

August 5, 2014

Elisabeth A. Shumaker
Clerk of Court

PUBLISH

UNITED STATES COURT OF APPEALS
TENTH CIRCUIT

LENOX MACLAREN SURGICAL
CORPORATION,

Plaintiff-Appellant,

v.

No. 13-1307

MEDTRONIC, INCORPORATED, a
Minnesota corporation; MEDTRONIC
SOFAMOR DANEK,
INCORPORATED, an Indiana
corporation; MEDTRONIC PS
MEDICAL, INCORPORATED, d/b/a
MEDTRONIC NEUROLOGIC
TECHNOLOGIES, a California
corporation; MEDTRONIC
SOFAMOR DANEK CO., LTD,

Defendants-Appellees.

**Appeal from the United States District Court
for the District of Colorado
(D.C. No. 1:10-CV-02139-RPM-BNB)**

Henk Brands, Washington, DC (G. Stephen Long and Nicole A. Westbrook, Jones & Keller, Denver, CO, on the briefs), for Plaintiff-Appellant.

Pratik Shah (Z.W. Julius Chen and C. Fairley Spillman, Washington, DC; Michael Simons and David C. Lawrence, Austin, TX, on the briefs), Akin Gump Strauss Hauer & Feld LLP, for Defendants-Appellees.

Before **HOLMES**, **McKAY**, and **BACHARACH**, Circuit Judges.

BACHARACH, Circuit Judge.

Lenox MacLaren Surgical Corporation manufactures bone mills, which are medical devices used in spinal-fusion surgery. In 2000, Lenox began to sell some of its bone mills through a Medtronic entity, Medtronic Sofamor Danek USA. The arrangement ended badly: Medtronic Sofamor Danek USA initiated a recall of Lenox's bone mills, and another Medtronic entity began to manufacture and sell its own bone mill. The result, according to Lenox, was that four Medtronic entities acquired an unfair competitive advantage; thus, Lenox sued these entities¹ for monopolization and attempted monopolization from 2007 to 2010. *See* 15 U.S.C. § 2 (2012). The district court granted the defendants' motion for summary judgment on both claims.

Lenox appeals, and we must address five issues:

- *Res Judicata*. The first issue is one that was not raised in Medtronic's summary judgment motion. But on appeal, Medtronic argues that even if the district court erred on the merits, res judicata would foreclose the monopolization and attempted monopolization claims because Lenox could have raised them in an earlier arbitration. But we will not entertain this argument. Res judicata requires privity of the parties in the first and second suit, and this element involves a disputed issue of fact. Because Medtronic did not

¹ We collectively refer to the Medtronic entities sued in this case as "Medtronic."

raise summary judgment based on res judicata, Lenox had no reason to present evidence disputing privity with the entity sued in the arbitration. Thus, we decline to entertain Medtronic's effort to salvage the summary judgment ruling based on res judicata.

- *Product Market.* The second issue involves definition of the product market, which is based on cross-elasticity of demand. If price increases for one product would not affect demand for the other product, the products would involve separate markets.

Lenox defines the product market as surgical bone mills. Medtronic argues that the product market should include hand tools because they (like bone mills) are used in spinal-fusion surgeries. Lenox defends its definition of the product market based on evidence that large price increases for a hand tool or bone mill would not affect demand for the other item. We conclude that this issue involves a fact-issue for the jury to resolve.

- *Monopoly Power.* With this conclusion, we must confront a third question: Does a triable fact-issue exist regarding Medtronic's monopoly power from 2007 to 2010 in a market consisting solely of bone mills? We conclude that a triable fact-issue exists.

Monopoly power involves two factors: market-share and barriers to entry. Lenox presented evidence that: (1) Medtronic's market share was 97-98% in 2007 and decreased over the next three years, but remained as high as 62% in 2010, and (2) new competitors faced substantial barriers to entry, including the need to avoid infringing existing patents, obtain significant capital in a market with relatively small revenues, and overcome entrenched buyer preferences among spinal surgeons. We conclude that Lenox's evidence of market-share and entry barriers creates a jury question on monopoly power.

- *Exclusionary Conduct.* The second and third issues lead to a fourth: If Medtronic acquired monopoly power from 2007 to 2010, did it acquire this power innocently or through exclusionary conduct? We conclude that the fact-finder could reasonably infer exclusionary conduct.

Lenox points to the recall, presenting evidence that it constituted a ruse and that the various Medtronic entities contrived the alleged

defects because one of them was planning to manufacture its own bone mill and wanted to eliminate competition by Lenox. This evidence creates a jury issue on exclusionary conduct.

- *Harm to Competition.* The second, third, and fourth issues lead to a fifth: harm to competition. Medtronic argues that Lenox has shown injury only to itself, not to competition in the marketplace. Lenox responds with evidence that the product recall served to concentrate power between Medtronic and another firm (Stryker), which inhibited competition by other smaller firms. This evidence creates a jury question on harm to competition.

With these conclusions, we hold that genuine issues of material fact exist regarding market definition, monopoly power, exclusionary conduct, and harm to competition. Thus, we reverse the district court's grant of summary judgment to Medtronic on the claims involving monopolization and attempted monopolization.

I. Lenox's Business

Because this appeal involves the grant of summary judgment to Medtronic, we view the evidence in the light most favorable to Lenox. *See Adler v. Wal-Mart Stores, Inc.*, 144 F.3d 664, 670 (10th Cir. 1998).

Spinal-fusion surgery constitutes a form of orthopedic surgery in which two adjacent vertebrae are fused with the help of small particles of bone. To obtain these small bone particles, technicians traditionally used hand tools such as scalpels, scissors, forceps, and rongeurs to grind bone during the surgery.

