. Another team of researchers found a 20% prevalence of a unique PPS-associated maculopathy among a cohort of patients being treated at the University of California, Los Angeles.[34] Their study suggests "a significant risk of macular toxicity for PPS-treated patients," and that "more significant PPS exposure was associated with more severe atrophy."

113. Most recently, two physicians from Harvard Medical School published a case study indicating that the damage caused by Elmiron continues to progress long after cessation of the

---

[30] Adam Hanif et al., *Phenotypic Spectrum of Pentosan Polysulfate Sodium-Associated Maculopathy: A multicenter Study*, 137 JAMA OPHTHALMOLOGY 1275, 1282 (Sep. 5, 2019), https://jamanetwork.com/journals/jamaophthalmology/article-abstract/2749093.

[31] Nieraj Jain et al., *Association of Macular Disease with Long-Term Use of Pentosan Polysulfate Sodium: Findings from a U.S. Cohort*, BRITISH JOURNAL OF OPHTHALMOLOGY (published online first, November 6, 2019), https://bjo.bmj.com/content/early/2019/11/06/bjophthalmol-2019-314765.

[32] Robin A. Vora et al., *A Case of Pentosan Polysulfate Maculopathy Originally Diagnosed as Stargardt Disease*, 17 AMERICAN JOURNAL OF OPHTHALMOLOGY CASE REPORTS 100604 (published online first, January 2020), http://www.sciencedirect.com/science/article/pii/S2451993620300086?via%3Dihub.

[33] *Id*. (emphasis added).

[34] Derrick Wang et al., *Pentosan-Associated Maculopathy: Prevalence, Screening Guidelines, and Spectrum of Findings Based on Prospective Multimodal Analysis*, CANADIAN JOURNAL OF OPHTHALMOLOGY (in press, published online January 2020), http://www.canadianjournalofophthalmology.ca/article/S00008-4182(19)31272-4/fulltext.

drug.[35] In their study, a patient continued to exhibit worsening symptoms of PPS-associated retinal maculopathy for at least 6 years after she stopped taking Elmiron.

114. The doctors noted "the present case adds a new layer of concern by demonstrating progressive maculopathy continuing for up to 6 years after cessation of PPS . . . this case emphasizes the need for a screening regimen that balances the demands on patients and physicians with the importance of prompt identification of early toxicity."[36]

115. The Interstitial Cystitis Network, a health publishing company dedicated to IC, launched its own patient survey on the heels of the Emory Eye Center findings. As of April 2019, the IC Network had almost 1,000 survey participants, of which 53% reported eye disease.

116. Patient reports on the IC Network Support Forum include (all [*sic*]):[37]

a. June 23, 2019: "I have been diagnosed with macular degeneration and no one in my family has it. I have been on elmiron for 15 years. I decided even though the correlation is not extremely strong to go off it for the sake of my eyes . . . am hoping the degeneration will slow if not stop. Am not looking for it reverse course. Am also hoping that I do not go back to the pain . . . all I can do is try. I feel to be between a rock and a hard place. I am an artist so my eyes are truly needed to continue my work."

b. February 3, 2019: "I saw the article too and took it to my ophthalmologist. She was very excited to see the research. She said that my macular degeneration that had occurred after 18 years of taking Elmiron was an unusual shape that they had not seen before. She said that while it won't heal me, they hoped that they could stop this from happening to other patients."

c. March 25, 2019: "After 4 excruciating years, I was diagnosed with IC in 2003. I started on Elmiron and have taken it since then. I was diagnosed with macular degeneration in 2014. My severity is mild to moderate. The left eye is definitely worse. I can no longer drive at night. I'm pretty

[35] Rachel M. Huckfeldt and Demetrios G Vavvas, *Progressive Maculopathy After Discontinuation of Pentosan Polysulfate Sodium*, 50 OPHTHALMIC SURGERY, LASERS AND IMAGING RETINA 656–59 (2019), ncbi.nlm.nih.gov/pubmed/31671200.

[36] *Id*. at 658.

[37] Interstitial Cystitis Network Patient Support Forum, https://forum.ic-network.com/.

> comfortable driving to places I am familiar with during the day. I am only 58. I dread the day I will not be able to drive."

117. All of this information was known by, and available to, Defendants at all relevant times.

118. The European Medicines Agency, a decentralized agency of the EU responsible for scientific evaluations, supervision, and safety monitoring of medicines in the EU, is specifically warning patients about Elmiron and advising that "[a]ll patients should have regular ophthalmic examinations for early detection of pigmentary maculopathy, particularly those with longterm use of PPS. In such situations, treatment cessation should be considered."[38]

119. Despite numerous signs of the potential for severe retinal side effects; multiple studies conducted at top research institutes; research being published in major peer-reviewed journals; and public warnings from a prominent EU health agency, ***Defendants failed to reasonably investigate the issue and warn patients and healthcare providers at all relevant times***.

