UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF NEW YORK

ANGIODYNAMICS, INC.,

Plaintiff, 1:17-cv-00598 (BKS/CFH)

v.

C.R. BARD, INC. and BARD ACCESS SYSTEMS, INC.,

Defendants.

Appearances:

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Hon. Brenda K. Sannes, United States District Judge:

MEMORANDUM-DECISION AND ORDER

I. INTRODUCTION

Plaintiff AngioDynamics, Inc. ("AngioDynamics") brings this antitrust action against Defendants C.R. Bard, Inc. and Bard Access Systems, Inc. (collectively, "Bard"), asserting a claim of illegal tying in violation of section 1 of the Sherman Act (codified at 15 U.S.C. § 1) under "per se" and "rule of reason" theories of liability. (Dkt. No. 1). AngioDynamics seeks treble damages, a permanent injunction, and declaratory relief. (*Id.* at 29). Presently before the Court are: (1) AngioDynamics' motion for partial summary judgment on liability and antitrust injury, (Dkt. No. 134); (2) Bard's motion for summary judgment seeking dismissal of the complaint, (Dkt. No. 133); and (3) Bard's motion in limine to preclude the trial testimony of AngioDynamics' causation and damages expert, Dr. Alan Frankel, (Dkt. No. 132). The Court heard oral argument on the motions on April 6, 2021. For the reasons below, both parties' motions for summary judgment are denied, and Bard's motion in limine is granted.

II. FACTS[1]

This case centers on AngioDynamics' claim that Bard's policy of only selling the proprietary stylet for its Tip Location System ("TLS") preloaded into its own peripherally inserted central catheters ("PICCs"), and refusing to sell its TLS stylet separately for use with its competitors' PICCs, constitutes an illegal tie in violation of the Sherman Act. The facts and evidence relevant to the Court's resolution of the pending motions are summarized below.

[1] The following facts are drawn from the parties' statements of undisputed material facts and responses pursuant to Local Rule 56.1 (formerly Local Rule 7.1(a)(3)), (Dkt. Nos. 133-2, 134-2, 144-1, 146), to the extent those facts are well-supported by pinpoint citations to the record, as well as the exhibits attached thereto and cited therein to the extent they could "be presented in a form that would be admissible in evidence" at trial. Fed. R. Civ. P. 56(c)(2). In considering the parties' cross-motions for summary judgment, the Court "in each case construe[s] the evidence in the light most favorable to the non-moving party." *Krauss v. Oxford Health Plans, Inc.*, 517 F.3d 614, 621-22 (2d Cir. 2008).

A. Background on PICCs and TLSs

1. PICC and TLS Technology

Bard and AngioDynamics compete to develop, manufacture, market, and sell vascular access medical devices, including PICCs, to hospitals and other medical care providers. (Dkt. No. 133-2, ¶¶ 1-2; Dkt. No. 134-2, ¶ 1; Dkt. No. 144-1, ¶¶ 1-2; Dkt. No. 146, ¶ 1). PICCs are long, thin, soft, flexible catheters inserted into the body through a vein, most commonly the basilica vein in the upper arm, and navigated to the distal superior vena cava, the large vein leading to the right atrium of the heart. (Dkt. No. 133-2, ¶¶ 3-4; Dkt. No. 134-2, ¶ 2; Dkt. No. 144-1, ¶¶ 3-4; Dkt. No. 146, ¶ 2). Clinicians use PICCs to deliver medications, fluids, and nutrients into a patient's body, sample blood, and power-inject contrast media. (Dkt. No. 133-2, ¶ 3; Dkt. No. 134-2, ¶ 3; Dkt. No. 144-1, ¶ 3; Dkt. No. 146, ¶ 3). PICCs are generally suited for patients requiring long-term intravenous medical treatment. (Dkt. No. 134-2, ¶ 3; Dkt. No. 146, ¶ 3). PICCs can be placed either at a patient's bedside by a nurse or in an interventional radiology ("IR") suite, usually by a physician. (Dkt. No. 134-2, ¶ 14; Dkt. No. 146, ¶ 14).

During placement of a PICC, clinicians often use a guidewire (also known as a "stylet") inside the PICC to stiffen it so that it can be threaded through the patient's veins. (Dkt. No. 133-2, ¶ 5; Dkt. No. 144-1, ¶ 5). After completing the PICC placement procedure, the clinician will remove the stylet from the PICC and discard it. (Dkt. No. 133-2, ¶ 5; Dkt. No. 144-1, ¶ 5). Because there are several places where a patient's veins branch before reaching the superior vena cava, clinicians sometimes route PICCs incorrectly. (Dkt. No. 133-2, ¶ 6; Dkt. No. 144-1, ¶ 6). In addition, sometimes clinicians get the final placement incorrect. (Dkt. No. 133-2, ¶ 7; Dkt. No. 144-1, ¶ 7). Historically, clinicians used a chest x-ray or fluoroscopy (a medical imaging technique that uses x-rays) to confirm that a PICCs' final placement was correct. (Dkt. No. 133-2, ¶¶ 7, 12; Dkt. No. 134-2, ¶ 10; Dkt. No. 144-1, ¶¶ 7, 12; Dkt. No. 146, ¶ 10).

To assist with the PICC navigation process and minimize the complications associated with incorrect PICC placement, certain companies developed TLSs. (Dkt. No. 133-2, ¶ 8; Dkt. No. 144-1, ¶ 8). TLSs can offer two key functions: pinpointing the location of the stylet as it moves through the body ("navigation") and confirming the PICC's location once it has been placed ("confirmation"). (Dkt. No. 133-2, ¶ 8; Dkt. No. 144-1, ¶ 8). A TLS may feature navigation functionality, confirmation functionality, or both. (Dkt. No. 133-2, ¶ 9; Dkt. No. 144-1, ¶ 9). Navigation technology uses magnetic tracking or Doppler technology to provide information regarding directionality of the PICC as it moves through the patient's veins, assisting clinicians in threading the PICC. (Dkt. No. 133-2, ¶ 10; Dkt. No. 134-2, ¶ 13; Dkt. No. 144-1, ¶ 10; Dkt. No. 146, ¶ 13). Confirmation technology enables a clinician to confirm the final location of the PICC within the superior vena cava using a patient's electrocardiographic ("ECG") waveform. (Dkt. No. 133-2, ¶ 11; Dkt. No. 134-2, ¶ 11; Dkt. No. 144-1, ¶ 11; Dkt. No. 146, ¶ 11).

While many clinicians now use TLSs to place PICCs because doing so is less expensive, less time consuming, and more accurate than placing PICCs without TLSs, not all clinicians use TLSs. (Dkt. No. 133-2, ¶ 12; Dkt. No. 134-2, ¶ 10; Dkt. No. 144-1, ¶ 12; Dkt. No. 146, ¶ 10). For example, physicians placing PICCs in an IR suite still typically use fluoroscopy, rather than a TLS, to confirm PICC placement. (Dkt. No. 133-2, ¶ 12; Dkt. No. 134-2, ¶ 16; Dkt. No. 144-1, ¶ 12; Dkt. No. 146, ¶ 16). There are also some hospitals in which nurses continue to place PICCs without navigation assistance or use chest x-rays rather than TLSs for confirmation. (Dkt. No. 133-2, ¶ 12; Dkt. No. 134-2, ¶ 17; Dkt. No. 144-1, ¶ 12; Dkt. No. 146, ¶ 17). However, a majority of PICCs placed by nurses at a patient's bedside use TLSs with navigation capabilities. (Dkt. No. 133-2, ¶ 12; Dkt. No. 134-2, ¶ 17; Dkt. No. 144-1, ¶ 12; Dkt. No. 146, ¶ 17).

2. PICC Purchasing Decisions

PICCs differ from each other in a variety of ways, including with respect to the material they are made from, the number of lumens (tubes or channels), the outside diameter, whether the PICC is valved (which can help prevent the backflow of blood into the PICC) or non-valved, and whether the PICC is preloaded with a TLS stylet. (Dkt. No. 133-2, ¶ 13; Dkt. No. 144-1, ¶ 13). Manufacturers typically sell PICCs in a kit that also contains various accessories, which vary depending on, among other things, whether the PICC will be placed by a nurse at the patient's bedside or by a physician in an IR suite. (Dkt. No. 133-2, ¶¶ 14-15; Dkt. No. 144-1, ¶¶ 14-15).

The process by which hospitals decide whether to purchase a particular manufacturer's PICC is "complex," "not monolithic" and "varies by hospital." (Dkt. No. 133-2, ¶¶ 15-17; Dkt. No. 144-1, ¶¶ 15-17). Depending on the hospital, various constituencies may be involved in the purchasing decision, including doctors, nurses and representatives from the supply chain, risk management and infection control departments. (Dkt. No. 133-2, ¶ 15). In some cases, hospitals have "value analysis committees," or "VACs," which play a role in the procurement process and consist of representatives from various hospital departments. (*Id.*). Some hospitals are part of Group Purchasing Organizations ("GPOs") or Integrated Delivery Networks ("IDNs"), which negotiate pricing for their member hospitals and have played an increasingly larger role in influencing the purchasing decisions of their member hospitals. (Dkt. No. 133-2, ¶ 16).

Hospitals consider a variety of factors when deciding whether to purchase PICCs, or particular types of PICCs, from a given supplier, including, among other things, price, quality of the PICCs, clinical outcomes, safety, PICC functionality and features (including whether they are preloaded with a TLS stylet or not, whether they are valved or not, and whether they have a flare-tip or small diameter, among other factors), the components of the kit in which the PICCs come (or the potential kit options), the breadth of a manufacturer's product portfolio, the benefits

of dealing with a single vendor for multiple products, the manufacturer's clinical team and training and customer support, and the requirements of GPO and IDN contracts. (Dkt. No. 133-2, ¶ 17). Different hospitals may weigh and prioritize these factors differently, depending on their particular needs and concerns. (Dkt. No. 144-1, ¶¶ 15-17).

B. Relevant Competitors and their Key Products

Several companies compete in the sale of PICCs. The three largest competitors, in terms of market share, are Bard, AngioDynamics, and Teleflex Incorporated ("Teleflex"). (Dkt. No. 133-2, ¶ 21; Dkt. No. 144-1, ¶ 21). These competitors' products that are most relevant to this litigation are described below.

1. AngioDynamics' BioFlo PICCs

In 2012, AngioDynamics began selling PICCs known as BioFlo PICCs after acquiring the technology from another company. (Dkt. No. 133-2, ¶ 33; Dkt. No. 144-1, ¶ 33). BioFlo PICCs are the first PICCs in the market to use Endexo Technology, a technology designed to reduce thrombus accumulation (blood clots). (Dkt. No. 134-2, ¶ 4; Dkt. No. 146, ¶ 6). Thrombus accumulation is a common problem associated with PICC placement that can lead to serious complications such as deep vein thrombosis ("DVT") and pulmonary embolism ("PE"). (Dkt. No. 134-2, ¶¶ 5-6; Dkt. No. 146, ¶¶ 5-6). The parties dispute whether the clinical evidence and published literature establishes that BioFlo is actually effective at reducing thrombus accumulation and its resulting complications, with both parties citing record evidence in support of their respective positions. (Dkt. No. 133-2, ¶¶ 34-36; Dkt. No. 134-2, ¶¶ 4, 7; Dkt. No. 144-1, ¶¶ 34-36; Dkt. No. 146, ¶¶ 4, 7).

Bard has spent significant time, money and energy working to develop a PICC with an anti-thrombus coating, including with Endexo Technology, but has been unsuccessful. (Dkt. No. 134-2, ¶ 8; Dkt. No. 146, ¶ 8). Bard claims, however, that its FT PICC, which has a taper with a

smaller diameter at the axillary arch in the arm vein where the majority of DVTs occur, has proven effective at reducing DVT rates. (Dkt. No. 146, ¶ 8).

2. Bard's TLS

Bard sells PICCs under several brand names, has been selling PICCs for decades, and sells the majority of PICCs in the U.S. (Dkt. No. 133-2, ¶ 22; Dkt. No. 144-1, ¶ 22). In 2006, Bard became the first company to develop a TLS with navigation technology, which it called the Sherlock tip navigation system. (Dkt. No. 133-2, ¶ 24; Dkt. No. 144-1, ¶ 24). In 2011, Bard received FDA approval for a tip confirmation system called Sapiens. (Dkt. No. 133-2, ¶ 24; Dkt. No. 144-1, ¶ 24). Then, in 2012, Bard launched the Sherlock 3CG TLS, which included both navigation and confirmation capabilities. (Dkt. No. 133-2, ¶ 24; Dkt. No. 144-1, ¶ 24). Bard's Sherlock 3CG system, which only works with Bard's special, patented proprietary stylet, is the first and only TLS to combine three technologies: (i) ultrasound technology to identify a suitable vein for inserting the PICC;[2] (ii) magnetic tracking navigation technology to monitor and guide the PICC through the venous system; and (iii) ECG technology to confirm the final location of the PICC's tip in the superior vena cava. (Dkt. No. 133-2, ¶¶ 25-26; Dkt. No. 134-2, ¶ 21; Dkt. No. 144-1, ¶¶ 25-26; Dkt. No. 146, ¶ 21).

Bard only sells its proprietary stylet pre-loaded into its PICCs; it does not sell the stylet "single sterile," i.e. as a standalone product that can be loaded into a different company's PICCs by a nurse or other medical professional at the patient's bedside. (Dkt. No. 133-2, ¶¶ 26-27, 30; Dkt. No. 134-2, ¶¶ 22-23; Dkt. No. 144-1, ¶¶ 26-27, 30; Dkt. No. 146, ¶¶ 22-23). As a result, a customer who wishes to use Bard's TLS can *only* do so by purchasing the stylet preloaded into a

[2] While Bard's TLS system combines ultrasound with navigation and confirmation technology, "ultrasound is universally available," "there are many [ultrasound systems] in the market," and a hospital can use any ultrasound system, including Bard's or another company's, in conjunction with Bard's TLS. (Dkt. No. 146, ¶ 21).

Bard PICC; there is no option to purchase a Bard TLS separately and combine it with a competitor's PICC. (Dkt. No. 133-2, ¶ 30; Dkt. No. 134-2, ¶ 22; Dkt. No. 144-1, ¶ 30; Dkt. No. 146, ¶ 22). To date, Bard has only made a single exception to its TLS policy: sales of a standalone stylet for a limited time to Cleveland Clinic, the circumstances of which are discussed further below in Section II.E.5.a *infra*. (Dkt. No. 133-2, ¶ 30; Dkt. No. 134-2, ¶ 23; Dkt. No. 144-1, ¶ 30; Dkt. No. 146, ¶ 23). While Bard does not sell its TLS stylets separately from its PICCs, it does sell its PICCs separately from its stylets and acknowledges that certain customers combine its PICCs with other companies' TLSs, though it does not expressly "condone the use of an alternative stylet with [its PICCs]." (Dkt. No. 134-2, ¶ 24; Dkt. No. 146, ¶ 24).

Bard executives' stated justification for its TLS policy is that loading Bard's TLS stylet into a PICC at a patient's bedside increases the risk of stylet breakage, serious patient injury, contamination of the sterile field and resulting patient infection. (Dkt. No. 133-2, ¶ 28). However, AngioDynamics challenges this justification, citing to analyses by several of its experts disputing that there is a clinical benefit to preloading a TLS stylet or an increased risk from loading the stylet bedside. (Dkt. No. 144-1, ¶ 28). Bard also claims that it designed its TLS stylet to be preloaded into its PICCs by trained operators in its manufacturing facilities and not by nurses at a patient's bedside, but AngioDynamics disputes this, noting that Bard has FDA approval to sell its TLS stylet single-sterile for bedside insertion, which it obtained in connection with its decision to sell Cleveland Clinic a single-sterile stylet. (Dkt. No. 133-2, ¶ 29; Dkt. No. 144-1, ¶ 29).

According to AngioDynamics, aside from Bard's sales of a single-sterile stylet to Cleveland Clinic, Bard "took steps to hide the fact that it had FDA approval to sell its stylet single sterile and attempted to block customers from ordering the stylet single sterile"; Bard

disagrees with this characterization, and justifies its actions by claiming that Bard "did not want to release false information to the market by suggesting that the product was available to the market broadly when in fact it was not." (Dkt. No. 133-2, ¶ 39; Dkt. No. 146, ¶ 39).

AngioDynamics cites to the following record evidence:

- A Bard executive wrote to team members, "Fucking A. Keep on down low!" when referring to Bard's application to the FDA to sell its TLS stylet as a standalone product. (Dkt. No. 138-12, at 2).

- A Bard vice president told others at Bard that Bard's decision to make the standalone stylet available to Cleveland Clinic was "top secret[.]" (Dkt. No. 138-13, at 2).

- A Bard product manager instructed Bard employees to keep any product information about the standalone TLS stylet "private as much as possible," explaining that "[w]e don't want to publicize that we offer a standalone Sherlock 3CG option to the masses." (Dkt. No. 138-14, at 3).

- When Bard's corporate representative was asked why Bard did not want to publicize the standalone option to the masses, he testified that Bard "would not have wanted to create demand for it." (Dkt. No. 138-15, at 8). He also testified that Bard did not want to publicize the "one-off experiment with the Cleveland Clinic" because "the only reason it worked for Cleveland was because we fully understood that risk and we had a complete connectivity with the clinical management in a hospital that satisfied us we could on-board this safely," and that Bard did not want to "promot[e] something when it was a limited market release." (Dkt. No. 147-16, at 22-23).

- The ordering information for Bard's standalone TLS stylet was not available on Bard's computer ordering system. (Dkt. No. 138-2, at 4).

- A Bard PICC Product Manager instructed that the product code for Bard's standalone TLS stylet "should remain 'invisible' to all of our customers" except for Cleveland Clinic and "should not be published in any pricing catalogs, online, etc." (Dkt. No. 138-18, at 2).

3. AngioDynamics' Attempts to Acquire a TLS

Since at least 2011, AngioDynamics has attempted to develop or acquire a TLS. (Dkt. No. 133-2, ¶ 48; Dkt. No. 134-2, ¶ 52; Dkt. No. 144-1, ¶ 48; Dkt. No. 146, ¶ 52). Since then, there have been times during which AngioDynamics offered a TLS. (Dkt. No. 133-2, ¶¶ 49-50; Dkt. No. 144-1, ¶¶ 49-50). For example, from 2013 through 2016, pursuant to a license from

another company, AngioDynamics sold a confirmation-only TLS called Celerity, for which it attempted to develop a navigation component. (Dkt. No. 133-2, ¶ 51; Dkt. No. 134-2, ¶ 53; Dkt. No. 144-1, ¶ 51; Dkt. No. 146, ¶ 53). However, in January 2016, when the Celerity technology was up for sale, Teleflex outbid AngioDynamics and acquired the technology, at which point AngioDynamics ceased its efforts to obtain FDA approval for navigation-enabled Celerity and discontinued selling Celerity aside from a small number of units from its remaining inventory. (Dkt. No. 133-2, ¶ 52; Dkt. No. 134-2, ¶ 54; Dkt. No. 144-1, ¶ 52; Dkt. No. 146, ¶ 54).[3] In addition to Celerity, AngioDynamics has offered other TLSs at times in the past, but it has never offered a TLS with both navigation and confirmation capabilities. (Dkt. No. 133-2, ¶¶ 49-50; Dkt. No. 144-1, ¶¶ 49-50). In late 2019, AngioDynamics acquired a TLS called C3 Wave, which has confirmation, but not navigation, capabilities. (Dkt. No. 133-2, ¶ 56; Dkt. No. 144-1, ¶ 56). Several AngioDynamics executives have publicly stated their belief that C3 Wave will help AngioDynamics compete in the PICC market, though deposition testimony from AngioDynamics' General Manager of Vascular Access clarified that these statements refer to the more limited market for PICCs that use confirmation-only TLS technology, not the much larger market for PICCs that use navigation-enabled TLSs like Bard's. (Dkt. No. 133-2, ¶¶ 58-59; Dkt. No. 144-1, ¶¶ 58-59).

4. Teleflex's PICC and TLS Technology

Like Bard and AngioDynamics, Teleflex markets and sells PICCs. (Dkt. No. 133-2, ¶ 63; Dkt. No. 144-1, ¶ 63). Like Bard, but unlike AngioDynamics, it also markets and sells TLSs that

[3] In January 2017, Teleflex received FDA approval for a TLS that was based off the same technology that AngioDynamics would have used to develop Celerity with navigation. (Dkt. No. 144-1, ¶ 52). Several AngioDynamics executives have testified as to their frustration and disappointment that Teleflex outbid AngioDynamics for the Celerity technology, and their belief that navigation-enabled Celerity would have helped AngioDynamics compete in the PICC market. (Dkt. No. 133-2, ¶¶ 53-54; Dkt. No. 144-1, ¶¶ 53-54).

provide both navigation and confirmation capabilities. (Dkt. No. 133-2, ¶ 63; Dkt. No. 144-1, ¶ 63). Unlike Bard, Teleflex historically has sold, and continues to sell, its TLSs both preloaded into its PICCs and as separate, standalone products that are compatible with third-party PICCs. (Dkt. No. 133-2, ¶ 64; Dkt. No. 134-2, ¶ 42; Dkt. No. 144-1, ¶ 64; Dkt. No. 146, ¶ 42). Therefore, hospitals that want to pair AngioDynamics' BioFlo PICCs with a navigation-enabled TLS are able to do so with Teleflex's TLSs. (Dkt. No. 133-2, ¶ 65; Dkt. No. 144-1, ¶ 65). AngioDynamics has, at times, marketed the option of pairing BioFlo with Teleflex's TLS technology to its customers, and some hospitals do utilize this option. (Dkt. No. 133-2, ¶¶ 66-67; Dkt. No. 144-1, ¶¶ 66-67).

C. Relevant Markets and the Competitors' Market Shares

The parties dispute the relevant product market for purposes of the Court's antitrust analysis. The parties appear to agree that PICCs constitute a distinct market from other types of vascular access devices; that all PICCs compete in the same market, regardless of the various distinctions between particular PICCs; and that the relevant geographic market is the United States. (Dkt. No. 144-1, ¶ 13; Dkt. No. 136-9, at 26-27, 36-37; Dkt. No. 147-13, at 13-14, 16). However, Bard contends that the only relevant product market is the market for "differentiated PICCs"—i.e. PICCs that differ from each other on a number of characteristics such as size, material, and others—and that Bard's preloaded TLS stylet is merely one way in which Bard's PICCs are differentiated, rather than a distinct product with its own market. (Dkt. No. 145, at 7-15, 17-19). AngioDynamics contends that PICCs and TLSs comprise two separate, distinct product markets. (Dkt. No. 134-1, at 14-19; Dkt. No. 152, at 7-9, 10-11).

Bard has historically captured the majority of the PICC market, with AngioDynamics and Teleflex capturing significantly smaller market shares. (Dkt. No. 133-2, ¶ 21; Dkt. No. 144-1, ¶ 21; Dkt. No. 138-78, at 2-3). [redacted]

[redacted]

(Dkt. No. 133-2, ¶ 21; Dkt. No. 144-1, ¶ 21).

PICCs used with TLSs constitute by far the largest segment of the PICC market. (Dkt. No. 133-2, ¶ 57; Dkt. No. 146, ¶ 57). The evidence cited by AngioDynamics suggests that, between 2013 and 2018, Bard sold the overwhelming majority of TLSs on the market—more than [redacted] percent—and Bard has not offered evidence contesting that assertion. (Dkt. No. 134-2, ¶ 47; Dkt. No. 146, ¶ 47). Teleflex, the only other seller of navigation-enabled TLS stylets, sold a much smaller percentage of TLSs—only [redacted] percent—over the same period. (Dkt. No. 134-2, ¶ 49; Dkt. No. 146, ¶ 49). Other TLSs sold today do not include navigation components and make up a negligible percentage of TLS sales. (Dkt. No. 138-20, at 25 n.107). Because Bard, which sells the majority of the TLSs, does not sell its TLS stylets single-sterile as a matter of policy, only a small percentage of all TLS stylets on the market are sold single-sterile. (Dkt. No. 146, ¶ 43). However, the percentage of stylets sold single-sterile by Teleflex, Bard's only meaningful competitor in the TLS space, is significant: between 2013 and 2018, [redacted] of Teleflex's TLS stylets were sold separately from its PICCs. (Dkt. No. 134-2, ¶ 43; Dkt. No. 146, ¶ 43).

The parties dispute whether, assuming TLS stylets comprise a separate market from the PICC market, there are high barriers to entry in the TLS market that enable Bard to sustain such a high market share. AngioDynamics cites "high development costs, the requirement for FDA clearance of medical devices, and Bard's ownership of patented TLS technology" as such barriers to entry. (Dkt. No. 134-2, ¶ 50). The evidence cited by the parties on each of these issues may be summarized as follows:

- **High Development Costs**: The parties agree that both AngioDynamics and Bard have spent significant time, effort and money developing navigation-based TLSs (Bard

successfully, and AngioDynamics unsuccessfully). (Dkt. No. 134-2, ¶¶ 51-52; Dkt. No. 146, ¶¶ 51-52). Bard nonetheless contests AngioDynamics' assertion that high development costs pose a significant barrier to entry, noting that AngioDynamics' own expert has identified seven different competing TLS products that have been developed by Bard's rivals in the past. (Dkt. No.146, ¶ 50).