Lenox was one of the first manufacturers to design a tool specifically for spinal-fusion surgery: the bone mill. Lenox's bone mill uses a hand-cranked

design that helps ensure a more consistent output than one might get from hand tools.

II. The Arbitration

Lenox claimed that Medtronic Sofamor Danek USA interfered with prospective business relations. The claim was decided through a binding arbitration. There a panel found that Medtronic Sofamor Danek USA had insufficient proof to justify the recall and that the company had taken action to clear the Lenox bone mill from the market. With these findings, the panel awarded damages to Lenox.

III. Standard of Review

We engage in de novo review of the district court's grant of summary judgment. *Sports Racing Servs., Inc. v. Sports Car Club of Am., Inc.*, 131 F.3d 874, 882 (10th Cir. 1997). Summary judgment is appropriate "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." Fed. R. Civ. P. 56(a). The party seeking summary judgment must identify portions of the record that demonstrate the absence of a genuine issue of material fact. *Celotex Corp. v. Catrett*, 477 U.S. 317, 323 (1986).

IV. Res Judicata

Medtronic moved for dismissal based on res judicata, arguing that Lenox could have asserted its claims in the arbitration. The district court denied the

motion, and Medtronic did not renew the res judicata argument in its motion for summary judgment.

On appeal, Medtronic argues that we can affirm the grant of summary judgment based on the alternative ground of res judicata. But, Medtronic did not seek summary judgment based on res judicata, and we decline to address the issue in the first instance.²

In the absence of notice to the plaintiff, our cases ordinarily disfavor an award of a summary judgment based on a ground omitted from the defendants' summary judgment motion. *See Evers v. Regents of the Univ. of Colo.*, 509 F.3d 1304, 1309-10 (10th Cir. 2007); *Tavery v. United States*, 32 F.3d 1423, 1427 n.5 (10th Cir. 1994). In oral argument, Medtronic tried to avoid this line of cases by characterizing res judicata as a "purely legal argument." Oral Arg. 17:19-20:22.

For the sake of argument, we can assume that res judicata generally involves a purely legal argument. But we must consider the specifics of the issue as it is invoked here.

Res judicata involves multiple elements, including identity or privity of the parties in the two suits. *Pelt v. Utah*, 539 F.3d 1271, 1281 (10th Cir. 2008). When the facts are undisputed, the application of res judicata involves a question of law. *King v. Union Oil of Cal.*, 117 F.3d 443, 445 (10th Cir. 1997). But

² Lenox also argues that we cannot consider res judicata because Medtronic did not file a cross-appeal. We need not address this argument.

Lenox contests privity, and this element involves a question of fact. *See Pelt*, 539 F.3d at 1280-81 (“[T]he issue of whether privity exists is a question of fact.”); *Lowell Staats Min. Co. v. Phila. Elec. Co.*, 878 F.2d 1271, 1276 (10th Cir. 1989) (“The ‘determination of identity between litigants for the purpose of establishing privity is a factual question.’” (quoting *Astron Indus. Assocs. v. Chrysler Motors Corp.*, 405 F.2d 958, 961 (5th Cir. 1968))). At a minimum, privity requires a showing that the parties in the two actions are “‘really and substantially in interest the same.’” *Pelt*, 539 F.3d at 1281 (quoting *Lowell Staats Min. Co. v. Phila. Elec. Co.*, 878 F.2d 1271, 1275 (10th Cir. 1989)).

This showing might have been made if Lenox had notice of a dispute regarding privity. But because Medtronic did not raise res judicata in the summary judgment motion, Lenox had no reason to present evidence disputing privity. In these circumstances, we decline to decide the issue of res judicata in the first instance. *See Schramm v. Oakes*, 352 F.2d 143, 150 (10th Cir. 1965) (per curiam) (order on pet. for reh’g) (stating that application of res judicata should be left to the district court to decide in the first instance); *see also Hatch v. Boulder Town Council*, 471 F.3d 1142, 1151 (10th Cir. 2006) (leaving res judicata for the district court to decide in the first instance).

V. The Merits of the Monopolization Claim

On the monopolization claim, Lenox had to prove three items:
(1) monopoly power in the relevant market; (2) willful acquisition or maintenance

of this power through exclusionary conduct; and (3) harm to competition.³ See *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966) (monopoly power in the relevant market and willful acquisition or maintenance of monopoly power); *City of Chanute, Kan. v. Williams Natural Gas Co.*, 955 F.2d 641, 654-55 (10th Cir. 1992) (discussing exclusionary conduct in connection with the creation or maintenance of monopoly power), *overruled in part on other grounds*, *Systemcare, Inc. v. Wang Labs. Corp.*, 117 F.3d 1137 (10th Cir. 1997) (en banc); *Four Corners Nephrology Assocs., P.C. v. Mercy Med. Ctr. of Durango*, 582 F.3d 1216, 1225 (10th Cir. 2009) (harm to competition). The district court held that Lenox had not created a triable issue of fact on: (1) the relevant product market, (2) monopoly power, (3) willful acquisition of monopoly power through exclusionary conduct, or (4) harm to competition. We disagree with these conclusions.

³ The district court concluded that Lenox had failed to show antitrust injury. Appellant's App. (unsealed) at 195, 198. Attacking this conclusion, Lenox argues that it could have incurred an antitrust injury even if competition had not been lessened. Appellant's Opening Br. at 63 (Oct. 2, 2013); see 15 U.S.C. § 15(a) (2012) (authorizing recovery for persons injured in their "business or property by reason of anything forbidden in the antitrust laws"). Responding, Medtronic argues that harm to competition must be proven either as a part of antitrust standing or as an element of the Sherman Act claims. Appellee's Response Br. at 51 n.18 (Dec. 2, 2013). For the sake of argument, we may assume that Medtronic is correct. Thus, for purposes of our opinion, we assume that Lenox had to prove harm to competition either as a part of antitrust standing or as an element of the Sherman Act.