120. At all relevant times, Defendants also failed to alert patients to the need for ophthalmological monitoring while taking Elmiron or whether risks increase with higher doses or longer durations.

121. Other medications affecting vision have included instructions and warnings for users and prescribers. For example, the anti-malaria drug Plaquenil (hydroxychloroquine) is likewise associated with retinal toxicity. In the labeling for Plaquenil, manufacturer Concordia Pharmaceuticals, Inc., provides the following warning:

> Irreversible retinal damage has been observed in some patients who had received hydroxychloroquine sulfate. Significant risk factors for retinal damage include daily doses of hydroxychloroquine sulfate greater than 6.5 mg/kg (5 mg/kg base)

[38] EUROPEAN MEDICINES AGENCY, PRODUCT INFORMATION. ELMIRON- PENTOSAN POLYSULFATE SODIUM 3, https://www.ema.europa.eu/en/documents/product-information/elmiron-epar-product-information_en.pdf.

of actual body weight, durations of use greater than five years, subnormal glomerular filtration, use of some concomitant drug products such as tamoxifen citrate and concurrent macular disease.

A baseline ocular examination is recommended within the first year of starting PLAQUENIL. The baseline exam should include: best corrected distance visual acuity (BCVA), an automated threshold visual field (VF) of the central 10 degrees (with retesting if an abnormality is noted), and spectral domain ocular coherence tomography (SD-OCT).

For individuals with significant risk factors (daily dose of hydroxychloroquine sulfate greater than 5.0 mg/kg base of actual body weight, subnormal glomerular filtration, use of tamoxifen citrate or concurrent macular disease) monitoring should include annual examinations which include BCVA, VF and SD-OCT. For individuals without significant risk factors, annual exams can usually be deferred until five years of treatment.

In individuals of Asian descent, retinal toxicity may first be noticed outside the macula. In patients of Asian descent, it is recommended that visual field testing be performed in the central 24 degrees instead of the central 10 degrees. It is recommended that hydroxychloroquine be discontinued if ocular toxicity is suspected and the patient should be closely observed given that retinal changes (and visual disturbances) may progress even after cessation of therapy.[39]

122. In stark contrast, until June 2020, The Elmiron label read:[40]

WARNINGS

None.

123. At all relevant times, Defendants have failed to adequately warn or instruct patients, the medical community, or prescribers in the United States that Elmiron causes, is linked to, and is associated with vision threatening retinal changes, including vision loss.

[39] Plaquenil Patient Package Insert, revised June 2018.

[40] Elmiron Patient Pakage Insert, revised August 2004.

124. At all relevant times, Defendants have failed to adequately warn or instruct patients, the medical community, or prescribers in the United States that patients taking Elmiron should undergo regular ophthalmological testing to detect pigmentary changes and discontinue use if such changes occur.

125. Defendants failed to mention vision-threatening retinal changes or the need for ophthalmological monitoring in any of the patient materials—including the Patient Education Flyer and Patient Brochure—the sources of information most likely viewed by physician and patients.

126. At all relevant times, the labeling for Elmiron listed serious side effects that have been reported with Elmiron, but did not list vision threatening retinal changes.

127. At all relevant times, the labeling for Elmiron failed to provide adequate warnings and instructions, failed to caution that patients should be closely monitored, failed to adequately inform patients and physicians that vision threatening retinal changes have been associated with Elmiron use, and failed to contain any proper dosing considerations.

128. At all relevant times, JANSSEN PHARMA maintained a website promoting Elmiron, www.orthoelmiron.com, which included, among other topics, "About Elmiron," "How Elmiron Works," "Important Safety Information," and "Patient Information." Nowhere on the website did Defendants mention the potential for vision-threatening retinal changes associated with Elmiron use.

129. On June 24, 2019 Defendant JANSSEN PHARMA submitted its Supplemental New Drug application (sNDA) under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Elmiron (PPS) 100 mg capsules. This Prior Approval labeling supplement to its application provided revisions to the package insert Warnings section and Post-Marketing section, as well as

an update to the Patient Labeling finally addressing the risk of vision threatening retinal changes associated with Elmiron use.

130. Defendants' sNDA dated June 24, 2019 was not approved by the FDA until June 16, 2020. Defendants did not provide warnings anywhere on its product label or packing referencing the risk of vision threatening retinal changes associated with Elmiron use until June 16, 2020.

131. As of no later than June 24, 2019 when Defendants submitted their sNDA to include warnings referencing the risk of vision threatening retinal changes associated with Elmiron use, Defendants knew of the risk of injury associated with their drug and failed to warn consumers and physicians, including Plaintiff, Plaintiff's physicians, and the public in general of same.