- **FDA Approval**: AngioDynamics cites the need for FDA approval of medical products as a barrier to entry for developing a TLS with navigation. (Dkt. No. 134-2, ¶ 50). Bard points out, however, that AngioDynamics' own expert economist opined in his deposition that FDA clearance is "not [an] insurmountable" barrier, and that "[i]f you have a successful technology . . . simply getting the FDA approval shouldn't be that difficult." (Dkt. No. 146, ¶ 50).

- **Patents**: The parties agree that Bard has multiple patents on its TLS stylets. (Dkt. No. 134-2, ¶ 55; Dkt. No. 146, ¶ 55). AngioDynamics' liability expert, Professor George Alan Hay, opined that entry into the alleged TLS market is "complicated by the fact that both Teleflex's and Bard's navigation systems are patented," as this patent protection requires an entrant into the TLS market to "invent around" these companies' existing intellectual property, and "entry with a similar technology could lead to costly patent litigation, even if there is no infringement." (Dkt. No. 134-2, ¶ 56; Dkt. No. 146, ¶ 56). During his deposition, however, Dr. Hay admitted that he "ha[s] not studied the patents," does not know "which patents Bard has on tip location," and could only make general assumptions about "which specific technological features of the Bard tip location system are covered by patents." (Dkt. No. 146, ¶¶ 50, 56). As noted above, Dr. Hay also identified seven different TLS products developed by Bard's competitors, notwithstanding Bard's patent protection. (Dkt. No. 146, ¶ 56). Bard's corporate representative testified that "[a competitor] could easily have reverse engineered [Bard's 3CG] stylet, and they would have to change an approach to creating a magnetic field to avoid our intellectual property. But they could do that and . . . that has been done." (Dkt. No. 138-26, at 4).

D. General Explanations for AngioDynamics' Alleged Lost Sales

Citing record evidence, Bard contends that AngioDynamics has lost existing PICC business or been unable to win new PICC business because of a variety of factors other than Bard's TLS policy, including "price, contracts, quality issues, product recalls, competing technologies, incomplete product lines, lack of data, customer relationships, and product backorders." (Dkt. No. 133-2, ¶ 38). AngioDynamics does not appear to meaningfully dispute that these factors have impacted its PICC business, but it contends that Bard's TLS policy is at least one materially contributing factor to its loss of PICC sales to Bard and/or its failure to win

PICC business from Bard. (Dkt. No. 144-1, ¶ 38). Some of the most significant factors Bard discusses with respect to the pending motions are discussed below.

1. Pricing

AngioDynamics' BioFlo PICCs are sometimes priced at a premium to other PICCs in the market at the point of sale. (Dkt. No. 133-2, ¶ 39; Dkt. No. 144-1, ¶ 39). According to Tom Aldrich, a former sales executive at AngioDynamics, AngioDynamics' former CEO believed that "customers should pay more for BioFlo than the other PICCs on the market." (Dkt. No. 133-2, ¶ 40; Dkt. No. 144-1, ¶ 40). AngioDynamics also believes that any price premium on BioFlo PICCs is justified by evidence that BioFlo PICCs' thrombus-accumulation-reducing properties result in long-term cost savings to the hospitals using them. (Dkt. No. 144-1, ¶¶ 39, 41-42). Nonetheless, AngioDynamics concedes that some hospitals are unwilling to pay a premium for BioFlo PICCs. (Dkt. No. 133-2, ¶ 43; Dkt. No. 144-1, ¶ 43).

AngioDynamics does not dispute that, as a result of this price premium, the combination of BioFlo PICCs with Teleflex's TLS stylets is "sometimes" more expensive than Bard's PICCs preloaded with its stylets. (Dkt. No. 133-2, ¶ 41; Dkt. No. 144-1, ¶ 41). However, AngioDynamics asserts that because AngioDynamics competes with Bard and other competitors on price, its pricing of BioFlo is specific to each customer, and that therefore, its pricing of BioFlo is sometimes higher and sometimes lower than Bard's pricing of its PICCs. (Dkt. No. 144-1, ¶ 41; *see also* Dkt. No. 138-61, at 2).

2. Quality/Reputational Issues

AngioDynamics has suffered from "multiple quality issues across multiple product lines and areas." (Dkt. No. 133-2, ¶ 45; Dkt. No. 144-1, ¶ 45). As relevant to its PICC business, in 2015, AngioDynamics recalled its entire line of Morpheus PICCs due to quality issues. (Dkt. No. 133-2, ¶ 46; Dkt. No. 144-1, ¶ 46). There is evidence in the record suggesting that the Morpheus

recall damaged AngioDynamics' relationship with at least some of its customers, and that these issues negatively impacted AngioDynamics' PICC sales. (Dkt. No. 133-2, ¶¶ 46-47). In internal correspondence, General Manager of Vascular Access Chad Campbell referred to a "Morpheus hangover"; Campbell testified that this merely referred to the fact that AngioDynamics had some "slow orders as [it] converted [its customers] to [its] other products," though he acknowledged that AngioDynamics also lost business entirely as a result of the Morpheus recall. (Dkt. No. 133-2, ¶ 46; Dkt. No. 144-1, ¶ 46; Dkt. No. 144-47, at 4). Unlike AngioDynamics, Bard has never recalled an entire line of its PICCs. (Dkt. No. 133-2, ¶ 23; Dkt. No. 144-1, ¶ 23).

3. AngioDynamics' Lack of a TLS

Because some customers value the convenience of preloaded PICCs and dealing with a single vendor, and thus prefer to purchase PICCs and TLSs from the same supplier even if they have the option to purchase them separately, (Dkt. No. 146, ¶¶ 65-66), Bard cites the fact that AngioDynamics does not offer its own TLS with both navigation and confirmation capabilities as a factor negatively impacting its PICC sales, independent of Bard's TLS policy. (Dkt. No. 133-2, ¶¶ 61-62). Bard cites to AngioDynamics' thus-far unsuccessful efforts to develop its own navigation-enabled TLS, as well as AngioDynamics' internal documents reflecting that it believes its lack of navigation-enabled TLS to be a reason for its loss of PICC market share and its difficulties competing with Bard's PICCs. (Dkt. No. 133-2, ¶¶ 48-62).

4. FDA Approval

Bard also cites regulatory issues as a factor impacting AngioDynamics' ability to win sales of PICCs against Bard independent of Bard's TLS policy. As discussed further below, *see* Section E.5.a *infra*, Bard first obtained FDA approval to sell its TLS stylet single-sterile in November 2014 in order to satisfy a request by Cleveland Clinic, which wanted to trial Bard's TLS with AngioDynamics' BioFlo PICCs. (Dkt. No. 133-2, ¶¶ 68-71; Dkt. No. 134-2, ¶¶ 28-29;

Dkt. No. 144-1, ¶¶ 68-71; Dkt. No. 146, ¶¶ 28-29). Bard obtained FDA clearance to sell its stylet as a standalone product that could be combined with any "open-ended, nonvalved, polyurethane [PICCs]," including those sold by Bard's competitors. (Dkt. No. 133-2, ¶¶ 70-71; Dkt. No. 134-2, ¶ 29; Dkt. No. 144-1, ¶¶ 70-71; Dkt. No. 146, ¶ 29). While Bard's purpose for obtaining this FDA clearance was to accommodate Cleveland Clinic's request, the clearance it received did not limit Bard to selling its single-sterile stylet only to Cleveland Clinic. (Dkt. No. 134-2, ¶ 30; Dkt. No. 146, ¶ 30).

An important limitation on Bard's FDA clearance for its single-sterile stylet is that it is only approved to sell its stylet for use with competitors' *non-valved* PICCs; Bard has never sought nor obtained FDA clearance to sell its stylet single-sterile for use with competitors' *valved* PICCs. (Dkt. No. 133-2, ¶ 71; Dkt. No. 144-1, ¶ 71). Therefore, a hospital's use of Bard's stylet with AngioDynamics' *valved* PICCs would be considered an "off-label use," i.e. a use that is not included in the FDA's approved indication for the product. (Dkt. No. 133-2, ¶ 71; Dkt. No. 144-1, ¶ 71). Bard argues that this constitutes an independent barrier to AngioDynamics' ability to compete for customers who prefer valved PICCs, which comprise a significant percentage of both Bard's and AngioDynamics' PICC sales. (Dkt. No. 133-2, ¶¶ 72-74; Dkt. No. 144-1, ¶¶ 72-74). AngioDynamics rejects this contention, arguing that AngioDynamics or another competitor could seek FDA approval to market Bard's single-sterile stylet to such customers; that, based on its own testing of Bard's stylet with valved PICCs, AngioDynamics believes such approval could be obtained; and that in any event, the law does not prohibit medical professionals from choosing to use medical products in ways that are "off-label." (Dkt. No. 144-1, ¶ 71).

E. Customer-Specific Evidence of AngioDynamics' Alleged Lost Sales

1. Overview

A central dispute between the parties is whether there is evidence that specific customers would have purchased AngioDynamics' PICCs for pairing with Bard's TLS but for Bard's TLS policy. Bard concedes that "the topic of whether Bard sells Stylets separately from its PICCs and/or whether Bard would do so has arisen" in its discussions with 17 hospitals, though it claims that it has never received a formal Request for Proposal regarding a stand-alone stylet. (Dkt. No. 133-2, ¶¶ 84, 86; Dkt. No. 134-2, ¶ 40; Dkt. No. 144-1, ¶¶ 84, 86; Dkt. No. 146, ¶ 40).[4] AngioDynamics has its own list of at least 22 institutions that it believes have requested that Bard sell its stylets on a standalone basis and been refused. (Dkt. No. 133-2, ¶ 83; Dkt. No. 144-1, ¶ 83). AngioDynamics also has provided what it contends is a "non-exhaustive" list of 31 customers—including hospitals, IDNs, and GPOs—from which it claims that it "potentially" lost sales as a result of Bard's TLS policy. (Dkt. No. 133-2, ¶ 87; Dkt No. 144-1, ¶ 87).

2. Customer Requests to Bard Regarding Standalone Stylet

AngioDynamics points to a number of documents that reflect specific examples of customer inquiries to Bard regarding the possibility of purchasing a standalone TLS stylet to pair with AngioDynamics' or another competitor's PICCs, and of Bard preparing for such inquiries. The Court summarizes the relevant portions of these communications as follows:

- In February 2015, in an internal email chain, a Bard employee wrote: "We need an official 'talk track' on the following subject so that everyone in Sales/Marketing/Nursing speaks with one voice on this issue. Not to make a big deal but it actually becomes more strategic and relevant now that Angio has a wire." (Dkt. No. 138-3, at 2). The employee was referring to the following passage from a District Manager's monthly report: "The AngioDynamics rep in Cincy is telling accounts '[Bard] got the indication to sell their

[4] Bard contends that "[m]ost of the hospital communications to Bard regarding standalone stylets came from nurses, not personnel making decisions about PICC purchases," but AngioDynamics disputes this characterization, citing record evidence that the decision-making process and the personnel involved varies by hospital. (Dkt. No. 133-2, ¶ 85; Dkt. No. 144-1, ¶ 85).

wire with our BloFlo PICCs.' . . . I've coached [sales representatives] specifically how to handle with their customers if it's brought up to them. In short, our response is, 'That is not an option available at this time.'" (*Id.*).

- In February 2015, another Bard employee described a phone call from a customer to a Bard clinical nurse "asking if they could get the 3CG standalone wire for there [sic] at risk patients so they could use a coated PICC." (Dkt. No. 138-5, at 2). The employee went on to write: "[The customer] said they had been told that the Cleveland Clinic is using a different PICC with 3CG. I will be able to squash this, but I think we will be hearing a lot of people bringing this up." (*Id.*).

- In March 2015, Bard executives discussed the fact that a customer was "getting pressure . . . to evaluate bioflo" and "contacted [Bard personnel] about pulling a separate 3CG wire with the Bioflo PICC line." (Dkt. No. 138-75, at 2).

- In March 2015, in an internal email chain, Bard personnel discussed the "talk track . . . so that [Bard personnel are] armed with the correct verbiage in case someone comes calling." (Dkt. No. 138-2, at 3). One Bard employee wrote, "If you receive any inquiries from other hospitals/customers about [the standalone stylet], please tell them that it is not currently available for purchase. If they mention Cleveland Clinic specifically . . . you can tell them that Cleveland Clinic is doing an evaluation, but there are no plans to make the kit available at other facilities at the current time." (*Id.* at 2).

- In March 2015, a Value Access Coordinator from a customer reached out to a Bard Territory Manager, writing: "I did contact Supply Chain at Cleveland Clinic. They are using the Bard 3CG technology and separately ordered/stocked Bard 3CG stylets with 2 DIFFERENT PICC vendors (both NOT bard). So . . . there are facilities getting this single sterile 3CG stylet? Can you send me pricing on the separately stocked 3CG stylet for my comparison." (Dkt. No. 138-76, at 4).

- In March 2015, a representative of HealthTrust, a GPO, wrote to a Bard Vice President that "[i]f [Bard's single-sterile TLS stylet] is being sold to HealthTrust members, as I have been informed it is, then it needs to be added to contract." (Dkt. No. 138-7, at 2).

- In an April 2015 email, a Bard representative described a "very agitated" customer who "want[ed] something in writing stating [that the stand-alone stylet was unavailable] and the reason why," because "she has been told otherwise." (Dkt. No. 138-4, at 2).

- In April 2015, a customer contacted a Bard sales representative about "the BARD guide wire being made available separate from the PICC kit so it can be used to place any PICC," stating that the customer "would still like to try the antimicrobial PICC if possible." (Dkt. No. 138-77, at 3). In a subsequent internal email, the Bard employee wrote that "[w]e explained that there is not a coated PICC that comes with 3CG and the director stated that Cleveland Clinic utilizes our wire with [Teleflex] PICCs. I understand that this isn't going to happen, but I wanted to make sure you are aware they are taking [sic] about it." (*Id.* at 2-3). Another Bard employee wrote: "This came up today as well at

Swedish . . . They are telling everyone this that the clinic is using our wire. I had a call with IHC with this last week as well. Hasn't been a big deal thus far, but just an FYI on what Teleflex is doing." (*Id.* at 2).

- According to a February 2016 memo circulated among Bard personnel, a representative of a customer "tried ordering the Clinic stand alone 3CG wire," and Bard personnel "communicated [to the representative] that product is unavailable and we haven't had issues since." (Dkt. No. 138-6, at 2).

- April 2016 meeting notes written by a Bard District Manager reflect that a customer "[w]anted to know if we would sell the 3CG stylet to use with the Arrow [Teleflex] PICC," and that Bard responded: "We do not sell the Stylet by itself. Period." (Dkt. No. 138-30, at 4).

3. Bard Internal Documents

AngioDynamics also cites to internal Bard documents arguably suggesting that Bard employees "knew that AngioDynamics and others could not compete for PICC business in hospitals that were using Bard's TLS." (Dkt. No. 134-2, ¶ 45). For example:

- December 2014 talking points for a Bard Board of Directors presentation include the notes, "We are the only company who sells PICCs but can also provide the Ultrasound/Tip location and Tip confirmation technology and all of that is integrated," and that [redacted] (Dkt. No. 138-11, at 2-3).

- In April 2015, a Bard employee wrote that he "th[ought] [AngioDynamics'] strategy [wa]s to pressure the market to pressure [Bard] into launching [the standalone stylet], so it will open the door for them to go after special patient populations in our 3CG [TLS] accounts and pick off 5-10%, which is better than the 0% they are getting at 3CG accounts now." (Dkt. No. 136-63, at 3; Dkt. No. 136-64, at 2).

- In July 2016, a Bard employee congratulated a sales representative on convincing Bard's "largest non-3CG nursing account nationally" to begin using Bard's 3CG stylet, commenting that "now this account is locked in with our best defense mechanism." (Dkt. No. 138-9, at 2).

- In September 2016, a Bard Strategic Accounts National Manager wrote: "We know AngioD is heavily focusing on our IR PICC and midline business since they obviously cannot compete with TLS and 3CG." (Dkt. No. 138-10, at 2).

4. Deposition Testimony of AngioDynamics Employees

The parties dispute whether the deposition testimony of AngioDynamics officers and employees demonstrates that AngioDynamics lost any sales to Bard as a result of Bard's TLS policy. That testimony is summarized below.

a. Tom Aldrich

Tom Aldrich worked for AngioDynamics from 2001 to 2017, and was the head salesperson in AngioDynamics' Vascular Access Group (the business segment that includes PICCs) from 2013 to 2017. (Dkt. No. 136-16, at 5-11). Aldrich testified that he "[knew] that [AngioDynamics] lost accounts as a result of our PICC line not being compatible with Bard's tip location," but did not know how many, and was only able to name one example of a customer that "might have been one that was interested in using our PICC line with the Bard tip location but [was] unable to." (*Id.* at 27-31). Aldrich also generally lacked knowledge regarding the entities on AngioDynamics' list of customers that it "potentially lost" as a result of Bard's tying policy. (*Id.* at 47-55). Aldrich did recall that AngioDynamics lost business from HealthTrust, a GPO, because some of the hospitals "wanted a navigation system" and AngioDynamics was "not able to convert them because they were using Bard," but he did not recall details about which hospitals within the GPO this applied to, or which individuals at those hospitals conveyed the information to him. (*Id.* at 52-54).

b. Chad Campbell

Chad Campbell is the General Manager of AngioDynamics' Vascular Access Group. (Dkt. No. 136-25, at 3-5). Campbell testified that "the number one reason [AngioDynamics loses business to Bard] is because customers prefer [Bard's] navigation and tip location" product, and are forced to use Bard's PICCs in order to gain access to that product. (Dkt. No. 136-25, at 19-23). However, he also testified that he lacked "firsthand personal information" regarding

business AngioDynamics lost as a result of Bard's TLS policy, and that he has not directly communicated with any hospital regarding their interest in combining AngioDynamics' BioFlo PICCs with Bard's TLS. (Dkt. No. 144-48, at 8). His only knowledge of such lost business came "through reps, managers, heads of sales, marketing, clinical, my teammates on my team." (*Id.*). Campbell demurred when asked to name specific examples of a customer whose business AngioDynamics lost as a result of Bard's TLS Policy, responding that "whatever the team has produced is who" and that he could not name "anyone specifically that I've talked to from a customer standpoint." (*Id.*).

c. Scott Centea

Scott Centea is AngioDynamics' Senior Director of Global Marketing. When shown AngioDynamics' non-exhaustive list of 31 entities from which it believed it "potentially lost sales," Centea identified 21 of them that he knew AngioDynamics lost sales from "due to not having a tip location system or our PICC being able to work with the Bard tip location system." (Dkt. No. 136-30, at 6-8). When asked about the basis for his knowledge of these lost sales, he testified as follows:

> So as a corporate account manager during this time, I was responsible for helping set up contracts as well as remaining very close to the sales representatives. I was also responsible for managing some of the sales. And we would have discussions, as well as . . . quarterly business reviews and progress reports. It's never fun when we lose an account. And so they were always typically brought to my attention, or someone within the organization's attention, to better understand what we could have done differently to potentially save the business.

(*Id.* at 7-8).

Centea testified that AngioDynamics' sales representatives "were being asked daily, if [AngioDynamics'] BioFlo could be used with Sherlock and 3CG." (Dkt. No. 144-37, at 5). When asked whether he had ever had "an actual conversation where any of these accounts ever told [him] that they would rather buy [AngioDynamics'] PICC with Bard's single sterile stylet

for more than Bard's PICC with Bard's Sherlock stylet," Centea testified that he has "had so many of those conversations, they all seem to run together." (Dkt. No. 136-30, at 13-14). However, because purchasing Bard's stylet single-sterile to combine with AngioDynamics' PICCs was not an option for customers, AngioDynamics was usually unable to reach the point where it could engage in discussions about the price of that option, and so Centea could not recall a situation in which a customer said that "we will, no matter what the price is, we will buy their single stylet, because it was never offered." (*Id.* at 16).

Centea specifically identified Community Health Systems and Florida Hospital as two customers with whom he was "pretty confident" that he "personally had a conversation" about pairing AngioDynamics' PICCs with Bard's TLS stylet. (*Id.* at 14). As to Community Health Systems, he could not "recall the exact conversation," but recounted the following details:

> [The conversation was with] either Sheila Jarrett or Marsha Hodge . . . I believe it was in person. We would hold monthly business reviews, updating them on . . . the progress of the conversion. And I believe Nicolas Abella was there as well . . . I remember Nicolas, who was their head of clinical or nursing I believe at the time, was saying that, based on some of the results, that if there was an option to receive the Bard single sterile stylet separately, that they would definitely take a look at . . . the pricing and run an economic analysis by knowing that that was what's going to be best for their accounts.

(*Id.* at 14-15). When pressed on whether the Community Health Systems representatives told him that they "would buy the Angio combined with Bard product if it was more expensive than the Bard product preloaded," Centea testified that "we never got to those conversations, because we knew that Bard was never willing to sell the single sterile stylet." (*Id.* at 16).

Similarly, as to Florida Hospital, Centea testified that his conversation "was one of those, well, if they do somehow decide to sell it to us, we . . . would take a look at, again, the BioFlo and the efficacy of the BioFlo and whatever price Bard was to offer, because we didn't have a price. It was really difficult to understand what the economic impact would [sic]. But if they said

it was reasonable, that it would make sense for them to convert." (*Id.* at 16-17). Centea acknowledged that he "did not have conversations with specifics to the cost and/or price of what that stylet would be" and therefore did not know the price premium Florida Hospital would be willing to pay to combine AngioDynamics' PICCs with Bard's TLS. (*Id.* at 17-19).

d. William Millar

William Millar is AngioDynamics' Southeast Region Business Manager. Millar testified that, based on "a general conversation with PICC nurses and [AngioDynamics'] sales team," he understood that "there is interest out there for our technology if it can be made available with [Bard's] stylet," and that there were "definitely hypotheses going around in conversations in my field every day out there of when we're trying to offer our technologies to our solutions." (Dkt. No. 144-38, at 3). As one example, he testified that the Director of Supply Chain at St. Dominic's Hospital in Mississippi "had [AngioDynamics] come in to do a presentation of BioFlo, believed in the technology and we were provided the feedback that . . . we could not proceed with the trial because [St. Dominic's had] Bard 3CG in the facility and the nurses prefer to keep or require that technology to move forward" but that "[i]f it was made available, [St. Dominic's] would definitely consider the BioFlo technology but at this point cannot proceed . . . based on the inability of not being able to marry the Sherlock 3CG system with BioFlo PICCs." (*Id.* at 3-4). Millar also testified that facilities in the Community Health System Family told AngioDynamics that they would purchase AngioDynamics' PICCs if they had the option to pair them with Bard's 3CG TLS, but could not recall which specific facilities did so. (Dkt. No. 136-19, at 16-19).

When asked for additional examples of hospitals that would have purchased AngioDynamics' PICCs had Bard made its standalone stylet available, Millar provided the names of hospitals, which he testified was non-exhaustive, including, among others: JFK,

Singing River, Biloxi Regional, and Christus Cabrini. (Dkt. No. 144-38, at 5-8). Millar testified that the information he had about AngioDynamics' potential lost sales came from his conversations with other AngioDynamics employees or, in some cases, hospital employees themselves. (Dkt. No. 133-2, ¶ 96; Dkt. No. 144-1, ¶ 96).

As to JFK, Millar testified that his knowledge that AngioDynamics lost business as a result of Bard's TLS policy came from conversations with either JFK's local clinical resource director or the AngioDynamics sales representative responsible for JFK; he could not recall which one. (Dkt. No. 154-4, at 16-17). He testified that AngioDynamics was the "incumbent supplier" and "the need for navigation tip location was a new initiative for [JFK]," which "changed" the "business landscape" and caused AngioDynamics to lose its PICC business when JFK opted to use Bard's TLS. (*Id.* at 16). He did not know whether JFK considered Teleflex's TLS a viable alternative solution, did not know how AngioDynamics' pricing compared to Bard's, and was not aware of whether the hospital realized any savings by switching to Bard PICCs, though he recalled that "pricing was not, to my knowledge, a decision-making factor into it." (*Id.* at 13-16).

As to Singing River Hospital, Millar testified that AngioDynamics was unable to win their PICC business because "they were using Bard's Sherlock device at the time and they required that stylet to place PICCs," and that hospital representatives told him that "if the technology was available to them to purchase separately . . . in order to buy our PICCs, they would consider a trial." (*Id.* at 27-28). When pressed on whether Singing River had *committed* to having a trial of the combined technologies (as opposed to merely considering it), Millar testified that the option "wasn't available so we couldn't go down the pathway of saying they would because Bard wasn't providing that opportunity for the customer to choose." (*Id.* at 28). He was

unaware as to whether Singing River ever asked Bard about the possibility of a standalone stylet. (*Id.* at 28-29).

