# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF UTAH, CENTRAL DIVISION 

## VICTORIA CERVENY, CHARLES <br> CERVENY, and ALEXANDER CERVENY,

Plaintiffs,
v.

AVENTIS, INC.,
Defendant.

## MEMORANDUM DECISION AND ORDER

Case No. 2:14-CV-00545
District Judge Dee Benson

Before the Court is Defendant Aventis, Inc.'s ("Aventis") Motion for Summary Judgment on Federal Preemption Grounds. (Dkt. No. 38.) The Court held a hearing on Aventis's motion on February 24, 2016. At the hearing, Plaintiffs Victoria Cerveny, Charles Cerveny, and Alexander Cerveny were represented by Christopher L. Schnieders and Eric D. Barton. Aventis was represented by Eric A. Swan and Gary T. Wright. At the conclusion of the hearing, the Court took the motion under advisement. After consideration of the memoranda submitted by the parties, the relevant law, and the oral argument presented by counsel, the Court renders the following Memorandum Decision and Order.

## BACKGROUND

The Court finds the undisputed facts as follows. On February 1, 1967, the Food and Drug Administration ("FDA") approved Clomid (or "clomiphene citrate") for the treatment of infertility. (Dkt. No. 39, p. vii.) Aventis is the current manufacturer of Clomid and the successor in interest to the former manufacturers of Clomid. (Dkt. No. 8, 『 5.) Relevant to Aventis's motion is how Clomid's labeling addresses Clomid's risks to pregnant women, how Clomid's
labeling addresses the risks, if any, to a fetus if Clomid is taken prior to pregnancy, and how Plaintiffs allege Clomid's labeling is inadequate.

## A. Clomid's Risks When Administered During Pregnancy

Clomid is a selective-estrogen-receptor modulator used to induce ovulation in women who are unable to ovulate. (Dkt. No. 38, Ex. G.) Clomid's manufacturers have consistently warned that while Clomid is effective in inducing ovulation, Clomid should not be taken while pregnant. In 1967, Clomid's label stated:

Although no causative evidence of a deleterious effect of Clomid therapy on the human fetus has been seen, such evidence in regard to the rat and rabbit has been presented (see Animal Pharmacology and Toxicology). To avoid inadvertent Clomid administration during early pregnancy, the basal body temperature should be recorded throughout all treatment cycles, and the patient should be carefully observed to determine whether ovulation occurs.
(Dkt. No. 39, Ex. 10, p. 2 (emphasis in original).) In 1980 and 1991, Clomid's label was revised but the 1980 and 1991 labels continued to maintain the same pregnancy warning as the 1967 label. (See Dkt. No. 39, Ex. 7, p.2; Dkt. No. 38, Ex. A, p. 1.)

In March 1987, the FDA suggested that Clomid carry a Category X labeling. Prior to 2015, the FDA required a Category X label if "studies in animals or humans have demonstrated fetal abnormalities or if there is positive evidence of fetal risk . . . and the risk of the use of the drug in a pregnant woman clearly outweighs any possible benefit." Labeling and Prescription Drug Advertising; Content and Format for Labeling for Human Prescription Drugs, 44 Fed. Reg. 37434, 37464 (June 26, 1979) (to be codified 21 C.F.R. pts. 201, 202). The Category X labeling suggested by the FDA in 1987 stated: "Clomid may cause fetal harm when administered to pregnant women. Since there is a reasonable likelihood of a patient becoming pregnant while receiving Clomid, the patient should be apprised of potential hazard to the fetus." (Dkt. No. 39, Ex. 11, p. 1.)

Clomid's label did not contain a Category X labeling until 1994. In 1994, the Clomid
Category X label stated:
CLOMID should not be administered during pregnancy. CLOMID may cause fetal harm in animals (see Animal Fetotoxicity). Although no causative evidence of a deleterious effect of Clomid therapy on the human fetus has been established, there have been reports of birth anomalies which, during clinical studies, occurred at an incidence within the range reported for the general population (see Fetal/Neonatal Anomalies and Mortality, ADVERSE REACTIONS).

To avoid inadvertent CLOMID administration during early pregnancy, appropriate tests should be utilized during each treatment cycle to determine whether ovulation occurs. The patient should be evaluated carefully to exclude pregnancy, ovarian enlargement, or ovarian cyst formation between each treatment cycle. The next course of CLOMID therapy should be delayed until these conditions have been excluded.
(Dkt. No. 39, Ex. 12, p. 1.) Similarly, Clomid's current label, approved on October 22, 2012, contains a Category X labeling which states:

CLOMID use in pregnant women is contraindicated, as CLOMID does not offer benefit in this population. Available human data do not suggest an increased risk for congenital anomalies above the background population risk when used as indicated. However, animal reproductive toxicology studies showed increased embryo-fetal loss and structural malformations in offspring. If this drug is used during pregnancy, or if the patient becomes pregnant while taking this drug, the patient should be apprised of the potential risks to the fetus.
(Dkt. No. 39, Ex. 4, p. 4.)
Consistent with Clomid's risk to pregnant women, Clomid is administered during carefully timed intervals with specific instructions to avoid a patient accidently ingesting Clomid while pregnant. Clomid is administered in five-day intervals to induce ovulation. (Dkt. No. 38, Ex. G, p. 2.) If used as directed, Clomid will typically induce ovulation within five to ten days.
(Dkt. No. 39, Ex. 4, p. 9.) A patient taking Clomid is warned to time coitus to coincide with ovulation to ensure that Clomid is not ingested while pregnant. (See, e.g., Dkt. No. 39, Ex. 4, p.

9; Dkt. No. 39, Ex. 7, p. 5.) Additionally, Clomid's label instructs that a patient should be
observed closely during Clomid treatment to exclude pregnancy between treatment cycles. (See, e.g., Dkt. No. 39, Ex. 4, p. 4, 10; Dkt. No. 39, Ex. 12, p. 1.)

## B. Clomid Use Prior to Pregnancy and Clomid's Association with Birth Defects

As explained above, since 1967, Clomid's labeling has consistently warned about the risk to a fetus if Clomid is ingested during pregnancy. However, in the nearly five decades Clomid has been used to induce ovulation, the FDA has never required that the Clomid label warn that if ingested prior to pregnancy, Clomid can cause birth defects.

