

**United States Court of Appeals  
for the Federal Circuit**

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**VALEANT PHARMACEUTICALS  
INTERNATIONAL, INC., SALIX  
PHARMACEUTICALS, INC., PROGENICS  
PHARMACEUTICALS, INC., WYETH LLC, FKA  
WYETH,**  
*Plaintiffs-Appellees*

v.

**MYLAN PHARMACEUTICALS INC., MYLAN INC.,  
MYLAN LABORATORIES LIMITED,**  
*Defendants-Appellants*

**ACTAVIS LLC,**  
*Defendant*

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2018-2097

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Appeal from the United States District Court for the District of New Jersey in Nos. 2:15-cv-08180-SRC-CLW, 2:15-cv-08353-SRC-CLW, 2:16-cv-00035-SRC-CLW, 2:16-cv-00889-SRC-CLW, 2:17-cv-06714-SRC-CLW, Judge Stanley R. Chesler.

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Decided: April 8, 2020

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BRYAN DINER, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, Washington, DC, argued for all plaintiffs-appellees. Plaintiffs-appellees Valeant Pharmaceuticals International, Inc., Salix Pharmaceuticals, Inc., Progenics Pharmaceuticals, Inc. also represented by JUSTIN JAMES HASFORD, CORA RENAE HOLT, ESTHER LIM; JESSICA C. LEBEIS, Boston, MA; CHARLES E. LIPSEY, Reston, VA.

CHARLES H. CHEVALIER, Gibbons P.C., Newark, NJ, for plaintiff-appellee Wyeth LLC. Also represented by JONATHON BRUGH LOWER.

ROBERT FLORENCE, Parker Poe Adams & Bernstein LLP, Atlanta, GA, argued for defendants-appellants. Also represented by MICHEAL L. BINNS, KAREN L. CARROLL.

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Before LOURIE, REYNA, and HUGHES, *Circuit Judges*.

LOURIE, *Circuit Judge*.

Mylan Pharmaceuticals Inc., Mylan Inc., and Mylan Laboratories Ltd. (collectively, “Mylan”) appeal from the U.S. District Court for the District of New Jersey’s grant of summary judgment that claim 8 of U.S. Patent 8,552,025 (“the ’025 patent”) is not invalid. *Valeant Pharm. Int’l, Inc. v. Mylan Pharm., Inc.*, No. 2:15-cv-08180 (SRC), 2018 WL 2023537 (D.N.J. May 1, 2018) (“*Decision*”). For the reasons detailed below, we reverse and remand.

#### BACKGROUND

Valeant owns the ’025 patent, which claims stable methylaltraxone pharmaceutical preparations. According to the ’025 patent specification, methylaltraxone, a quaternary amine opioid antagonist derivative, can be useful for reducing the side effects of opioids but is unstable in aqueous solution. The inventors discovered, however, that when the pH of a methylaltraxone solution is adjusted,

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optimally to between 3.0 and 3.5, the percentage of total degradants drops significantly. '025 patent col. 2 l. 39.

The inventors' preferred manufacturing process for their formulation, as described in Example 2, includes several ingredients acting in concert. Example 2 includes methylnaltrexone, sodium edetate as a chelating agent, sodium citrate and citric acid as buffering agents, and sodium chloride as an isotonicity agent. Each ingredient in the formulation plays its own role. For example, the buffer stabilizes the formulation's pH, which can drop during an autoclaving step, and adding isotonicity agents matches the formulation to the osmotic potential of human extracellular fluids. Chelating agents reduce methylnaltrexone degradation on their own, and the addition of disodium edetate in particular yields an additional, synergistic effect in concert with pH manipulation. The specification thus explains that "manipulating other parameters in concert with pH resulted in stable formulations of methylnaltrexone anywhere in a range from a pH of 2.0 to 6.0." '025 patent col 8. ll. 62–66.

Relevant here are claim 1 and claim 8 of the '025 patent. Claim 8 depends from claim 1, which recites:

A stable pharmaceutical preparation comprising a solution of methylnaltrexone or a salt thereof, wherein the preparation comprises a pH between about 3.0 and about 4.0.