A. Product Market Definition

In assessing the existence of monopoly power, we must begin by identifying the relevant product market. *SCFC ILC, Inc. v. Visa U.S.A., Inc.*, 36 F.3d 958, 966 (10th Cir. 1994). Lenox bears the burden on this issue. *Campfield v. State Farm Mut. Auto Ins. Co.*, 532 F.3d 1111, 1118 (10th Cir. 2008).

The outer bounds of the product market are defined by cross-elasticity of demand, an economic measure of the substitutability of two products. *See Brown Shoe Co. v. United States*, 370 U.S. 294, 325 (1962). This definition involves an issue of fact. *See Telecor Commc'ns, Inc. v. Sw. Bell Tel. Co.*, 305 F.3d 1124, 1131 (10th Cir. 2002) (“It is well settled that defining the relevant market is an issue of fact.”).

The degree of substitutability turns on sensitivity of demand based on price changes for the other item. David N. Hyman, *Microeconomics* 144 (4th ed. 1997). For example, if the demand for margarine increases 200% when the price of butter increases 100%, the cross-elasticity of demand between margarine and butter is 2. A high cross-elasticity of demand indicates that products are substitutes; a low cross-elasticity of demand indicates that the products are not substitutes and, as a result, do not compete in the same market. *See United States v. E. I. du Pont de Nemours & Co.*, 351 U.S. 377, 400 (1956). A relevant product market excludes products with low or zero cross-elasticity of demand. *See Times-Picayune Publ'g Co. v. United States*, 345 U.S. 594, 612 n.31 (1953).

Lenox defines the relevant product market as the surgical bone-mill market, including both hand-cranked and electric-powered bone mills. This definition excludes other tools used to mill bone, such as scalpels and surgical scissors. Medtronic argues that this proposed market definition is too narrow and that the relevant market consists of both bone mills and hand tools such as scalpels and scissors.

The differing definitions create a fact question on the product market, precluding summary judgment. For three reasons, a fact-finder could reasonably conclude that the relevant product market includes bone mills but excludes hand tools: (1) Lenox presented expert testimony that substantial price changes would not lead surgeons to switch from bone mills to hand tools; (2) a substantial price difference exists between hand tools and bone mills; and (3) Medtronic's market literature identifies its competition as other companies' bone mills, not hand tools.

First, Lenox presented expert testimony by a medical expert, Dr. Samuel J. Chewning, Jr.:

- “Surgeons like myself would not select handtools over bone mills even if the price of bone mills increased significantly above the current level — say, even if the price of bone mills doubled.”⁴

⁴ Appellant's App. (unsealed) at 165 ¶ 6.

- Surgeons do not view hand tools as reasonably interchangeable with bone mills.⁵
- Using hand tools is time-consuming and generates inferior output; thus, “no spinal surgeon who regularly practices in the field relies on anything but a bone mill for use in spinal surgery.”⁶

From Dr. Chewning’s testimony, a fact-finder could reasonably infer a low or zero cross-elasticity of demand between hand tools and bone mills. With this inference, a fact-finder could reasonably conclude that the product market does not include hand tools.

Medtronic downplays the reliability of Dr. Chewning’s testimony as “anecdotal” extrapolations from his personal experience, citing *Lantec, Inc. v. Novell, Inc.*, 306 F.3d 1003 (10th Cir. 2002). Appellee’s Response Br. at 23 (Dec. 2, 2013). But the fact-finder could reasonably rely on Dr. Chewning’s testimony.

Dr. Chewning testified that he had become “intimately familiar” with medical devices to morselize bone, as well as the ways that bone mills are marketed. Appellant’s App. (unsealed) at 97. From this testimony, the district court could infer sufficient knowledge to qualify as an expert on purchasing preferences among hospitals for medical devices used to morselize bone.

⁵ Appellant’s App. (unsealed) at 97-98 ¶ 4.

⁶ Appellant’s App. (unsealed) at 97-98 ¶ 4.

Medtronic's reliance on *Lantec, Inc.* is misguided. There, we considered whether the district court had abused its discretion in excluding expert testimony. *Lantec, Inc. v. Novell, Inc.*, 306 F.3d 1003, 1025 (10th Cir. 2002). Here, however, the district court did not exclude Dr. Chewning's opinion testimony or question its admissibility. *See* Appellant's App. (unsealed) at 191-92. Thus, we are not limited by the abuse-of-discretion standard.

Instead, we view Dr. Chewning's affidavit in the light most favorable to Lenox as the party opposing summary judgment. When confronted with this affidavit, Medtronic did not challenge its admissibility. *See* Appellant's App., vol. 2 (sealed) at 630-31. In the absence of such a challenge, we assume the affidavit was admissible for purposes of summary judgment. *See McGarry v. Bd. of Cnty. Comm'rs.*, 175 F.3d 1193, 1200 n.3 (10th Cir. 1999) (“[W]e assume that Cumnock's statements are evidence that would be admissible at trial, as required by Fed. R. Civ. Pro. 56(c), because no objection to the statements' inclusion in McGarry's Opposition to the Board's summary judgment motion was raised.”); *Thrasher v. B & B Chem. Co.*, 2 F.3d 995, 998 (10th Cir. 1993) (holding that an expert affidavit presented by the plaintiff would be considered on appeal of a summary-judgment ruling because the defendant did not move to strike the affidavit from “the summary judgment consideration”).