In 1994, Clomid's label was revised to include a Contraindications subsection entitled "Fetal/Neonatal Anomalies and Mortality." (Dkt. No. 39, Ex. 12, p. 1.) ${ }^{1}$ The 1994

Fetal/Neonatal Anomalies and Mortality subsection listed the incidents of birth defects reported from Clomid use. (Id.) However, the 1994 label concluded: " $[t]$ he overall incidence of reported birth anomalies from pregnancies associated with maternal CLOMID ingestion during clinical studies was within the range of that reported for the general population." (Id.) Clomid's 1995 label contained the same conclusion. (Dkt. No. 39, Ex. 15, p. 4.)

On November 29, 2007, Terence Mix ("Mix") submitted a citizen petition to the FDA requesting that the FDA: (1) order changes to the labeling and package insert for Clomid and its generics to include warnings of Clomid's ability to cause birth defects if ingested prior to conception; (2) order a risk evaluation and mitigation strategies for Clomid to determine if the benefits of Clomid outweighed its risks; and (3) order post-market studies or clinical trials for Clomid to determine if the use of dietary supplements of cholesterol can mitigate or eliminate the increased risk of birth defects from using Clomid. (See Dkt. No. 38, Ex. B, p. 1.)

[^0]Mix argued that the scientific research available suggested that Clomid "has a long halflife and is still biologically active well into the second month of pregnancy when most organs are being formed . . [Clomid] thus has the opportunity to malform the human embryo in every woman who conceives during a [Clomid] treatment cycle." (Id. (emphasis in original).) Mix contended that Clomid "acts on the enzyme delta(24)-dehydrocholesterol reductase, resulting in the impaired biosynthesis of cholesterol and an elevation of its precursor, desmosterol." (Id. at 1-2.) Therefore, Mix argued, "during the first two months of pregnancy, every woman who conceives during a treatment cycle with [Clomid] . . . has a cholesterol-inhibiting drug present in the maternal and embryonic circulation when most organs are being formed." (Id. at 2.) Mix supplemented his petition to the FDA five times to include scientific literature that he claimed supported his theories. (Dkt. No. 38, Exs. C, D, E, F.)

On September 8, 2009, the FDA denied Mix's petition. (Dkt. No. 38, Ex. G.) To evaluate Mix's petition, the FDA reviewed and tested the scientific merit of the research submitted by Mix. (Id. at 3.) Additionally, the FDA "independently surveyed the literature regarding clomiphene citrate." (Id.) In rejecting Mix's petition, the FDA found:
the currently available, relevant, and reliable scientific evidence does not establish that clomiphene citrate is a clinically significant cholesterol inhibitor that carries teratogenic risks when used at the recommended dosage of 50 or 100 mg for the treatment of ovulatory dysfunction in women. Therefore, the scientific literature does not justify ordering changes to the labeling that warn of such risk beyond those presently included in labeling.
(Id.) The FDA noted that Mix "failed to establish that short courses of clomiphene citrate, as used for ovulation induction, cause severe inhibition of cholesterol synthesis in women . . ." (Id. at 6.) Furthermore, the FDA concluded that "based on the scientific evidence reviewed, there is insufficient data to demonstrate reasonable evidence of an association between clomiphene
exposure in the periconceptional [preconception] period and the risk of teratogenicity [the capability of causing congenital abnormalities]." (Id. at 10.)

In response to Mix's claim that Clomid can be shown to be biologically active well into the second month of pregnancy, the FDA concluded that any half-life resulting from Clomid is the result of one of Clomid's two racemic isomers, en-clomiphene and zu-clomiphene. (Id. at 6.) The FDA found that "[e]n-clomiphene disappears rapidly from the circulation, whereas zuclomiphene is cleared slowly and may accumulate across consecutive cycles of treatment." (Id.) However, the FDA concluded that the "[c]urrently available clinical data" suggested that "the level of zu-clomiphene present at the time of organogenesis is insufficient to cause significant inhibition of cholesterol synthesis even after multiple cycles of treatment." (Id. at 6-7.)

The FDA made several findings in response to Mix's theory that ingestion of Clomid prior to conception is associated with birth defects. With respect to Mix's assertion that Clomid is associated with neural tube defects, the FDA stated: "[w]e have reviewed the references submitted, along with our own independent review of the literature, and we find that, overall, the scientifically reliable published literature does not support an association between the use of clomiphene citrate and an increased risk of [neural tube defects]." (Id. at 10.) With respect to cardiovascular defects, digestive tract defects, genitourinary defects, musculoskeletal defects, Down Syndrome, and orofacial defects, the FDA found, "the evidence is insufficient to establish that the use of clomiphene citrate is associated with these congenital abnormalities." (See id. at 12.) Furthermore, the FDA concluded "the evidence is insufficient to establish that the use of clomiphene citrate is associated with any other congenital abnormalities." (See id. at 12-13.)

On September 29, 2009, Mix filed an eighteen-page Petition for Reconsideration asking the FDA to reconsider changing the labeling of Clomid to include warnings suggesting an
association with preconception use of Clomid and birth defects. (Dkt. No. 38, Ex. H.) During 2010, Mix supplemented his Petition for Reconsideration with more scientific data to support his theories. (Dkt. No. 38, Exs. L, M.)

On March 8, 2012, the FDA denied Mix's Petition for Reconsideration. The FDA responded to Mix's Petition for Reconsideration, stating: "Contrary to the statements you make in the Reconsideration Petition, we find that our Original Petition Response was properly founded upon relevant and reliable scientific evidence, including available epidemiology studies regarding clomiphene citrate." (Dkt. No. 38, Ex. I, p. 3.) The FDA further stated: "we continue to believe that the Original Petition and Reconsideration Petition fail to provide reasonable evidence to demonstrate that the association between clomiphene citrate exposure and neural tube defects or other congenital abnormalities is due to the drug and not to the disease process being treated by clomiphene citrate." (Id.)

Clomid's current label, approved on October 22, 2012, does not contain warnings suggesting an association between Clomid use prior to pregnancy and birth defects. (Dkt. No. 39, Ex. 4.) The "Precautions" section of the 2012 Clomid label states: "Inform the patient that the available data suggest no increase in the rates of spontaneous abortion (miscarriage) or congenital anomalies with maternal CLOMID use compared to rates in the general population." (Id. at 6.) Additionally, under the "Precautions" subsection entitled "Pregnancy", the 2012 label states: "The available human data from epidemiologic studies do not show any apparent cause and effect relationship between clomiphene citrate periconceptional [or preconception] exposure and an increased risk of overall birth defects, or any specific anomaly." (Id. at 7.)