'025 patent col. 19 ll. 25–27. Claim 8 recites "[t]he pharmaceutical preparation of claim 1, wherein the preparation is stable to storage for 24 months at about room temperature." *Id.* col. 19 ll. 44–46. Notably, claim 8 recites the same preparation as claim 1, but with a newly stated result: 24-month stability. Given that there are no limitations indicating any difference between the preparation of claim 1 and claim 8, it is unclear what, if anything, accounts for the added stability limitation. Apparently only the nature of methylnaltrexone and the pH matter. And

there are no limitations in the claim to bring about the stated stability.

The '025 patent is listed in the Orange Book for Relistor®, an injectable drug used to treat constipation as a side effect of taking opioid medication. Mylan filed an Abbreviated New Drug Application (“ANDA”) seeking approval from the U.S. Food and Drug Administration to market a generic version of Relistor®, and Valeant responded by bringing suit against Mylan in the District of New Jersey, alleging that Mylan’s proposed product would infringe the '025 patent. As relevant here, Mylan ultimately conceded that its ANDA product would infringe claim 8 of the '025 patent but maintained that claim 8 was invalid as obvious over solutions of similar anti-opioids.

The parties stipulated to the construction of claim 8’s stability limitation, and the district court did not hold a claim construction hearing. Specifically, the court entered the parties’ stipulation that the phrase “the preparation is stable to storage for 24 months at about room temperature” means “the methylnaltrexone degradation products in the preparation do not exceed 2.0% of the total methylnaltrexone present in the preparation and the preparation is suitable for pharmaceutical use when stored for 24 months at room temperature.” Stipulation and Order, *Valeant Pharm., Int’l v. Mylan Pharm. Inc.*, 2:15-cv-08180-SRC-CLW (May 30, 2017), ECF No. 148; J.A. 651.

Before the district court, Valeant moved for summary judgment that claim 8 would not have been obvious, and the district court granted Valeant’s motion. The court rejected Mylan’s expert testimony and cited references as insufficient, largely because the references did not teach methylnaltrexone formulations but instead formulations of similar but different compounds, naloxone and naltrexone. *Decision*, 2018 WL 2023537, at \*8. The court also rejected Mylan’s theory that the claimed pH range would have been obvious to try. Ultimately, the court held that there was

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nothing in the record suggesting that a pH of 3–4, “without added stabilizers,” was associated with 24-month stability for injectable pharmaceutical solutions. *Id.* at \*10.

Mylan appealed, and we have jurisdiction under 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

We review a grant of summary judgment under the law of the regional circuit, which in this case is the Third Circuit. *See Charles Mach. Works, Inc. v. Vermeer Mfg. Co.*, 723 F.3d 1376, 1378 (Fed. Cir. 2013) (citing *Grober v. Mako Prods., Inc.*, 686 F.3d 1335, 1344 (Fed. Cir. 2012)). We exercise plenary review over the district court’s grant of summary judgment, *Capps v. Mondelez Glob., LLC*, 847 F.3d 144, 151 (3d Cir. 2017) (citing *Seamans v. Temple Univ.*, 744 F.3d 853, 859 (3d Cir. 2014)), reviewing it *de novo*, *Heraeus Med. GmbH v. Esschem, Inc.*, 927 F.3d 727, 733 (3d Cir. 2019) (citing *Faush v. Tuesday Morning, Inc.*, 808 F.3d 208, 215 (3d Cir. 2015)).

Summary judgment is appropriate when the moving party demonstrates that “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322–23 (1986). We construe the evidence in the light most favorable to the nonmovant and draw all reasonable inferences in that party’s favor. *Capps*, 847 F.3d at 151 (citing *Prowel v. Wise Bus. Forms, Inc.*, 579 F.3d 285, 286 (3d Cir. 2009)). “Only disputes over facts that might affect the outcome of the suit under the governing law will properly preclude the entry of summary judgment.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

The sole issue in this appeal is obviousness. Obviousness is a question of law, supported by underlying fact questions. *In re Baxter Int’l, Inc.*, 678 F.3d 1357, 1361 (Fed. Cir. 2012). In our obviousness analysis, we consider the

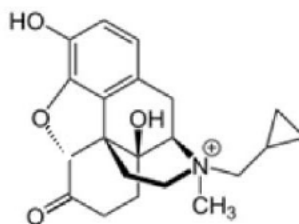
scope and content of the prior art, differences between the prior art and the claims at issue, the level of ordinary skill in the pertinent art, and any secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966); *see also Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (en banc) (“Objective indicia of nonobviousness must be considered in every case where present.”).