Second, Lenox presented evidence indicating a substantial difference between the prices for hand tools and bone mills. For example, Dr. Chewning

testified that the cost of hand tools is effectively zero because hospitals already have them for other procedures. Appellant's App. (unsealed) at 164. In contrast, bone mills cost thousands of dollars. See Appellant's App., vol. 1 (sealed) at 251 (testimony that Medtronic's price is \$6250 for its bone mill and ten disposable bowls), 258 (testimony that the average selling price is \$7500 for a bone-mill base), 266, 272, 274 (Medtronic stating that the prices were \$1000 for a console and \$3000 for a base), 276 (Lenox sales data showing \$4500-\$6900 as the sales price per bone mill); Medtronic's Supplemental App. (unsealed) at 132 (showing the suggested retail price of a Stryker bone mill as \$8000); Medtronic's Supplemental App. (sealed) at 305 (stating that the average price paid to Lenox for a bone mill was \$5688).

Our court, like other courts, has held that a substantial price difference can support an inference that the products belong in different markets. See *Bd. of Regents of the Univ. of Okla. v. NCAA*, 707 F.2d 1147, 1158 (10th Cir. 1983) (noting that a 2½ times differential in the price of advertising constitutes evidence that NCAA football is a distinct market), *aff'd*, 468 U.S. 85, 111 (1984); accord *Geneva Pharms. Tech. Corp. v. Barr Labs. Inc.*, 386 F.3d 485, 497 (2d Cir. 2004) (“Here we find a substantial gap in pricing indicative of separate markets.”); *U.S. Anchor Mfg., Inc. v. Rule Indus., Inc.*, 7 F.3d 986, 996 (11th Cir. 1993) (stating that the fact that prices for one product were higher provides evidence “that a distinct group of customers” would not “switch products “in response to price

increases above competitive levels”); *Kaplan v. Burroughs Corp.*, 611 F.2d 286, 292 (9th Cir. 1979) (“[P]rice differential between competing products and services is a relevant factor to consider, though price differential alone does not govern the scope of the relevant market.”).

Medtronic cites one circuit opinion for the proposition that a substantial price difference is not enough to create a jury question on the product market. Appellee’s Response Br. at 26-27 (Dec. 2, 2013) (citing *HDC Med., Inc. v. Minntech Corp.*, 474 F.3d 543, 548-49 (8th Cir. 2007)). But, that decision did not preclude consideration of a price differential as one factor among many bearing on product definition; the court simply held that a price difference was insufficient by itself to create a fact question on the product market. *HDC Med., Inc. v. Minntech Corp.*, 474 F.3d 543, 548-49 (8th Cir. 2007). Indeed, the Supreme Court has held that a substantial price difference, along with other factors, can bear on definition of the product market. *United States v. Aluminum Co. of Am.*, 377 U.S. 271, 277 (1964).

Third, Lenox submitted Medtronic’s marketing literature, which identifies two competing bone mills (but no hand tools) as the “Competition.” Appellant’s App., vol. 2 (sealed) at 576-77.

Medtronic downplays this evidence, arguing that its marketing literature also lists hand tools. That is true. Medtronic’s literature lists “manual preparation” tools when discussing “[p]roblems with current methods.”

Appellant's App., vol. 1 (sealed) at 290, 352, 358; Appellant's App., vol. 2 (sealed) at 575, 578, 582. But, Medtronic's literature does not refer to hand tools as the "competition." That description is used only for bone mills.

The fact-finder could consider Medtronic's marketing literature as evidence that large price increases might lead surgeons to switch to other bone mills, but not to hand tools. *See Spirit Airlines, Inc. v. Nw. Airlines, Inc.*, 431 F.3d 917, 933-34 (6th Cir. 2005) (relying in part on the defendant's internal documents regarding pricing to conclude that business and leisure travel constitute separate markets for purposes of Section 2 of the Sherman Act).

For these three reasons, a fact-finder could reasonably conclude that cross-elasticity of demand of bone mills and hand tools is low or zero, meaning that the products are not substitutes. Thus, a fact-finder could reasonably conclude that the relevant product market consists of bone mills.⁷ On the other hand, a fact-

⁷ At oral argument, defense counsel stated that Medtronic had to lower its prices when another powered bone mill entered the market, but not when manual bone mills entered. Oral Arg. 24:46-26:41. Based on this statement, Medtronic's counsel argued that Lenox had improperly defined the market under its own theory, as the Lenox hand-operated bone mill did not constrain the price of electric bone mills. *Id.*

But Medtronic did not raise this argument in its motion for summary judgment. Even in its appeal brief, Medtronic did not raise the argument. Instead, Medtronic simply stated in a footnote that Lenox's legal theory suggested "that . . . powered bone mills constituted a distinct market," separate from hand-cranked bone mills. Appellee's Resp. Br. at 25 n.6 (Dec. 2, 2013) (emphasis omitted).

With only this passing mention in a footnote of Medtronic's appeal brief

finder might conclude that the relevant product market consists of both hand tools and bone mills, relying on evidence that both can be used to grind bone for spinal surgery. Because both conclusions would be reasonable, the factual dispute on the product market would preclude summary judgment on this issue.

B. Monopoly Power

Lenox must not only identify the product market, but also show monopoly power in that market. *United States v. Grinnell Corp.* 384 U.S. 563, 570-71 (1966). The district court held that Lenox had failed to create a fact question on monopoly power even under its proposed market definition. We disagree. A factfinder could reasonably conclude that Medtronic had monopoly power in the bone-mill market.

The parties agree that “monopoly power” involves two aspects: the power to control prices and the power to exclude competition. The parties disagree, however, about whether the plaintiff must establish one or both of these powers. *Compare Shoppin’ Bag of Pueblo v. Dillon Cos.*, 783 F.2d 159, 162-64 (10th Cir. 1986) (stating that both must be proven), *with Four Corners Nephrology Assocs.*,

and complete omission in its summary judgment brief filed in the district court, we decline to consider Medtronic’s assertion in oral argument that powered mills and hand-cranked mills constitute separate markets. *See Gross v. Burggraf Constr. Co.*, 53 F.3d 1531, 1547 (10th Cir. 1995) (declining to consider a matter presented in oral argument when it was inadequately briefed); *United States v. Williamson*, ___ F.3d ___, 2014 WL 998409, at 4 n.1 (10th Cir. Mar. 17, 2014) (declining to consider an argument presented in oral argument because the Court does not address arguments omitted or inadequately presented in an appellant’s opening brief).