## C. Plaintiffs' Failure-to-Warn Theory

In September 1992, Plaintiff Victoria Cerveny ("Mrs. Cerveny") was prescribed Clomid. (Dkt. No. 2, 『 21.) Mrs. Cerveny took "Clomid as prescribed and as directed in the package insert until approximately late October 1992." (Dkt. No 8, ब| 11.) In November 1992, "following her second round of Clomid, [Mrs. Cerveny] discovered she was pregnant" and subsequently delivered her son Alexander Cerveny ("Alexander"). (Id. at $\mathbb{\| \|} 12,14$.$) Alexander was born$ without his first and fifth digits on his left hand. (Id. at ब $\|$ 15.) Alexander was also born with "a congenital dislocation of the left radial head" on his left elbow. (Id. at $\mathbb{\|} \| 16,18$.)

The Plaintiffs contend that Alexander's birth defects are the result of Clomid remaining present in Mrs. Cerveney's body during conception and organogenesis. (Id. at || 13.) Specifically, Plaintiffs allege that "Clomid impairs the biosynthesis of cholesterol," which in turn causes birth defects. (Id. at $\mathbb{\|} \| 22,45$.) Plaintiffs contend Clomid use prior to pregnancy can cause several birth defects, including:
ventricular septal defects, atrial septal defects, hypoplastic left or right heart syndrome, aortic and ventricular outflow tract obstruction defects, craniosynostosis, omphalocele, gastroschisis, persistent pulmonary hypertension of the newborn (PPHN), Tetralogy of Fallot, pulmonary atresia, limb deformations, limb reductions, spina bifida, cleft palate, and patent ductus arteriosus.
(Id. at 『 22.) Plaintiffs’ Amended Complaint cites numerous scientific studies in support of their theory. (Id. at $1925-54$.) Every piece of scientific literature cited in the Plaintiffs' Amended Complaint was presented to the FDA in Mix's citizen petitions. (Dkt. No. 38, Ex. F (comparing the scientific literature submitted by Mix and the scientific literature cited in the Plaintiffs' Amended Complaint); Dkt. No. 39, p. ix.)

Plaintiffs allege that Aventis falsely represented that there was "no causative evidence of a deleterious effect of Clomid therapy on the human fetus . . ." (Dkt. No. 8, \| 57.) Plaintiffs
argue that Aventis had a duty to warn Mrs. Cerveny's prescribing physician that Clomid can cause birth defects if taken prior to pregnancy. (Id. at \| 22.) Plaintiffs contend that if Mrs. Cerveny had "been aware of the hazards associated with the use of Clomid prior to pregnancy, she would not have purchased and/or consumed" Clomid. (Id. at 『 21.)

## STANDARDS OF REVIEW

Pursuant to Rule 56(a) of the Federal Rules of Civil Procedure, " $[\mathrm{t}]$ he court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." "A fact is 'material' if, under the governing law, it could have an effect on the outcome of the lawsuit. A dispute over a material fact is 'genuine' if a rational jury could find in favor of the nonmoving party on the evidence presented." Tabor v. Hilti, Inc., 703 F.3d 1206, 1215 (10th Cir. 2013) (citations omitted). In evaluating a motion for summary judgment, the Court reviews the facts in a light most favorable to the nonmovant and draws all reasonable inferences in the nonmovant's favor. Jones $v$. Norton, 809 F.3d 564, 573 (10th Cir. 2015). "To survive a motion for summary judgment, a nonmoving party 'must set forth specific facts showing that there is a genuine issue for trial as to those dispositive matters for which he [or she] carries the burden of proof."" Christy v. Travelers Indem. Co. of Am., 810 F.3d 1220, 1233 (10th Cir. 2016) (citations omitted).

Whether federal law preempts a plaintiff's state tort law claims presents a pure question of law appropriate for resolution by summary judgment. See Dobbs v. Wyeth Pharm., 797 F. Supp. 2d 1264, 1267 (W.D. Okla. 2011); In re Incretin-Based Therapies Prods. Liab. Litig., No. 12-md-2452, 2015 WL 6912689, at *3 (S.D. Cal. Nov. 9, 2015).

## DISCUSSION

The Supremacy Clause of the United States Constitution provides that the "Constitution, and Laws of the United States . . . shall be the Supreme Law of the Land . . . ." U.S. Const. art. VI, cl.2. The Supremacy Clause "invalidates state laws that 'interfere with, or are contrary to,' federal law." Hillsborough Cnty. Florida v. Automated Med. Labs., Inc., 471 U.S. 707, 712 (1985) (citations omitted). To determine whether federal preemption exists, the Court is "guided by two cornerstones" of preemption jurisprudence. Wyeth v. Levine, 555 U.S. 555, 565 (2009). "First, 'the purpose of Congress is the ultimate touchstone in every preemption case.'" Id. (quoting Medtronic, Inc. v. Lohr, 518 U.S. 470, 485 (1996)). Second, when preemption involves a field in which the States have traditionally occupied, the "historic police powers of the States [are] not to be superseded by . . . Federal Act unless that [is] the clear and manifest purpose of Congress." Rice v. Santa Fe Elevator Corp., 331 U.S. 218, 230 (1947).
"There are three forms of preemption . . . express preemption, conflict preemption, and field preemption." Devon Energy Prod. Co., L.P. v. Mosaic Potash Carlsbad, Inc., 693 F. 3d 1195, 1203, n. 4 (10th Cir. 2012) (citing cases). Express preemption exists where Congress utilizes "explicit statutory language" to supersede state law. English v. Gen. Elec. Co., 496 U.S. 72, 79 (1990). Field preemption "'occurs when the federal scheme of regulation is so pervasive that Congress must have intended to leave no room for a State to supplement it.'" US Airways, Inc. v. O'Donnell, 627 F.3d 1318, 1324 (10th Cir. 2010) (citations omitted). Conflict preemption arises "where it is impossible for a private party to comply with both state and federal requirements . . . or where state law 'stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.'" English, 496 U.S. at 79 (1990) (citations omitted).

Aventis's motion relies on conflict preemption. Specifically, Aventis contends that the FDA would not have permitted Aventis to include the warnings suggested by the Plaintiffs. Therefore, Aventis argues, Plaintiffs' state tort law claims are conflict preempted because it is impossible for Aventis to comply with both state and federal law. To evaluate Aventis' Motion, the Court must first examine the regulatory burden imposed on Aventis by the FDA. Next, the Court will consider whether Aventis has established a preemption defense by satisfying the "clear evidence" standard announced in Wyeth v. Levine, 555 U.S. 555 (2009).