As to Biloxi Regional, Millar testified that Biloxi was an existing Bard PICC customer whose business AngioDynamics was unable to win, and that Biloxi's Director of Cardiology told him that if Bard's standalone stylet became available, Biloxi "would conduct a trial to move to our business." (*Id.* at 29-30). He testified that he had "numerous" conversations with the Director of Cardiology and several PICC nurses in which they conveyed that "if [the option to combine the technology] was made available and you could use that system, 'We would consider your PICCs.'" (*Id.* at 37-38). When asked whether he had reason to believe that Teleflex's TLS would not be a viable alternative for Biloxi, Millar testified that "[t]hey were already invested into the 3CG system – Sherlock system, and their interest was if they could maintain the – the current use of the 3CG Sherlock device and incorporate the BioFlo PICC, they would take interest in it." (*Id.* at 36).

As to Christus Cabrini, Millar testified that in the 2014-2016 timeframe, Christus was "interested in the BioFlo technology" and was "using it . . . on a couple of other platforms we have," and that AngioDynamics was "down the pathway of moving toward trial potentially based off the interest in the BioFlo." (*Id.* at 40-43). However, the nurses on the PICC team were "comfortable" with Bard's TLS, "were using that as a reliability tool for the Sherlock device, a navigation component," and "wanted that Sherlock device to continue to be used" because "that's how they were trained"; thus, because Bard's system could not be combined with AngioDynamics' PICCs, AngioDynamics "didn't have an offering . . . to continue down the pathway of trialing our PICCs." (*Id.*). As a result, although AngioDynamics "had a lot of meetings with them showing our technology [and] educating them on that" and "they had interest

[in AngioDynamics'] technology," "that opportunity didn't come to fruition because we didn't have the Sherlock stylet available to them." (*Id.* at 42-43). Millar testified that his knowledge was based on direct, in-person conversations with the PICC team at Christus Cabrini, though he could not recall specifically who. (*Id.* at 43-44).

5. Other Evidence Regarding Specific Customers

Both parties also cite to documentary evidence—including internal correspondence among AngioDynamics and Bard employees, as well as correspondence between the parties' employees and customers—that purportedly demonstrate examples of customers switching from AngioDynamics' PICCs to Bard's PICCs or foregoing AngioDynamics' PICCs in favor of Bard's PICCs, and the reasons for those decisions. The Court summarizes this evidence below.

a. Cleveland Clinic

To date, Cleveland Clinic is the only customer to whom Bard has offered its TLS stylet as a stand-alone product. (Dkt. No. 133-2, ¶ 30; Dkt. No. 144-1, ¶ 30). In 2014, Cleveland Clinic began using AngioDynamics' BioFlo PICCs in an effort to lower its DVT rates, an effort which was successful. (Dkt. No. 134-2, ¶¶ 25-26; Dkt. No. 146, ¶¶ 25-26). Later that year, Cleveland Clinic made a request to Bard to purchase Bard's TLS stylet single sterile so that it could trial it with AngioDynamics' BioFlo PICCs as an alternative to Teleflex's TLS, which it was using to place the BioFlo PICCs. (Dkt. No. 133-2, ¶ 68; Dkt. No. 134-2, ¶¶ 27-28; Dkt. No. 144-1, ¶ 68; Dkt. No. 146, ¶¶ 27-28). At that time, Bard did not have FDA approval to market standalone Bard TLS stylets for pairing with other companies' PICCs, but it sought and obtained FDA approval to do so in order to accommodate Cleveland Clinic's request. (Dkt. No. 133-2, ¶¶ 70-71; Dkt. No. 134-2, ¶ 29; Dkt. No. 144-1, ¶¶ 70-71; Dkt. No. 146, ¶ 29).

Ultimately, Bard agreed to sell the standalone stylet to Cleveland Clinic for $101. (Dkt. No. 133-2, ¶ 69; Dkt. No. 134-2, ¶ 33; Dkt. No. 144-1, ¶ 69; Dkt. No. 146, ¶ 33). A Bard

executive testified that Bard felt comfortable offering its standalone stylet to Cleveland Clinic, despite its general safety concerns regarding bedside loading of the product, because Bard felt that it "had a complete connectivity with the clinical management in a hospital that satisfied us we could on-board this safely." (Dkt. No. 146, ¶ 35 (quoting Dkt. No. 147-16, at 23)). A Bard internal weekly report indicates that Bard earned a fairly high margin on these sales, though Bard cites to evidence suggesting that the margin calculation does not include certain relevant costs associated with a standalone stylet (including liability, training and reputational risk costs), and that the price at which Bard sold its standalone stylet to the Celveland Clinic was a promotional price that was discounted from the price at which Bard would be willing to sell the standalone stylet to the market generally. (Dkt. No. 134-2, ¶ 48; Dkt. No. 146, ¶ 48).

Cleveland Clinic began its trial of Bard's TLS with AngioDynamics' BioFlo PICCs in early 2015, and found that, with the use of Bard's TLS, it was successfully able to place the BioFlo PICCs at the patient's bedside and confirm placement without the need for a chest x-ray. (Dkt. No. 133-2, ¶ 75; Dkt. No. 134-2, ¶ 36; Dkt. No. 144-1, ¶ 75; Dkt. No. 146, ¶ 36). However, beginning in October 2015, Cleveland Clinic conducted a three-month trial of Bard's FT PICC preloaded with Bard's TLS stylet, after which it chose to begin using that integrated product, rather than BioFlo, as its primary PICC product. (Dkt. No. 133-2, ¶¶ 76-77; Dkt. No. 134-2, ¶ 37; Dkt. No. 144-1, ¶¶ 76-77; Dkt. No. 146, ¶ 37). The parties dispute the reasons for Cleveland Clinic's decision, but the evidence they cite suggests that the following factors were relevant: (i) Bard agreed to sell Cleveland Clinic its integrated product at the same price it had been previously selling the stand-alone stylet, and thus the integrated product was less expensive than the combination of a BioFlo PICC and a Bard TLS stylet; (ii) Bard's PICC kit contained accessories that Cleveland Clinic's PICC team preferred; (iii) according to the head of Cleveland

Clinic's PICC team, the team observed lower DVT rates using Bard's FT PICCs than with BioFlo (though AngioDynamics disputes the credibility and significance of this testimony, *see* Dkt. No. 144-1, ¶ 77); (iv) Cleveland Clinic's PICC team believed that the fact that Bard's PICCs were preloaded, which eliminated the need to load the stylet at the beside, reduced the risk of patient infection, a factor which "weighed heavy in the decision"; and (v) the relationship between AngioDynamics and Cleveland Clinic may have deteriorated after AngioDynamics released data concerning the results of Cleveland Clinic's use of BioFlo prematurely and without Cleveland Clinic's permission. (Dkt. No. 133-2, ¶ 77; Dkt. No. 134-2, ¶ 37; Dkt. No. 144-1, ¶ 77; Dkt. No. 146, ¶ 37).

b. University of Colorado

On April 24, 2015, a PICC team manager from the University of Colorado reached out to Bard to inquire about a standalone TLS stylet. (Dkt. No. 134-2, ¶ 78; Dkt. No. 144-1, ¶ 78). According to an email from a Bard representative, after Bard indicated a standalone stylet was not available, the customer became "very agitated" and "want[ed] something in writing stating" that the stylet was "not available as a standalone" and the reason why, because "she has been told otherwise." (Dkt. No. 136-57, at 2). Ultimately, the University of Colorado proceeded to combine AngioDynamics' PICCs with Teleflex's TLS stylets. (Dkt. No. 134-2, ¶ 79; Dkt. No. 144-1, ¶ 79).

In August 2017, the University of Colorado switched from AngioDynamics' BioFlo PICCs to Bard's preloaded PICCs. (Dkt. No. 133-2, ¶ 80; Dkt. No. 144-1, ¶ 80). According to an email written by an AngioDynamics employee, the decision was "based on contract savings and a corporate rebate agreement." (Dkt. No. 136-58, at 4). The email also noted that the "clinical champion for BioFlo" at the University of Colorado "has been disappointed in the [upper extremity DVT] results [from BioFlo] for the past few years and her data collection doesn't

allow her to argue/justify the contract savings to supply chain anymore." (*Id.*). The email further referenced the fact that "[o]ther [h]ospitals within" the University's medical system were "HUGE Bard supporters," and that "[t]hey were told if University switched then [sic] the other teams could get their new equipment, if she didn't then [sic] no funding would be available for future requests this year." (*Id.* at 5).

c. Torrance Hospital

In August 2017, AngioDynamics lost its PICC business with Torrance Hospital to Bard. (Dkt. No. 133-2, ¶ 81; Dkt. No. 144-1, ¶ 81). In an email reporting on the loss, an AngioDynamics employee attributed the loss to "the discontinuance of Navigator [an audio-only tip navigation system AngioDynamics had offered] and the hospitals [sic] need for a Navigation piece for" its PICC placement. (Dkt. No. 136-59, at 3). The email explained that the decision "came down to ICU nurses, Administration and Radiology finding a safe and acceptable system from Bard, Teleflex or Medcomp that would allow them to place Piccs [sic] in the ICU for their patients . . . We have tried to influence the decision but in the end they chose Bard." (*Id.*). The email cited, as an additional reason for the change, the fact that Torrance Hospital received "a tremendous savings of over 15% with the change to Bard," and noted that the hospital was "never open to paying any type of premium for [AngioDynamics' BioFlo PICC] and remained steadfastly concerned about reducing acquisition costs." (*Id.*).

d. Hillcrest Medical Center

According to a 2013 internal Bard memo, in that year, AngioDynamics won the PICC business of Hillcrest Medical Center in Tulsa, Oklahoma from Bard "based on [BioFlo PICCs'] superior results during long evaluation period." (Dkt. No. 138-31, at 3). The memo noted that, at the time, Hillcrest did *not* use tip location to place PICCs, and that such non-tip-location accounts were "by far [Bard's] most vulnerable." (*Id.*).

Scott Centea testified that Hillcrest was a customer that had "collected data" and prepared a "poster presentation" for nursing conferences "show[ing] the efficacy of the BioFlo PICC and how it reduced . . . DVTs." (Dkt. No. 144-37, at 12-13). He also testified that he learned from other AngioDynamics employees that Hillcrest had "inquired [to Bard] about the ability or the opportunity . . . to potentially purchase a stylet from Bard" for use with AngioDynamics' PICCs after AngioDynamics had informed them that this "was an option in the market" based on Bard's selling of the stylet to Cleveland Clinic. (Dkt. No. 144-37, at 13-15).

In a February 2015 email, summarizing a three-month BioFlo trial being conducted at Hillcrest, a Bard employee wrote that Hillcrest had experienced "hemolysis and poor flow rates" with AngioDynamics' valved BioFlo PICC and "cracked/leaking hubs" with their non-valved BioFlo PICCs, and that Hillcrest ultimately "made the decision to stay with Bard Solo after having multiple issues with hemolysis." (Dkt. No. 144-29, at 2).

Later in 2015, Hillcrest decided to implement tip location and considered TLSs from Bard, Teleflex and AngioDynamics; an internal Bard memo speculated that the reason for evaluating all three vendors' technology, rather than merely using AngioDynamics' Celerity TLS that was available at the time, was dissatisfaction with the BioFlo PICCs' results. (Dkt. No. 138-32, at 3, 5).

In October 2015, the Clinical Resource Management Director at Ardent Health Services wrote to AngioDynamics representatives: "Following an extensive trial at Hillcrest Medical Center, to include a multitude of vendor product combinations, we will be standardizing to BARD PICC Lines and 3CG technology . . . I know you cannot be surprised by the decision, as currently AngioDynamics does not have similar technology." (Dkt. No. 144-12, at 2-3). In a subsequent follow-up email to Hillcrest's corporate parent, Scott Centea wrote, "This entire

situation could have been avoided if Bard was willing to sell you their single sterile 3CG stylet. . . . If they were willing to offer you this product, like they have at other facilities, [then] your PICC nurses could have used the Sherlock/3CG system with our BioFlo." (Dkt. No. 138-35, at 2).

In November 2015, a Bard employee wrote, "Big win at Hillcrest to finally win PICCs back after 2 year[s] of Bioflo. Total growth should be about $700k . . . [T]hey did attest that they actually had used more Cathflo[, a product used to dissolve thrombus formations in or around the PICC,] while using Bioflo. They declined to evaluate Celerity, based on the fact that they didn't have an algorithm aspect like 3CG Diamon[d] and VPS did." (Dkt. No. 147-40, at 2).

e. Christus St. Patrick

In October 2014, Bard's Louisiana Territory Manager, Shane Beaudean, wrote to other Bard employees that a "Bio-Flo trial [at Christus St. Patrick] has concluded and the decision has been made to stick with Bard." (Dkt. No. 144-14, at 2). When asked for more details regarding why the hospital chose to stick with Bard, Beaudean responded:

> The PICC nurse really disliked Celerity. She said it felt like she was using 10 year old technology. She was required to screenshot a baseline P-wave, initial deflection P-wave, and max P-wave for each patient. She was instructed by the rep to do this. She really felt like this slowed her down and she missed our real-time navigation. On one patient she achieved max P and the catheter was up the U. She was instructed how to check for malpositions using our Site-Rite 6 which she really disliked due to sterility issues. The nurses hated the triple lumen PICC compared to ours. Nurses had problems with blood draws so much so that the Angio rep showed them "a new technique for drawing blood." They had issues with the flow rates of the PICC's [sic] to the point that the rep talked to BioMed about changing IV pump settings which they refused to do. At the end of the day, the PICC nurse felt that Bard's technology was far superior on all fronts.

(*Id.* at 2). A November 2014 email from an AngioDynamics territory manager provides a somewhat different explanation based on his own discussions with Christus St. Patrick representatives. The email says that the PICC nurse "gave us outstanding reviews on the overall performance of BioFlo" and "stated the data should reflect a switch to BioFlo," but that "one of

the Executives brought up the fact that we do not have Navigation with Celerity" and "stated that Christus should look into converting once we have Navigation." (Dkt. No. 138-37, at 6). After a subsequent meeting, a different AngioDynamics employee confirmed that the PICC nurse's "feedback has been terrific regarding the performance of BioFlo," but that "as expected, [the nurse] (and Christus as a whole) enjoys the time saver and clinical benefit of eliminating [chest x-rays]" through TLS technology, and that Christus "advised that when we can eliminate [chest x-rays], then we can move to the next step with St Patrick as well as with Christus as a whole." (*Id.* at 4).

f. McLaren Oakland

In a March 2014 memo, a Bard employee wrote: "We have finalized a $120,000 PICC conversion [with McLaren Oakland] starting May 5th. This conversion will knock Angio D and Bioflo out of its only account in this system and gives us full compliance with Bard and 3CG. They are planning on eliminating X-Ray [with Bard TLS] on day one of placements." (Dkt. No. 144-15, at 3). In a subsequent May 2014 email describing the conversion, a Bard employee wrote that "[t]he biggest reasons for this conversion are clinical buy-in and McLaren's Corporate initiative to eliminate Chest X-Ray." (Dkt. No. 144-16, at 2). A Bard Regional Manager responded to that email, saying, "This [Bard] win brings AD's total lost business, in Michigan alone, to a staggering $880,000!!! Trust me when I say, Bioflo is a BioFLOP." (*Id.*). A spreadsheet prepared by Bard's sales team several months later reports that McLaren Oakland "has had great results going to solo from bioflo." (Dkt. No. 147-41, at 2).

g. Summerlin

In September 2015, an AngioDynamics territory manager wrote that the PICC Registered Nurse at Summerlin was "[o]pen to BioFlo, BUT SKEPTICAL," and listed concerns about, among other things, whether BioFlo would "do what we say it will," BioFlo's larger lumens size

compared to the PICCs Summerlin was currently using, and the fact that the TLS AngioDynamics offered at the time, Celerity, did not yet have a navigation component. (Dkt. No. 147-42, at 3). In October 2015, in connection with an upcoming trial of BioFlo PICCs with Celerity, a representative of Summerlin hospital wrote to AngioDynamics employees explaining that the PICC Nurse "has many concerns about the AngioDynamic catheters," but that "[h]is main concern is the inability to do tip navigation to prevent malpositions and the lack of some size catheters he uses." (Dkt. No. 138-42, at 3).

In his deposition, Scott Centea testified, based on his understanding from another AngioDynamics employee involved in the conversation, that Summerlin told AngioDynamics that it was "having difficulties . . . placing our BioFlo PICC without [Bard's] 3CG system," and that he believed Summerlin unsuccessfully requested a standalone stylet from Bard to pair with the BioFlo PICCs. (Dkt. No. 152-5, at 3-5).

In November 2015, a Bard Sales Trainer and Territory Manager wrote to other Bard employees describing his takeaways from a discussion with a PICC nurse at Summerlin Hospital who was "currently evaluating the BioFlo PICC and Celerity." (Dkt. No. 144-17, at 3). One of the "main takeaways" was that Bard's Sherlock TLS "is irreplaceable - by far this is our #1 competitive advantage - Celerity doesn't have a way to address malpositions." (*Id.*). However, the Summerlin team also expressed various other concerns about BioFlo and Celerity, including stylet stiffness, lumen sizes, cumbersomeness, and the fact that Celerity "doesn't come pre-loaded." (*Id.*). Approximately a month later, when Summerlin opted to discontinue the BioFlo evaluation, the customer provided feedback to Scott Centea in an email reflecting that "[t]he overriding concern was the lack of a navigation system" which led to "concern about inaccurate placement as well as the increased time to place and assure correct placement"; however, the

customer also listed various other issues with the BioFlo/Celerity system, including TLS equipment failures, cumbersomeness, oozing and cracking of the PICCs (including one PICC cracking while inside a patient's body), and concerns about patient safety. (Dkt. No. 144-18, at 4). Reflecting on this feedback, another AngioDynamics employee wrote that, "[f]rom the sounds of it the biggest factor in them ending their trial mid-term was CELERITY . . . Definitely further supports the notion that tip location is often the deciding factor in many of our trials, and more often than not seems to trump the PICC performance and outcomes." (*Id.* at 2).

h. UHS Delaware

In May 2014, in discussing Universal Health Systems of Delaware's ("UHS Delaware") decision to purchase Bard's PICCs, a Bard National Accounts Manager wrote: "AngioDynamics/Bioflop was once again turned away as they could not compete against our clinically superior products. This is a perfect example of why we need all of our customers using 3CG technology. The proprietary technology including 3CG, HF, FT and PowerGlide help lockdown our business as our competition cannot offer these products." (Dkt. No. 138-44, at 2).

In December 2015, following a "multi site trial of AngioDynamics BioFlo and Celerity," the Value Analysis Program Director at UHS of Delaware, Patricia Tyrrell, wrote to a Bard National Accounts Manager: "I wanted to let you all know that the decision was made today by the PICC work group, that we will be staying with Bard. The biggest issue in moving forward was lack of navigation." (Dkt. No. 144-19, at 3). After receiving this email, the National Account Manager forwarded it to other Bard employees, writing: "All of you did a great job protecting what is yours with [redacted] in PICC and Midline spend. Once again the significance of getting our facilities to 3CG played an important role here." (*Id.* at 2).

In subsequent correspondence between Tyrrell and Scott Centea, Centea wrote that "[t]he initial objective with this evaluation was to compare the merits of BioFlo against a non-BioFLo

PICC (Bard)" but "[w]hat ended up happening is that our Celerity was being compared against 3CG Sherlock. Unfortunately, the primary objective of the evaluation was silenced rather quickly." (Dkt. No. 144-21, at 2). Tyrrell responded: "[W]hen we look [sic] PICCs again, we will again include Bioflow [sic] knowing that your navigation will be available at that time." (*Id.*).

i. Baycare

Bard emails reflect that, in 2012, Bard was able to capture "close to $1 million" in new PICC business from Navilyst (BioFlo's previous owner) by converting Baycare Health Systems to Bard's TLS with "help from dozens of our Clinical Specialists," which allowed the system to eliminate the use of chest x-rays for tip confirmation. (Dkt. No. 144-22, at 2). In an August 2013 email describing the conversion, a Bard employee wrote that, during Baycare's trial of Bard's TLS, Bard "strongly stressed the trial was not about [comparing PICC technology], it was about catheter tip position confirmation and eliminating X-ray," but that Bard also "just happened to have a proximal valved Picc as they were used to and if they function equally then no comparison needed." (Dkt. No. 144-23, at 2). The email also noted that Baycare "actually loved the [Bard] kit component upgrades . . . over current Navilyst" kits. (*Id.*).

Years later, in a January 2017 email from William Millar to Tom Aldrich listing "key losses and risks for Q2," Millar listed Baycare as a "$850,000 Loss due to no Tip Location/Confirmation." (Dkt. No. 144-20, at 2). In his deposition, Millar expanded on this, testifying that, based on his

> conversations with [Baycare personnel] . . . BayCare was interested in moving to a navigation tip location system. We conducted a trial head-to-head against Bard, our midlines versus their midlines, because at the time that was also an interest . . . they had clinical data outcomes proving that we had better outcomes with the BioFlo midline versus the Bard device, yet . . . they wanted tip location 3CG and they could not use our PICC lines with the Bard system, so they made the business decision to move [to] Bard

> PICCs and midlines from AngioDynamics because of the requirement of not being able to get provided that solution.

(Dkt. No. 138-46, at 3-4). Millar further testified that Baycare switched from AngioDynamics' midline catheters to Bard's midline catheters, even though better patient outcomes were observed with AngioDynamics' catheters, and that their stated reason was the need for Bard's TLS stylet and the inability to pair it with AngioDynamics' PICCs. (*Id.* at 5-20).

j. St. Vincent's

In an April 2016 email listing updates on PICC opportunities, Daniel Tighe, a Bard District Manager, wrote: "St. Vincent – Billings – Angio D competitive conversion . . . Scheduled for June 13th." (Dkt. No. 144-25, at 2). In a subsequent November 2016 memo, Tighe wrote to a sales representative: "Excellent job of converting [the St. Vincent's] account from Angio D to 3CG in the first quarter. The team seems very satisfied with 3CG." (Dkt. No. 138-40, at 2).

k. UH Cleveland

Internal Bard documents reflect that, in 2015, Bard was able to convert UH Cleveland to its TLS system, putting Bard "one step closer to OWNING Cleveland with both PICCs and Tip Confirmation." (Dkt. No. 144-26, at 3; Dkt. No. 144-27, at 3). Scott Centea testified that, after experiencing multiple complications with a particular patient using Bard's PICC lines, UH Cleveland decided to try a BioFlo PICC (which needed to be placed by a physician in the IR suite rather than at the patient's bedside, since it could not be paired with Bard's TLS), and the patient had "zero complications" with the BioFlo PICC. (Dkt. No. 144-37, at 6-11). Centea testified that a UH Cleveland representative informed an AngioDynamics representative that, following this "fantastic patient success story," UH Cleveland asked Bard whether it would be possible to buy Bard's stylet single-sterile, but Bard "said no," and therefore UH Cleveland

continued purchasing Bard's PICCs with its preloaded stylet rather than AngioDynamics' BioFlo PICCs. (*Id.* at 7-8). Centea could not recall the specific AngioDynamics representative who relayed this information to him or the specific UH Cleveland representatives who were involved, but testified that the story was "pretty well-known because of how we worked closely with this patient," that the story became "pretty high profile testimony" regarding BioFlo's benefits, and that "a lot of people were asking within AngioDynamics, as well as other institutions," whether UH Cleveland had switched to BioFlo. (*Id.* at 10-11).

l. VA Little Rock

In a May 2014 email, in response to a question regarding whether AngioDynamics had lost or was going to lose VA Little Rock's business, Millar responded: "Lost. Bard 3CG was implemented as tip location/navigation was decided to be the requirement." (Dkt. No. 144-28, at 2). In February 2015, a Bard employee wrote that VA Little Rock "was an Angiodynamics account who used Bioflo and Navigator. To eliminate X-ray, they trialed 3CG and the Solo, changed to Bard with no increase in cathflo and less placement complications." (Dkt. No. 144-29, at 3).

III. STANDARD OF REVIEW

Under Rule 56(a), summary judgment may be granted only if all the submissions taken together "show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986); *see also Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247-48 (1986). The moving party bears the initial burden of demonstrating "the absence of a genuine issue of material fact." *Celotex*, 477 U.S. at 323. A fact is "material" if it "might affect the outcome of the suit under the governing law," and is genuinely in dispute "if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Anderson*, 477 U.S. at 248; *see also Jeffreys v. City of New*

York, 426 F.3d 549, 553 (2d Cir. 2005) (citing *Anderson*, 477 U.S. at 248). The movant may meet this burden by showing that the nonmoving party has "fail[ed] to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." *Celotex*, 477 U.S. at 322; *see also Selevan v. N.Y. Thruway Auth.*, 711 F.3d 253, 256 (2d Cir. 2013) (explaining that summary judgment is appropriate where the nonmoving party fails to "'come forth with evidence sufficient to permit a reasonable juror to return a verdict in his or her favor on' an essential element of a claim" (quoting *In re Omnicom Grp., Inc. Sec. Litig.*, 597 F.3d 501, 509 (2d Cir.2010))).