P.C. v. Mercy Med. Ctr. of Durango, 582 F.3d 1216, 1220 (10th Cir. 2009) (“Monopoly power . . . consists of ‘the power to control prices or exclude competition’” (quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966))). For the sake of argument, we can assume that both must be proven.

These powers can be proven through identification of “a relevant product and geographic market,” with a showing that the defendant had a sufficient market share and that new competitors would face significant barriers to entry. *Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1071 (10th Cir. 2013), *cert. denied*, 82 U.S.L.W. 3626 (U.S. Apr. 28, 2014) (No. 13-1042). Lenox has presented sufficient evidence of market share and barriers to entry for a fact-finder to infer that Medtronic had monopoly power in the bone-mill market.

Though market-share percentages bear on the existence of monopoly power, they are not ordinarily conclusive. *See Reazin v. Blue Cross & Blue Shield of Kan., Inc.*, 899 F.2d 951, 968 (10th Cir. 1990) (“We prefer the view that market share percentages may give rise to presumptions, but will rarely conclusively establish or eliminate market or monopoly power.”). When the market-share percentages are viewed favorably to Lenox, they could support a finding of monopoly power.

Lenox’s economic expert testified that in 2007, Medtronic had a 97-98% share of the bone-mill market. Appellant’s App., vol. 1 (sealed) at 249. The

expert added that Medtronic's market share had "dropped somewhat," but had remained "as high as 62 percent" as late as 2010. *Id.* at 250.

Medtronic questions these figures. For example, Medtronic argues that "the undisputed evidence shows that Stryker had captured a third of the disposable bone bill market revenue in the latter half of 2008" Appellee's Response Br. at 30 (Dec. 2, 2013). For this characterization of evidence as "undisputed," Medtronic cites one page (Appellant's App., vol. 1 (sealed) at 344), which is from its own marketing documents. *See* Appellant's App., vol. 1 (sealed) at 221-22. On this page, Medtronic states that its share of bone-mill revenue was 100% throughout 2007 and the first half of 2008. *Id.* at 344. For the third and fourth quarters of 2008, Medtronic refers to its share of market revenues as 76.3% and 65%. *Id.* Other Medtronic literature refers to its market share as 73.6% for the year ending in the first quarter of 2009 and only a 26.4% market share for Stryker during the same period. Appellant's App., vol. 2 (sealed) at 460. Medtronic's reliance on its own marketing literature is neither "undisputed" nor inconsistent with a finding of monopoly power throughout 2007 and 2008.

In addition, Medtronic argues that its 2010 market share was overstated by Lenox. Appellee's Response Br. at 30 (Dec. 2, 2013). For this argument, Medtronic relies on a page from its own summary judgment brief. *Id.* There, Medtronic compares the number of disposable units it sold in 2010 by the sum of disposable units sold in 2010 by both Medtronic and Stryker. *Id.*; *see* Appellant's

App., vol. 1 (sealed) at 423. This reference shows Medtronic's calculation of market share,⁸ not Lenox's.

A fact-finder could reasonably consider a 97-98% or 62% market share as evidence of monopoly power. *See Reazin v. Blue Cross & Blue Shield of Kan., Inc.*, 899 F.2d 951, 969-70 (10th Cir. 1990) (holding that evidence of monopoly power was sufficient when the defendant had a market share between 47% and 62%); *accord Arthur S. Langenderfer, Inc. v. S.E. Johnson Co.*, 917 F.2d 1413, 1443-44 (6th Cir. 1990) (holding that an average market share of 58% was sufficient, along with other factors, to support a finding of monopoly power).

Medtronic not only presents evidence of a lower market share, but also questions the durability of its alleged market dominance. Market power is meaningful only if it is durable. *See Reazin v. Blue Cross & Blue Shield of Kan., Inc.*, 899 F.2d at 968 (“[M]arket power, to be meaningful for antitrust purposes, must be durable.”); *see also* IIB Phillip E. Areeda, Herbert Hovenkamp, & John L. Solow, *Antitrust Law* ¶ 506d, at 128 (2d ed. 2002) (“The ability profitably to charge a supracompetitive price indicates market power, but transitory power may

⁸ In its response brief, Medtronic refers to Lenox's figure as 63.3% of market revenues, but does not explain how it derived this figure from the chart that it cited (at Appellant's App., vol. 1 (sealed) at 423). This chart includes Medtronic's data regarding the number of disposable units sold by Medtronic and Stryker. *Id.* From this chart, one could calculate Medtronic's share of disposable units sold (not revenue) at 58%, not 63.3%. But Lenox's economic expert calculated Medtronic's market share in 2010 as 62% (not 63.3%) of revenues (not units sold) for all bone-mill manufacturers. Appellant's App., vol. 1 (sealed) at 250, 257.

safely be ignored by antitrust law.”). We conclude that durability involves a fact question for the jury.

From Lenox’s evidence, a fact-finder could reasonably conclude that Medtronic’s market domination was durable. Lenox’s evidence showed a four-year period in which Medtronic had 62% to 97-98% of the bone-mill market. Viewing the evidence favorably to Lenox, a fact-finder could reasonably infer that Medtronic’s market dominance was sufficient to impede competition between 2007 and 2010.