## A. Federal Regulation of Drug Labeling

Under the Federal Food, Drug, and Cosmetics Act, Congress has delegated authority to the FDA to regulate pharmaceutical manufacturers and their products. 21 U.S.C. § 301. Before taking a drug to market, drug manufacturers are required to obtain FDA approval for both a proposed drug and the exact labeling text accompanying the drug. See 21 U.S.C. § $355 ; 21$ C.F.R. § 314.105(b). The FDA requires a drug label to include several different types of information, including indications and usage, contraindications, warnings, precautions, and adverse reactions. See 21 C.F.R. § 201.80. The FDA will approve a drug application if the FDA determines "that the drug meets the statutory standards for safety and effectiveness, manufacturing and controls, and labeling." 21 C.F.R. § 314.105(c).

A "central premise of federal drug regulation [is] that the manufacturer bears responsibility for the content of its label at all times." Levine, 555 U.S. at 570. A drug manufacturer is not only responsible for ensuring the label is adequate when approved by the FDA, but the manufacturer also has an ongoing responsibility to ensure that the drug's label remains adequate as long as the drug remains on the market. See 21 C.F.R. 314.80(b) (ordering manufacturers to engage in post-market drug research and drug surveillance and to report
findings to the FDA); 21 C.F.R. § 201.80(e) (mandating that a drug manufacturer revise a drug label "to include a warning as soon as there is reasonable evidence of an association of a serious hazard with a drug"). Additionally, the FDA is responsible for monitoring the safety of approved drugs. 21 U.S.C. § 355(e). The FDA must withdraw its approval of a drug if it determines, based on "clinical or other experience, tests, or other scientific data," that a "drug is unsafe for use under the conditions of use upon the basis of which the application was approved." Id. Furthermore, the FDA is required to revoke approval if "on the basis of new information" the FDA concludes that the drug's labeling "is false or misleading in any particular." Id.

Generally, a drug manufacturer cannot change the labeling of a drug without seeking prior approval from the FDA. See 21 C.F.R. § 314.70(b). However, the FDA's "changes being effected" ("CBE") regulation allows a drug manufacturer to strengthen certain aspects of a label "to reflect newly acquired information" prior to seeking FDA approval. 21 C.F.R. § 314.70 (c)(6)(iii). ${ }^{2}$ Specifically, after a manufacturer files a supplemental application to change a drug label, a manufacturer can "add or strengthen a contraindication, warning, precaution, or adverse reaction" or "add or strengthen an instruction about dosage and administration that is intended to increase the safe use of the drug product" before the FDA approves the supplemental application. Id. at § 314.70(c)(6)(iii)(A), (C). The FDA has defined "newly acquired information" to not only include newly acquired data but also to encompass "new analyses of previously submitted data." Supplemental Applications Proposing Labeling Changes for Approved Drugs, Biologics,

[^1]and Medical Devises, 73 Fed. Reg. 49603, 49604 (Aug. 22, 2008) (to be codified at 21 C.F.R. pts. 314, 601, and 814).

In addition to CBE submissions, the FDA has process whereby interested parties may submit citizen petitions arguing for alterations of a drug's labeling. See 21 C.F.R. 10.30. Whether a request for a warning labeling change comes from a manufacturer through a CBE submission or from a citizen through a citizen petition, the FDA's standard of review is the same. In re Incretin-Based Therapies Prods. Liab. Litig., 2015 WL 6912689, at *12, n. 18 ("Regardless of what prompts the FDA's review of an issue, whether as part of initial drug approval, a CBE submission, or the FDA's own review of a safety signal, the same regulatory standard applies."). ${ }^{3}$ FDA regulations require that " $[t]$ he labeling shall be revised to include a warning as soon as there is reasonable evidence of an association of a serious hazard with a drug; a causal relationship need not have been proved." 21 C.F.R. § 201.80(e).

## B. Application of the "Clear Evidence" Standard

In the context of pharmaceutical drug regulation, the Supreme Court in Wyeth v. Levine, 555 U.S. 555, 568 (2009) announced a context specific standard for determining whether state tort failure-to-warn claims are preempted by the FDA's pervasive regulation of drug labeling. In Levine, the plaintiff was administered the drug Phenergan through the IV push method. Id. at 559. The IV push method caused the drug to enter the plaintiff's artery resulting in gangrene and the eventual amputation of the plaintiff's right arm. Id. The plaintiff brought a state tort failure-to-warn claim arguing that Phenergan's labeling inadequately warned that Phenergan is

[^2]dangerous when administered by the IV push method. Id. at 560. Phenergan's manufacturer, Wyeth, argued that the plaintiff's claims were preempted because it was impossible to comply with state law and the FDA's labeling requirements. Id. at 563. Specifically, Wyeth contended that the FDA's regulations did not permit Wyeth to change Phenergan's labeling until there was "newly acquired information" that allowed Wyeth to utilize the FDA's CBE regulation to strengthen Phenergan's label. Id. at 568-69.

The Levine Court held that the FDA's initial approval of a drug label does not preempt all subsequent failure-to warn claims. $I d$. at 588. To evaluate Wyeth's preemption defense, the Court looked beyond the FDA's initial approval of Phenergan's label and considered four factors, including: (1) whether Wyeth tried to strengthen Phenergan's label; (2) whether the FDA prohibited Wyeth from strengthening Phenergan's label; (3) whether the FDA or Wyeth focused on the risks associated with Phenergan IV push administration; and (4) whether Wyeth had provided the FDA with its evaluation of the risks associated with Phenergan IV push administration. Id. at 572-73; see In re Incretin-Based Therapies Products Liab. Litig., 2015 WL 6912689, at * 4 (breaking down the factors analyzed by the Supreme Court in Levine).