If the moving party meets this burden, the nonmoving party must "set out specific facts showing a genuine issue for trial." *Anderson*, 477 U.S. at 248, 250; *see also Celotex*, 477 U.S. at 323-24; *Wright v. Goord*, 554 F.3d 255, 266 (2d Cir. 2009). "When ruling on a summary judgment motion, the district court must construe the facts in the light most favorable to the non-moving party and must resolve all ambiguities and draw all reasonable inferences against the movant." *Dallas Aerospace, Inc. v. CIS Air Corp.*, 352 F.3d 775, 780 (2d Cir. 2003). Still, the nonmoving party "must do more than simply show that there is some metaphysical doubt as to the material facts," *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586 (1986), and cannot rely on "mere speculation or conjecture as to the true nature of the facts to overcome a motion for summary judgment," *Knight v. U.S. Fire Ins. Co.*, 804 F.2d 9, 12 (2d Cir. 1986) (quoting *Quarles v. Gen. Motors Corp.*, 758 F.2d 839, 840 (2d Cir. 1985)). Furthermore, "[m]ere conclusory allegations or denials . . . cannot by themselves create a genuine issue of material fact where none would otherwise exist." *Hicks v. Baines*, 593 F.3d 159, 166 (2d Cir. 2010) (quoting *Fletcher v. Atex, Inc.*, 68 F.3d 1451, 1456 (2d Cir. 1995)).

When considering cross-motions for summary judgment, a court "must evaluate each party's motion on its own merits, taking care in each instance to draw all reasonable inferences against the party whose motion is under consideration." *Hotel Emp. & Rest. Emp. Union, Local 100 of New York, N.Y. & Vicinity v. City of New York Dep't of Parks & Recreation*, 311 F.3d 534, 543 (2d Cir. 2002) (quoting *Heublein v. United States*, 996 F.2d 1455, 1461 (2d Cir. 1993) (internal quotation marks omitted)). "In the context of antitrust cases . . . summary judgment is particularly favored because of the concern that protracted litigation will chill pro-competitive market forces." *Pepsi Co, Inc. v. Coca-Cola Co.*, 315 F.3d 101, 104-05 (2d Cir. 2002) (citing *Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 95 (2d Cir.1998)). "Although all reasonable inferences will be drawn in favor of the non-movant, those inferences 'must be reasonable in light of competing inferences of acceptable conduct.'" *Id.* (quoting *Tops Mkts.*, 142 F.3d at 95).

IV. DISCUSSION

AngioDynamics moves for summary judgment on all liability elements of its tying claim, as well as on the issue of antitrust injury, leaving the amount of damages as the only triable issue. (Dkt. No. 134). Bard moves for summary judgment seeking dismissal of the complaint, asserting that AngioDynamics has failed to raise a triable issue of fact as to antitrust injury and damages. (Dkt. No. 133). In conjunction with its motion for summary judgment, Bard moves to exclude the testimony of AngioDynamics' causation and damages expert. (Dkt. No. 132). Bard contends that if its motion is successful, AngioDynamics would have "no evidence of any damages" with which it could "create a triable issue as to damages." (Dkt. No. 133-1, at 36). The Court addresses each element in turn, and addresses Bard's motion in limine in connection with its analysis of damages.

A. Liability Elements

"A tying arrangement is 'an agreement by a party to sell one product but only on the condition that the buyer also purchases a different (or tied) product, or at least agrees that he will not purchase that product from any other supplier.'" *Smugglers Notch Homeowners' Ass'n, Inc. v. Smugglers' Notch Mgmt. Co., Ltd.*, 414 F. App'x 372, 374 (2d Cir. 2011) (quoting *Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 464 (1992)). To state a tying claim under the Sherman Act, a plaintiff must prove that: (1) "the sale of one product (the tying product) is conditioned on the purchase of a separate product (the tied product)"; (2) "the seller uses actual coercion to force buyers to purchase the tied product"; (3) "the seller has sufficient economic power in the tying product market to coerce purchasers into buying the tied product"; (4) "the tie-in has anticompetitive effects in the tied market"; and (5) "a not insubstantial amount of interstate commerce is involved in the tied market." *Kaufman v. Time Warner*, 836 F.3d 137, 141 (2d Cir. 2016) (citing *E&L Consulting, Ltd. v. Doman Indus. Ltd.*, 472 F.3d 23, 31 (2d Cir. 2006)).

AngioDynamics' complaint alleges that Bard has violated section 1 of the Sherman Act by unlawfully tying the purchase of Bard TLS stylets to the purchase of Bard PICCs. (Dkt. No. 1, ¶ 95). The "tying products"—the products over which Bard allegedly has market power—are Bard's TLSs, and the "tied products"—the products that Bard allegedly coerces buyers to purchase—are Bard's PICCs. (*Id.* ¶¶ 96–96, 104). AngioDynamics argues that based on the record evidence, there is no genuine dispute of material fact as to any of the five elements. (Dkt. No. 134).

1. Separate Products

"The 'separate product' element requires that the alleged tying product and tied product be separate, *i.e.*, they must exist in separate and distinct product markets." *Kaufman*, 836 F.3d at

141. "This is because if there is no separate market for the allegedly tied product, there can be no fear of leveraging a monopoly in one market to harm competition in a second market." *Id.* at 142. Courts apply a "consumer demand test" to determine whether two products are separate for antitrust law purposes. *Id.* Two products are separate only if "there is a sufficient demand for the purchase of [the tied product] separate from [the tying product] to identify a distinct product market in which it is efficient to offer [the former] separately from [the latter]." *Jefferson Par. Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 21-22 (1984), *abrogated on other grounds by Ill. Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 31 (2006). Separateness "turns not on the functional relation between [the products], but rather on the character of the demand for the two items." *Id.* at 19. Factors relevant to whether there is "separate and distinct consumer demand" for the two products include, among others, "the history of the products being, or not being, sold separately" and "the sale of the products separately in similar markets." *Kaufman*, 836 F.3d at 142.

AngioDynamics contends that there is no genuine dispute of material fact as to whether Bard's PICCs and its TLSs constitute separate products. AngioDynamics cites the following evidence in support of its position that they are separate products: (1) documentary evidence and Bard's own admissions establishing that some customers have inquired about the possibility of purchasing a standalone TLS stylet, and that one (Cleveland Clinic) actually did for a time; (2) documentary evidence reflecting Bard's efforts to avoid publicizing to customers the fact that it had obtained FDA approval to sell its TLS stylet single-sterile, and was doing so with respect to Cleveland Clinic, at least partly out of a concern that customers might demand such a product; and (3) the fact that Teleflex, Bard's only competitor that sells navigation-enabled TLSs, "has always sold its TLS Stylets separately from its PICCs and continues to offer this option to

customers today," and a significant number of its TLS customers elect that option. (Dkt No. 134-1, at 16-19; Dkt. No. 152, at 8).

In arguing that there is a genuine dispute of material fact as to the separate products element, Bard relies on the analysis of its expert, Professor Fiona Scott Morton, who opines, among other things, that: (1) "the total demand for a separate 3CG stylet represented by [the hospitals the parties have identified as having inquired about a standalone stylet] is at most relatively small"; (2) based on this low demand and the costs of offering a standalone stylet, "Bard would reasonably conclude that there would likely be little demand for a separate 3CG stylet at a price that would make it profitable for Bard to sell the stylet separately"; and (3) "[t]he fact that Teleflex sells a relatively small number of . . . stylets separately is not evidence that there would be enough demand for a separate 3CG stylet to induce Bard to sell it separately," including because Teleflex and Bard Stylets "are based on different technology" and the two companies "face different costs for selling them separately," rendering it "not at all unreasonable or surprising that the two firms would come to different conclusions about selling their stylets separately." (Dkt. No. 145, at 8 (quoting Dkt. No. 147-13, at 33-34); *id.* at 10-11 (quoting Dkt. No. 147-13, at 31); *id.* at 13-14 (quoting Dkt. No. 147-13, at 35)). Bard also argues that: (1) Bard's witness testimony suggests that it developed its TLS stylets to be used exclusively as components in Bard's PICCs and that they were "not intended or designed to be loaded in the field"; (2) AngioDynamics' witness testimony establishes that, when it tracks its "market share at the PICC level," it does not separately track market share for "disposables" like TLS stylets; (3) neither "anecdotal" examples of customer inquiries regarding a standalone stylet nor documents reflecting Bard's "prepar[ation] for the possibility that a customer might make an inquiry" establish that there was significant enough demand for Bard's TLS as a separate product to

satisfy the consumer demand test, particularly where none of the inquiring individuals submitted a formal Request for Proposal, discussed the price they would be willing to pay for a standalone stylet, or had complete decision-making authority on behalf of their hospitals; and (4) "AngioDynamics' own economic expert . . . agreed that one must evaluate whether there would be sufficient demand for Bard's standalone stylets at a price that covered all the relevant costs of offering the product," but "has not quantified the relevant costs Bard would have to cover if it offered the standalone stylet, nor did he determine at what price demand for standalone stylets would dry up." (Dkt. No. 145, at 9-13).

Based on the parties' arguments and the record before it, the Court finds that Bard has raised a genuine dispute of material fact sufficient to survive summary judgment with respect to the separate products element. AngioDynamics is correct that the record evidence of customer inquiries to Bard regarding a standalone stylet and Bard's efforts to conceal knowledge of the standalone stylet in the market, as well as the fact that Bard's only significant TLS competitor offers its standalone stylet separately from its PICCs and many of its TLS customers choose to purchase it that way, constitutes strong evidence that consumer demand exists for TLSs as a separate product from PICCs. However, Bard has presented expert analysis suggesting that, whatever demand for Bard's standalone stylet may have existed in the market, it was not significant enough to make it "efficient [for Bard] to offer [TLSs] separately from [PICCs]," and thus satisfy the "consumer demand" test for purposes of antitrust law. *See Jefferson Par.*, 466 U.S. at 21-22. Because, based on the record before the Court, both parties take positions that a reasonable fact-finder could credit, their disputes are appropriately resolved at trial, not at the summary judgment stage.

AngioDynamics relies on *Park v. Thomson Corp.*, No. 05-cv-2931, 2007 WL 119461, 2007 U.S. Dist. LEXIS 2001 (S.D.N.Y. Jan. 11, 2007) and *In re Visa Check/Mastermoney Antitrust Litigation*, No. 96-cv-5328, 2003 WL 1712568, 2003 U.S. Dist. LEXIS 4965 (E.D.N.Y. Apr. 1, 2003) for the proposition that "[w]here the items have been sold separately, distinct products exist," and argues that under this case law, the fact that Teleflex sells its TLS separately from its PICCs establishes the existence of separate products. (Dkt. No. 134-1, at 14-15; Dkt. No. 152, at 7-8). However, the Court does not read either case to suggest that Teleflex's sale of a standalone TLS establishes the existence of separate products *as a matter of law*. In *Park,* the Court found that BAR/BRI's Multistate Bar Examination ("MBE") and state-specific bar review courses constituted separate products by relying on the fact that "numerous sellers offer an MBE-only or specific-state course to buyers every year," and granted summary judgment to the plaintiff on the separate products element. *Park*, 2007 WL 119461, at *3, 2007 U.S. Dist. LEXIS 2001, at *9-10. The *In re Visa* court found that "[o]verwhelming evidence establishes that merchant demand for credit card services is distinct from merchant demand for debit card services," including that "those services are sold separately; many merchants would refuse to use off-line debit services if given the choice to do so; and the defendants themselves have repeatedly acknowledged in their business strategy and marketing activities the distinctive attributes of their off-line debit services compared to their credit card services." *In re Visa*, 2003 WL 1712568 at *2, 2003 U.S. Dist. LEXIS 4965, at *8-9.

The evidence here is not so clear-cut. It establishes that there are only two competitors who sell navigation-enabled TLSs—one that sells its TLS stylet as a standalone product and one that does not. It also suggests that there are genuine technological distinctions between the two companies' products that may or may not affect the price at which they would need to offer their

respective stylets single-sterile in order to cover their associated costs, and consequently, the level of consumer demand for each of them as standalone products when sold at that price. (Dkt. No. 136-6, at 33-34 (describing technological differences between Teleflex and Bard stylets); Dkt. No. 147-44, ¶¶ 4-10 (same); Dkt. No. 147-13, at 35 (opining that technological differences would impact the companies' costs of selling their respective TLS stylets single-sterile, the price at which those single-sterile stylets would be offered, and the resulting consumer demand)).[5] While the Court agrees with the *In re Visa* court that "[t]he proper question is not whether it was more efficient for [Bard] to offer [its PICCs and TLS stylets] together, but whether the nature of the demand is such that those services could be offered separately," *In re Visa*, 2003 WL 1712568 at *3, 2003 U.S. Dist. LEXIS 4965, at *9, here (unlike in *In re Visa*) the genuine disputes of fact do not merely relate to "whether it was more efficient for [Bard] to offer [its PICCs and TLS stylets] together," but to whether the "nature of the demand" for Bard's TLS stylet (as distinct from Teleflex's TLS stylet) is such that Bard could efficiently sell the products separately at all. Therefore, the Court denies AngioDynamics' motion for summary judgment with respect to the separate products element of its claim.

2. Coercion

"Actual coercion by the seller that in fact forces the buyer to purchase the tied product is an indispensable element of a tying violation." *Unijax, Inc. v. Champion Int'l, Inc.*, 683 F.2d 678, 685 (2d Cir. 1982). Indeed, "the essential characteristic of an invalid tying arrangement lies in the seller's exploitation of its control over the tying product to force the buyer into the

[5] Moreover, the fact that Bard sold single-sterile stylets to Cleveland Clinic for a price at which Bard appeared to make a fairly high margin, (Dkt. No. 138-79, at 3), does not definitively resolve the question of whether sufficient demand existed to allow Bard to efficiently sell the products separately to the market at large, given the record evidence suggesting that this price was based on factors specific to Cleveland Clinic and was discounted from the price at which Bard would have been able to offer its single-sterile stylet to the market. (Dkt. No. 146, ¶ 48 (citing and summarizing record evidence)).

purchase of a tied product that the buyer either did not want at all, or might have preferred to purchase elsewhere on different terms." *Jefferson Par.*, 466 U.S. at 12. "When such 'forcing' is present, competition on the merits in the market for the tied item is restrained and the Sherman Act is violated." *Id.* "The element of actual coercion is designed to weed out the many cases where the bundling of separate products is due to consumer demand. If a consumer ***wants*** to purchase a bundle of the alleged tying and tied products, the seller is simply satisfying consumer demand and monopolization concerns are irrelevant." *Kaufman*, 836 F.3d at 142. A seller's "use of strong persuasion, encouragement, or cajolery to the point of obnoxiousness to induce [a buyer] to buy its full line of products does not . . . amount to actual coercion," which is present only if the seller "goes beyond persuasion and conditions its [buyer's] purchase of one product on the purchase of another product." *Unijax*, 683 F.2d at 685 (internal quotation marks omitted).

An "unremitting policy of tie-in, if accompanied by sufficient market power in the tying product to appreciably restrain competition in the market for the tied product constitutes the requisite coercion . . . given foreclosure of a not insubstantial volume of interstate commerce." *Hill v. A-T-O, Inc.*, 535 F.2d 1349, 1355 (2d Cir. 1976). Thus, when the seller has "a policy of never offering the [tying product] separately from the [tied product]," *id.*, allegations of individual coercion are unnecessary. *See Park*, 2007 WL 119461, at *4, 2007 U.S. Dist. LEXIS 2001, at *11-12 ("When a policy of conditioned sales is demonstrated, proof of coercion on an individual basis is unnecessary."); *cf. Reisner v. Gen. Motors Corp.*, 511 F. Supp. 1167, 1177 n.21 (S.D.N.Y. 1981) ("The 'unremitting policy of tie-in,' which under some circumstances can substitute for coercion, is appropriate only in a situation . . . where the policy was applied to all buyers." (citation omitted)), *aff'd*, 671 F.2d 91 (2d Cir. 1982).

AngioDynamics argues that the element of coercion is met here because "Bard admits that it has a policy of only selling its TLS Stylets preloaded in its PICCs—forcing those who

want to purchase Bard's TLS to also purchase its PICCs—and that it has only made one exception to that policy, for the Cleveland Clinic." (Dkt. No. 134-1, at 20-21; *see also* Dkt. No. 152, at 10). AngioDynamics also argues that "the record establishes, and Bard has admitted, that many institutions have requested to purchase Bard's TLS Stylets separately from its PICCs," and that "Bard refused these requests and has not sold its PICCs to any of these institutions—only to the Cleveland Clinic." (*Id.* at 21).

Bard responds that AngioDynamics "has a complete failure of proof" on the coercion element because "not a single hospital will testify that it 'either did not want [the Bard PICC] at all, or might have preferred to purchase [PICCs] elsewhere on different terms'"; to the contrary, "the only hospital that the jury will hear, Cleveland Clinic, will testify [that] it had the choice to purchase Bard's standalone stylets and use them with AngioDynamics' PICCs, but quickly decided that it preferred Bard's preloaded PICCs." (Dkt. No. 145, at 15-16 (quoting *Jefferson Par.*, 466 U.S. at 12)). Bard also argues that AngioDynamics cannot satisfy the coercion element "by showing only that Bard does not offer its stylets separately from its PICCs," without any evidence that particular customers were actually coerced into purchasing the products together. (*Id.* at 16-17).

Here, it is undisputed that, with the sole exception of Cleveland Clinic for a limited period in the past, Bard has never, and does not, allow its customers to purchase its TLS stylets separately from its PICCs. In other words, as a matter of Bard's policy, customers who wish to purchase Bard's TLS stylet are forced to purchase Bard's PICCs along with it. (Dkt. No. 133-2, ¶¶ 26-27, 30; Dkt. No. 134-2, ¶¶ 22-23; Dkt. No. 144-1, ¶¶ 26-27, 30; Dkt. No. 146, ¶¶ 22-23). Thus, Bard's policy is precisely the type of "unremitting policy of a tie," i.e. the "policy of never offering the [tying product] separately from the [tied product]," that the Second Circuit has long

held "constitutes the requisite coercion," assuming the other elements of market power and foreclosure of a not insubstantial amount of commerce are satisfied. *Hill,* 535 F.2d at 1355.

Bard's argument that AngioDynamics cannot prevail on the coercion element without proof that individual customers were coerced into purchasing the tied products together misses the mark. While Bard correctly states that the Second Circuit requires a showing of actual coercion to prevail on a tying claim, it has offered no rebuttal to the case law in this Circuit establishing that a "policy of never offering the [tying product] separately from the [tied product]," *Hill,* 535 F.2d at 1355, which "[is] applied to all buyers," *Reisner*, 511 F. Supp. at 1177 n.21, in itself constitutes such "actual coercion," since any customer who wants the tying product is, by definition, forced to purchase it with the tied product or not at all. *See Park*, 2007 WL 119461, at *4, 2007 U.S. Dist. LEXIS 2001, at *11-12 ("When a policy of conditioned sales is demonstrated, proof of coercion on an individual basis is unnecessary."); *In re Visa*, 2003 WL 1712568, at *2, 2003 U.S. Dist. LEXIS 4965, at *7-8 (holding, on a plaintiff's motion for summary judgment, that the defendants "indisputably" engaged in a tie because the defendants' "rules require merchants who accept [the tying product] to also accept [the tied product]" and "Defendants do not claim otherwise").

Bard argues that "AngioDynamics cannot meet the *Hill* standard," because *Hill* establishes that, "in addition to a policy of tying, a plaintiff must also show (i) market power in the tying market, and (ii) foreclosure of a not insubstantial amount of commerce." (Dkt. No. 145, at 17). Bard is correct that, under *Hill*, an "unremitting policy of a tie" only transforms into "actual coercion" where the defendant has sufficient market power such that its policy can "appreciably restrain competition in the market for the tied product" and "foreclos[e] a not insubstantial volume of interstate commerce." *Hill*, 535 F.2d at 1355. Indeed, without such

market power, a defendant cannot actually coerce customers into purchasing its tied products, since those customers can simply purchase the desired products separately elsewhere. In its most recent discussion of the "actual coercion" element, while it did not address the continued validity of *Hill*, the Second Circuit took a consistent approach, noting that "the 'separate product' and 'market power' requirements are usually essential to the coercion element," since those separate elements are necessary to distinguish tying policies that result from the defendant's market power from situations where "the bundling of separate products is due to consumer demand." *Kaufman*, 836 F.3d at 141-43.

The Court reads these cases to hold that an "unremitting policy of a tie" constitutes actual coercion if, and only if, the other elements of a tying claim—market power, separate products, and the foreclosure of a not insubstantial amount of commerce—are met. Therefore, if a plaintiff proves that a defendant has an unremitting policy of a tie that applies to all customers, the plaintiff need not present proof of individualized coercion, but must still prove the other elements of its tying claim in order to establish that that "unremitting policy" in itself constitutes "actual coercion." Here, the fact that Bard engages in an "unremitting policy of a tie" is not in dispute; given that, proof that Bard's TLS policy coerced individual customers who did not want Bard's PICCs into buying them is unnecessary to prove the "actual coercion" element of AngioDynamics' claim. However, the Court cannot conclude that Bard's "unremitting policy of a tie," in itself, satisfies that element unless it determines that Bard has sufficient market power, and forecloses a sufficiently "not insubstantial" amount of commerce, to transform that "unremitting policy" into "actual coercion" within the meaning of the antitrust laws. Because, as discussed below, genuine factual disputes remain as to these distinct elements of

AngioDynamics' tying claim, the Court must, at this stage, deny AngioDynamics' motion for summary judgment on the actual coercion element.

3. Market Power in the Tying Product Market

With respect to the third element of AngioDynamics' tying claim—market power in the tying product market—the Second Circuit has explained:

> The third element at issue here—market power in the tying product—is essential to a would-be monopolist's coercion via tie-in. Without the leverage of market power, a seller's inefficient tie-in will fail because a rational consumer will buy the tying product from the seller's competitor. "As a simple example, if one of a dozen food stores in a community were to refuse to sell flour unless the buyer also took sugar it would hardly tend to restrain competition in sugar if its competitors were ready and able to sell flour by itself." *N. Pac. Ry. Co.*, 356 U.S. at 6-7, 78 S.Ct. 514. Hence, without market power, there is little risk of anticompetitive harm from the seller's tie-in.
>
> Market power is "the ability of a single seller to raise price and restrict output." *Eastman Kodak*, 504 U.S. at 464, 112 S.Ct. 2072 (*quoting Fortner Enters., Inc. v. U.S. Steel Corp.*, 394 U.S. 495, 503, 89 S.Ct. 1252, 22 L.Ed.2d 495 (1969)). It can be shown by specific evidence of a seller's ability to control prices or exclude competitors from the market. *See K.M.B. Warehouse Distribs., Inc. v. Walker Mfg. Co.*, 61 F.3d 123, 129 (2d Cir. 1995). Market share is a proxy for market power. *See id.; Eastman Kodak*, 504 U.S. at 464, 112 S.Ct. 2072. A high market share alone, however, is insufficient to infer a seller's market power if other characteristics of the product market, such as low barriers to entry, high cross elasticity of demand, or technological developments in the industry, interfere with the seller's control of prices. *See Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 98-99 (2d Cir. 1998) ("A court will draw an inference of monopoly power only after full consideration of the relationship between market share and other relevant market characteristics."). Indeed, in a tying case, "the best way" to plead market power is to allege facts that, if proven, "establish directly that the price of the tied package is higher than the price of components sold in competitive markets." *Will v. Comprehensive Accounting Corp.*, 776 F.2d 665, 671-72 (7th Cir. 1985) (Easterbrook, J.).

Kaufman, 836 F.3d at 143.

AngioDynamics argues that Bard's overwhelming share of the market for TLSs establishes its market power. (Dkt. No. 134-1, at 22-23; Dkt. No. 152, at 11-12). AngioDynamics also contends that Bard's significant market share is protected by high barriers to entry in the TLS market, including high development costs, the requirement for FDA clearance of medical devices, and Bard's ownership of patented TLS technology. (Dkt. No. 134-1, at 22-23; Dkt. No.

152, at 12). Bard argues that genuine factual disputes exist as to the market power element because: (1) the parties disagree as to whether the "TLS market" is a separate and distinct relevant antitrust market, or whether the relevant market is the market for "differentiated PICCs," and AngioDynamics has not presented evidence regarding Bard's market power in the "differentiated PICC" market; and (2) even assuming the market for TLSs constitutes its own antitrust market, there are factual disputes regarding the significance of barriers to entry in the TLS market, and whether "Bard has maintained high share because it has offered a good product at a cheaper price rather than because of high entry barriers." (Dkt. No. 145, at 17-21).