Though Medtronic’s market share could support a finding of monopoly power, we must also consider barriers to entry, which are characteristics of the market impeding new entries. *See Reazin v. Blue Cross & Blue Shield of Kan., Inc.*, 899 F.2d at 967-68; *Novell, Inc. v. Microsoft Corp.*, 731 F.3d 1064, 1071 (10th Cir. 2013), *cert. denied*, 82 U.S.L.W. 3626 (U.S. Apr. 28, 2014) (No. 13-1042). On the issue of entry barriers, Lenox has created a genuine fact question through expert testimony on economics and design of medical devices.

Lenox’s economic expert opined that significant barriers to entry had existed in the bone-mill market, including: (1) the need to develop and research the product, (2) comply with FDA rules, (3) develop a sales channel, and (4) overcome existing relationships between market incumbents and large-scale purchasers. Appellant’s App., vol. 1 (sealed) at 252.

Lenox also presented sworn testimony by a designer and engineer of medical devices. Appellant's App. (unsealed) at 172-74. This expert testified about the significance of five barriers to new entry into the bone-mill market:

- the necessity of a design and development phase,
- the need to find a manufacturer offering sufficient reliability at attractive prices,
- the need to make a name for oneself among influential surgeons,
- the need to build and supervise a distribution channel, and
- the need to overcome powerful bundling tactics employed by existing competitors in the sale of medical devices.

Id.

From the testimony of Lenox's experts on economics and design of medical devices, a fact-finder could infer the existence of significant barriers to entry in the bone-mill market. These barriers, combined with Medtronic's market share of 62 to 97-98% (from 2007 to 2010), could lead a reasonable fact-finder to infer monopoly power.

Medtronic argues that Lenox's own entry into the bone-mill market shows that entry was neither time-consuming nor costly. But we measure entry barriers for new entrants, not incumbents. *See Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1439 (9th Cir. 1995). To measure the barriers for new entrants, we must view the evidence in the light most favorable to Lenox. Viewing the evidence in

this manner, the fact-finder could infer significant barriers to entry for companies wanting to compete in the bone-mill market.

One competitor, Stryker, broke through the entry barriers. The district court viewed Stryker's success as indisputable proof that barriers to entry were insignificant. We disagree. A single competitor's breakthrough does not preclude a finding of significant barriers to entry. *See Rebel Oil Co. v. Atl. Richfield Co.*, 51 F.3d 1421, 1440 (9th Cir. 1995) ("The fact that entry has occurred does not necessarily preclude the existence of 'significant' entry barriers."); IIB Phillip E. Areeda, Herbert Hovenkamp, & John L. Solow, *Antitrust Law* ¶ 422e, at 99 (3d ed. 2007) ("a single instance of entry over recent years need not show low barriers"); *see also Multistate Legal Studies, Inc. v. Harcourt Brace Jovanovich Legal & Prof'l. Publ'ns, Inc.*, 63 F.3d 1540, 1555-56 (10th Cir. 1995) (holding that the plaintiff's evidence of entry barriers, showing that two of three attempted entries into the market were "largely unsuccessful," would preclude summary judgment to the defendant on a claim of attempted monopolization).

From Lenox's evidence, the fact-finder could regard Stryker as an atypical competitor, for it enjoyed three attributes—an existing distribution network, credibility among institutional buyers, and a vast supply of capital to invest in a market generating limited revenues—that provided a competitive edge uniquely suited to the bone-mill market.

When entering the bone-mill market, Stryker was already a major manufacturer of medical devices. As a result, it had a ready-made distribution network and an existing reputation among hospital purchasers. Appellant's App. (unsealed) at 173-74; Appellant's App., vol. 1 (sealed) at 252. Both proved beneficial because other competitors would have experienced difficulty in overcoming entrenched buyer preferences and the absence of a reputation in the industry. *See Image Tech. Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1208 (9th Cir. 1997) (stating that "entrenched buyer preferences" are common entry barriers); *Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery*, 185 F.3d 606, 623 (6th Cir. 1999) ("[E]stablishing credibility naturally seems to be a significant barrier to entry, particularly for an enterprise that depends heavily upon reputation, such as certification of medical specialists.").

The fact-finder could also infer that Stryker had ample financial resources to take advantage of its existing distribution network and established credibility among medical purchasers. With these resources, Stryker was able and willing to spend roughly \$1.5 million to develop its bone mill. Appellant's App. (unsealed) at 144. A fact-finder could view this investment as unique because the entire bone-mill market produced only about \$7-8 million in revenue. *See Reazin v. Blue Cross & Blue Shield of Kan., Inc.*, 899 F.2d 951, 968 (10th Cir. 1990) ("Entry barriers may include high capital costs . . ."); Appellant's App., vol. 1

(sealed) at 344 (Medtronic literature showing 2008 revenues for 4 disposable bone mills as \$7,806,000).

Stryker's entry into the bone-mill market would not preclude the jury from finding significant barriers to entry in the bone-mill market. Notwithstanding Stryker's successful entry, a fact-finder could reasonably infer that Medtronic had monopoly power in the bone-mill market from 2007 to 2010 based on its high market share and the presence of barriers to entry. Thus, Medtronic is not entitled to summary judgment on the issue of monopoly power.

C. Exclusionary Conduct

Lenox must show not only monopoly power, but also anticompetitive conduct. *Christy Sports, LLC v. Deer Valley Resort Co., Ltd.*, 555 F.3d 1188, 1192 (10th Cir. 2009). On the existence of anticompetitive conduct, the district court held that Lenox had failed to create a fact question, reasoning that Lenox demonstrated injury to itself but not to the competitive market. In articulating this reasoning, the district court analyzed Medtronic's conduct under a six-factor test for trade disparagement. Medtronic urges us to do the same. But even if we were to apply this test, Lenox has presented sufficient evidence for a fact-finder to infer anticompetitive conduct.