The Court concluded that Wyeth had not attempted to give a warning specific to Phenergan's risks when administered through the IV push method. Levine, 555 U.S. at 572. Additionally, the Court concluded that the record demonstrated that the FDA and Wyeth had given Phenergan's IV push method risks only "'passing attention.'" Id. (citations omitted). Furthermore, Wyeth had not provided the FDA with an evaluation of the risks associated with IV push method of administration of Phenergan. Id. Rejecting Wyeth's preemption defense, the Supreme Court held, "[t]he CBE regulation permitted Wyeth to unilaterally strengthen its warning, and the mere fact that the FDA approved Phenergan's label does not establish that it
would have prohibited such a change." Id. at 573. The Court further held that "absent clear evidence that the FDA would not have approved a change to Phenergan's label" the Court would "not conclude that it was impossible for Wyeth to comply with both federal and state requirements." Id. at 571.
"Levine does not define 'clear evidence,' nor does it suggest the level of proof required to constitute such evidence." Dobbs, 797 F. Supp. 2d at 1270. However, courts applying Levine agree that "the clear evidence standard is a fact based inquiry that depends on the express type of warning at issue and the particular facts of each case." Koho v. Forest Labs., Inc., 17 F.Supp.3d 1109, 1118 (W.D. Wash. 2014); Dobbs, 797 F. Supp. 2d at 1270 ("[A]pplication of the clear evidence standard is necessarily fact specific."). In support of preemption, Aventis contends that there are two sources of evidence that suggest the FDA would not have approved a stronger warning label on Clomid prior to 1992. First, Aventis contends the FDA's rejection of Mix's citizen petitions of 2009 and 2012 are clear evidence the FDA would not have approved a warning on Clomid's label suggesting an association between Clomid use prior to pregnancy and birth defects. (Dkt. No. 38, p. 12.) Second, Aventis argues, the FDA's history of approving Clomid labeling that includes statements contrary to the Plaintiffs' theories is further evidence that the FDA does not associate Clomid use prior to pregnancy with birth defects. (Dkt. No. 40, p. 9 (stating, "every official action by FDA over the last 20 years has reaffirmed that FDA does not believe Clomid causes or increases the risk of birth defects in women who take it prior to pregnancy").) Each of Aventis's arguments will be discussed in turn.

## i. The FDA's Denial of a Citizen Petition as "Clear Evidence"

Courts have universally rejected the notion that Levine requires a showing that the manufacturer attempted to apply the warning suggested by the plaintiff but that the labeling
change was ultimately rejected by the FDA. ${ }^{4}$ While Courts have found the actual rejection of a CBE submission to be "highly persuasive evidence" of preemption, a rejection of a CBE submission is not the only way a manufacturer can satisfy the Levine "clear evidence" standard. Dobbs, 797 F. Supp. 2d at 1276-77. Indeed, several courts have concluded that "citizen petition responses ... [are] indicative of whether the FDA would reject a proposed labeling change." In re Incretin-Based Therapies Prods. Liab. Litig., 2015 WL 6912689, at * 13 (citing Mason v.

SmithKline Beecham Corp., 596 F.3d 387, 395 (7th Cir. 2010); Koho v. Forest Labs., Inc., 17 F.
Supp. 3d 1109, 1117 (W.D. Wash. 2014); Dorsett v. Andoz, 699 F. Supp. 2d 1142, 1157 (C.D.
Cal. 2010)). The Supreme Court and the Tenth Circuit have yet to address the evidentiary strength of a citizen petition denial in the context of Levine. However, several courts provide the Court guideposts on which to evaluate the FDA's denial of a citizen petition.

Many courts have held that denial of a citizen petition is insufficient evidence of preemption where the citizen petition predates the injury. See, e.g., Dorsett v. Andoz, 699 F. Supp. 2d 1142, 1157 (C.D. Cal. 2010) ("The FDA's rejections of citizen petitions in the 1990s do not constitute clear evidence that warnings of such an association in July 2004 would have been false and misleading, and hence not permitted."); Koho, 17 F. Supp. 3d at 1117; Dobbs, 797
F. Supp. 2d at 1277 ("This court agrees with [the manufacturer] that the FDA rejection of the

[^3]citizen petitions [in 1997] is not, without more, sufficient because [the patient's] suicide . . . occurred several years after 1997, and additional studies were conducted in the interim."). Indeed, in theory, scientific information improves over time and therefore a citizen petition rejected years prior to the injury is not clear evidence that the FDA would not approve a later warning on a drug label. ${ }^{5}$

For example, in Koho v. Forest Labs., Inc., 17 F. Supp. 3d 1109, 1111 (W.D. Wash 2014), the plaintiff brought a failure-to-warn-claim against a drug manufacturer after her husband committed suicide in 2002. The plaintiff's husband had been prescribed the antidepressant Celexa, which the plaintiff contended was associated with suicidality. Id. at 1116-17. Celexa is a part of a class of drugs known as Selective Serotonin Reuptake Inhibitors or SSRIs. Id. at 1111. In an attempt to show that the FDA would have rejected a stronger suicide warning, Clexa's manufacturer provided the court three citizen petitions for the SSRI Prozac that were reviewed and rejected by the FDA in 1990, 1991, and 1997. Id. at 1112. The citizen petitions alleged that there is a causal connection between SSRI use and suicide. Id. The FDA rejected each of the Prozac petitions because the FDA concluded that there was "insufficient causal evidence to support an association between SSRIs and suicidality." Id. The court found that the latest rejection of a citizen petition in 1997, five years prior to the alleged injury, did not constitute "clear evidence" that the FDA would have rejected a warning in 2002. Id. at 1117.

[^4]The court held, " $[i] n$ light of the evolving nature of the data regarding the effects of prescription drugs, the temporal gap between the latest rejection of a citizen petition in 1997 and [the patient's death] in 2002 is significant." Id.

Similarly, courts have found citizen petitions to be unpersuasive where the citizen petition fails to address the theory proffered by the plaintiff. See, e.g., Hunt v. McNeil Consumer Healthcare, 6 F. Supp. 3d 694, 701 (E.D. La. 2014); Newman v. McNeil Consumer Healthcare, No. 10-CV-01541, 2012 WL 39793, at *6 (N.D. Ill. Jan. 9, 2012) (noting "in its response to the Citizen Petition, the FDA did not reject the warning Plaintiffs claim is required"). For example, in Hunt v. McNeil Consumer Healthcare, 6 F. Supp. 3d 694, 701 (E.D. La. 2014), the court concluded that the FDA's 2005 denial of a citizen petition was not clear evidence that the FDA would not have approved a stronger warning on a Children's Motrin label prior to the plaintiff's injury. The plaintiff brought a failure-to-warn claim after suffering personal injury as the result of ingesting Children's Motrin. Id. at 696. The active ingredient in Children's Motrin is ibuprofen. Id. at 697.