Bard does not meaningfully dispute that it sold over the overwhelming majority of all TLSs between 2013 and 2018. (Dkt. No. 134-2, ¶ 47; Dkt. No. 146, ¶ 47). Assuming the TLS market constitutes its own antitrust market, this extremely high market share alone would constitute significant evidence of market power. *See, e.g., In re Visa*, 2003 WL 1712568, at *4, 2003 U.S. Dist. LEXIS 4965, at *11-12 (finding that market share of "nearly 60 percent" "easily qualifies as 'appreciable economic power' for purposes of the per se [tying] rule"); *Park*, 2007 WL 119461, at *8, 2007 U.S. Dist. LEXIS 2001, at *21-22 (noting that "[h]ow much market power is necessary to find a *per se* illegal tying arrangement is an unsettled issue of antitrust law" but that the fact that "Defendants possess an 80-90% market share might, standing alone, permit an inference of market power"); *Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455, 473 (S.D.N.Y. 1996), *as corrected* (Mar. 15, 1996) (holding that "a market share above 30 percent is necessary to establish the requisite [market] power" for purposes of a tying claim under Sherman Act § 1). However, the Court nonetheless finds that there are factual disputes that preclude summary judgment for AngioDynamics on this element.

First, for the same reasons the Court found that a genuine dispute of material fact existed as to whether TLSs and PICCs are separate products, the Court finds that the contrasting expert analyses by Dr. Hay and Professor Scott Morton as to whether these products constitute separate relevant antitrust markets, (Dkt. No. 136-9, at 26-35; Dkt. No. 147-13, at 13-16; Dkt. No. 138-22, at 4-6), viewed together with the record evidence as a whole, raise a genuine factual dispute as to this question.[6] Because an analysis of market power "only makes sense with reference to a particular market," *Heerwagen v. Clear Channel Commc'ns*, 435 F.3d 219, 229 (2d Cir. 2006), the question of whether Bard has sufficient market power for purposes of AngioDynamics' tying claim must survive summary judgment as well.[7]

Second, even assuming the TLS market constitutes a distinct market, there are factual questions regarding the barriers to entry AngioDynamics identifies and their impact on Bard's market power. From the record evidence, there is little doubt that high development costs, the need for FDA approval, and patents held by Bard pose barriers for market entrants seeking to develop TLSs. (Dkt. No. 134-2, ¶¶ 50-56 (citing record evidence discussing these barriers to entry)). However, there are factual questions as to whether those barriers are significant enough

[6] Indeed, at oral argument, AngioDynamics' counsel agreed that, should the Court find a genuine dispute of material fact as to whether Bard's PICCs constitute a separate product from its TLSs, it should also find a factual dispute as to the proper market definition for purposes of the "market power" element.

[7] AngioDynamics argues that Professor Scott Morton's opinion is based on the premise that there is no separate use for TLSs independent of their use with PICCs, and that this premise is contrary to law because "[t]he Supreme Court and courts in this Circuit have repeatedly held . . . that it does not matter whether 'there is no separate use' for the tying product." (Dkt. No. 152, at 11 (citing *Park*, 2007 WL 119461, at *4, 2007 U.S. Dist. LEXIS 2001, at 10-11; *Kodak*, 504 U.S. at 463)). AngioDynamics is correct that the mere fact that two products are interdependent does not preclude a finding that they are separate products or exist in separate antitrust markets. However, Professor Scott Morton's opinion is not based merely on the fact that Bard's TLSs have no use separate from Bard's PICCs. Rather, she opines that consumers "do not evaluate the price of [a TLS] stylet in comparison with the price of other stylets," but rather "evaluate the price of that stylet paired with a PICC in comparison with other combinations of stylets and PICCs," and "choose the differentiated PICC system that best suits its needs based on the system's overall features and price." (Dkt. No. 147-13, at 15). Professor Scott Morton concludes that, "[b]ecause the relevant competition between manufacturers occurs at the differentiated PICC level and not at the TLS or TLS stylet level . . . there is not a separate relevant product market for TLSs." (*Id.* at 16).

to protect Bard's ability to raise price and restrict output in the TLS market, particularly given record evidence that Bard's competitors have developed TLS products in the past notwithstanding the associated development costs and Bard's patents, (Dkt. No. 146, ¶¶ 50, 56), that the price of Bard's PICCs preloaded with its TLS stylet has sometimes been *lower* than the combination of AngioDynamics' PICCs and Teleflex's TLS, (Dkt. No. 133-2, ¶¶ 39-41; Dkt. No. 144-1, ¶¶ 39-41), that [redacted], (Dkt. No. 133-2, ¶ 21; Dkt. No. 144-1, ¶ 21), and that there is no record evidence suggesting that Bard has, in fact, raised prices or restricted output in the TLS market. These questions are best resolved by a fact-finder after development of a complete record at trial, rather than the Court on summary judgment. Therefore, the Court denies AngioDynamics' motion for summary judgment on the market power element of its claim.

4. "Not Insubstantial" Amount of Interstate Commerce

As to the fourth element of AngioDynamics' claim, the Supreme Court has stated that there must be a substantial potential for impact on competition in the tied market in order to justify condemnation of an alleged tying arrangement. *Jefferson Par.,* 466 U.S. at 16. "If only a single purchaser were 'forced' with respect to the purchase of a tied item, the resultant impact on competition would not be sufficient to warrant the concern of antitrust law." *Id.* The Supreme Court has defined "substantial" in this context as "substantial enough in terms of dollar-volume so as not to be merely *de minimis.*" *Fortner Enters., Inc. v. United States Steel Corp.,* 394 U.S. 495, 501 (1969) ("*Fortner I*"). "There is no magic number that definitively establishes whether a plaintiff has foreclosed a 'not insubstantial' amount of potential sales for the tied product." *Gonzalez v. St. Margaret's House Housing Dev. Fund Corp.*, 880 F.2d 1514, 1518 (2d Cir. 1989). In *Fortner I*, the Supreme Court held that a sum of almost $200,000 is not "paltry or

'insubstantial,'" while the Second Circuit has "said that $600,000 of commerce clearly meets 'any test of substantiality.'" *Id.* (quoting *Fortner*, 394 U.S. at 502; *Yentsch v. Texaco, Inc.*, 630 F.2d 46, 58 (2d Cir. 1980)).

AngioDynamics argues that, for purposes of this element, the Court should look "solely to the amount of sales processed by the tied product." (Dkt. No. 134-1, at 24; Dkt. No. 152, at 12-14). It asserts that "the data produced by Bard in the litigation shows that Bard sold over [redacted] PICCs pre-loaded with TLS, valued at over [redacted] during the period 2013-2018." (Dkt. No. 134-1, at 24; Dkt. No. 152, at 12). Bard argues that the relevant measure is not the *total volume of tied sales*, but the *amount of foreclosed sales*, i.e. the amount of sales that would have occurred but for the challenged tie (subtracting those sales in which the customer would have voluntarily chose to purchase the tied package even if they had a different option). (Dkt. No. 145, at 21-22).

The Supreme Court has held that, "[f]or purposes of determining whether the amount of commerce foreclosed is too insubstantial to warrant prohibition of the practice . . . the relevant figure is the total volume of sales tied by the sales policy under challenge, not the portion of this total accounted for by the particular plaintiff who brings suit." *Fortner I*, 394 U.S. at 502. Clearly, then, the relevant metric is the amount of PICC sales Bard's TLS policy foreclosed with the respect to the *entire market*, not just AngioDynamics, and no party contends otherwise. The more difficult, and relevant, question is whether this language means that the Court should look simply to the total volume of Bard's tied sales, rather than the amount of sales that Bard's competitors actually were foreclosed from as a result of Bard's conduct. AngioDynamics cites several district court cases in support of its argument that the court should look solely to the total volume of tied sales, rather than the volume of sales that were actually foreclosed. *See In re Data*

Gen. Corp. Antitrust Litig., 490 F. Supp. 1089, 1117 (N.D. Cal. 1980) ("In Fortner I and the earlier cases relied on therein, the Supreme Court looked solely at the total volume of the defendant's tied sales . . . Proof of actual foreclosure has never been required in order to satisfy the effect on commerce test." (citation omitted)); *In re Visa*, 2003 WL 1712568, at *2, 2003 U.S. Dist. LEXIS 4965, at *7 ("In 1999 alone, merchants processed over one hundred and fifty billion dollars in sales through the defendants' off-line debit cards. This figure is 'not insubstantial.' . . . To the extent that the defendants contend that this element incorporates the need for a showing of 'foreclosure' or 'anticompetitive effect' in the tied product market, I disagree.").

However, the Second Circuit has noted that while "one might read *Fortner I* to require the district court to consider the [total amount of tied sales], we believe that the Supreme Court in *Fortner I* was primarily concerned with ascertaining the total sales lost to potential competitors due to the tying policy." *Gonzalez*, 880 F.2d at 1519 (citation omitted). The *Gonzalez* court found that using the total amount of tied sales (in that case, mandatory meal charges collected from residents of a housing facility) "overstates the amount of commerce foreclosed because the record already indicates that many residents would continue to use the meal plan by choice," and that using only the amount of tied sales to the specific plaintiffs in the litigation "may also overstate the amount of commerce foreclosed by the mandatory meal policy because some plaintiffs would choose not to buy the product (the single, prepared meal) at all . . . for a variety of reasons; e.g., they might cook in their rooms at a lower cost." *Id.* at 1518. The Second Circuit remanded to the district court to "determine whether the impact of the alleged tying arrangement is substantial enough to warrant the protection of the antitrust laws" by "tak[ing] into consideration the actual number of people affected by the disputed policy," and

noted that "[i]f the district court can ascertain [the total sales lost to potential competitors due to the tying policy], it may use that as the relevant figure." *Id.* at 1519.

Notwithstanding the somewhat ambiguous language in *Fortner I*, this Court is bound by the Second Circuit law in *Gonzalez*. Here, to estimate the amount of commerce foreclosed by Bard's TLS policy, AngioDynamics has simply provided its expert's valuation of the total volume of Bard's sales of PICCs preloaded with its TLS. (Dkt. No. 138-20, at 53-54). This, however, likely "overstates the amount of commerce foreclosed" by Bard's TLS policy, as it does not account for the near-certainty that at least *some* customers would have voluntarily purchased Bard's PICCs preloaded with its TLS stylet even if they had the option not to. *Gonzalez*, 880 F.2d at 1518; *cf., e.g.*, *Park*, 2007 WL 119461, at *9, 2007 U.S. Dist. LEXIS 2001, at *28 (finding that using a defendant's "total revenues" to measure the volume of commerce affected "would overstate the effect [of the alleged anticompetitive activity] because many consumers purchase the integrated BAR/BRI course by choice"). Of course, given that amounts as low as a few hundred thousand dollars are sufficient to find a "not insubstantial" amount of foreclosed commerce, if a fact-finder were to conclude that even a relatively small fraction of Bard's total PICC sales were actually foreclosed to competitors by its TLS policy, the fact-finder would likely have a basis to conclude that the amount of foreclosed commerce was "not insubstantial." However, as discussed below in connection with the "anticompetitive effects" element of AngioDynamics' claim, there are outstanding factual disputes as to whether Bard's TLS policy actually foreclosed *any* PICC sales at all. Therefore, the Court must deny AngioDynamics' motion for summary judgment on this element.[8]

[8] The Court recognizes that AngioDynamics' damages expert, Dr. Frankel, puts forth a number of estimates of AngioDynamics' lost profits that resulted from Bard's TLS policy. If proven, any one of these estimates would far exceed the low threshold to allow this Court to find that a "not insubstantial" amount of commerce has been foreclosed, without even accounting for other PICC competitors' lost sales. (Dkt. No. 132-5, at 45). However, these lost profits

5. Anticompetitive Effects[9]

To prove anticompetitive effects, a plaintiff must prove that "the defendants' challenged behavior had an actual adverse effect on competition as a whole in the tied product market." *Geneva Pharms. Tech. Corp. v. Barr Labs.,* 386 F.3d 485, 506-07 (2d Cir. 2004). Anticompetitive effects may be proven directly by control of prices or exclusion of competition. *See Virgin Atl. Airways Ltd. v. British Airways PLC*, 257 F.3d 256, 264 (2d Cir. 2001); *see also Yentsch*, 630 F.2d at 57 (explaining that anticompetitive effects may be shown if "competitors were foreclosed from selling to [buyers] because of [the defendant's] policies"). If plaintiffs establish anticompetitive effects, the burden shifts to defendants to justify their tying arrangement. *Geneva,* 386 F.3d at 507. "Assuming defendants can provide such proof, the burden shifts back to the plaintiffs to prove that any legitimate competitive benefits offered by defendants could have been achieved through less restrictive means." *Id.*

AngioDynamics argues that Bard's TLS policy caused "substantial foreclosure in the PICC market, which harmed not only competitors but also the competitive environment in the PICC market." (Dkt. No. 134-1, at 25). AngioDynamics argues that, "[a]s a result of Bard's tie and its overwhelming market share in the TLS market . . . Bard has almost entirely foreclosed competition in the largest segment of the PICC market (PICCs used with TLS)." (Dkt. No. 152, at 15). AngioDynamics also argues that Bard's policy "suppressed innovation and investment in

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estimates are obviously in dispute, and given that (as discussed below) there are genuine disputes of material fact as to whether *any* of AngioDynamics' lost profits may be fairly attributed to Bard's TLS policy, these estimates cannot, at this stage, serve as a basis for granting summary judgment in AngioDynamics' favor.

[9] As they did at the motion to dismiss stage, the parties disagree on whether AngioDynamics must prove anticompetitive effects as an element of its per se claim, as distinct from its rule of reason claim. (Dkt. No. 134-1, at 24-25; Dkt. No. 145, at 22 n.26; Dkt. No. 152, at 14 & n.8). Because the Court has found that genuine disputes of material fact exist as to the other elements of AngioDynamics' claim under either a per se or rule of reason theory, a decision on this issue would not affect the Court's ultimate decision on either party's motion for summary judgment. Therefore, the Court does not address this issue.

the PICC market and frustrated customer choice." (Dkt. No. 134-1, at 26). Bard argues that: (1) customers who wish to use non-Bard PICCs with a TLS have the option to pair those PICCs with Teleflex's TLS, so Bard's PICC competitors are not entirely foreclosed from competing for such customers; (2) [redacted] (3) Bard's actions have benefitted consumers in the form of lower PICC prices and higher product quality; (4) AngioDynamics has failed to establish BioFlo's technological superiority to Bard's PICCs (a basis for AngioDynamics' belief that many customers prefer BioFlo to Bard's PICCs and that Bard's TLS policy is therefore thwarting customer access to a desired product); and (4) the record belies any argument that Bard's TLS policy "suppressed innovation and investment in the PICC market," as both AngioDynamics and Teleflex have made significant investments in the development of innovative antithrombogenic and antimicrobial PICC technology. (Dkt. No. 145, at 22-25).

AngioDynamics' argument is facially compelling. Because Bard's policy forces any customer who wishes to use Bard's TLS stylet to pair it with Bard's PICCs, Bard's PICC competitors are effectively unable to compete for the PICC business of any customer who opts to use Bard's TLS. And because the vast majority of customers within the market segment for TLS-paired PICCs use Bard's TLS, Bard's TLS policy arguably precludes Bard's competitors from competing with Bard in by far the largest segment of the PICC market.

Nonetheless, as Bard has demonstrated, factual disputes exist as to whether Bard's TLS policy has actually foreclosed any PICC sales by Bard's competitors, given the combination of the following factors: (1) customers who wish to use a TLS stylet with a non-Bard PICC have the option to pair the non-Bard PICC with Teleflex's TLS, meaning that Bard's PICC

competitors are not *entirely* foreclosed from competing with Bard even in the market segment for PICCs paired with TLSs; (2) record evidence suggests that customers who use Bard's PICCs preloaded with its TLS may prefer Bard's integrated product for various reasons independent of its TLS policy, including price, quality, ease of use, concerns about heightened risks to patient safety from loading a TLS stylet at the patient's bedside, the convenience of dealing with a single supplier, and preferences for Bard's PICC technology over competitors' PICC technology, including BioFlo; and (3) as discussed more fully with respect to the Court's analysis of antitrust injury, *see* Section IV.B.2. *supra*, AngioDynamics has not adduced evidence establishing beyond dispute that Bard's TLS policy caused AngioDynamics or Teleflex to lose PICC sales to Bard that they otherwise would have made.

Given these factors, a reasonable jury could find that Bard's dominance of the market segment for PICCs paired with TLSs has resulted from customers' overwhelming preference for Bard's combined PICC-TLS product over the other PICC and TLS combinations currently available, and not because Bard's TLS policy prevented Bard's PICC competitors from competing in that market segment. [redacted]

Moreover, AngioDynamics cites no evidence that Bard's conduct has increased prices, reduced output or reduced product quality in the market. *Cf. MacDermid Printing Solutions LLC*

v. Cortron Corp., 833 F.3d 172, 182-84 (2d Cir. 2016) (explaining that "[o]ur cases suggest that it is possible, at least in theory, to prove that a challenged action harmed competition without offering evidence of higher prices, reduced output, or reduced quality," but "in no precedential opinion in this Circuit has a plaintiff successfully proved an adverse effect on competition without offering" such evidence, though "[w]e have suggested that actions that reduce consumer choice are inherently anticompetitive"). And the Court agrees with Bard that AngioDynamics' claim that Bard's TLS policy suppressed innovation in the PICC market is conclusory and without support in the record.

Therefore, the Court finds that genuine disputes of material fact exist as to the anticompetitive effects element of AngioDynamics' claim, and denies AngioDynamics' motion for summary judgment on this element.

6. Liability Summary

For the foregoing reasons, the Court finds that genuine disputes of material fact exist as to each of the liability elements of AngioDynamics' claim, for purposes of both its per se and rule of reason theories. Therefore, the Court denies AngioDynamics' motion for summary judgment as to liability.

B. Antitrust Injury

Both parties move for summary judgment on the antitrust injury element of AngioDynamics' claim. (Dkt. No. 133-1; Dkt. No. 134-1, at 26-34). The notion of "antitrust injury" grew from the recognition that a competitor may be injured not only by prohibited anticompetitive activity, but also by competition itself, and that the antitrust laws were not intended to afford the latter injuries a remedy. *See Balaklaw v. Lovell,* 14 F.3d 793, 797 (2d Cir. 1994). Antitrust injury, then, simply means "injury of the type the antitrust laws were intended to prevent and that flows from that which makes defendants' acts unlawful." *Brunswick Corp. v.*

Pueblo Bowl-O-Mat, Inc., 429 U.S. 477, 489 (1977). "To establish antitrust injury, a private litigant must 'prove . . . "injur[y] in its business or property" by reason of the violation . . . [and that] the violation was at least a material cause of the plaintiff's injury.'" *Blue Tree Hotels Inv., Ltd. v. Starwood Hotels & Resorts Worldwide, Inc.*, 369 F.3d 212, 220 (2d Cir. 2004) (citations omitted, alterations in original). In other words, "a plaintiff must show (1) an injury-in-fact; (2) that has been caused by the violation; and (3) that is the type of injury contemplated by the [antitrust] statute." *Id*. The antitrust injury requirement thus ensures that a "plaintiff can recover only if the loss stems from a competition-*reducing* aspect or effect of the defendant's behavior." *Atlantic Richfield Co. v. USA Petroleum Co.,* 495 U.S. 328, 344 (1990).

1. Preliminary Evidentiary Issues

Before turning to the merits of the parties' arguments, the Court must address a preliminary evidentiary issue. Throughout its briefing and its response to AngioDynamics' statement of material facts, Bard objects to certain evidence AngioDynamics relies on as inadmissible hearsay. Bard's overall argument is that, to the extent AngioDynamics cites statements from hospital employees (directly or as recounted second-hand by AngioDynamics employees), those statements are hearsay (and, in the latter case, double hearsay) and thus inadmissible. (Dkt. No. 145, at 26-30; Dkt. No. 146, ¶¶ 40(a)-(e), 59, 63-65 & "Statement of Additional Material Facts" ¶¶ 22(d), 23(c); Dkt. No. 154, at 10 & n.5, 12-13). AngioDynamics argues that this evidence is admissible under the "state of mind" exception to the hearsay rule to "show customer motive, such as a customer's reason for ceasing to do business with AngioDynamics." (Dkt. No. 144, at 29-30; Dkt. No. 152, at 19-20).

The Court "may only consider admissible evidence" in ruling on a motion for summary judgment. *Humphrey v. Diamant Boart, Inc.*, 556 F. Supp. 2d 167, 173-74 (E.D.N.Y. 2008) (citations omitted). At the same time, "material relied on at summary judgment need not be

admissible in the form presented to the district court. Rather, so long as the evidence in question will be presented in admissible form at trial, it may be considered on summary judgment." *Smith v. City of New York*, 697 F. App'x 88, 89 (2d Cir. 2017) (internal quotation marks omitted). Thus, under Rule 56(c)(2) of the Federal Rules of Civil Procedure, "[a] party may object that the material cited to support or dispute a fact cannot be presented in a form that would be admissible in evidence."

As the Second Circuit has long held, under Fed. R. Evid. 803(3), "[s]tatements of a customer as to his reasons for not dealing with a supplier are admissible for [the] limited purpose" of demonstrating the customer's motive, "although not as evidence of the facts recited as furnishing the motives." *Herman Schwabe, Inc. v. United Shoe Machinery Corp.*, 297 F.2d 906, 914 (2d Cir. 1962) (citations and internal quotation marks omitted); *see also Hydrolevel Corp. v. Am. Soc. Of Mech. Eng'rs, Inc.*, 635 F.2d 118, 128 (2d Cir. 1980) (same); *Sleepy's LLC v. Select Comfort Wholesale Corp.*, 779 F.3d 191, 204 (2d Cir. 2015) (same, outside the antitrust context); *Discover Fin. Servs. v. Visa U.S.A. Inc.*, No. 04-cv-7844, 2008 WL 4560707, at *1, 2008 U.S. Dist. LEXIS 80801, at *4 (S.D.N.Y. Oct. 9, 2008) ("Defendants argue that this Court should preclude [plaintiff's] current and former executives from testifying at trial about what Citibank's executives purportedly told them . . . However, testimony concerning the motivation of customers for ceasing to deal with a business is admissible under the 'state of mind' exception to the hearsay rule, Rule 803(3) of the Federal Rules of Evidence, provided that there is otherwise admissible proof that business was lost.").

While from a different Circuit, *Callahan v. A.E.V.*, 182 F.3d 237 (3d Cir. 1999), which AngioDynamics cites, is instructive. There, the court found that the plaintiff beer retailers' deposition testimony recounting statements by their customers as to the customers' reasons for

no longer purchasing beer from the plaintiffs was admissible for the purpose of proving the customers' motives, but not for the fact of lost sales; that the plaintiffs' own testimony that "they knew of customers who used to purchase beer from them, but no longer did," was admissible as "direct evidence of an actual loss of customers," but not as evidence of "the reason therefore"; and that the "plaintiffs' testimony that certain customers no longer purchased beer from them, coupled with their testimony concerning the customers' statements of their motive, which is admissible hearsay under Rule 803(3), are together evidence of the fact of damage." *Id.* at 252-53.

AngioDynamics argues that "show[ing] customer motive, such as a customer's reason for ceasing to do business with AngioDynamics," is "exactly how AngioDynamics relies on" the evidence Bard challenges, and thus that this evidence is admissible under Rule 803(3). (Dkt. No. 144, at 29). Bard offers two responses.

First, Bard argues that "PICC purchases are complicated decisions made by hospital committees comprised of many stakeholders," and that "[a]t most, AngioDynamics' evidence [of statements by particular hospital employees regarding the hospitals' motivations] constitutes speculation by hospital personnel about what drove past decisions of other decision-makers." In support of this argument, Bard primarily relies on *Amerisource Corp. v. RxUSA Int'l Inc.*, No. 02-cv-2514, 2009 WL 235648, 2009 U.S. Dist. LEXIS 6864 (E.D.N.Y. Jan. 30, 2009). In that case, the court declined to apply the state-of-mind exception to admit deposition testimony and written notes from the plaintiffs' executives reflecting that "employees of various non-party distributors told [them] (i) that their companies would not deal with [the plaintiff]; (ii) that their companies would not deal with [the plaintiff] until [the defendant] gave its approval; and (iii) that their companies would not deal with [the plaintiff] because [the defendant] said that [the

plaintiff] was a bad credit risk." *Id.* at *1, 2009 U.S. Dist. LEXIS 6864, at *2. As relevant to Bard's argument, the court reasoned:

> Here, the declarants are salespersons for various non-party pharmaceutical distributors with whom [the plaintiff] sought to do business. However, credit managers rather than salespersons decided whether or not to do business with prospective customers and the declarants in this case had no authority or involvement in the decision to decline RxUSA's business. Consequently, the salespersons' states of mind and intentions are not relevant. Indeed, their statements reveal not their own intention but rather their belief or memory as to the intention of the actual decision-maker, which is explicitly excluded by Rule 803(3).

Id. at *2, 2009 U.S. Dist. LEXIS 6864, at *4.[10] This ruling may have some applicability to certain documents or testimony AngioDynamics relies on. The parties agree that the personnel involved in PICC purchasing decisions varies by hospital and can include nurses, doctors and other professionals. (Dkt. No. 133-2, ¶¶ 15-17; Dkt. No. 144-1, ¶¶ 15-17). Given this complexity, there are factual questions as to the roles the hospital employee speakers in the evidence AngioDynamics relies on played in the decision-making processes at their hospitals, and whether their statements can be fairly construed as reflections of their hospitals' "then-existing state of mind" so as to warrant admission under Rule 803(3). However, at this stage of the proceedings, without further factual development on these questions, the Court declines to find that the evidence of their statements AngioDynamics presents could not be presented in admissible form at trial.