132. The FDA has established reporting categories for post-approval changes to a drug's label. The Changes Being Effected supplement ("CBE") (21 CFR § 314.70(c)(3)) allows for changes in the labeling of a drug product to reflect newly acquired information without prior approval from the FDA.

133. The CBE process allows for drug manufacturers to change a drug label more quickly than the sNDA process based on newly acquired information about the drug.

134. Defendants should have changed the Elmiron label to include warnings and instructions addressing the risk of injury associated with the drug as soon as they had notice of adverse reports relating to same.

135. By failing to use the FDA's CBE supplement to warn Plaintiff, consumers, and physicians, of the risk of vision threatening retinal changes associated with using Elmiron, Defendants acted in a gross and flagrant character, evincing reckless disregard of human life, and of the safety of persons exposed to its dangerous drug.

136. Additionally, by failing to use the FDA's CBE supplement to warn Plaintiff, consumers, and physicians, of the risk of vision threatening retinal changes associated with using Elmiron, Defendants showed wantonness, recklessness, or a grossly careless disregard for the public's safety and welfare.

TOLLING OF THE STATUTE OF LIMITATIONS

A. Discovery Rule Tolling

137. As a result of the acts and omissions of Defendants, Plaintiff could not have discovered, through the exercise of reasonable due diligence, that exposure to Elmiron was associated with increased exposure to vision threatening retinal changes as set forth above. Thus, the applicable limitations periods did not begin to accrue until Plaintiff discovered, or through the exercise of reasonable diligence should have discovered, Defendants' wrongful acts and omissions.

B. Fraudulent Concealment Tolling

138. All applicable statutes of limitation have also been tolled by Defendants' knowing and active fraudulent concealment and denial of the vision-threatening retinal changes associated with Elmiron throughout the time period relevant to this action.

139. Defendants are under a continuing duty to disclose the true character, quality, and nature of Elmiron to Plaintiff. At all relevant times, Defendants nevertheless failed to inform patients and doctors about the vision threatening retinal changes associated with Elmiron, as discussed above.

140. Plaintiff reasonably relied upon Defendants' knowing, affirmative, or active concealment when they continued to use Elmiron as prescribed.

141. Because Defendants actively concealed the vision threatening retinal changes associated with Elmiron, they are estopped from relying on any statutes of limitations defense.

C. Estoppel

142. Defendants were, and are, under a continuous duty to disclose to Plaintiff the vision threatening retinal changes associated with Elmiron. Instead, they actively concealed the true character, quality, and nature of Elmiron and knowingly made misrepresentations and/or omissions about the safety of Elmiron and the vision-threatening retinal changes associated with it.

143. Plaintiff reasonably relied upon Defendants' knowing and affirmative misrepresentations and active concealment of material facts. Therefore, Defendants are estopped from relying on any defense based on statutes of limitations in this action.

COUNT 1
Strict Liability – Failure to Warn

144. Plaintiff incorporates the factual allegations set forth in paragraphs 1 to 120 as if fully set forth herein and further alleges as follows:

145. At all relevant times, Defendants engaged in the business of researching, testing, developing, manufacturing, labeling, marketing, selling, inspecting, handling, storing, distributing, and/or promoting Elmiron and placed it into the stream of commerce in a defective and unreasonably dangerous condition. These actions were under the ultimate control and supervision of Defendants.

146. Defendants had a duty to provide adequate warnings and instructions for Elmiron, to use reasonable care to design a product that is not unreasonably dangerous to users, and to adequately understand, test, and monitor their product.

147. The Elmiron drug supplied to Plaintiff by Defendants was defective due to inadequate warnings, labeling, or instructions concerning the foreseeable risks of its use.

Defendants' failure to provide these adequate warnings and/or instructions made Elmiron unreasonably dangerous.

148. Defendants knew or should have known through testing, scientific knowledge, advances in the field, published research in major peer-reviewed journals, public warnings from a prominent EU health agency, or otherwise, that Elmiron created a risk of serious and potentially irreversible vision issues, retinal harm, PPS toxicity, PPS Maculopathy, and/or could interfere with the normal health, healing, proliferation, migration, and/or growth of cells, including epithelial cells and RPE cells.

149. Defendants' failure to provide adequate warnings or instructions rendered Elmiron unreasonably dangerous in that it failed to perform as safely as an ordinary patient, prescriber, and/or other consumer would expect when used as intended and/or in a manner reasonably foreseeable by the Defendants, and in that the risk of danger outweighs the benefits.

150. The Elmiron supplied to Plaintiff by Defendants was defective, unreasonably dangerous, and had inadequate warnings or instructions at the time it was sold, and Defendants also acquired additional knowledge and information confirming the defective and unreasonably dangerous nature of Elmiron. Despite this knowledge and information, Defendants failed and neglected to issue adequate warnings that Elmiron causes serious and potentially irreversible vision issues and retinal harm and/or instructions concerning the need for ophthalmological monitoring and potential discontinuation of use of Elmiron.