In 2005, a group of citizens petitioned the FDA to add warnings to ibuprofen labels that would include the risk of Stevens Johnson Syndrome and Toxic Epidermal Necrolysis ("SJS/TEN") associated with ibuprofen use. Id. at 699-7001. The FDA agreed to require manufacturers to list the symptoms of SJS/TEN, but rejected listing SJS/TEN by name on the label. Id. The FDA concluded that " most consumers are unfamiliar with these terms" and a "'description of symptoms is more appropriate." Id. (citations omitted). The court found that the plaintiff's failure-to-warn claims went beyond a mere lack of SJS/TEN warnings on the Children's Motrin label. The plaintiff suggested that the Children's Motrin label should have warned that use of Children's Motrin may result in:
'massive skin loss or sloughing of skin; blindness or eye injuries; burns over large portions of the body; massive scarring; damage to bodily organs; extensive external or internal injuries; severe and permanent disability; transient and/or permanent mucosal injuries, including injuries to the genitalia; recurrent and/or irreversible damage to hair and nails; and potential long-term dental injures or deformities.'

Id. at 701 (citations omitted). In the context of Levine, the court concluded that the 2005 citizen petition denial was unpersuasive because "the FDA did not clearly reject any of ... [the plaintiff's] warnings." Id. (emphasis in original).

Conversely, where a citizen petition post-dates the alleged injury and addresses the failure-to-warn claim proffered by a plaintiff, a citizen petition denial can be evidence to support a manufacturer's preemption defense. See, e.g., Robinson v. McNeil Consumer Healthcare, 615 F.3d 861, 873 (7th Cir. 2010) ("The 'clear evidence' in this case is the agency's refusal to require a reference to SJS/TEN on the label of over-the-counter drugs containing ibuprofen, when it had been asked to do so [in the citizen petition] to which the agency was responding."); In re Incretin-Based Therapies Prods. Liab. Litig., 2015 WL 6912689, at *13.

For example, in In re Incretin-Based Therapies Products Liability Litigation, No. 13-md-2452, 2015 WL 6912689, at * 1 (S.D. Cal. Nov. 9, 2015) the plaintiffs brought failure-towarn claims alleging that drugs commonly used to treat type 2 diabetes, Januvia, Janumet, Byetta, and Victoza, create or cause an increased risk of pancreatic cancer. To determine the plaintiffs' failure-to-warn claims were conflict preempted, the court relied on several types of evidence, including "the FDA's rejection of a citizen petition requesting the withdrawal of Victoza." Id. at *9. In April 2012, the FDA received a citizen petition demanding that the FDA remove Victoza from the market. $I d$. at *9-10. The citizen petition alleged that scientific data available suggested an increased risk of pancreatic cancer associated with Victoza use. Id.

The FDA rejected the citizen petition, finding: "'In our review of 49 unique cases recovered from [FDA Adverse Reporting System] we found no new evidence regarding the risk of pancreatic carcinoma in association with the use of Victoza that would support any changes to the current approved labeling." Id. at *10 (citations omitted). The FDA also concluded that ""[a]ny causal association between exposure to Victoza and pancreatic cancer is indeterminate at this time.'" Id. The court concluded that "responding to citizen petitions is within the FDA's regulatory authority" and served as evidence that the FDA would have rejected stronger warnings on Victoza's label. See id. at *13.

In this case, the FDA heard and rejected the Plaintiffs' theory embodied in Mix's citizen petitions, which post-dates Mrs. Cerveny's Clomid use by over fifteen years. Plaintiffs' failure-to-warn theory is twofold. First, Plaintiffs contend Clomid has a long half-life and is still biologically active in a woman's body during conception and organogenesis. (Dkt. No. 8, ¢ 13.) Second, Plaintiffs argue that Clomid impairs the biosynthesis of cholesterol by inhibiting the function of certain enzymes. (Id. at $\boldsymbol{\|} \| 22,45$.) Plaintiffs believe that Clomid's alleged ability to inhibit cholesterol causes several birth defects when administered prior to pregnancy. (Id. at a 22.)

Mix's 2007 Citizen Petition and Mix's 2009 Petition for Reconsideration argued the Plaintiffs' theories to the FDA. (Dkt. No. 38, Ex. F (comparing the scientific literature submitted by Mix and the scientific literature cited in the Plaintiffs' Amended Complaint).) Mix argued that Clomid has a long half-life and is "still biologically active well into the second month of pregnancy when most organs are being formed." (See Dkt. No. 38, Ex. B, p. 1.) Mix contended that Clomid "acts on the enzyme delta(24)-dehydrocholesterol reductase, resulting in the impaired biosynthesis of cholesterol and an elevation of its precursor desmosterol." (Id.) Mix
proffered that Clomid's interference with cholesterol synthesis can cause severe birth defects. To support this theory, Mix provided the FDA with the same scientific research that the Plaintiffs cite in the Amended Complaint as support for their theories. (Dkt. No. 38, Ex. F.)

On September 8, 2009, the FDA rejected Mix's theories and, by proxy, rejected the Plaintiffs' theories. (Dkt. No. 38, Ex. F.) In evaluating Mix's 2007 petition, the FDA not only reviewed the scientific research submitted by Mix, the FDA also "independently surveyed the literature regarding clomiphene citrate [or Clomid]." (Id. at 3.) The FDA concluded:
the currently available, relevant, and reliable scientific evidence does not establish that clomiphene citrate is a clinically significant cholesterol inhibitor that carries teratogenic risks when used at the recommended dosage of 50 or 100 mg for the treatment of ovulatory dysfunction in women. Therefore, the scientific literature does not justify ordering changes to the labeling that warn of such risk beyond those presently included in labeling.
(Id.) The FDA noted that Mix "failed to establish that short courses of clomiphene citrate, as used for ovulation induction, cause severe inhibition of cholesterol synthesis in women . . ." (Id. at 6.) Furthermore, the FDA concluded that "based on the scientific evidence reviewed, there is insufficient data to demonstrate reasonable evidence of an association between clomiphene exposure in the periconceptional [preconception] period and the risk of teratogenicity [the capability of causing congenital abnormalities]." (Id. at 10.)

Specifically, the FDA concluded that the scientific research showed that any half-life resulting from Clomid "is insufficient to cause significant inhibition of cholesterol synthesis even after multiple cycles of treatment." (Id. at 6-7.) Furthermore, the FDA concluded that there was no reliable scientific data that proved an association between Clomid and an increased risk of neural tube defects, cardiovascular defects, digestive tract defects, genitourinary defects, musculoskeletal defects, Down Syndrome, and orofacial defects. (Id. at 10-13.) The FDA
further found that "the evidence is insufficient to establish that the use of [Clomid] is associated with any other congenital abnormalities." (Id. at 12-13 (emphasis added).)