[10] The court also found that the third-party salespersons' "statements explaining why the company did not intend to do business with [the plaintiff] [were] expressly outside the state-of-mind exception" because they constituted "statement[s] of memory or belief to prove the fact remembered or believed." *Id*., 2009 WL 235648, at *2, 2009 U.S. Dist. LEXIS 6864, at *4-5. In *Amerisource*, there was "no dispute" that the hearsay statements were being offered not only to prove the third-party company's motivations, but also to prove the facts underlying those motives, i.e. "that [the defendant] said [plaintiff] was a bad credit risk." *Id*. at *1, 2009 U.S. Dist. LEXIS 6864, at *3. Here, to the extent AngioDynamics offers evidence of customers' then-existing states of mind solely to show its customers' motivations for switching away from or declining to purchase AngioDynamics' PICCs, and not for the fact of lost sales itself or the truth of the underlying facts asserted in those customers' statements, the evidence would be admissible under Rule 803(3) for that purpose.

Second, Bard argues that much of AngioDynamics' evidence "does not even quote customers directly but rather involves AngioDynamics' employees' (oftentimes, hazy) recollection of what either a hospital employee or another AngioDynamics sales representative told them about the hospital's PICC purchases." (Dkt. No. 154, at 13). As Bard correctly points out, "[e]ach hearsay statement within multiple hearsay statements must have a hearsay exception in order to be admissible." *United States v. Cruz*, 894 F.2d 41, 44 (2d Cir. 1990). AngioDynamics does not respond to Bard's argument regarding "double hearsay."

Applying the foregoing principles, it appears to the Court that certain of the documents and deposition testimony that AngioDynamics relies on would be admissible at trial under Rule 803(3) for the limited purpose of showing AngioDynamics' customers' motivations for declining to purchase AngioDynamics' PICCs, or for switching from AngioDynamics' PICCs to Bard's PICCs. Other evidence is of more questionable admissibility, given the multiple layers of hearsay embedded in certain documents and testimony, as well as questions over whether certain documents truly reflect a hospital customer's "then-existing state of mind" as opposed to merely a statement of the speaker's "memory or belief to prove the fact remembered or believed." Fed. R. Evid. 803(3). In the absence of fully developed briefing with respect to each piece of evidence Bard raises objections to, the Court cannot issue a formal ruling on the admissibility of each such piece of evidence at this time. Rather, applying the foregoing principles, the Court will determine whether there appears to be enough record evidence that could be presented in admissible form to raise a genuine dispute of material fact for trial with respect to antitrust injury.

2. Injury-in-Fact and Causation

a. Legal Standard

To establish antitrust injury, "[t]here must be a causal connection between an antitrust violation and an injury sufficient for the trier of fact to establish that the violation was a 'material

cause' of or a 'substantial factor' in the occurrence of damage." *Billy Baxter, Inc. v. Coca-Cola Co.*, 431 F.2d 183, 187 (2d Cir. 1970). "The fact of injury must be demonstrated with reasonable certainty and may not be speculative," and "failure to satisfactorily prove that a plaintiff is injured by reason of the defendant's alleged antitrust violations is sufficient to defeat the antitrust claims." *Erie Conduit Corp. v. MAPA*, 102 F.R.D. 877, 879 (E.D.N.Y. 1984) (citations omitted).

While antitrust plaintiffs are entitled to a "relaxed standard of proof" with respect to the amount of damages they suffered as a result of a defendant's conduct, "this relaxed standard of proof applies to the amount of damages, not to whether the violation caused damage." *Hygrade Milk & Cream Co. v. Tropicana Products, Inc.*, No. 88-cv-2861, 1996 WL 257581 at *16-17, 1996 U.S. Dist. LEXIS 6598, at *52-54 (S.D.N.Y. May 16, 1996) (citing *MCI Comms. Corp. v. Am. Tel. & Tele. Co.*, 708 F.2d 1081, 1161 (7th Cir. 1982)). That said, the amount of harm a plaintiff needs to prove to meet its burden of demonstrating antitrust injury is not high; rather, a plaintiff need only demonstrate "proof of some damage flowing from the unlawful [conduct]; inquiry beyond this minimum point goes only to the amount and not the fact of damage." *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 114 n.9 (1969). Despite this relatively low burden, "[a]lthough there appear to be few precedents on point, the relevant decisions do suggest that a trivial effect on a claimant's sales is insufficient to demonstrate antitrust injury." *Drug Mart Pharm. Corp. v. Am. Home Prod. Corp.*, No. 93-cv-5148, 2012 WL 3544771, at *14, 2012 U.S. Dist. LEXIS 115882, at *47-48 (E.D.N.Y. Aug. 16, 2012) (finding a de minimus amount of lost sales insufficient to establish antitrust injury in the context of a Robinson-Patman Act claim (discussing *Allen Pen Co. v. Springfield Photo Mount Co.*, 653 F.2d 17, 23 (1st Cir.

1981); *Hygrade Milk and Cream Co.*, 1996 WL 257581 at *18-19, 1996 U.S. Dist. LEXIS 6598, at *59-60)).[11]

An antitrust plaintiff need "not necessarily [prove that the defendant's misconduct was] the sole cause" of the plaintiff's alleged injury, and "a plaintiff need not exhaust all possible alternative sources of injury in fulfilling his burden of proving compensable injury." *In re Actos End-Payor Antitrust Litig.*, 848 F.3d 89, 97-98 (2d Cir. 2017) (quoting *Zenith Radio Corp.*, 395 U.S. at 114 n.9); *see also In re Publ'n Paper Antitrust Litig.*, 690 F.3d 51, 66 (2d Cir. 2012) (holding that "an antitrust defendant's unlawful conduct need not be the sole cause of the plaintiffs' alleged injuries; to prove a 'causal connection' between the defendant's unlawful conduct and the plaintiff's injury, the plaintiff need only 'demonstrate that [the defendant's] conduct was a substantial or materially contributing factor' in producing that injury" and that "the injuries alleged would not have occurred *but for* [the defendant's] antitrust violation") (citations omitted). "[R]equiring otherwise 'would effectively deny private remedies, because multiple causes always affect everyone.'" *In re Gabapentin Patent Litig.*, 649 F. Supp. 2d 340, 356 (D.N.J. 2009) (quoting Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 338a at 317 (2d Ed. 2000)).

[11] Citing case law from other Circuits, AngioDynamics argues that the relaxed standard of proof typically applied to the *amount of damages* in antitrust cases also applies to the element of antitrust injury, and that an antitrust plaintiff need only prove a "trifle of injury" resulting from the defendant's conduct in order to satisfy this element. (Dkt. No. 134-1, at 27-29; Dkt. No. 144, at 12-13; Dkt. No. 152, at 15-16 (relying on *In re Data Gen. Corp. Antitrust Litig.*, 490 F. Supp. at 1117-18; *In re K-Dur Antitrust Litig.*, No. 01-cv-1652, 2008 WL 2660776, at *4, 2008 U.S. Dist. LEXIS 71772, at *21-22 (D.N.J. Feb. 21, 2008); *Digidyne Corp. v. Data Gen. Corp.*, 734 F.2d 1336, 1339 n.1 (9th Cir. 1984))). The Court applies the Second Circuit's standard for evaluating antitrust injury, as set forth above, and declines to follow the cases AngioDynamics cites to the extent they are inconsistent with that standard.

b. The Parties' Arguments

Bard argues, in summary, that: (1) no hospital witness will testify at trial that it would have purchased an AngioDynamics PICC to pair with Bard's TLS but for Bard's TLS policy;[12] (2) the evidence AngioDynamics relies on consists only of "[s]econd-hand, self-serving, and speculative" testimony from its own executives, anecdotal documentary evidence of discussions with specific customers, and "speculative comments" in Bard's internal emails and documents; and (3) none of that evidence establishes that any customer currently using Bard's preloaded PICCs would have purchased AngioDynamics' PICCs but for Bard's TLS policy or that Bard's TLS policy was a "material cause" of any PICC sales AngioDynamics lost, given the various reasons some customers prefer to purchase Bard's preloaded product independent of its TLS policy. As to these reasons, Bard has adduced evidence that they include: (1) the lack of FDA approval for the use of Bard's standalone stylet with other companies' *valved* PICCs; (2) hospital preferences for certain characteristics that Bard's PICCs have and AngioDynamics' PICCs do not; (3) the premium that AngioDynamics charges for BioFlo PICCs relative to other PICCs in the market; (4) AngioDynamics' inability to definitively prove BioFlo's superiority to other PICC technology through peer-reviewed clinical trials; (5) AngioDynamics' past product recalls and the resulting damage to its reputation in the market; (6) Bard's more substantial training and clinical support programs relative to AngioDynamics'; (7) Bard's wider breadth of product lines relative to AngioDynamics; (8) the effect of GPO and IDN contracts on purchasing decisions; (9) possible risks to patient safety and other inconveniences of loading a TLS stylet at a patient's bedside rather than purchasing it preloaded into a PICC; (10) some customers' preference for

[12] Pursuant to a stipulation dated April 17, 2020, the parties agreed that neither party will call at trial any witnesses from third-party hospitals, hospital groups or representatives, except for two witnesses from Cleveland Clinic who have already been deposed. (Dkt. No. 136-27).

purchasing PICCs and TLSs from a single supplier; and (11) the fact that Bard would likely need to charge a premium for its single-sterile stylet in order to compensate for its additional costs of offering that product standalone, "including liability and reputational risks Bard would face in the event of stylet breakage and patient injury." (Dkt. No. 133-1, at 12-32; Dkt. No. 145, at 25-34; Dkt. No. 154, at 6-12).

AngioDynamics argues, in summary, that: (1) the documentary evidence it relies on demonstrates specific (and non-exhaustive) examples in which customers declined to purchase AngioDynamics' PICCs, or chose to switch from AngioDynamics' PICCs to Bard's PICCs, because they had no option to pair AngioDynamics' PICCs with Bard's TLS stylet; (2) this same evidence demonstrates that, even if multiple factors were at play in any particular customer's purchasing decision, the inability to pair AngioDynamics' PICCs with Bard's TLS stylet was at least one "material factor" in that decision, which is all AngioDynamics needs to show in order to establish antitrust injury; (3) economic evidence also supports a finding of injury and causation, including that Bard sells the overwhelming majority of the TLSs on the market and that "in those segments of the PICC market where Bard's TLS is not a factor, or less of a factor," "AngioDynamics sells substantially more PICCs." (Dkt. No. 134-1, at 26-34; Dkt. No. 144, at 12-30; Dkt. No. 152, at 17-20).[13]

c. Bard's Motion for Summary Judgment

The record contains the following types of evidence that, viewed collectively and in the light most favorable to AngioDynamics for purposes of Bard's summary judgment motion, raises

[13] The parties also present arguments as to whether the testimony of AngioDynamics' causation and damages expert, Dr. Frankel, is sufficient to establish injury-in-fact or causation. (Dkt. No. 133-1, at 17-24, 26-32; Dkt. No. 134-1, at 33; Dkt. No. 144, at 17, 24-26; Dkt. No. 154, at 14-16). For the reasons explained in Section IV.C.1 of this Decision, the Court is granting Bard's motion to exclude Dr. Frankel's causation opinion. Therefore, the Court does not consider Dr. Frankel's opinion in connection with its injury-in-fact or causation analysis and, consequently, does not address Bard's specific critiques of his opinion or AngioDynamics' responses here.

genuine issues of material fact as to whether AngioDynamics lost a more-than-de-minimus amount of PICC sales to Bard and whether Bard's TLS policy was a material cause of those lost sales: (1) evidence that Bard received inquiries from some customers regarding the possibility of purchasing a stand-alone TLS stylet to pair with AngioDynamics' or another competitor's PICCs, which Bard consistently rebuffed; (2) internal Bard communications reflecting Bard's efforts to avoid disseminating knowledge of its sale of single-sterile TLS stylets to Cleveland Clinic, at least in part out of a concern that customers would demand such an option if they knew it was available; (3) internal Bard documents which could be read to reflect the views of some Bard employees that Bard's TLS policy prevented competitors like AngioDynamics from effectively competing for some PICC customers that used Bard's TLS, including one employee's observation that being forced to sell a stand-alone TLS stylet would "open the door for [AngioDynamics]" to "pick off 5-10%" of customers currently using Bard's PICCs preloaded with its TLS, (Dkt. No. 136-63, at 3; Dkt. No. 136-64, at 2); (4) deposition testimony of AngioDynamics executives identifying particular PICC customers that AngioDynamics has lost to Bard; (5) deposition testimony from AngioDynamics executives recounting discussions with specific customers (some of which the witnesses participated in directly, and some of which they were informed about by sales representatives) in which those customers expressed interest in AngioDynamics' PICCs, but conveyed that they could not consider purchasing them because the PICCS could not be paired with Bard's TLS; (6) emails from customers explaining their reasons for choosing Bard's PICCs over AngioDynamics' PICCs, including, in some cases, because they wanted to use Bard's TLS, which could only be obtained by buying Bard's PICCs; and (7) emails from AngioDynamics or Bard employees recounting similar discussions with customers. *See* Section II.E *supra* (summarizing this record evidence in detail).

While, as Bard argues, some of AngioDynamics' evidence regarding discussions with customers appears to include multiple layers of hearsay or is otherwise of questionable admissibility, much of AngioDynamics' evidence does not suffer from these problems, and many of the "double hearsay" problems that do exist could be corrected by, for example, calling the Bard or AngioDynamics sales representatives who directly spoke with the relevant customers to testify at trial. *See, e.g.*, *Smith Wholesale Co., Inc. v. R.J. Reynolds Tobacco Co.*, No. 03-cv-30, 2005 WL 8162569, at *5[14] (E.D. Tenn. Feb. 23, 2005) (finding that a "double hearsay" problem with the plaintiff's corporate representatives' testimony about what sales representatives told them regarding conversations with customers was corrected by calling the sales representatives themselves as witnesses, and that the sales representatives' testimony was admissible under Fed. R. Evid. 803(3)). As discussed previously, *see* Section IV.B.1 *supra,* the combination of evidence that AngioDynamics did, in fact, lose PICC sales to Bard (in the form of deposition testimony from AngioDynamics witnesses and the parties' email communications) and evidence regarding customers' statements about their motivations for not purchasing, or switching away from, AngioDynamics PICCs (at least some of which is likely admissible under Fed. R. Evid. 803(3)) constitutes enough evidence that could be presented in admissible form to raise a genuine dispute of material fact that precludes summary judgment. *See, e.g.*, *Callahan*, 182 F.3d at 252-54, 260; *Complete Entm't Res. LLC v. Live Nation Entm't, Inc.*, No. 15-cv-9814, 2017 WL 6512223, at *4 n.9, 2017 U.S. Dist. LEXIS 183213, at *11 n.9 (C.D. Cal. Oct. 16, 2017) (finding that "Plaintiffs' records of customer statements regarding their reasons for not using

[14] No parallel LEXIS citation available.

Plaintiffs' services" was "material from which a factfinder could decide that at least some artist-clients would have chosen Plaintiff if not for Defendants' allegedly anticompetitive conduct").[15]

Independent of its evidentiary objections, Bard also argues that the deposition testimony of AngioDynamics' witnesses is too speculative and self-serving to constitute evidence of injury or causation. (Dkt. No. 133-1, at 14-17; Dkt. No. 154, at 9-12). Bard's arguments attacking AngioDynamics' witnesses' testimony largely address the basis for their knowledge regarding certain lost opportunities they testified about, their unfamiliarity with particular "potential lost sales" AngioDynamics listed in its interrogatory responses, their failure to recall certain pertinent details of discussions with particular customers, and the inconsistency of some witnesses' recollections about particular customers with other record evidence regarding those customers' purchasing decisions. (Dkt. No. 133-1, at 14-17; Dkt. No. 154, at 10-12). While some of these arguments may have merit, they are questions of weight that are best resolved by a fact-finder at trial, rather than at the summary judgment stage.[16] Bard is correct that AngioDynamics witnesses

[15] Bard attempts to distinguish *Callahan* on the ground that *Callahan* "featured extensive [expert] economic evidence on injury and causation that bolstered the plaintiffs' testimony." (Dkt. No. 154, at 9-10). While the Court is not considering Dr. Frankel's opinion on causation, and this case is thus distinguishable from *Callahan* in that respect, this distinction is not dispositive. While the *Callahan* court considered the evidence before it collectively, nowhere did it suggest that the evidence would have been insufficient to raise a triable issue of fact *without* the expert analysis, and it is well-established that a plaintiff may prove antitrust injury without the use of expert evidence. *See, e.g.*, *Smith Wholesale Co., Inc.*, 2005 WL 8162569, at *5 ("Contrary to defendant's insistence, expert testimony is not necessarily required to prove antitrust injury if the facts and circumstances otherwise fall within the ambit of F.R.E. 701, and here they do."); *Cason-Merenda v. Detroit Med. Ctr.*, 862 F. Supp. 2d 603, 642-43 (E.D. Mich. 2012) ("Plaintiffs correctly note that they may forge the necessary link between Defendants' alleged antitrust violations and antitrust injury without expert testimony."); *Valassis Comms., Inc. v. News Corp.*, No. 17-cv-7378, 2019 WL 802093, at *12, 2019 U.S. Dist. LEXIS 27770, at *37 (S.D.N.Y. Feb. 21, 2019) ("Any defect in [the plaintiff's damages expert's] opinion on the amount of damages does not undermine [the plaintiff's] ability to prove the fact of injury."). Here, the Court finds that the record as it stands is sufficient to raise a genuine dispute as to injury-in-fact and causation; whether that evidence is enough to prove AngioDynamics' case is a question for trial. Bard's attempt to distinguish *Complete Entm't Resources* on the grounds that that case "concerns 'records of customer statements' rather than plaintiff's own testimony and deals with admissibility rather than sufficiency" is also inapposite. (Dkt. No. 154, at 10 n.4). Here, AngioDynamics relies on both its own witnesses' testimony and documentary evidence regarding its customers' motivations, and the court in *Complete Entm't Resources* was not dealing solely with admissibility, but rather was (as here) considering whether there was sufficient admissible evidence in the record to raise a triable issue of fact as to antitrust injury. *Id.*

[16] The line of cases Bard cites for the proposition that the "'isolated self-serving statements' of a plaintiff's corporate officers may not provide substantial evidence upon which a jury can rely" is inapposite, as those cases involved

cannot testify with certainty as to what a customer would have done had it had the option of pairing AngioDynamics' PICCs with Bard's TLS. However, as executives responsible for the sale of AngioDynamics' vascular access products, they can certainly testify as to their personal knowledge of PICC sales that AngioDynamics lost to Bard and what customers told them regarding their reasons for not purchasing AngioDynamics' PICCs. Thus, for summary judgment purposes, the Court finds that this testimony, when viewed collectively with the record as a whole, constitutes competent evidence from which a genuine dispute of material fact can be found.[17]

Bard also spends a significant portion of its briefing attacking AngioDynamics' anecdotal examples of particular customers choosing Bard's PICCs over AngioDynamics' PICCs, arguing, with respect to each customer, that the relevant documentary evidence and deposition testimony: (1) demonstrates that the customer had numerous reasons for choosing Bard's PICCs independent of its TLS policy; (2) is ambiguous as to the precise reasons for the customer's purchasing decision; and/or (3) does not demonstrate that the customer would have chosen to pair AngioDynamics' PICCs with Bard's TLS if given the option to do so, particularly when accounting for other factors impacting the customer's decision. (Dkt. No. 133-1, at 20-22; Dkt. No. 145, at 26-31; Dkt. No. 154, at 6-9). Bard also more generally argues that AngioDynamics

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conclusory statements by officers that found no support in, and in many cases flatly contradicted, the evidence in the record. *See Argus Inc. v. Eastman Kodak Co.*, 801 F.2d 38, 41-46 (2d Cir. 1986); *Chrysler Credit Corp. v. J. Truett Payne Co.*, 670 F.2d 575, 581-82 (5th Cir. 1982). By contrast, the witness testimony here regarding lost sales and the reasons for those losses, as a general matter, is not inconsistent with, and finds some support in, the documentary evidence. *See* Section II.E.5 *supra* (reviewing evidence).

[17] In a similar vein, Bard also argues that customers' statements to AngioDynamics regarding their reasons for not purchasing AngioDynamics' PICCs (even if admissible to show the customers' motivations) are inherently unreliable. (Dkt. No. 133-1, at 16-17). AngioDynamics takes issue with this characterization. (Dkt. No. 144, at 18-20). These arguments concern the weight the relevant evidence should be given, and are best resolved by a fact-finder at trial rather than at the summary judgment stage.

has not demonstrated that Bard's TLS policy caused AngioDynamics' injury, given the various other independent factors affecting customers' purchasing decisions. (Dkt. No. 133-1, at 25-32; Dkt. No. 145, at 25-34; Dkt. No. 154, at 6-12). The Court need not address each of Bard's arguments about each specific anecdote and relevant factor. Viewing the evidence as a whole and in the light most favorable to AngioDynamics, the Court finds that a reasonable fact-finder could conclude that the desire for Bard's TLS, which could only be purchased preloaded into Bard's PICCs, played a significant role in these customers' decision to choose Bard's PICCs over AngioDynamics' PICCs; that any customer that chose to use Bard's TLS was necessarily precluded from using a competitor's PICCs; that even accounting for other factors at play, at least *some* of the customers may have made a different PICC purchasing decision if given the option to pair AngioDynamics' PICCs with Bard's TLS; and that Bard's TLS policy was one material cause (even if not the *only* cause) of customers' decision not to purchase AngioDynamics' PICCs. *See* Section II.E.5 *supra* (summarizing the relevant evidence in detail). Given this, questions about the proper inferences to be drawn from particular pieces of evidence, whether Bard's TLS policy was both a but-for and material cause of each particular customer's purchasing decision in light of other factors at play, the precise significance of confounding factors independent of Bard's TLS policy, and whether the evidence sufficiently demonstrates that AngioDynamics lost more than a de minimus amount of sales as a result of Bard's TLS policy are all disputed factual questions to be resolved at trial.[18]

[18] While the Court need not address each of Bard's arguments with respect to the various factors it cites, there is one argument Bard makes that the Court sees fit to briefly address. Bard argues that the failure of AngioDynamics and its damages expert to account for the fact that Bard had not obtained FDA approval to market its TLS stylet for use with competitors' valved PICCs is fatal to any claim it has with respect to valved PICC sales, citing case law for the proposition that a "regulatory or legislative bar can break the chain of causation in an antitrust case." (Dkt. No. 133-1, at 31-32 (citing *In re Wellbutrin XL Antitrust Litig.*, 868 F.3d 132, 165 (3d Cir. 2017); *In re Ciprofloxacin Hydrochloride Antitrust Litig.*, 261 F. Supp. 2d 188, 206 (E.D.N.Y. 2003)). Even assuming (without deciding) that the case law Bard cites applies here, it does not defeat AngioDynamics' claim of antitrust injury; this lack of FDA approval is not a factor for the large number of AngioDynamics' PICC sales that involve non-valved PICCs.

The Court rejects Bard's argument that Bard's internal emails and documents—and, particularly, an email from a Bard employee expressing his belief that AngioDynamics' strategy "[wa]s to pressure the market to pressure [Bard] into launching [the standalone stylet], so it will open the door for them to go after special patient populations in our 3CG [TLS] accounts and pick off 5-10%, which is better than the 0% they are getting at 3CG accounts now," (Dkt. No. 136-63, at 3; Dkt. No. 136-64, at 2)—cannot serve as evidence of injury or causation. (Dkt. No. 133-1, at 22-24). Statements by Bard's own employees regarding their beliefs about the impact of Bard's allegedly anticompetitive activity are clearly relevant to the question of whether that activity caused injury to AngioDynamics. Arguments about the proper inferences to be drawn from those statements or the weight they should be given merely raise factual disputes that are best reserved for trial.