1. Analysis Under the Test for Trade Disparagement

Lenox alleges that Medtronic engaged in anticompetitive conduct by: (1) telling potential customers that the Lenox mill was dangerous, and (2) helping to

initiate a recall. The district court treated these allegations as involving trade disparagement rather than general anticompetitive conduct.

Lenox contends that Medtronic's conduct extended beyond trade disparagement into a comprehensive scheme of exclusionary conduct. Thus, Lenox urges us to apply the less stringent test, which does not presume a *de minimis* effect on competition. We need not decide which test applies because Lenox has demonstrated a fact question regarding anticompetitive conduct under the more stringent trade-disparagement test.

This test presumes that trade disparagement bears only a *de minimis* effect on competition. *E.g.*, *Nat'l Ass'n of Pharm. Mfrs., Inc. v. Ayerst Labs.*, 850 F.2d 904, 916 (2d Cir. 1988); *Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc.*, 323 F.3d 366, 371 (6th Cir. 2003). A Section 2 plaintiff may rebut this presumption by satisfying a six-factor test, showing that the disparagement was: (1) clearly false, (2) clearly material, (3) clearly likely to induce reasonable reliance, (4) made to buyers without knowledge of the subject matter, (5) continued for prolonged periods, and (6) not readily susceptible to neutralization or other offset by rivals. *E.g.*, *Am. Prof'l Testing Serv., Inc.*, 108 F.3d at 1152.

The district court held that Lenox could satisfy the first three factors, and Medtronic supplies no reason to disturb that portion of the district court's

conclusion. We also conclude that Lenox presented sufficient evidence for a favorable finding on the last three factors.

Factor 4 requires Lenox to demonstrate that Medtronic made false statements to buyers without knowledge of the subject matter. In analyzing this factor, the district court noted that hospitals and hospital purchasing groups are “sophisticated consumers.” Appellant’s App. (unsealed) at 197. But Lenox presented evidence that even sophisticated consumers would rely on Medtronic’s false statements. And Lenox’s medical expert opined that “hospitals are extremely hesitant to acquire a product that has been the subject of a product recall” when they have a choice among competing products. *Id.* at 99. From this evidence, a fact-finder could reasonably infer that Medtronic made its representations to hospital buyers who would not have known whether the bone mills were dangerous.

Factor 5 requires Lenox to show that the materially false statements continued for prolonged periods. To make this showing, Lenox’s president submitted a declaration stating that “the Lenox bone mill remains on the FDA website for recalled products and the hospitals find the taint of a prior recall—regardless of its validity—to be too much of a liability risk to justify the purchase and use of a Lenox bone mill.” *Id.* at 184. From this declaration, a fact-finder could reasonably conclude that Medtronic’s false statements affected demand for a prolonged period.

Factor 6 requires Lenox to show that it could not readily neutralize the disparaging statements. To make this showing, Lenox presented testimony from its medical expert and company president. Both witnesses opined that because of worries involving malpractice liability, hospitals are unwilling to purchase bone mills that have been recalled. *Id.* at 99, 184. From this testimony, a fact-finder could reasonably infer that Lenox could not have neutralized the effects of the recall: Once the bone mill appeared on the FDA’s recall list, it became too risky because of the threat of malpractice liability.

Lenox has presented sufficient evidence to create a question of material fact on each prong of the trade-disparagement test.⁹ Thus, a fact-finder could reasonably infer that Lenox rebutted the presumption of a *de minimis* impact on competition.

2. Medtronic Sofamor Danek USA’s Role

Medtronic also challenges Lenox’s reliance on the recall, stating that it was instigated by Medtronic Sofamor Danek USA and that this entity is not a party in the present case. In earlier litigation, Lenox had sued Medtronic Sofamor Danek USA for breach of contract. This entity sought to intervene in the present case, but Lenox successfully objected. According to Medtronic, Lenox represented that

⁹ We need not determine whether a plaintiff must satisfy all six factors to overcome the *de minimis* presumption. *See Am. Council of Certified Podiatric Physicians & Surgeons v. Am. Bd. of Podiatric Surgery, Inc.*, 323 F.3d 366, 371 (6th Cir. 2003) (declining to consider whether each factor must be met).

the prior litigation “was ‘utterly collateral’ to this case.” Appellant’s App. (unsealed) at 188 (district court’s order).

Plaintiff’s counsel argued to the district court that: (1) in the antitrust case, Lenox is focusing on exclusionary conduct by PS Medical, not Medtronic Sofamor Danek USA, and (2) the prior litigation had involved “different facts, claims, parties, and damages” Appellee’s Supplemental App. (unsealed) at 94, 156. Lenox’s present theory is consistent with the representations made to the district judge.

Medtronic appears to assume that the present defendants—Medtronic, Inc., Medtronic Sofamor Danek, Inc., Medtronic PS Medical, Inc., and Medtronic Sofamor Danek Co., Ltd.—had no role in the recall. But, Medtronic does not expressly advance this argument, and we doubt that it could: On January 4, 2012, the district court directed the parties to focus discovery on market share; then the court prohibited further discovery in November 2012. Appellant’s App. (unsealed) at 156; Mots. Hearing Tr. at 14-15 (Nov. 14, 2012). The district court could not have required evidence regarding the role of the affiliated companies in the recall when Medtronic lacked an opportunity to conduct discovery on the issue. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 257 (1986).

Though Medtronic assumes that Medtronic Sofamor Danek USA is solely responsible for the recall, the defendants do not defend the summary judgment ruling on this ground and their roles were not subject to discovery. As a result,

Medtronic cannot salvage the summary judgment ruling based on its assumption that none of the present defendants played a role in the recall.