151. Defendants failed to provide adequate warnings to users, purchasers, and/or prescribers of Elmiron, including Plaintiff and Plaintiff's prescribing physicians, and instead continued to sell Elmiron in an unreasonably dangerous form without adequate warnings or instructions.

152. By failing to adequately test and research harms associated with Elmiron, and by failing to provide appropriate warnings and instructions about Elmiron use, patients and the medical community, including prescribing doctors, were inadequately informed about the true risk-benefit profile of Elmiron and were not sufficiently aware that serious and potentially irreversible vision issues and retinal harm might be associated with use of Elmiron. Nor were the medical community, patients, patients' families, or regulators appropriately informed that serious and potentially irreversible vision issues and retinal harm might be a side effect of Elmiron and should or could be reported as an adverse event.

153. The Elmiron designed, researched, manufactured, tested, advertised, promoted, marketed, sold and distributed by Defendants were defective due to inadequate postmarketing surveillance and/or warnings because, even after Defendants knew or should have known of the risks and severe and permanent vision and retinal injuries from ingesting Elmiron, they failed to provide adequate warnings to users or consumers of the products, and continued to improperly advertise, market and/or promote Elmiron.

154. Elmiron is defective and unreasonably dangerous to Plaintiff and other consumers regardless of whether Defendants had exercised all possible care in its preparation and sale.

155. The foreseeable risk of serious and potentially irreversible vision issues and retinal harm caused by Elmiron could have been reduced or avoided by Plaintiff, prescribers, and/or other consumers had Defendants provided reasonable instructions or warnings of these foreseeable risks of harm.

156. As a direct and proximate result of Defendants' conduct, including the inadequate warnings, dilution or lack of information, lack of adequate testing and research, and the defective and dangerous nature of Elmiron, Plaintiff suffered bodily injury and resulting pain and suffering,

disability, mental anguish, loss of capacity for the enjoyment of life, expense of hospitalization, medical and nursing care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and aggravation of previously existing conditions. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 2
Strict Liability – Design Defect

157. Plaintiff incorporates the factual allegations set forth in paragraphs 1 to 120 as if fully set forth herein and further alleges as follows:

158. At all relevant times, Defendants engaged in the business of researching, testing, developing, manufacturing, labeling, marketing, selling, inspecting, handling, storing, distributing, and/or promoting Elmiron, and placed it into the stream of commerce in a defective and unreasonably dangerous condition. These actions were under the ultimate control and supervision of Defendants.

159. Defendants had a duty to create a product that was not unreasonably dangerous for its normal, intended, and foreseeable use.

160. Defendants breached that duty when they created a product unreasonably dangerous for its intended and foreseeable use.

161. Defendants designed, researched, manufactured, tested, advertised, promoted, marketed, sold and distributed a defective product which created an unreasonable risk to the health of consumers, and Defendants are therefore strictly liable for the injuries sustained by Plaintiff.

162. The Elmiron supplied to Plaintiff by Defendants was defective in design or formulation in that, when it left the hands of the manufacturer or supplier, it was in an unreasonably dangerous and a defective condition because it failed to perform as safely as an

ordinary consumer would expect when used as intended or in a manner reasonably foreseeable to Defendants, posing a risk of serious and potentially irreversible vision issues and retinal harm to Plaintiff and other consumers.

163. Elmiron is a medication prescribed primarily for IC, a bladder condition. Elmiron in fact causes serious and potentially irreversible vision issues, retinal harm, PPS toxicity, PPS Maculopathy, and/or could interfere with the normal health, healing, proliferation, migration, and/or growth of cells, including epithelial cells and RPE cells, harming Plaintiff and other consumers.

164. Plaintiff, ordinary consumers, and prescribers would not expect an IC drug designed, marketed, and labeled for bladder treatment to cause irreversible vision and retinal damage.

165. The Elmiron supplied to Plaintiff by Defendants was defective in design or formulation in that, when it left the hands of the manufacturer or supplier, it had not been adequately tested, was in an unreasonably dangerous and defective condition, and posed a risk of serious and potentially irreversible vision issues and retinal harm to Plaintiff and other consumers.

166. The Elmiron supplied to Plaintiff by Defendants was defective in design or formulation in that its limited and unproven effectiveness, low efficacy, and low bioavailability, did not outweigh the risks of serious and potentially irreversible vision issues and retinal harm posed by the drug. In light of the utility of the drug and the risk involved in its use, the design of the Elmiron drug makes the product unreasonably dangerous.

167. The design defects render Elmiron more dangerous than other drugs and therapies designed to treat IC and causes an unreasonable increased risk of injury, including but not limited to potentially irreversible vision issues and retinal harm.