Before the district court, Mylan argued that claim 8 would have been obvious in view of three references teaching formulations of either naloxone or naltrexone and in view of two treatises on pharmaceutical formulation. We begin by reviewing those references.

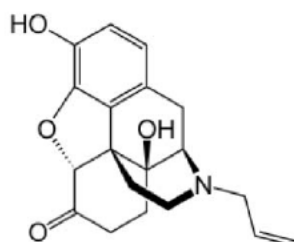
The primary reference at issue here is U.S. Patent 5,866,154 (“Bahal”), entitled “Stabilized Naloxone Formulations” and issued to inventors Surendra Mohan Bahal and Lei-Shu Wu. Bahal teaches stable compositions of naloxone for injection with a pH of 3.0 to 3.5. Similar to the methyl naltrexone formulation described in the ’025 patent, the Bahal solutions comprise an opioid antagonist derivative—in this case, naloxone—an acidic or buffer component, a tonicity-adjusting agent, and a stabilizing agent.

Mylan also relied on Oshlack, U.S. Patent Application Publication 2003/0229111, which describes stable naltrexone hydrochloride compositions. Oshlack teaches dissolving a “stabilizer” in solution before adding naltrexone hydrochloride. Stabilizers can be organic acids, and, in certain preferred embodiments, the stabilizer is butylated hydroxytoluene or ascorbic acid. Oshlack ¶ 0051. Thereafter, the pH of the solution may be adjusted to about 3 to about 5, but preferably to about 4. *Id.* ¶ 0054.

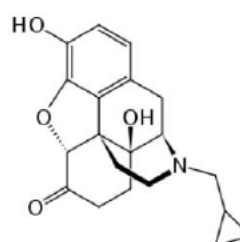
The respective structures of methyl naltrexone, naloxone, and naltrexone are as follows:



Methylnaltrexone



Naloxone



Naltrexone

Fawcett, a journal article about formulations of naltrexone for oral administration, describes decomposition studies on naltrexone in solution at 4, 25 and 70 degrees Celsius over 90 days. J. Paul Fawcett et al., *Formulation and Stability of Naltrexone Oral Liquid for Rapid Withdrawal from Methadone*, 31 ANNALS OF PHARMACOTHERAPY, 1291–95 (1997). At 25 degrees, decomposition was not significant, but at 70 degrees, the color of the naltrexone turned brown, indicating physical instability. The concentration of naltrexone dwindled over time, and the pH of the formulations at all temperatures fell from 3.5 to 3.2.

Gibson, a pharmaceutical development treatise, recommends target pH ranges of 3 to 11 for intramuscular formulations and 3 to 6 for subcutaneous administration. Joanne Broadhead, *Parenteral Dosage Forms*, in PHARMACEUTICAL PREFORMULATION AND FORMULATION 331, 333 (Mark Gibson ed., 2001); J.A. 3225. Gibson

explains that many products are formulated at a slightly acidic pH because of solubility or stability considerations and that the majority of licensed products have a pH between 3 and 9. According to Gibson, more acidic pH can cause phlebitis and pain, while more basic pH can cause tissue necrosis.

Similarly, another pharmaceutical treatise, Remington, teaches that drugs with amide or ester linkages are prone to hydrolysis. Remington explains that many hydrolytic reactions are catalyzed by hydronium and hydroxyl ions, so pH is a relevant consideration in determining the rate of decomposition. 1 REMINGTON: THE SCIENCE AND PRACTICE OF PHARMACY 643 (Alfonso R. Gennaro et al. eds., 19th ed. 1995); J.A. 3255. According to Remington, “[t]he pH range of minimum decomposition (or maximum stability) depends on the ion having the greatest effect on the reaction,” but, “[i]n general, hydroxyl ions have the stronger effect.” Thus, Remington concludes, the minimum reactivity “is often found between pH 3 and 4.” *Id.*

Relying on these references, Mylan argued that a person of skill in the art would have been motivated to prepare and would have arrived at the preparation of claim 8 via routine optimization of pH. Bahal, Oshlack, and Fawcett each taught pH ranges that overlapped with the “about 3 to about 4” range in claim 8, but those references detailed formulations of naloxone and naltrexone. In Mylan’s view, however, the references still established a prima facie case of obviousness because naloxone and naltrexone were structurally and functionally similar to methylnaltrexone. Mylan also argued that the pH range in the claim would have been obvious to try.