The Court also rejects Bard's argument that AngioDynamics' failure to present any direct testimony from a hospital representative (at trial or via deposition) regarding the hospital's reasons for purchasing Bard's PICCs over AngioDynamics' dooms its case. (Dkt. No. 133-1, at 13-14). For the reasons explained, there is sufficient evidence in the record regarding AngioDynamics' lost sales and customers' statements about the reasons for those losses to at least raise a genuine issue for trial; it is for a fact-finder to decide whether that evidence is sufficient to meet AngioDynamics' burden without direct testimony from AngioDynamics' customers.[19]

Bard also argues that AngioDynamics cannot prove injury or causation because it has, at most, presented evidence that, absent Bard's TLS policy, some customers would have been

[19] In a similar vein, the Court need not address the parties' arguments over whether a survey of hospitals or interviews of hospital representatives—which neither AngioDynamics nor its experts conducted—would have been appropriate in this case. (Dkt. No. 133-1, at 13, 19-20; Dkt. No. 144, at 24-25; Dkt. No. 154, at 15-16). The question for the Court is whether the record *as it stands* raises triable issues of material fact, and the Court finds that it does.

willing to *conduct a trial* of AngioDynamics' PICCs with Bard's TLS and compare the pricing of AngioDynamics' PICCs with other options; AngioDynamics has not presented evidence of the price at which any current Bard TLS customer would have been willing to purchase Bard's standalone TLS stylet to combine with AngioDynamics' PICCs, nor has it shown that any current Bard TLS customer would have been willing to pay a premium for that option. (Dkt. No. 133-1, at 14, 16, 24, 28; Dkt. No. 145, at 27, 31; Dkt. No. 154, at 6-9). The Court does not find that Bard is entitled to summary judgment based on this argument. Viewed in the light most favorable to AngioDynamics, the record suggests that at least some PICC customers were interested in exploring the option of combining BioFlo PICCs with Bard's TLS, but Bard's TLS policy precluded them from even considering that option, thus depriving AngioDynamics of the opportunity to *even attempt to compete* with Bard for those customers on other factors relevant to hospitals' purchasing decisions, such as price and clinical effectiveness. *See, e.g.*, Section II.E.4.c-d *supra* (summarizing testimony describing such examples). Moreover, record evidence suggests that PICC pricing is a customer-specific decision, and the question of whether pricing would deter customers from pairing AngioDynamics' PICCs with Bard's TLS absent Bard's TLS policy is rife with factual disputes, including how often AngioDynamics' BioFlo PICCs are actually priced at a premium to Bard's PICCs, the size of that premium, how much of a premium Bard would charge for its single-sterile TLS stylet, the value customers place on BioFlo for its purported clinical benefits and long-term cost-savings, and the extent to which AngioDynamics would be able to discount its BioFlo PICCs to induce customers to switch from Bard PICCs. *See* Section II.D.1 *supra* (summarizing the evidence and the parties' disputes regarding pricing). Therefore, on this record, the Court cannot conclude as a matter of law that AngioDynamics

cannot demonstrate a more-than-de-minimus amount of injury directly resulting from Bard's TLS policy.

The Court has carefully considered all of Bard's remaining arguments for summary judgment and finds them to be without merit. Therefore, for the foregoing reasons, the Court denies Bard's motion for summary judgment with respect to injury-in-fact and causation.

d. AngioDynamics' Motion for Summary Judgment

While AngioDynamics has raised a triable issue of fact as to injury-in-fact and causation, it has failed to establish its entitlement to summary judgment with respect to these issues. Relying on deposition testimony from its own executives, email communications from customers, and the parties' internal correspondence, AngioDynamics cites a number of specific examples of customers who purportedly chose to purchase Bard's PICCs over AngioDynamics' because they desired Bard's TLS and, due to Bard's TLS policy, had no option to pair it with AngioDynamics' PICCs. (Dkt. No. 134-1, at 29-32; Dkt. No. 144, at 9-11, 16, 22-24; Dkt. No. 152, at 17-19). However, as Bard points out, much of this evidence is ambiguous as to the precise reasons for the customers' purchasing decisions or suggests that numerous factors were at play in addition to Bard's TLS policy, and none of it establishes beyond dispute that any customer would have purchased AngioDynamics' PICCs to pair with Bard's TLS but for Bard's TLS policy. (Dkt. No. 133-1, at 20-22; Dkt. No. 145, at 26-31; Dkt. No. 154, at 6-9). While the Court has already found that Bard's arguments were insufficient to win its own summary judgment motion, they *are* sufficient to raise genuine factual questions as to whether Bard's TLS policy was both a but-for and material cause of a more-than-de-minimus amount of PICC sales that AngioDynamics lost to Bard.

AngioDynamics' contention that AngioDynamics "sells substantially more PICCs" "in those segments of the PICC market where Bard's TLS is not a factor, or less of a factor," also

does not entitle it to summary judgment; rather, this is, at most, an argument that AngioDynamics may use to support its claim at trial. (Dkt. No. 134-1, at 32-33).[20] Given other factors at play in customers' purchasing decisions—including some customers' preference for purchasing TLSs and PICCs from the same supplier, and possible differences in purchasing patterns and PICC preferences between hospitals that purchase PICCs for pairing with navigation-enabled TLSs and those in other segments of the PICC market, (Dkt. No. 146, at ¶ 66 (making this argument and citing record evidence))—the data AngioDynamics presents does not, in itself, establish beyond dispute that Bard's TLS policy is a but-for or material cause of AngioDynamics' relatively lower success with customers that use navigation-enabled TLS.

The Court has carefully considered all of AngioDynamics' remaining arguments for summary judgment and finds them to be without merit. For the foregoing reasons, the Court denies AngioDynamics' motion for summary judgment with respect to injury-in-fact and causation.

3. Type of Injury the Antitrust Laws Were Designed to Prevent

In addition to establishing injury-in-fact and causation, to establish antitrust injury, an antitrust plaintiff must prove that its injury is "of the type the antitrust laws were intended to prevent and that flows from that which makes defendants' acts unlawful." *Brunswick Corp.,* 429 U.S. at 489. "Thus, allegations of an injury to a competitor are insufficient unless accompanied by allegations of injury to competition as well." *See Xerox Corp. v. Media Scis. Intern., Inc.*, 511

[20] Bard objects to AngioDynamics' reliance on a chart purportedly showing AngioDynamics' share of particular PICC market segments, arguing that it "appears nowhere in Frankel's reports," was compiled by "AngioDynamics' lawyers pull[ing] numbers from three different appendices to Frankel's reports and perform[ing] additional calculations," is based on unreliable data, and was not timely disclosed as an expert opinion. (Dkt. No. 153, at 7-8 & n.4). For purposes of the parties' summary judgment motions, the Court need not decide whether or not consideration of this demonstrative is appropriate, as it finds that neither party is entitled to summary judgment whether or not the demonstrative is considered.

F. Supp. 2d 372, 380 (S.D.N.Y. 2007); *see also Capital Imaging Assocs., P.C. v. Mohawk Valley Med. Assocs., Inc.*, 996 F.2d 537, 547 (2d Cir. 1993) ("[Plaintiff's] position is simply that it has been harmed as an individual competitor. It has not shown that defendants' activities have had any adverse impact on price, quality, or output of medical services offered to consumers in the relevant market."); *Daniel v. Am. Bd. of Emergency Med.*, 428 F.3d 408, 442-43 (2d Cir. 2005) (holding that plaintiffs failed to demonstrate antitrust injury where their "economic expert conceded that he had performed no analysis of the consumer effect of defendants' purportedly anticompetitive conduct").

"A competitor's '[e]xclusion from a market is a conventional form of antitrust injury' because it is 'exactly the type [of injury] that antitrust laws were designed to prevent and flows from the competition-reducing aspect of [defendant's] conduct.'" *Valassis Comms., Inc.*, 2019 WL 802093, at *11, 2019 U.S. Dist. LEXIS 27770, at *32 (collecting cases (quoting *Higgins v. New York Stock Exch.*, 755 F. Supp. 113, 116 (S.D.N.Y. 1991), *aff'd sub nom., Higgins v. New York Stock Exch., Inc.*, 942 F.2d 829 (2d Cir. 1991))); *Xerox Corp*, 511 F. Supp. 2d at 381-82 ("This threatened injury (of direct exclusion from the marketplace) is exactly the type that antitrust laws were designed to prevent and flows from the competition-reducing aspect of [the defendant's] conduct." (collecting cases)). Moreover, a competitor's loss of sales constitutes an injury of the sort protected by the antitrust laws if "it stems from conduct that prevents potential customers from obtaining a desired product." *Id.* at 382 (citing *National Assoc. of Pharmaceutical Mfrs., Inc. v. Ayerst Labs.*, 850 F.2d 904, 913 (2d Cir. 1988)).

Bard argues that, even if AngioDynamics can demonstrate that it lost sales as a result of Bard's TLS policy, AngioDynamics has failed to show that Bard's actions harmed competition in the PICC market as a whole, such as by increasing prices or reducing output. (Dkt. No. 133-1,

at 32-35; Dkt. No. 145, at 34-35; Dkt. No. 154, at 17-18). AngioDynamics responds that Bard's TLS policy has led to substantial foreclosure of competition in the PICC market, the threat of increased concentration in that market, and the restriction of consumer choice, all of which are the types of injuries the antitrust laws are aimed at. (Dkt. No. 144, at 30-34).

The Court finds that there are genuine disputes of material fact precluding summary judgment for either party on this issue. AngioDynamics' claim is that, by forcing customers who purchase its TLS to also purchase its PICCs, Bard effectively precludes AngioDynamics and other PICC competitors from competing in the largest segment of the PICC market. If proven true, this would be "exactly the type [of injury] that antitrust laws were designed to prevent," *Valassis Comms., Inc.*, 2019 WL 802093, at *11, 2019 U.S. Dist. LEXIS 27770, at *32; *Xerox Corp*, 511 F. Supp. 2d at 381-82, and AngioDynamics "need not wait to make this claim until it is 'actually . . . driven from the market and competition is thereby lessened.'" *Id.*, 511 F. Supp. 2d at 381 (quoting *Brunswick Corp.*, 429 U.S. at 489 n. 14). Moreover, there is a question as to whether Bard's TLS policy "prevents potential customers from obtaining a desired product," i.e. the combination of AngioDynamics' PICCs and Bard's TLS. *Id.*, 511 F. Supp. 2d at 382. At the same time, for the reasons discussed in connection with the Court's analysis of the anticompetitive effects element of AngioDynamics' claim, *see* Section IV.A.5 *supra*, there are genuine disputes over whether the injuries AngioDynamics complains of are, in fact, a result of a "competition-reducing aspect" of Bard's conduct (i.e. Bard's purported foreclosure of competition in the PICC marketplace through its TLS policy), or are merely the result of lawful competition and many customers' preference for Bard's preloaded PICCs over the other options available to them. *Valassis Comms., Inc.*, 2019 WL 802093, at *11, 2019 U.S. Dist. LEXIS

27770, at *32. Therefore, the Court denies both parties' motions for summary judgment on this issue.[21]

4. Antitrust Injury Summary

For the foregoing reasons, the Court finds that there are triable issues of fact with respect to every component of the antitrust injury element of AngioDynamics' claim. Therefore, the Court denies both parties' motions for summary judgment with respect to antitrust injury.

C. Damages/Bard's Motion to Exclude Dr. Frankel's Testimony

Bard moves to exclude the testimony of AngioDynamics' causation and damages expert, Dr. Frankel, (Dkt. No. 132), and argues that "[s]ince AngioDynamics offers no evidence of any damages other than through Dr. Frankel, the exclusion of his testimony means that AngioDynamics cannot create a triable issue as to damages." (Dkt. No. 133-1, at 36).

Under Rule 702 of the Federal Rules of Evidence, the Court is charged with a "gatekeeping" obligation with respect to expert testimony: the trial judge must ensure "that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 597 (1993). Rule 702 provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

[21] Bard analogizes to a Tenth Circuit case, *Suture Express, Inc. v. Owens & Minor Distribution, Inc.*, 851 F.3d 1029, 1044 (10th Cir. 2017), in which the Court observed that significant evidence of a "market that is becoming more, not less, competitive" "raise[d] questions about . . . whether it was really competition that was harmed instead of simply one competitor," and found that "[t]here is simply not enough probative evidence for a jury to find that [the defendants'] bundling practices constitute an injury of the kind the antitrust laws are intended to prevent." *Id.* at 1045. Here, while the record contains some indica of a competitive PICC marketplace, *see* Section IV.A.5 *supra*, there is also evidence that Bard's TLS policy prevents competitors like AngioDynamics from being able to meaningfully compete for PICC customers that use Bard's TLS, and that Bard dominates the market (especially with respect to PICCs that use TLSs) to a much greater extent than any defendant in *Suture Express*. Thus, unlike in *Suture Express*, then, the evidence of robust competition notwithstanding Bard's TLS policy is not so overwhelming as to preclude a finding that Bard's actions have harmed competition in the market.

Fed. R. Evid. 702. "To determine whether a witness qualifies as an expert, courts compare the area in which the witness has superior knowledge, education, experience, or skill with the subject matter of the proffered testimony." *United States v. Tin Yat Chin*, 371 F.3d 31, 40 (2d Cir. 2004).

"Under *Daubert*, factors relevant to determining reliability include the theory's testability, the extent to which it has been subjected to peer review and publication, the extent to which a technique is subject to standards controlling the technique's operation, the known or potential rate of error, and the degree of acceptance within the relevant scientific community." *Restivo v. Hessemann*, 846 F.3d 547, 575-76 (2d Cir. 2017) (internal quotation marks omitted). The reliability inquiry is "a flexible one," *Daubert*, 509 U.S. at 594, and the factors to be considered "depend[ ] upon the particular circumstances of the particular case at issue." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 150 (1999). When applying the gatekeeping obligation to non-scientific testimony, a district court may choose to utilize some or all of the above *Daubert* factors, or it may look to other indicia of reliability. *Id.*

"In undertaking this flexible inquiry, the district court must focus on the principles and methodology employed by the expert, without regard to the conclusions the expert has reached or the district court's belief as to the correctness of those conclusions." *Amorgianos v. Natl. R.R. Passenger Corp.*, 303 F.3d 256, 266 (2d Cir. 2002). "Thus, when an expert opinion is based on data, a methodology, or studies that are simply inadequate to support the conclusions reached, *Daubert* and Rule 702 mandate the exclusion of that unreliable opinion testimony." *Id.* In other words, "[a] court may conclude that there is simply too great an analytical gap between the data and the opinion proffered." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). "Frequently, though, 'gaps or inconsistencies in the reasoning leading to [the expert's] opinion . . . go to the

weight of the evidence, not to its admissibility.'" *Restivo*, 846 F.3d at 577 (quoting *Campbell ex rel. Campbell v. Metro. Prop. & Cas. Ins. Co.*, 239 F.3d 179, 186 (2d Cir. 2001)).

Ultimately, a district court has "the same broad latitude when it decides *how* to determine reliability as it enjoys in respect to its ultimate reliability determination." *Gen Elec. Co.*, 522 U.S. at 142. Moreover, "[v]igorous cross-examination, presentation of contrary evidence and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596. With this framework in mind, the Court addresses Bard's arguments for exclusion of Dr. Frankel's opinions.[22]

1. Causation

a. Dr. Frankel's Causation Opinion

As to causation, Dr. Frankel concludes that Bard's TLS policy caused injury to AngioDynamics based on the following facts (stated in Dr. Frankel's words):

- Bard's dominant share of TLS devices used in the United States and the large share of PICCs placed with the assistance of TLS devices.
- The ability of manufacturers to sell TLS devices and navigation stylets separately from their PICCs, and the actual use of alternative suppliers' PICCs with a TLS when that option is available.
- The preference some customers would have had for AngioDynamics BioFlo PICCs due to BioFlo's antithrombotic[23] properties.
- The interest expressed by customers seeking to use AngioDynamics PICCs with Bard TLS devices.
- Bard's recognition that some of its TLS customers would purchase BioFlo PICCs if Bard sold stylets separately.

[22] In the following discussion, the Court summarizes only the portions of Dr. Frankel's opinions that are relevant to the pending motions.

[23] While AngioDynamics disavows any claim that it markets BioFlo PICCs as having "antithrombotic" properties and clarifies that it only claims BioFlo PICCs reduce "thrombus accumulation," (Dkt. No. 144-1, ¶¶ 34-36), Dr. Frankel uses the term "antithrombotic properties" throughout his report.

- Bard's refusal to sell its stylets separately from its PICCs.

(Dkt. No. 132-5, at 13-14). To arrive at the foregoing factual predicates, Dr. Frankel reviews, interprets and draws inferences from documents and data in the record, much of which overlaps with the evidence AngioDynamics relies on in its summary judgment motion. (*Id.* at 14-23). Based on the evidence he reviews, Dr. Frankel concludes that "Bard's refusal to sell stylets separately from its PICCs harmed AngioDynamics by preventing it from selling PICCs to Bard TLS customers that otherwise would have preferred to use AngioDynamics PICCs for some or all of their bedside PICC placements," and that "Bard's tie enabled it to obtain a larger percentage of U.S. PICC sales than otherwise, and suppressed AngioDynamics' sales and profits." (*Id.* at 23-24).

b. Bard's Motion to Exclude Dr. Frankel's Causation Opinion

Bard moves to exclude Dr. Frankel's causation opinion, (Dkt. No. 132-5, at 13-23), on the grounds that: (1) Dr. Frankel "did no economic (or any other) analysis to determine whether Bard's conduct ***caused*** hospitals to purchase Bard's PICCs instead of AngioDynamics' PICCs, or whether hospitals would have purchased more AngioDynamics PICCs ***but for*** Bard's TLS policy," but instead "***assumes*** that the jury will find causation—the very opinion he claims to be offering"; (2) Dr. Frankel's opinion does little more than [serve] as a conduit to publish the [record] evidence, at least some of which is likely inadmissible, to the jury, adding the patina of an expert economist to mere fact information"; and (3) Dr. Frankel selectively relies on evidence that supports his opinion while ignoring evidence that contradicts it, and the evidence he relies on fails to establish that there are customers "who do not already purchase AngioDynamics' PICCs, who would purchase them but for the challenged conduct." (Dkt. No. 132-1, at 11-18; *see also* Dkt. No. 153, at 5-8).

AngioDynamics responds that: (1) Dr. Frankel's opinion does not assume a finding on *causation*, as Bard claims, but on the separate liability element of *coercion*, which is a proper assumption for a causation and damages report; (2) Dr. Frankel's opinion does not merely "'narrate' factual evidence," but "analyze[s] contemporaneous documents and data and reache[s] a conclusion based on that analysis," which is "precisely what expert economists do in antitrust litigation"; and (3) Dr. Frankel "review[s] the structure of the industry, sales data, and record evidence of Bard's conduct and applie[s] well-established economic principles to reach each of his conclusions," which is "precisely what FRE 702 requires," and his opinion is well-supported by the evidence he relies on and the record as a whole. (Dkt. No. 143, at 13-20).

As an initial matter, the Court rejects Bard's argument that Dr. Frankel's opinion improperly assumes a conclusion. In his deposition, Dr. Frankel acknowledged that his analysis "assum[es] a finding of liability," i.e. "a conclusion by the fact-finder that Bard coerced some hospitals to purchase its PICCs . . . when otherwise they would have purchased Angio's PICCs," but he explicitly disavowed the suggestion that his analysis "assum[es] that Angio has suffered injury as a result of Bard's conduct," instead confirming that his analysis both "offer[s] [an] opinion [that AngioDynamics was injured by Bard's conduct]," and also "quantif[ies] the damages associated with that injury." (Dkt. No. 132-3, at 143-46). While the language Dr. Frankel and his examiner used in the deposition is somewhat imprecise, from a review of Dr. Frankel's expert report and testimony, it appears clear that his analysis presupposes a conclusion on liability, but not on the issues on which he was asked to opine, i.e. causation and damages. (Dkt. No. 132-5, at 13-23). Bard argues that the "supposed distinction [between coercion and causation] is irrelevant here because the nature of this tying claim requires that there be ***coercion*** in order for there to have been ***causation***." (Dkt. No. 153, at 5-6). However, as an expert on

causation and damages rather than liability, it was appropriate for Dr. Frankel to do what he did here, i.e. assume a finding that Bard adopted a coercive tying policy, and then perform an analysis of the separate question of whether that coercive policy actually caused AngioDynamics to lose any PICC sales that it otherwise would have made.

Nonetheless, the Court agrees with Bard that Dr. Frankel's causation opinion must be excluded because it does little more than summarize record evidence (including sales and market share data and documents produced in this litigation) and lend Dr. Frankel's expert credentials to AngioDynamics' interpretation of that evidence. Dr. Frankel offers no specialized economic analysis that would assist a fact-finder in interpreting the record evidence he relies on. Rather, he recites that evidence, draws inferences that a fact-finder could glean from merely examining the evidence itself, and concludes from those inferences that the evidence establishes causation—a conclusion a fact-finder is perfectly capable of making based on the evidence without the aid of expert testimony. Such an opinion, without more, does not pass muster under Rule 702. *See, e.g., In re Namenda Direct Purchaser Antitrust Litig.*, 331 F. Supp. 3d 152, 170-72 (S.D.N.Y. 2018) (barring expert testimony that "adds nothing to the direct evidence that cannot be elicited from fact witnesses—nothing other than the use of [the expert's] impressive credentials to bolster the credibility of those witnesses impermissibly");[24] *Hernandez v. Leichliter*, No. 14-cv-5500, 2016 WL 684038, at *2, 2016 U.S. Dist. LEXIS 19728, at *5 (S.D.N.Y. Feb. 18, 2016) ("To the extent [the expert] merely repeats or recasts the testimony of [Plaintiff] in order to arrive at a theory of

[24] AngioDynamics argues that *Namenda* is distinguishable because there "the Court excluded the testimony of an expert who failed to analyze contemporaneous documents and data and instead relied only on her industry experience and fact witness testimony in forming her opinion," whereas "Dr. Frankel analyzed contemporaneous documents and data and reached a conclusion based on that analysis." (Dkt. No. 143, at 19). Bard points out that this distinction ignores the fact that the *Namenda* court "excluded the expert's testimony both because the expert failed to rely on sufficient facts or data, and for a separate reason (that Bard cites)—the proposed expert testimony would simply regurgitate information that could be introduced through fact witnesses." (Dkt. No. 153, at 7 n.3). The Court agrees with Bard.

causation, he is not testifying as an expert witness based upon specialized knowledge, but rather is acting as a conduit for another witness's testimony in the guise of an expert's opinion.") (citation omitted); *Palazzetti Imp./Exp., Inc. v. Morson*, No. 98-cv-722, 2001 WL 793322, at *2-3, 2001 U.S. Dist. LEXIS 9538, at *8 (S.D.N.Y. July 13, 2001) (holding that "proposed expert testimony regarding the elements of a franchise agreement and their alleged absence here does not meet the standard of Rule 702" because "neither of the elements of a franchise agreement requires knowledge beyond the ken of the average juror" and there was "nothing . . . to believe that the jurors would be assisted (rather than improperly swayed) by the testimony of the expert").

This case is unlike other antitrust cases involving claims of unlawful collusion (some of which AngioDynamics cites), in which experts have been permitted to testify as to whether conduct or market conditions reflected in the record evidence were consistent with the existence of an anticompetitive conspiracy, on the grounds that such an analysis requires specialized knowledge outside the province of an ordinary juror. *See, e.g.*, *U.S. Info. Sys., Inc. v. Int'l Bhd. of Elect. Workers Local Union No. 3, AFL-CIO*, 313 F. Supp. 2d 213, 239-41 (S.D.N.Y. 2004) (finding that the plaintiff's expert could not draw a legal conclusion on whether or not the defendants engaged in anticompetitive conduct, but could "point to factors that would tend to show anticompetitive conduct in a market," "indicate whether he believed those factors existed here, and what the economic significance of those factors would be," "explain how certain conduct could affect a market through the use of hypothetical statements" and "hypothesize that if certain conduct did occur, economists would expect the market to react in a particular way"); *Fleischman v. Albany Med. Ctr.*, 728 F. Supp. 2d 130, 151-52 (N.D.N.Y. 2010) ("[Plaintiffs' expert] seeks to testify that the information exchanges, engaged in by the Defendant hospitals,

made it easier for Defendants to form and maintain a wage agreement. This type of opinion may be helpful to the jury and is admissible."). Here, by contrast, Dr. Frankel brings no specialized economic analysis to bear in his interpretation of the record evidence. The conclusions he draws from that evidence consist of arguments AngioDynamics' lawyers can readily make without the aid of expert analysis, and are all well within the province of an ordinary, intelligent juror. Therefore, the Court grants Bard's motion to exclude Frankel's causation opinion.[25]

2. Damages

a. Legal Standard for Antitrust Damages

The Court evaluates Bard's motion to exclude Dr. Frankel's damages opinion in light of the legal standard for proving antitrust damages. "[T]he actual amount [of an antitrust plaintiff's damages] need not be proven to the same degree of certainty as proving some quantum of damages," given the difficulty (and, at times, impossibility) of accurately constructing a hypothetical world untainted by the defendant's challenged conduct. *Drug Mart Pharm. Corp. v. Am. Home Prod. Corp.*, 472 F. Supp. 2d 385, 424 (S.D.N.Y. 2007) (citing *Story Parchment Co. v. Paterson Parchment Paper Co.,* 282 U.S. 555, 562 (1931)). The "wrongdoer is not entitled to complain that [the damages] cannot be measured with the exactness and precision that would be possible if the case, which he alone is responsible for making, were otherwise." *Story Parchment Co.,* 282 U.S. at 563. Indeed, "[t]he most elementary conceptions of justice and public policy require that the wrongdoer shall bear the risk of the uncertainty which his own wrong has created." *Bigelow v. RKO Radio Pictures*, 327 U.S. 251, 264-65 (1946), *reh'g denied,* 327 U.S. 817 (1946). Therefore, an antitrust plaintiff need only "come forward with substantial evidence

[25] Because the Court has found that Dr. Frankel's causation opinion must be excluded on the foregoing grounds, it need not address the parties' remaining arguments regarding that opinion. To the extent these arguments amount to disputes over whether the record supports a finding of causation, the Court has addressed this question in resolving the parties' cross-motions for summary judgment on antitrust injury. *See* Section IV.B *supra.*

from which a jury can determine the amount of damages from a 'just and reasonable estimate of the damage based upon relevant data.'" *Drug Mart Pharm. Corp.*, 472 F. Supp. 2d at 424 (quoting *Bigelow,* 327 U.S. at 264); *see also, e.g.*, *New York v. Julius Nasso Concrete Corp.*, 202 F.3d 82, 88 (2d Cir. 2000) ("Where . . . there is a dearth of market information unaffected by the collusive action of the defendants, the plaintiff's burden of proving damages, is, to an extent, lightened.").