168. Defendants knew or should have known through testing, scientific knowledge, advances in the field, published research in major peer-reviewed journals, public warnings from a prominent EU health agency, or otherwise, that Elmiron created a risk of serious and potentially irreversible vision issues, retinal harm, PPS toxicity, PPS Maculopathy, and/or could interfere with the normal health, healing, proliferation, migration, and/or growth of cells, including epithelial cells and RPE cells.

169. Elmiron is defective and unreasonably dangerous to Plaintiff and other consumers in that, despite early indications and concerns that Elmiron use could result in vision issues, Defendants failed to adequately test or study the drug, including but not limited to: pharmacokinetics and pharmacodynamics of the drug, its effects on vision and retinal epithelial cells, the potential effects and risks of long-term use, the potential for inter-patient variability, and/or the potential for a safer effective dosing regimen.

170. Elmiron is defective and unreasonably dangerous to Plaintiff and other consumers even if Defendants had exercised all possible care in the preparation and sale of Elmiron.

171. As a direct and proximate result of Defendants' conduct, including the of adequate testing and research and the defective and dangerous nature of Elmiron, Plaintiff suffered bodily injury and resulting pain and suffering, disability, mental anguish, loss of capacity for the enjoyment of life, expense of hospitalization, medical and nursing care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and aggravation of previously existing conditions. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 3
Negligent Failure to Warn

172. Plaintiff incorporates the factual allegations set forth in paragraphs 1 to 120 as if fully set forth herein and further alleges as follows:

173. At all times material herein, Defendants had a duty to exercise reasonable care and had the duty of an expert in all aspects of the warning and post-sale warning to assure the safety of Elmiron when used as intended or in a way that Defendants could reasonably have anticipated, and to assure that the consuming public, including Plaintiff and Plaintiff's physicians, obtained accurate information and adequate instructions for the safe use or non-use of Elmiron.

174. Defendants' duty of care was that a reasonably careful designer, manufacturer, seller, importer, distributor and/or supplier would use under like circumstances.

175. Defendants had a duty to warn Plaintiff, Plaintiff's physicians, and consumers of Elmiron's dangers and serious side effects, including serious and potentially irreversible vision issues and retinal harm, as it was reasonably foreseeable to Defendants that Elmiron could cause such injuries.

176. At all times material herein, Defendants failed to exercise reasonable care and knew, or in the exercise of reasonable care should have known, that Elmiron had inadequate instructions and/or warnings.

177. Each of the following acts and omissions herein alleged was negligently and carelessly performed by Defendants, resulting in a breach of the duties set forth above. These acts and omissions include, but are not restricted to:

a. Failure to adequately warn of the potentially dangerous, defective, unsafe, and deleterious propensity of Elmiron and of the risks associated with its use;

b. Failure to adequately warn of the risks that Elmiron could interfere with the normal health, healing, proliferation, migration, and/or growth of cells, including epithelial cells and RPE cells;

c. Failure to adequately warn of the risk of serious and potentially irreversible vision issues and retinal harm;

d. Failure to adequately warn of the risk of PPS-toxicity and/or PPS-maculopathy;

e. Failure to adequately warn and advise of adverse reactions involving vision, eyes, retinas, and maculopathy;

f. Failure to instruct patients, prescribers, and consumers of the need for ophthalmological monitoring when taking Elmiron for pigmentary changes; and

g. Failure to instruct patients, prescribers, and consumers of the need to discontinue Elmiron in the event of pigmentary changes.

178. As a direct and proximate result of Defendants' negligence, Plaintiff suffered bodily injury and resulting pain and suffering, disability, mental anguish, loss of capacity for the enjoyment of life, expense of hospitalization, medical and nursing care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and aggravation of previously existing conditions. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 4
Negligent Design

179. Plaintiff incorporates the factual allegations set forth in paragraphs 1 to 120 as if fully set forth herein and further alleges as follows:

180. At all times material herein, Defendants had a duty to exercise reasonable care and had the duty of an expert in all aspects of the design, formulation, manufacture, compounding, testing, inspection, packaging, labeling, distribution, marketing, promotion, advertising, sale, testing, and research to assure the safety of Elmiron when used as intended or in a way that Defendants could reasonably have anticipated, and to assure that the consuming public, including

Plaintiff and Plaintiff's physicians, obtained accurate information and adequate instructions for the safe use or non-use of Elmiron.

181. At all times material herein, Defendants failed to exercise reasonable care and the duty of an expert and knew, or in the exercise of reasonable care should have known, that Elmiron was not properly manufactured, designed, compounded, tested, inspected, packaged, distributed, marketed, advertised, formulated, promoted, examined, maintained, sold, prepared, or a combination of these acts.