The district court disagreed, rejecting Mylan’s arguments about Bahal, Oshlack, and Fawcett because none of the references taught methylnaltrexone formulations. In the court’s view, overlapping ranges only establish a prima facie case of obviousness when the only difference between



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the prior art is the “range or value of a particular variable.” *Decision*, 2018 WL 2023537, at \*4.

The district court then turned to what it deemed to be Mylan’s main argument—that a pH range of 3 to 4 would have been obvious to try. The court expressly rejected Mylan’s view that the range was just one of a finite number of options between pH 3 and 7 that a person of skill would try, holding that “given any two unequal numbers, the quantity of number ranges falling between the two is infinite, not finite,” adding that this conclusion was one of “basic math.” *Decision*, 2018 WL 2023537, at \*5. Mylan cited Gibson and testimony from two experts that adjusting pH could improve stability, but the court rejected this evidence because, in its view, the evidence did not support that “adjusting pH would be the *first* variable formulators would consider to improve stability.” *Id.*

Next, the court rejected Mylan’s assertion that long-term stability of methylnaltrexone was a predictable result of arriving at a pH range of 3 to 4. The court faulted the expert report of Dr. Khan, Mylan’s expert, because he stated that a person of skill would have expected “stable formulations” of methylnaltrexone at an acidic pH. The court held that there was a “large gap” between this testimony and the specific claimed pH range of 3 to 4 with its claimed stability profile of 24 months. *Id.* at \*7.

In the remainder of its analysis, the district court detailed how the prior art references and expert testimony of record failed to establish that methylnaltrexone could be stabilized based on *pH alone*. The court expressly rejected Bahal and Oshlack for their reliance on stabilizers in addition to pH manipulation, holding that neither reference taught a formulation “without added stabilizers.” *Id.* at \*7–9. The court recognized that the prior art suggested that pH was “generally important in formulating pharmaceuticals” and could “have an effect on stability,” but, in its view, the art did not contemplate an injectable solution

“made stable over the long term by pH alone.” *Id.* at \*10. After stating that the art recognized that adjusting pH was only “one dart among a number of others,” the court granted Valeant’s motion for summary judgment that claim 8 would not have been obvious. *Id.* at \*10–11.

In this appeal, Mylan argues that the district court erred in at least two respects: (1) by failing to hold that Mylan established a prima facie case that claim 8 would have been obvious because the pH range in the claim overlaps with pH ranges in the prior art for similar compounds and (2) by resolving disputed fact issues at summary judgment. We address each argument in turn.

## I

Mylan cites three prior art references involving different compounds, but each discloses formulations with pH ranges that overlap with the range recited in claim 8, pH between about 3 and about 4. Specifically, Bahal teaches a naloxone composition with a pH of 3 to 3.5, Oshlack teaches a naltrexone composition with a pH of about 3 to about 5 and about 4, and Fawcett discloses a naltrexone formulation with a pH of 3.5 that fell to 3.2 over 90 days. In Mylan’s view, these references establish a prima facie case of obviousness because the pH ranges they teach overlap with those in claim 8. While no reference contemplates methylnaltrexone specifically, Mylan submits that methylnaltrexone bears significant structural and functional similarity to both naloxone and naltrexone such that a person of skill in the art would seek to use prior disclosed pHs for naloxone and naltrexone when formulating solutions of methylnaltrexone.

Valeant responds that overlapping ranges for different chemical compounds that fail to meet claim 8’s stability requirement do not establish obviousness. According to Valeant, the structural and functional similarities of the compounds are not relevant because claim 8 recites a solution of methylnaltrexone with a stability profile

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unrecognized and unattained in the prior art. Nevertheless, Valeant submits, methylnaltrexone, naloxone, and naltrexone function differently because of their structural differences, and nothing about the shared function of the drug is relevant to their stability in solution.

We agree with Mylan that the record supports a *prima facie* case of obviousness here. In *Peterson*, this court recognized that “[a] *prima facie* case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art.” *In re Peterson*, 315 F.3d 1325, 1329 (Fed. Cir. 2003) (citing *In re Geisler*, 116 F.3d 1465, 1469 (Fed. Cir. 1997)); *In re Woodruff*, 919 F.2d 1575, 1578 (CCPA 1990); *In re Malagari*, 499 F.2d 1297, 1303 (CCPA 1974). At issue in *Peterson* was a claim to a nickel-base single-crystal superalloy used in the manufacture of turbine engines. The claimed composition included a relatively small amount of rhenium—about 1 to 3 percent. The prior art of record taught compositions with 0 to 7 percent rhenium, an overlapping range within which the narrower, claimed range fell. We explained that “[s]electing a narrow range from *within* a somewhat broader range disclosed in a prior art reference is no less obvious than identifying a range that simply *overlaps* a disclosed range.” *Peterson*, 315 F.3d at 1329–30. We thus held that the overlapping ranges were sufficient to establish a *prima facie* case of obviousness, shifting the burden to the patentee to show that the invention would not have been obvious.