In 2009, Mix filed a Petition for Reconsideration, supplementing his petition with more scientific data to support his theories. (Dkt. No. 39, Exs. H, L, M.) On March 9, 2012, the FDA once again concluded that Mix's petitions "fail[ed] to provide reasonable evidence to demonstrate that the association between clomiphene citrate exposure and neural tube defects or other congenital abnormalities is due to the drug and not to the disease process being treated by clomiphene citrate." (Dkt. No. 39, Ex. H, p. 3 (emphasis added).)

Mix's request to alter Clomid's label is the exact theory and substance on which the Plaintiffs' case relies. Importantly, the FDA's rejection of the Plaintiffs' theories occurred many years after Mrs. Cerveny took Clomid to induce ovulation. If the FDA concluded in 2009 and 2012 that (1) Clomid is not a significant inhibitor of cholesterol and (2) if used as directed, Clomid does not pose a risk of causing birth defects, the Court cannot say the FDA would have approved a contrary warning prior to 1992. Indeed, the FDA's regulations only require a warning if there is "reasonable evidence of an association of a serious hazard with a drug." 21 C.F.R. § 201.80(e). The FDA's denial of the Plaintiffs' theories embodied in Mix's citizen petitions is clear evidence that the FDA would not have permitted Aventis to strengthen Clomid's label prior to 1992.

## ii. The FDA's Inaction as "Clear Evidence"

The FDA's denials of Mix's citizen petitions, standing alone, is clear evidence that the FDA would not have permitted Aventis to strengthen Clomid's label to include warnings of the risks of birth defects if taken prior to pregnancy. However, the Court also finds it dispositive
that the FDA, in addition to rejecting Mix's citizen petitions, has consistently approved Clomid labeling that includes affirmative rejections of the Plaintiffs' theories.

In In re Incretin-Based Therapies Products Liability Litigation, in addition to finding the FDA's rejection of a Victoza citizen petition to be evidence of preemption, the court also found persuasive the FDA's "subsequent approval of other incretin-based therapies without any reference to pancreatic cancer in the product labeling." 2015 WL 6912689, at *9. The court concluded that " $[t]$ he FDA's subsequent inaction regarding [incretin-based] drug labeling supports the conclusion that the FDA does not consider available scientific evidence of a causal association sufficient to warrant inclusion in the labeling." Id. at *11. Specifically, the court found, " $[t]$ he FDA has . . . not required any of the Defendants to add a pancreatic cancer warning, or required the inclusion of a warning in newly approved incretin-based therapies." Id. In support of preemption, the court held "[w]hile FDA inaction is insufficient on its own to establish preemption, it is highly persuasive given the FDA's comprehensive review of pancreatic safety and ability to mandate a labeling change if it concluded the regulatory standards were satisfied." Id.

Just like In re Incretin-Based Therapies Products Liability Litigation, the FDA's inaction with respect to Clomid's labeling is highly persuasive evidence that the FDA would not have approved strengthening Clomid's label prior to 1992. Since 1967, Clomid's label has consistently warned about the risk to a fetus if Clomid is ingested during pregnancy. However, in the nearly five decades Clomid has been used to induce ovulation, the FDA has never required Clomid to carry warnings suggesting birth defects associated with Clomid use prior to pregnancy. Furthermore, since 1994, the FDA has approved Clomid labeling that acknowledges
that Clomid exposure prior to pregnancy does not cause birth defects at a rate greater than that observed in the general population.

In 1994, Clomid's label was revised to include a new contraindications subsection entitled "Fetal/Neonatal Anomalies and Mortality." (Dkt. No. 39, Ex. 12, p. 1.) The 1994 Fetal/Neonatal Anomalies and Mortality subsection listed the incidents of birth defects reported from Clomid use. (Id.) However, the 1994 label concluded: " $[t]$ he overall incidence of reported birth anomalies from pregnancies associated with maternal CLOMID ingestion during clinical studies was within the range of that reported for the general population." (Id.) Clomid's 1995 label contained the same conclusion. (Dkt. No. 39, Ex. 15, p. 4.)

After the FDA reviewed and rejected Mix's citizen petitions in 2009 and 2012, Clomid's current label was revised. Clomid's current label does not contain warnings suggesting Clomid use prior to pregnancy causes birth defects. (See Dkt. No. 39, Ex. 4.) Under the "Precautions" section, the label states: "Inform the patient that the available data suggest no increase in the rates of spontaneous abortion (miscarriage) or congenital anomalies with maternal CLOMID use compared to rates in the general population." (Id. at 6.) Additionally, under the "Precautions" subsection entitled "Pregnancy" the label states: "The available human data from epidemiologic studies do not show any apparent cause and effect relationship between clomiphene citrate periconceptional [or preconception] exposure and an increased risk of overall birth defects, or any specific anomaly." (Id. at 7.)

In other words, Clomid's current label states that there is no statistically significant evidence to suggest that Clomid carries a risk of causing birth defects above the risk of birth defects found in the general population. The FDA's inaction alone cannot support a preemption defense. The Court finds, however, that the FDA's inaction, coupled with the FDA's
comprehensive review of any association between Clomid ingestion prior to pregnancy and birth defects, to be highly persuasive evidence that the FDA would not permit Aventis to strengthen Clomid's labeling as the Plaintiffs suggest.

The Plaintiffs rely heavily on the FDA's history of requiring that Clomid carry a Category X warning. Clomid's history of carrying a Category X warning is irrelevant to Plaintiffs' case and is certainly not dispositive as to whether the FDA would have permitted Aventis to strengthen Clomid's warning to include warnings suggesting exposure to Clomid prior to pregnancy causes birth defects. Prior to 2015, the FDA utilized a five category system to indicate the potential of a drug to cause birth defects if used during pregnancy. A Category X label was required if "studies in animals or humans have demonstrated fetal abnormalities or if there is positive evidence of fetal risk based on adverse reaction reports from investigational or marketing experience, or both, and the risk of the use of the drug in a pregnant woman clearly outweighs any possible benefit." Labeling and Prescription Drug Advertising; Content and Format for Labeling for Human Prescription Drugs, 44 Fed. Reg. 37434, 37464 (June 26, 1979) (to be codified 21 C.F.R. pts. 201, 202) (emphasis added). On June 30, 2015, the FDA finalized a rule that will eliminate the FDA's pregnancy category system. See Pregnancy, Lactation, and Reproductive Potential: Labeling for Human Prescription Drug and Biological ProductsContent and Format, 79 Fed. Reg. 72064, 72065 (Dec. 4, 2014) (to be codified 21 C.F.R. pt. 201).