182. Each of the following acts and omissions herein alleged was negligently and carelessly performed by Defendants, resulting in a breach of the duties set forth above. These acts and omissions include, but are not restricted to:

a. Negligent and careless research and testing of Elmiron;

b. Negligent and careless design or formulation of Elmiron;

c. Negligent and careless failure to provide instructions on ways to safely use Elmiron to avoid injury;

d. Negligent and careless failure to explain the mechanism, mode, and types of adverse events associated with Elmiron; and

e. Negligent and careless failure to conduct postmarketing surveillance of adverse events associated with Elmiron.

183. Defendants' negligence and Elmiron's failures arise under circumstances precluding any other reasonable inference other than a defect in Elmiron.

184. As a direct and proximate result of Defendants' negligence, Plaintiff suffered bodily injury and resulting pain and suffering, disability, mental anguish, loss of capacity for the enjoyment of life, expense of hospitalization, medical and nursing care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and aggravation of previously

existing conditions. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 5
Fraudulent Misrepresentation

185. Plaintiff incorporates the factual allegations set forth in paragraphs 1 to 120 as if fully set forth herein and further alleges as follows:

186. Defendants made the false statement that Elmiron is safe and well-tolerated to the FDA, and ultimately to consumers, physicians, and the public in general, every time Defendants marketed and sold Elmiron without warning of the risks of potentially serious vision issues and retinal harm.

187. Defendants knew that Elmiron is not safe and well-tolerated but that it instead causes significant and irreparable vision loss and eye damage no later than July 2019 when Defendants submitted sNDA #14 to Elmiron, addressing the risk of pigmentary maculopathy associated with the use of Elmiron.

188. Beginning no later than July 2019, Defendants clearly had knowledge of the significant and irreparable damage Elmiron was causing to consumers, including Plaintiff.

189. Nevertheless, rather than use the FDA's Changes Being Effected ("CBE") supplement—which would have enabled Defendants to change their label unilaterally as early as July 2019 to effect a stronger warning vis a vis Elmiron's association with pigmentary maculopathy—Defendants continued to represent Elmiron as safe and well-tolerated until June 2020.

190. By not using the FDA's CBE process to propose a stronger warning label alerting consumers, physicians, and the public in general to Elmiron's association with pigmentary maculopathy by at least July 2019 when Defendants submitted this information to the FDA in

their sNDA #14, Defendants intended to induce consumers, physicians, and the public in general to purchase Elmiron under the false representation that it is safe and well-tolerated.

191. At the time the aforesaid representations were made by Defendants, and at the time Plaintiff received Elmiron, Plaintiff or Plaintiff's physicians, and the public in general, reasonably believed them to be true.

192. In reasonable and justified reliance upon the representations that Elmiron is safe and well-tolerated, Plaintiff purchased and used Elmiron.

193. As a direct and proximate result of reliance upon Defendants' misrepresentations, Plaintiff suffered bodily injury and resulting pain and suffering, disability, mental anguish, loss of capacity for the enjoyment of life, expense of hospitalization, medical and nursing care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and aggravation of previously existing conditions. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 6
Negligent Misrepresentation

194. Plaintiff incorporates the factual allegations set forth in paragraphs 1 to __ as if fully set forth herein and further alleges as follows:

195. Defendants misrepresented to consumers and physicians, including Plaintiff and Plaintiff's physicians and the public in general, that Elmiron was safe or well-tolerated when used as instructed, and that Elmiron was safe or well-tolerated, when, in fact, Elmiron was dangerous to the well-being of patients.

196. Defendants misrepresented to consumers and physicians, including Plaintiff and Plaintiff's physicians and the public in general, that Elmiron is "The Only Oral Medication FDA Approved to Treat the Bladder Pain or Discomfort of Interstitial Cystitis (IC)."

197. Defendants knew or should have known of the falsity of such a representation to consumers, physicians, and the public in general since Elmiron is not the only oral medication approved by the FDA that can be used to treat IC, and it is not the only IC treatment option. Nevertheless, Defendants' marketing of Elmiron falsely represented Elmiron to be the only FDA-approved option for the treatment of IC.

198. Defendants knew or should have known that marketing and representing Elmiron as the only FDA-approved option for the treatment of IC was a false representation that would, and did, mislead consumers and physicians to believe there were no other options available to treat the pain and discomfort caused by IC and/or that Elmiron was a first-line treatment for IC.

199. Not only did Defendants know of the falsity of the aforementioned representation, but Defendants purposefully marketed Elmiron as the only FDA-approved drug for the treatment of IC with an intent to induce consumers and physicians, including Plaintiff and Plaintiff's physicians, and the public in general, to purchase Elmiron over any one of the other treatment options available.

200. In addition, at the time Defendants promoted Elmiron as safe and well-tolerated, they did not have adequate proof upon which to base such representations, and, in fact, knew or should have known that Elmiron was dangerous to the well-being of Plaintiff and others. Defendants not only relied on a study noting adverse events affecting vision, including optic neuritis and retinal hemorrhage, in their own Amendment to the New Drug Application but also learned of subsequent adverse events involving vision and eye health through adverse event reports and medical literature.