Here, the pH range recited in claim 8 clearly overlaps with the pH range in the record art, but none of the references disclose the same drug as the one claimed. We are thus presented with the question whether prior art ranges for solutions of structurally and functionally similar compounds that overlap with a claimed range can establish a *prima facie* case of obviousness. We conclude that they can and, in this case, do.

We have held that, for chemical compound claims, a *prima facie* case of obviousness “frequently turns on the structural similarities and differences between the compounds claimed and those in the prior art.” *Daiichi Sankyo Co. v. Matrix Labs., Ltd.*, 619 F.3d 1346, 1352 (Fed. Cir. 2010) (citing *In re Dillon*, 919 F.2d 688, 692 (Fed. Cir. 1990) (en banc)). Our case law reflects an understanding that skilled artisans can expect structurally similar compounds to have similar properties. *See, e.g., Dillon*, 919 F.2d at 692 (“[S]tructural similarity between claimed and prior art subject matter, proved by combining references or otherwise, where the prior art gives reason or motivation to make the claimed compositions, creates a *prima facie* case of obviousness . . . .”); *In re Deuel*, 51 F.3d 1552, 1558 (Fed. Cir. 1995) (“Structural relationships may provide the requisite motivation or suggestion to modify known compounds to obtain new compounds.”). We have also recognized that an obviousness analysis can rely on prior art compounds with similar pharmacological utility in addition to structural similarity. *See, e.g., In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (holding that a person of skill in the art would have expected amitriptyline to resemble imipramine in the alleviation of depression in humans because of the drugs’ close structural similarity and similar use); *Application of Payne*, 606 F.2d 303, 314 (CCPA 1979) (“Because of the close structural similarity between the claimed compounds at issue here and the compounds [in the prior art], and because those prior art compounds possess pesticidal activity, we conclude that the required motivation is present here.” (citing *In re Wood*, 582 F.2d 638, 641 (CCPA 1978)); *Application of Rosselet*, 347 F.2d 847, 850 (CCPA 1965) (“[A]ppellants have failed to present adequate evidence to overcome a *prima facie* showing of obviousness by reason of the admitted ‘gross structural similarities’ of the art compounds, coupled with the fact those compounds are shown to have utility in the same area of pharmacological activity.”).

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Our previous cases address claims to compounds and their uses. But the principle established in these cases applies more broadly: a person of skill in the art can expect that compounds with common properties are likely to share other related properties as well. *See Anacor Pharms., Inc. v. Iancu*, 889 F.3d 1372, 1384 (Fed. Cir. 2018) (“Where the patent is directed to a new treatment using a known compound, it is reasonable to assume that similar compounds that share certain common properties are apt to share other related properties as well.” (citing *Merck*, 800 F.2d at 1096)). When compounds share significant structural and functional similarity, those compounds are likely to share other properties, including optimal formulation for long-term stability.

Here, the art teaches stable formulations of naloxone, naltrexone, and methylnaltrexone. All three compounds are well-known opioid antagonists that operate by binding to the body’s opioid receptors without activating them. Each is an oxymorphone derivative, and the group members have remarkably similar structures, as indicated earlier. The only structural difference between these three molecules is the identity of the functional group attached to the nitrogen atom. Naloxone is a neutral tertiary amine. Naltrexone, also a neutral tertiary amine, has a cyclopropylmethyl group attached to the nitrogen. Methylnaltrexone, a derivative of naltrexone, is a quaternary ammonium salt and has both a cyclopropylmethyl group and a methyl group attached to its nitrogen with a positive charge. Because of the strong structural and functional similarity between the molecules, a person of skill could expect similar stability of the molecules at similar pH ranges in solution. The district court erred by rejecting this inference as a matter of law at the summary judgment stage.

Because these three molecules bear significant structural and functionality similarity, and because the prior art of record teaches pH ranges that overlap with the pH range recited in claim 8, Mylan has at least raised a prima

facie case of obviousness sufficient to survive summary judgment.