3. Our Prior Opinion

Lenox represented to a prior panel that it was not alleging concerted action between the four Medtronic defendants and Medtronic Sofamor Danek USA. Appellee's Br. at 25, *Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, Case No. 11-1251 (10th Cir. Aug. 3, 2011); *see* Oral Arg. 17:47-18:38. In oral argument, the Medtronic defendants contended that this representation was fatal because: (1) the prior panel had held that the present claims require proof of cooperation between Medtronic Sofamor Danek USA and the four Medtronic defendants, and (2) without Medtronic Sofamor Danek USA's conduct, there would be no evidence of coordination between MSD Japan and Medtronic PS Medical. Oral Arg. 20:27-23:07. We disagree.

The Medtronic defendants err in characterizing the prior panel's holding. The prior panel simply held that Lenox did not need to arbitrate its claims for monopolization and attempted monopolization. *Lenox MacLaren Surgical Corp. v. Medtronic, Inc.*, 449 F. App'x 704, 710-11 (10th Cir. 2011). For this holding, the panel reasoned that the antitrust claims had not been founded in or intertwined with the contract between Lenox and Medtronic Sofamor Danek USA. *Id.* at 710. The antitrust claims were based on actions by the four Medtronic defendants, not Medtronic Sofamor Danek USA: "What matters is whether the Medtronic

defendants used the recall as a way to clear the market of [Lenox's] bone mill so Medtronic PS Medical could substitute its own bone mill." *Id.*

Focusing on the conduct of the four Medtronic defendants, the prior panel did not say that the monopolization and attempted monopolization claims could succeed only with proof of collusion with Medtronic Sofamor Danek USA. Instead, the panel correctly pointed to the need to prove exclusionary conduct by the entities being sued. Their conduct was either exclusionary or it was not. If the conduct was exclusionary, there would be no need to prove complicity by Medtronic Sofamor Danek USA. As a result, we reject the contentions by defense counsel in oral argument.

D. Harm to Competition

The district court concluded that Lenox had not shown harm to competition. Appellant's App. (unsealed) at 195, 198. For this conclusion, the district court relied on the availability of other bone mills. *Id.* at 196. Notwithstanding evidence of other bone mills, a fact-finder could reasonably have inferred harm to competition.

This inference was possible in part because Lenox presented evidence that from 2007 to 2010: (1) Medtronic was able to charge supracompetitive prices, and (2) other bone mills remained insubstantial. Lenox's economic expert stated under oath that by eliminating Lenox from the market, Medtronic raised the price of spinal surgeries. Appellant's App., vol. 1 (sealed) at 253-56.

Medtronic pointed to continued sales by Biomet and Tracer, two competitors, but Lenox's evidence indicated that these two companies had accounted for only about 2% of the market in 2007. *See id.* at 340-41, 344, 413-33; Appellant's App., vol. 2 (sealed) at 447, 462.

Unlike Bryant and Tracer, Stryker did emerge as a significant competitor. But the fact-finder could infer harm to competition from concentration of the market in Medtronic and Stryker. *See LePage's Inc. v. 3M (Minn. Mining & Mfg. Co.)*, 324 F.3d 141, 159 (3d Cir. 2003) (en banc) (stating that foreclosure of even a single significant competitor can lead to higher prices and reduced output); *Conwood Co. v. U.S. Tobacco Co.*, 290 F.3d 768, 790 (6th Cir. 2002) (holding that evidence of injury to competition was sufficient when the plaintiff presented evidence that two of the three other manufacturers grew more slowly than they otherwise would have).

VI. Claim of Attempted Monopolization

Lenox also claims attempted monopolization under § 2 of the Sherman Act. This claim involves three elements:

- predatory or anticompetitive conduct,
- a specific intent to monopolize, and
- a dangerous probability of achieving monopoly power.

See Christy Sports, LLC v. Deer Valley Resort Co., 555 F.3d 1188, 1192 (10th Cir. 2009). Each element could be decided favorably to Lenox.

We have elsewhere concluded that the fact-finder could reasonably infer monopoly power and exclusionary conduct. With these inferences, the jury could also find an intent to monopolize. *See M & M Med. Supplies & Serv., Inc. v. Pleasant Valley Hosp., Inc.*, 981 F.2d 160, 166 (4th Cir. 1992) (“Specific intent may be inferred from the defendant’s anticompetitive practices.”); *Gen. Indus. Corp. v. Hartz Mountain Corp.*, 810 F.2d 795, 802 (8th Cir. 1987) (“Specific intent need not be proven by direct evidence, but can be inferred from the defendant’s anticompetitive practices or other proof of unlawful conduct.”); *Volvo North America Corp. v. Men’s Int’l. Prof’l. Tennis Council*, 857 F.2d 55, 74 (2d Cir. 1988) (stating that specific intent to monopolize can be inferred from proof of “anticompetitive or exclusionary conduct”); *Penn. Dental Ass’n v. Med. Serv. Ass’n of Penn.*, 745 F.2d 248, 261 (3d Cir. 1984) (“Direct evidence of specific intent . . . may be inferred from predatory or exclusionary conduct.”). Thus, Lenox presented sufficient evidence to survive summary judgment not only on its claim of actual monopolization, but also on its claim of attempted monopolization. *See E.I. du Pont de Nemours & Co. v. Kolon Indus., Inc.*, 637 F.3d 435, 453 (4th Cir. 2011) (“Given that we held above that [the plaintiff] pled actual monopolization, we can reach no conclusion other than that [the plaintiff] adequately pled a dangerous probability of success as to [the defendant’s] attempted monopolization.”).

VII. Conclusion

Lenox has presented sufficient evidence to support a finding on each element of its Section 2 claim for actual monopolization: monopoly power in the relevant product market, exclusionary conduct, and harm to competition. Thus, fact questions also exist on Lenox's claim of attempted monopolization. These disputes of material fact preclude summary judgment to Medtronic. In these circumstances, we reverse the district court's grant of summary judgment to Medtronic and remand for further proceedings.