201. Defendants failed to exercise reasonable care and competence in obtaining or communicating information regarding the safe use of Elmiron and otherwise failed to exercise

reasonable care in transmitting information to Plaintiff, Plaintiff's physicians, and the public in general regarding both the fact that other treatment options for IC were available, and the fact that Elmiron was not safe or well-tolerated due to the adverse events affecting vision and eye health.

202. Defendants made the aforesaid representations in the course of Defendants' business as designers, manufacturers, and distributors of Elmiron despite having no reasonable basis for their assertion that these representations were true or without having accurate or sufficient information concerning the aforesaid representations.

203. At the time the aforesaid representations were made, Defendants intended to induce Plaintiff or Plaintiff's physicians to rely upon such representations in an effort to increase its sales of Elmiron.

204. At the time the aforesaid representations were made by Defendants, and at the time Plaintiff received Elmiron, Plaintiff or Plaintiff's physicians, and the public in general, reasonably believed them to be true. In reasonable and justified reliance upon the representations that Elmiron is safe and well-tolerated and the only FDA-approved medication to treat bladder pain and discomfort caused by IC, Plaintiff purchased and used Elmiron.

205. As a direct and proximate consequence of Defendants' aforementioned fraudulent conduct, Defendants obtained increased sales profits for the sale of Elmiron.

206. As a direct and proximate result of reliance upon Defendants' misrepresentations, Plaintiff suffered bodily injury and resulting pain and suffering, disability, mental anguish, loss of capacity for the enjoyment of life, expense of hospitalization, medical and nursing care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and

aggravation of previously existing conditions. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 7
Breach of Express Warranty

207. Plaintiff incorporates the factual allegations set forth above as if fully set forth herein and further alleges as follows:

208. At all relevant times, Defendants engaged in the business of researching, testing, developing, manufacturing, labeling, marketing, selling, inspecting, handling, storing, distributing, and/or promoting Elmiron, and placed it into the stream of commerce in a defective and unreasonably dangerous condition. These actions were under the ultimate control and supervision of Defendants.

209. Defendants expressly warranted to Plaintiff, Plaintiff's healthcare providers, and the general public, by and through Defendants and/or their authorized agents or sales representatives, in publications, labeling, the internet, and other communications intended for physicians, patients, Plaintiff, and the general public, that Elmiron was safe, effective, fit and proper for its intended use.

210. Defendants expressly warranted that Elmiron was safe and well-tolerated. However, they did not have adequate proof upon which to base such representations, and, in fact, knew or should have known that Elmiron was dangerous to the well-being of Plaintiff and others.

211. Elmiron does not conform to those express representations because it is defective, is not safe, and has serious adverse side effects.

212. Plaintiff and her physicians justifiably relied on Defendants' representations regarding the safety of Elmiron, and Defendants' representations became part of the basis of the bargain.

213. Plaintiff and her healthcare providers justifiably relied on Defendants' representations that Elmiron was safe and well-tolerated in their decision to ultimately prescribe, purchase and use the drug.

214. Plaintiff's healthcare providers justifiably relied on Defendants' representations through their marketing and sales representatives in deciding to prescribe Elmiron over other alternative treatments on the market, and Plaintiff justifiably relied on Defendants' representations in deciding to purchase and use the drug.

215. Plaintiff purchased and ingested Elmiron without knowing that drug is not safe and well-tolerated, but that it instead causes significant and irreparable vision loss and eye damage.

216. As a direct and proximate result of Defendants' breached of warranty, Plaintiff suffered bodily injury and resulting pain and suffering, disability, mental anguish, loss of capacity for the enjoyment of life, past and future medical care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and other damages. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 8
Breach of Implied Warranty

217. Plaintiff incorporates the factual allegations set forth above as if fully set forth herein and further alleges as follows:

218. At all relevant times, Defendants engaged in the business of researching, testing, developing, manufacturing, labeling, marketing, selling, inspecting, handling, storing, distributing, and/or promoting Elmiron, and placed it into the stream of commerce in a defective and unreasonably dangerous condition. These actions were under the ultimate control and supervision of Defendants.

219. Defendants were the sellers of the Elmiron and sold Elmiron to be taken for treatment of IC and bladder pain or irritation.

220. When the Elmiron was prescribed by Plaintiff's physician and taken by Plaintiff, the product was being prescribed and used for the ordinary purpose for which it was intended.

221. The Elmiron sold to Plaintiff was not merchantable because it was not fit for its ordinary purpose to treat IC and bladder pain/irritation safely and effectively.