In 1987, the FDA suggested that the Clomid label be revised to include the following language: "Clomid may cause fetal harm when administered to pregnant women. Since there is a reasonable likelihood of a patient becoming pregnant while receiving Clomid, the patient should be apprised of potential hazard to the fetus." (Dkt. No. 39, Ex. 11, p. 1 (emphasis
added).) Clomid's label did not contain a Category X labeling until 1994. However, previous iterations of the Clomid label contained a similar warning as the pregnancy warning suggested by the FDA in 1987. (See Dkt. No. 39, Ex. 7, p.2; Dkt. No. 38, Ex. A. p.1.) Clomid's current label, approved in October 2012, states:

CLOMID use in pregnant women is contraindicated, as CLOMID does not offer benefit in this population. Available human data do not suggest an increased risk for congenital anomalies above the background population risk when used as indicated. However, animal reproductive toxicology studies showed increased embryo-fetal loss and structural malformations in offspring. If this drug is used during pregnancy, or if the patient becomes pregnant while taking this drug, the patient should be apprised of the potential risks to the fetus.
(Dkt. No. 39, Ex. 4, p. 4 (emphasis added).) The Plaintiffs contend that the FDA's suggestion in 1987 and the post 1992 Clomid Category X warnings are clear evidence that the FDA would have permitted Aventis to strengthen its warning prior to 1992. Therefore, Plaintiffs' argue, Aventis's preemption defense fails.

The Plaintiffs' arguments are inapposite. The FDA's history of requiring Clomid to carry a Category X labeling is irrelevant to the Plaintiffs' case. The Plaintiffs claim that Clomid carries a risk of causing birth defects if the drug is ingested prior to pregnancy. Indeed, the Plaintiffs are not alleging that Mrs. Cerveny took Clomid while she was pregnant. (See Dkt. No $8, \boldsymbol{q} \| 11,12,14$.) It would be a nonsensical result if a plaintiff could avoid a preemption defense by arguing that a drug label could have been strengthened in any form, regardless of its relevance to the plaintiff's case. If anything, Clomid's Category X labeling indicates that the FDA has always maintained the position that a patient using Clomid to induce ovulation should not continue to take Clomid while pregnant. Clomid's Category X labeling is not an indication that the FDA would have permitted Aventis to warn about the risks of causing birth defects if Clomid is taken prior to pregnancy.

## CONCLUSION

Aventis's Motion for Summary Judgment on Federal Preemption Grounds is GRANTED.
Dated: March 16, 2016.
BY THE COURT:


United States District Judge


[^0]:    ${ }^{1}$ The parties dispute whether the Fetal/Neonatal Anomalies and Mortality subsection was added in 1993 or 1994. (Dkt. No. 40, p. vii-viii, 『 30.) However, for purposes of Aventis's motion it is irrelevant whether the label was revised in 1993 or 1994.

[^1]:    ${ }^{2}$ The FDA initially proposed the CBE preapproval process in 1982. See New Drug and Antibiotic Regulations, 47 Fed. Reg. 46622, 46623 (Oct. 19, 1982) (to be codified 21 C.F.R. pts. 310, $312,314,430,431$, and 733) ("These supplements would describe changes placed into effect to correct concerns about newly discovered risks from the use of the drug.").

[^2]:    ${ }^{3}$ Plaintiffs argue that " $[a]$ citizen petition submitted under 21 CFR 10.30 and submission of a labeling supplement by a pharmaceutical sponsor under 21 CFR 314.70 are fundamentally different." (Dkt. No. 38, p. 5.) However, besides merely pointing to anecdotal conjecture, the Plaintiffs do not cite any statute, regulation, or FDA guidance to support their speculation that an FDA citizen petition is reviewed with any less rigor than a manufacturer's CBE submission.

[^3]:    ${ }^{4}$ See, e.g., Levine, 555 U.S. at 572-73 (noting that the FDA, in addition to the manufacturer, had not evaluated the risks of administering Phenergan through the IV push method); In re Incretin-Based Therapies Prods. Liab. Litig., 2015 WL 6912689, at *13 ("In reaching its conclusion that clear evidence exists, the Court rejects Plaintiffs' position that Defendants cannot establish preemption absent express rejection of a proposed labeling change."); Reckis v. Johnson \& Johnson, 28 N.E.3d 445, 459, n. 29 (Mass. 2015) cert. denied, $136 \mathrm{~S} . \mathrm{Ct} .896$ (2016) ("The court in [Levine] specifically suggested that 'clear evidence' could be established by the FDA's rejection of a drug maker's attempt to give the warning underlying a claim of failure to warn . . . That is not to say that the [Levine] standard of clear evidence can be satisfied only by the FDA's rejection of a manufacturer's request for an additional warning." (citations omitted)); see also PLIVA, Inc. v. Mensing, 131 S. Ct. 2567, 2588-89 (2011) (Sotomayor, J. dissenting) (noting in the context of "clear evidence" that "[a] generic manufacturer might . . show that the FDA had itself considered whether to request enhanced warnings in light of the evidence on which a plaintiff's claim rests but had decided to leave the warnings as is").

[^4]:    5 Plaintiffs' counsel misrepresented the law on this issue. Plaintiffs' counsel stated: 'Several other federal courts have similarly rejected the argument that a tort claim was preempted because a citizen petition-or a series of citizen petitions-had been rejected by the FDA." (Dkt. No. 39, p. 7 (citing cases).) Plaintiffs' counsel failed to mention that several of the cases cited in the Plaintiffs' brief found the denial of a citizen petition to be unpersuasive because the denial predated the injury-not that a denial of a citizen petition can never serve as "clear evidence" that the FDA would reject a proposed label change. See Koho, 17 F. Supp. 3d at 1117; Hunt v. McNeil Consumer Healthcare, 6 F. Supp. 3d 694, 701 (E.D. La. 2014) ("[T]he FDA's response in 2006 to the Citizen Petition is not clear evidence the agency would have rejected in 2010 the stronger warnings Plaintiff proposes."); Dorsett, 699 F. Supp. 2d at 1157; Dobbs, 797 F. Supp. 2d at 1277.