Our holding should not be misconstrued to mean that molecules with similar structure and similar function can always be expected to exhibit similar properties for formulation. Indeed, when this case is tried to a factfinder, the factfinder should consider whether Valeant has rebutted Mylan's prima facie case, by, for example, establishing that the claimed pH range is critical or that the quaternary nitrogen results in unexpected beneficial properties. *See, e.g., Geisler*, 116 F.3d at 1469; *Woodruff*, 919 F.2d at 1578. Valeant may also attempt to rebut Mylan's case by showing that the prior art teaches away from the claimed invention in any respect. *Peterson*, 315 F.3d at 1331 (citing *Geisler*, 116 F.3d at 1469). Whether methylnaltrexone's structural similarity in an overlapping range of pH in solution is sufficient to yield a prima facie case of obviousness depends on the facts of record. *In re Jones*, 958 F.2d 347, 350 (Fed. Cir. 1992) ("Every case, particularly those raising the issue of obviousness under section 103, must necessarily be decided upon its own facts."). Contrary to the district court's view in this case, however, such a theory of obviousness is not defective as a matter of law, and summary judgment to that effect was granted in error.

## II

Next, we address Mylan's argument that there were factual disputes precluding summary judgment. Many of Mylan's arguments have been adequately addressed by our analysis above. Mylan raises a significant concern, however, with the district court's obvious-to-try analysis. In evaluating Mylan's obvious-to-try argument, the district court held that there was not a finite number of options between pH ranges falling between 3 and 7. The court held that, as a matter of "basic math," "given any two unequal numbers, the quantity of number ranges falling between the two is infinite, not finite." *Decision*, 2018 WL 2023537,

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at \*5. The court also rejected Mylan's citations of expert testimony and prior art references because none of the references identified pH as the "first variable" that an experienced formulator would consider and because Mylan's expert concluded that a person of skill would have expected only "stable formulations," not formulations stable for 24 months at room temperature. *Id.* at \*6–7.

In Mylan's view, the district court disregarded Mylan's obvious-to-try evidence because the pH ranges taught in the prior art were not sufficiently narrow. Mylan submits that the adequacy of a prior art range is a classic question of fact and that the district court imposed a heightened predictability requirement.

Valeant does not appear to defend the district court's "basic math" reasoning and, respectfully, we disagree with the court's view of basic math. Instead, Valeant responds that a pH range of 3 to 4 would not have been obvious to try because the asserted prior art did not disclose a formulation exhibiting 24-month stability and because Mylan's experts did not explain why such stability would have been expected.

We agree with Mylan that the district court's obvious-to-try analysis is inconsistent with precedent. "When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). If one of these predictable solutions leads to the anticipated success, the combination was obvious to try. *Id.*

The bounded range of pH 3 to 4 presents a finite number of narrower pH ranges for a skilled artisan to try. As a matter of math, there may be an infinite potential number of ranges within the range 3 to 4, but only if the realities of pH values (and the limitations of commercially available pH meters) are ignored. But on this record, there

is no indication that pH is measured to any significant figure beyond two digits. And in our view of basic math and based on the record, there is only one significant figure after the decimal point, in which case the range of pH variables is ten, or, if one considers two significant figures after the decimal point, one hundred, not an infinity.

The district court rejected record evidence because no reference listed pH as the “first variable” that an artisan would manipulate. But there is no requirement that for a variable to be obvious to try, it must be the first variable a person of skill would alter. And as to the stability limitation, a factfinder could draw the inference from this record that trying a pH of 3–4 would lead to a methylnaltrexone formulation stable at room temperature. Absolute predictability that the proposed pH range would yield the exact stability parameters in the claim is not required. Moreover, it is important to note that pH is in fact the only variable in claim 8, not one of many variables that can be experimented with. And, lacking anything in the claim that is a stabilizer, it can be presumed, if the claim is valid, that the stability for up to 24 months must be due to the nature of the compound in the solution and the claimed pH level. Thus, the district court’s grant of summary judgment on Mylan’s obvious-to-try theory was in error.

#### CONCLUSION

We have considered the parties’ remaining arguments but find them unpersuasive. In light of the foregoing, we reverse the district court’s grant of summary judgment that claim 8 would not have been obvious and remand this case for further proceedings consistent with this opinion.

**REVERSED AND REMANDED**