222. The Elmiron would not pass without objection in the trade; is not of fair average quality; is not fit for its ordinary purposes for which the product is used; was not adequately contained, packaged and labeled; and fails to conform to the promises or affirmations of fact made on the container or label.

223. Defendants' breach of their implied warranties resulted in ingestion of the unreasonably dangerous and defective product by Plaintiff, which placed her health and safety at risk and resulted in the damages alleged herein.

224. As a direct and proximate result of reliance upon Defendants' breaches of warranty, Plaintiff suffered bodily injury and resulting pain and suffering, disability, mental anguish, loss of capacity for the enjoyment of life, past and future medical care and treatment, loss of earnings, loss of ability to earn money and other economic losses, and other damages. The losses are either permanent or continuing, and Plaintiff will suffer the losses in the future.

COUNT 9
Breach of Missouri Merchandising Practices Act

225. Plaintiff incorporates the factual allegations set forth above as if fully set forth herein and further alleges as follows:

226. Plaintiff purchased Elmiron entirely for personal use to treat her IC and bladder pain/irritation.

227. Plaintiff purchased Elmiron due to the act, use or employment by Defendants of deception, fraud, false pretense, false promise, misrepresentation, unfair practice, and concealment, suppression, or omission of material fact in connection with the sale or advertisement of that drug.

228. As a direct and proximate result of Defendants' fraudulent actions and omissions, Plaintiff purchased Elmiron repeatedly over the course of several years and suffered an ascertainable economic loss.

COUNT 10
Punitive Damages

229. Plaintiff incorporates the factual allegations set forth above as if fully set forth herein and further alleges as follows:

230. Specifically, the acts and omissions of Defendants described herein consisted of oppression, fraud, and/or malice, and were done with advance knowledge, conscious disregard of the safety of others, and/or ratification by Defendants' officers, directors, and/or managing agents.

231. Defendants misled both the medical community and the public, including Plaintiff and her physicians, by making false representations about the safety and effectiveness of Elmiron and by failing to provide adequate instructions and training concerning its use.

232. Defendants downplayed, understated, and/or disregarded their knowledge of the serious and permanent side effects and risks associated with the use of Elmiron despite available information demonstrating that drug could interfere with the normal health, healing, proliferation, migration, and/or growth of cells, including epithelial cells and RPE cells; cause potentially irreversible vision issues and retinal harm; cause PPS-toxicity and/or PPS-maculopathy; cause irreversible damage to vision, eyes, and retinas; and cause maculopathy.

233. Defendants were or should have been in possession of evidence demonstrating that Elmiron use could interfere with the normal health, healing, proliferation, migration, and/or growth of cells, including epithelial cells and RPE cells; cause potentially irreversible vision issues and retinal harm; cause PPS-toxicity and/or PPS-maculopathy; cause irreversible damage to vision, eyes, and retinas; and cause maculopathy. Nevertheless, Defendants continued to market Elmiron by providing false and misleading information with regard to its safety and effectiveness.

234. Defendants failed to provide warnings that would have dissuaded health care professionals from using Elmiron, thus preventing health care professionals, including Plaintiff's prescribing physician, and consumers, including Plaintiff, from weighing the true risks against the benefits of using Elmiron.

235. Consequently, Defendants are liable for punitive damages in an amount to be determined by the jury.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff seeks judgment in Plaintiff's favor as follows:

a. Awarding compensatory damages, including but not limited to lost earnings in the past; loss of earning capacity in the future; medical expenses incurred in the past; medical expenses to be incurred in the future; other economic damages; pain and suffering; disability; physical impairment; disfigurement; mental anguish; inconvenience; aggravation of a disease or physical defect; loss of capacity for the enjoyment of life sustained in the past and to be sustained in the future; and other non-economic damages;

b. Awarding punitive damages;

c. Awarding the costs and expenses of this litigation to Plaintiff;

d. Awarding reasonable attorneys' fees and costs to Plaintiff as provided by law;

e. Awarding pre-judgment and post-judgment interest to Plaintiff; and

f. For such further relief as this Court deems necessary, just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Fed. R. Civ. P. 38(b), Plaintiff demands a jury trial for any and all issues triable by a jury.

Respectfully submitted: July 9, 2020

	<u>/s/ Lydia T. Lucius</u> **Lydia T. Lucius** llucius@awkolaw.com Missouri Bar No. 70201 **D. Nicole Guntner** nguntner@awkolaw.com *Pro hac vice application forthcoming* **Neil D. Overholtz** noverholtz@awkolaw.com *Pro hac vice application forthcoming* **Douglass A. Kreis**

	Dkreis&awkolaw.com *Pro hac vice application forthcoming* **AYLSTOCK, WITKIN, KREIS & OVERHOTLZ, PLLC** 17 East Main Street, Suite 200 Pensacola, FL 32502-5998 ***Counsel for Plaintiff***