At the same time, "even where the defendant by his own wrong has prevented a more precise computation, the jury may not render a verdict based on speculation or guesswork." *SCM Corp. v. Xerox Corp*., 645 F.2d 1195, 1212 (2d Cir. 1981) (quoting *Bigelow*, 327 U.S. at 264). Moreover, a more lenient standard in proving the amount of damages should only be applied where the plaintiff puts forth "proof of defendant's wrongful acts and their tending to injure plaintiffs' business, and from evidence in the decline of prices, profits and values, ***not shown to be attributable to other causes.***" *Bigelow*, 327 U.S. at 264 (emphasis added); *see also MCI Communications Corp.,* 708 F.2d at 1162 ("When a plaintiff improperly attributes all losses to a defendant's illegal acts, despite the presence of significant other factors, the evidence does not permit a jury to make a reasonable and principled estimate of the amount of damages. This is precisely the type of speculation or guesswork not permitted for antitrust jury verdicts.") (internal marks omitted).

b. Dr. Frankel's Damages Opinion

Dr. Frankel calculates AngioDynamics' purported damages resulting from Bard's TLS policy by estimating its lost profits, using a formula that includes, among other variables, the estimated percentage of Bard's TLS-paired PICC sales that would have been won by AngioDynamics had Bard not engaged in alleged tying. For purposes of its motion in limine,

Bard only challenges Dr. Frankel's methodology for determining that variable, and that is therefore where the Court focuses its discussion.

Dr. Frankel determines this percentage using a "benchmark" or "yardstick" analysis. As a first step, Dr. Frankel "consider[s] a number of potential indicators of AngioDynamics' prospective success at selling PICCs to users of Bard TLS devices" based on documents in the record, and selects two of these "indicators" as benchmarks to use in calculating AngioDynamics' lost profits. (*Id.* at 28-29).[26]

As his first benchmark ("Benchmark 1"), Dr. Frankel selects "AngioDynamics' share of PICCs used with Teleflex TLS devices." (*Id.* at 29). Dr. Frankel derives that percentage—[redacted] percent—from an email sent by Teleflex's outside counsel containing a rough estimate of the percentage of its standalone stylets that are used with AngioDynamics PICCs. (*Id.* at 29-30; *see also id.* at 42 (explaining Dr. Frankel's calculation of Benchmark 1)). Dr. Frankel testified that he felt this benchmark was justified because Teleflex offers a single-sterile stylet and "Angio is able to sell PICCs that are used [redacted] percent of the time with that system," which is an "obvious analogue to look at as a piece of information that bears on" how successful AngioDynamics would be if Bard offered a single-sterile stylet as Teleflex does. (Dkt. No. 132-3, at 232).

For his second benchmark ("Benchmark 2"), Dr. Frankel conducts "a comparison of Teleflex's share of sales of PICCs used with its own TLS devices and Teleflex's share of unguided nursing PICC sales," and "use[s] the ratio of . . . non-Teleflex shares – the non-Teleflex share of Teleflex TLS usage divided by the non-Teleflex share of unguided nursing PICCs used – as a benchmark for Bard." (Dkt. No. 132-5, at 31). This benchmark "assumes [that,

[26] At oral argument, AngioDynamics' counsel suggested that Dr. Frankel's other potential "indicators" could serve as a basis for a damages model if the Court excludes Dr. Frankel's benchmarking analysis; Bard's counsel disagreed. (Dkt. No. 187, at 64-67, 81-82). As Bard has only moved to exclude Dr. Frankel's benchmarking analysis, the Court only addresses the issue that has been presented and briefed by the parties.

absent the TLS policy,] Bard would have had the same relative increased success as Teleflex in selling PICCs for use with its own TLS devices," and that non-Bard PICC manufacturers "would have been relatively less successful at selling PICCs to Bard TLS users to the same extent non-Teleflex PICC manufacturers have less relative success selling PICCs to Teleflex TLS users." (*Id.*). Based on these assumptions, Dr. Frankel determines that "[d]uring the period 2013-2018 . . . [absent the TLS policy,] Bard would have sold [redacted] percent of PICCs used with Bard TLS devices," while "[t]he remaining [redacted] percent of PICCs—i.e., Bard TLS-guided PICCs that would not have been sold by Bard absent Bard's tie—would have been sold by the other PICC suppliers." (*Id.* at 31-32). Dr. Frankel then "allocate[s] those sales across those suppliers, including AngioDynamics, pro-rata based on their share of non-Bard unguided nursing PICCs sold in the United States." (*Id.* at 32). Using this methodology, Dr. Frankel finds that AngioDynamics "would have accounted for [redacted] percent of U.S. PICC sales used with Bard TLS devices." (*Id.*). In his deposition testimony, Dr. Frankel described Benchmark 2 as a "more conservative alternative" to Benchmark 1, designed to account for the fact that "Bard might do particularly well in selling PICCs to its own customers, just as Teleflex does particularly well in selling PICCs to its TLS customers." (Dkt. No. 132-3, at 232).

Dr. Frankel testified that he "[doesn't] have a strong opinion as to which of [his benchmarks] is better." (*Id.*). He stated that his benchmark analysis is designed to "suggest[] to a jury that . . . we can't know with precision this variable because of [Bard's alleged anticompetitive] conduct, and there's a reasonable range spanning between these two benchmarks. And I leave it to them to make a reasonable choice or their own choice based on the best I can do, which is to present this range of outcomes." (*Id.* at 231).

c. Bard's Motion to Exclude Dr. Frankel's Damages Opinion

Bard moves to exclude Dr. Frankel's damages opinion on three grounds: (1) Dr. Frankel bases his analysis on unreliable data; (2) Dr. Frankel's analysis relies on benchmarks that have been affected and distorted by Bard's challenged conduct; and (3) Dr. Frankel failed to sufficiently analyze the comparability of his chosen benchmarks. (Dkt. No. 132-1, at 18-28). AngioDynamics generally responds that Bard's arguments regarding Dr. Frankel's benchmarking methodology go to the methodology's weight, not its admissibility, and do not provide grounds for exclusion. (Dkt. No. 143, at 20-31).

i. Reliability of Dr. Frankel's Data

Bard argues that Dr. Frankel's damages methodology must be excluded on the grounds that it is based on unreliable data. Specifically, the percentage of Teleflex standalone stylets used with AngioDynamics PICCs, which Dr. Frankel uses as the basis of both of his benchmarks, comes from the following excerpt from an email sent by Teleflex's outside counsel several days before Dr. Frankel served his expert report:

> Teleflex believes that the vast majority (in excess of [redacted]) of non-preloaded PICCs are being sold for use with another company's stylet. Based on sales personnel input in May 2019, Teleflex roughly estimates that approximately [redacted] of the standalone stylet sales is [sic] used with AngioDynamics catheters and approximately [redacted] with Bard Catheters. However, Teleflex's sales data does not capture this information and accordingly Teleflex cannot confirm these estimates.

(Dkt. No. 147-23, at 3). Bard contends that this "rough[] estimate[]" is insufficiently reliable to pass muster under *Daubert*, given that the email does not indicate (and Dr. Frankel does not know) the time frame to which it applies, how it was determined, what information it was based on, which sales personnel contributed, or what their titles or seniority levels were. (Dkt. No. 132-1, at 25-28; Dkt. No. 153, at 12-14). AngioDynamics replies that "experts are granted wide latitude with respect to the evidence and data on which they rely"; that Dr. Frankel testified that

"the Teleflex estimate is precisely the type of information on which economists typically rely"; that the estimate was "provided by Teleflex in response to subpoenas by both parties in the normal course of discovery and was accepted in satisfaction of those subpoenas by both parties"; that "Teleflex sales personnel are in the best position to estimate [the number of Teleflex TLS Stylets that are paired with AngioDynamics' PICCs] based on their daily interactions with customers in the field"; and that "Dr. Frankel undertook independent analysis to verify the accuracy of the estimate." (Dkt. No. 143, at 27-31).

As a preliminary matter, AngioDynamics is correct that experts have wide latitude with respect to the data on which they rely, and challenges concerning the reliability of an expert's data often present questions of weight, rather than admissibility. *See, e.g.*, *Allen v. Dairy Farmers of Am., Inc.*, No. 09-cv-230, 2014 WL 266290, at *9, 2014 U.S. Dist. LEXIS 8343, at *27 (D. Vt. Jan. 23, 2014) ("Most 'challenge[s] to the facts or data relied upon by [an expert do] not go to the admissibility of his testimony, but only to the weight of his testimony.'" (quoting *Aventis Envtl Sci. USA LP v. Scotts Co.*, 383 F. Supp. 2d 488, 514 (S.D.N.Y. 2005))); *Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F. Supp. 2d 295, 325 (D. Vt. 2007) ("[L]imitations in some of the data on which [an expert] relied goes to the weight of [the expert's] testimony . . . , not its admissibility."); *Hartle v. FirstEnergy Generation Corp.*, No. 08-cv-1019, 2014 WL 1317702, at *9, 2014 U.S. Dist. LEXIS 43033, at *29 (W.D. Pa. Mar. 31, 2014) ("Even if the data relied on by the expert is 'imperfect, and more (or different) data might have resulted in a 'better' or more 'accurate' estimate in the absolute sense, it is not the district court's role under Daubert to evaluate the correctness of facts underlying an expert's testimony.'" (quoting *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 856 (Fed. Cir. 2010))). Nonetheless, this general principle does not divest the Court of its gatekeeping obligation to

ensure that an expert's testimony is "based on sufficient facts or data" to pass muster under Rule 702.

Bard relies heavily on *ZF Meritor, LLC v. Eaton Corp.*, 696 F.3d 254 (3d Cir. 2012), a Third Circuit case that illustrates the circumstances under which an expert's data is so unreliable as to warrant exclusion. In that case, the plaintiff's expert based his analysis on a one-page forecast that the company prepared to project its estimated sales volume, prices, manufacturing costs, operating expenses, and other criteria. *Id.* at 291 & n.23, 292. The expert used that forecast to "estimate[] the incremental revenues that [the plaintiff] would have earned 'but for' [the defendant's] anticompetitive conduct, and then subtracted from that figure the incremental cost that [the plaintiff] would have had to incur to achieve such incremental sales." *Id.* at 291-92. The district court excluded the expert's testimony, finding it unreliable for "rel[ying] on a one-page set of profit and volume projections without knowing the circumstances under which such projections were created or the assumptions on which they were based." *Id.* at 292. The Third Circuit affirmed, explaining that "[a]n expert's lack of familiarity with the methods and the reasons underlying [someone else's] projections virtually preclude[s] any assessment of the validity of the projections through crossexamination." *Id.* at 293. Even though the expert "was generally aware of the circumstances under which the [one-page forecast] was created and the purposes for which it was used," he "did not know who initially calculated the . . . figures . . . [,] did not know whether the . . . projections were calculated by [the plaintiff's] management, lower level employees at [the plaintiff], or came from some outside source . . ., [and did not] know the methodology used to create the [one-page forecast] or the assumptions on which the . . . price and volume estimates were based." *Id.* Therefore, the Third Circuit held that the district court was justified in excluding his opinion. *Id.*

AngioDynamics argues that this case is more analogous to cases in which "*ZF Meritor* has been routinely distinguished." (Dkt. No. 143, at 30 n.15). AngioDynamics relies on *Apotex, Inc. v. Cephalon, Inc.*, 321 F.R.D. 220 (E.D. Pa. 2017). In *Apotex*, like in *ZF Meritor*, the plaintiffs' expert relied on the plaintiffs' internal market share projections. *Id.* at 232. However, the court found its case distinguishable from *ZF Meritor*, in part because the expert in *Apotex* had also considered corroborating sources such as "a series of [the plaintiff's] internal projections" and "the deposition testimony of . . . [the plaintiff's] former President" who "reviewed and signed off on the market share forecasts relied upon by [the expert], and generally explained how they were created." *Id.* at 232-33. Thus, the court found that the *Apotex* expert was "was clearly more informed about how the market share projections were created than the expert in *ZF Meritor*," and concluded that "[w]hether [the expert] relied on the best data in forming his opinions is a question for the jury." *Id.* at 233. AngioDynamics also cites other cases in which courts similarly distinguished *ZF Meritor*. *See e.g., In re SemCrude L.P.*, 648 Fed. Appx. 205, 214 (3d Cir. 2016) (finding expert's use of contemporaneous valuation report reliable where the expert explained his reliance on the valuation and adjusted it based on his own analysis); *Insight Equity v. Transitions Optical, Inc.*, 252 F. Supp. 3d 382, 396 (D. Del. 2017) (finding expert's use of projections reliable where "the estimates were actually used in the course of business and incorporated actual sales data"); *In re Mushroom Direct Purchaser Antitrust Litig.*, No. 06-cv-0620, 2015 WL 5767415, at *17 n.10, 2015 U.S. Dist. LEXIS 120892, at *67-71 n.10 (E.D. Pa. July 29, 2015) (finding expert's use of contemporaneous internal estimates reliable, because the expert had "grounded his opinion on factual evidence in the record produced by defendants").

As the cases AngioDynamics cites demonstrate, *ZF Meritor* is not the typical case; rather, it represents an extreme category of cases in which the data relied on by an expert is so patently unreliable as to render it inadmissible. However, the Court finds that the data Dr. Frankel relies on here falls into that category. In his deposition, Dr. Frankel acknowledged that he "know[s] no further details [about the data] other than what's in" the email, including which sales personnel the email refers to, what their "seniority" or "experience base" was, what "products they were responsible for selling or the geographic region that they knew about," the "circumstances under which the unnamed Teleflex sales personnel came up with this estimate," what Teleflex did to "aggregate and estimate" the figure, or the specific time period the data covered. (Dkt. No. 132-3, at 260-63). Dr. Frankel's ignorance as to the most basic facts underlying the data he relies on is precisely the "lack of familiarity" that the Third Circuit in *ZF Meritor* found "preclude[s] any assessment of the validity of the projections through crossexamination," and thus warrants exclusion. *ZF Meritor*, 696 F.3d at 293. The cases cited by AngioDynamics are inapposite, as each of them involved experts who could point to at least *some* corroborating information or record evidence demonstrating how the data was created or validating its reliability, which is utterly lacking here.

It is no answer that "Teleflex is in the best position to estimate and report this information," as Dr. Frankel asserts in his rebuttal report, (Dkt. No. 132-6, at 14), or that the data was provided by Teleflex's counsel in response to discovery subpoenas, as AngioDynamics argues, (Dkt. No. 143, at 28). Assuming that the data provided in Teleflex's counsel's email is sufficiently reliable simply because Teleflex provided it, as Dr. Frankel did here, ignores the email's numerous caveats that the data constitutes a "rough estimate" and that "Teleflex cannot confirm these estimates." (Dkt. No. 147-23, at 3). It also ignores the fact that the email provides

none of the information necessary to confirm that it is suitable for use in Dr. Frankel's analysis, including such information as how the "rough estimate" was determined, what form of "sales personnel input" was used to calculate it (given that "Teleflex's sales data does not capture this information"), and whether those estimates applied to the time period Dr. Frankel examined in his analysis. (*Id.*).

AngioDynamics also attempts to distinguish *ZF Meritor* on the grounds that the data at issue in *ZF Meritor* involved profit and volume projections, whereas the data at issue here is "an estimate concerning *actual* sales" that came from "sales personnel, who have direct knowledge on which to base such an estimate." (Dkt. No. 143, at 29). This argument fails in light of Teleflex's caveats that its "sales data does not capture this information" and that it "cannot confirm these estimates." (Dkt. No. 147-23, at 3). Indeed, nothing in the information Dr. Frankel utilized indicates what "sales personnel input" means, the methodology by which this "input" was gathered from salespeople and aggregated to compute the estimates in Teleflex's counsel's email, and whether that methodology was sufficiently sound and reliable to justify the use of the estimates in a damages analysis. .

AngioDynamics further contends that the Court should accept Dr. Frankel's data, despite its limitations, because it was the best data available in this litigation, and because Dr. Frankel testified that "the Teleflex estimate is precisely the type of information on which economists typically rely." (Dkt. No. 143, at 27-28; Dkt. No. 132-3, at 261-62, 266; Dkt. No. 132-6, at 14). But it is well established that an expert's "lack of access to reliable data does not justify use of unreliable data, and militates against admission under Daubert." *Danley v. Bayer (In re Mirena IUD Prods. Liab. Litig.)*, 169 F. Supp. 3d 396, 445 (S.D.N.Y. 2016). And Dr. Frankel's conclusory insistence that the Teleflex data is the type that an economist would normally rely on

(at least in the absence of more precise data) does not establish that the data is sufficiently reliable to allow Dr. Frankel to craft a damages estimate that is "just and reasonable" and not based on "speculation or guesswork." *Drug Mart Pharm. Corp.*, 472 F. Supp. 2d at 424 (citations omitted).

Finally, AngioDynamics argues that Dr. Frankel confirmed the accuracy of Teleflex's estimates by conducting an independent analysis. (Dkt. No. 143, at 28-29). Specifically, according to Dr. Frankel's rebuttal report:

> Using AngioDynamics sales data . . . I reported that in 2018 AngioDynamics sold [redacted] non-IR PICCs to customers AngioDynamics was able to identify as using Teleflex TLS devices. Those sales alone represent [redacted] percent of Teleflex separate stylet usage in 2018.

(Dkt. No. 132-6, at 14-15). In his deposition, Frankel described the process in greater detail:

> My staff . . . asked AngioDynamics, through counsel, to give us their best available list of hospitals that they knew were using Teleflex TLSs and stylets to place Angio nursing PICCs. And they did their best to assemble that list for us. And then my staff went through the data. And that was a process because . . . the right hospital names in the data wasn't always obvious, and so we did our best to match those up. I think they may have been confirming the communications with Angio to make sure we were on the right track. And that generated the [redacted] percent of stylets that that are sold separately . . . [redacted]

(Dkt. No. 132-3, at 273-74). Thus, through this independent analysis, Frankel came to a figure of [redacted] percent, approximately half of the figure used in Benchmark 1 and slightly higher than the figure used in Benchmark 2. (Dkt. No. 132-3, at 268-70).[27]

This independent analysis, however, does not confirm the reliability of the figure Dr. Frankel used for Benchmark 1: at most, it confirmed a figure that is only *half* of the figure he

[27] At oral argument, the parties disputed whether the percent figure Dr. Frankel independently calculated should be reduced in order to represent the percentage of *total* (as opposed to *standalone*) Teleflex TLS stylets that are sold for use in AngioDynamics' PICCs. (Dkt. No. 185, at 44, 78-79). This issue was not addressed in the parties' briefing, and the Court does not address it here, as it makes no difference to the Court's analysis.

computed using Teleflex's data of questionable reliability. Dr. Frankel insists that the list of customers AngioDynamics provided is not comprehensive since AngioDynamics personnel "knew some of [the customers that were using Teleflex TLS stylets with AngioDynamics PICCs], but not [all] of them," meaning the actual percentage of such customers is greater than the figure he was able to confirm. (Dkt. No. 132-3, at 268). Accepting this as true, this at most establishes that the actual percentage of Teleflex TLS customers using AngioDynamics PICCs is somewhere above the figure he was able to confirm; it says nothing about what that percentage actually is, and it certainly does not validate the figure Dr. Frankel used in Benchmark 1. For the foregoing reasons, the Court finds that Dr. Frankel's benchmarking analysis is based on unreliable data for purposes of *Daubert*.

ii. Bard's Other Arguments for Exclusion

Bard offers two other reasons why Dr. Frankel's benchmarking analysis should be excluded under *Daubert*. First, Bard argues that Dr. Frankel's benchmarks are "tainted" by the challenged conduct. (Dkt. No. 132-1, at 18-21; Dkt. No. 153, at 8-11).[28] Second, Bard argues that Dr. Frankel "performed no analysis to ensure that Bard's customers are sufficiently similar to Teleflex's so that it is fair and reliable to assume that they would have combined their respective TLSs with AngioDynamics' PICCs in the same proportion"; Bard specifically points to Dr. Frankel's failure to account for the fact that Teleflex TLS users have already demonstrated "a strong preference for BioFlo, since this alternative is more expensive than a Bard preloaded

[28] As to Benchmark 1, Bard contends that "the percentage of Teleflex's stylets [paired with AngioDynamics' PICCs] would have been far lower in the but-for world because some hospitals currently using them with AngioDynamics' PICCs would have shifted to Bard's superior TLS," and thus using this figure as a benchmark overstates the percentage of Bard's TLS stylets that would be combined with AngioDynamics' PICCs in the but-for world. (Dkt. No. 132-1, at 18-21; Dkt. No. 153, at 8-11). As to Benchmark 2, Bard contends that "the higher the number of AngioDynamics PICCs paired with Teleflex TLS, the smaller the relative advantage Teleflex has in selling its PICCs to its own TLS users as compared to nurses who place PICCs without TLS, which inflates Benchmark 2." (Dkt. No. 132-1, at 20 n.15).

PICC . . . and requires hospitals to use what Dr. Frankel alleges is an inferior TLS," whereas Bard TLS users "had the opportunity to make the same choice . . . but none decided that the purported advantages of AngioDynamics' PICCs were worth it." (Dkt. No. 132-1, at 21-25; *see also* Dkt. No. 153, at 11-12). AngioDynamics responds, in summary, that, given that: (1) Teleflex is Bard's only competitor to offer navigation-based TLS; (2) the two companies sell similar products to similar types of customers (hospitals, GPOs and IDNs), and even some of the same customers; and (3) Teleflex does *not* engage in an alleged tying scheme similar to Bard's, Teleflex's performance in the real world is the most economically reasonable comparator to use to estimate Bard's performance in a world without its TLS policy, and Bard's criticisms regarding taint and comparability are best addressed as questions of weight rather than admissibility. (Dkt. No. 143, at 20-27).

As a starting premise, the general rule is that arguments regarding the comparability or appropriateness of a particular benchmark go to the weight, not the admissibility, of a benchmarking analysis. *See, e.g., In re Blood Reagents Antitrust Litig.*, MDL No. 09-2081, 2015 WL 6123211, at *21 n.18, 2015 U.S. Dist. LEXIS 141909, at *68 n.18 (E.D. Pa. Oct. 19, 2015) ("Many courts . . . have held that the question whether plaintiffs have met their burden of proving comparability should be left to the trier of fact to resolve because comparability challenges generally involve weighing facts."); *Washington v. Kellwood Co.*, 105 F. Supp. 3d 293, 317 (S.D.N.Y. 2015) ("[W]hile the evidence underlying [the expert's benchmark analysis] may, in defendant's view, be thin, questionable, or self-servingly selective, our role as gatekeeper is not to divest defendant of the task of challenging the weight of such evidence before the trier of fact."). Moreover, a benchmark need not be perfectly comparable, so long as it allows the jury to calculate a "reasonable estimate of damages" as required under the antitrust

laws. *See, e.g.*, *Fleischman*, 728 F. Supp. 2d at 148 (citing *McDonough v. Toys R Us, Inc.*, 638 F. Supp. 2d 461, 491 (E.D. Pa. 2009)). This is particularly true where a Defendant's anticompetitive conduct has rendered selection of a perfectly comparable benchmark difficult or impossible. *See, e.g.*, *Dial Corp. v. News Corp.*, 314 F.R.D. 108, 118-19 (S.D.N.Y. 2015) (finding arguments regarding benchmark companies' comparability go to weight, not admissibility, where, because the defendant "has allegedly maintained a monopoly in the market . . . since at least 2000," "creating a benchmark using [the defendant's] prices during a time of 'robust competition' is not feasible," and "the selection of perfectly comparable benchmark firms aside from [the defendant] is impossible where [the defendant's] alleged monopoly prevents comparable firms from operating within its market").

Nonetheless, there are some circumstances under which, even applying the foregoing liberal standard, a benchmarking analysis may be so utterly deficient as to warrant its exclusion. One such circumstance is where the expert did not merely select arguably inappropriate benchmarks, but utterly "failed to perform ***any*** substantive analysis of those factors most relevant to comparability." *In re Blood Reagents Antitrust Litig.*, 2015 WL 6123211, at *22, 2015 U.S. Dist. LEXIS 141909, at *69 (emphasis added); *see also El Aguila Food Prods., Inc. v. Gruma Corp.*, 131 F. App'x 450, 453 (5th Cir. 2005) (affirming exclusion of expert testimony where the expert "made no effort to demonstrate the reasonable similarity of the plaintiffs' firms and the businesses whose earnings data he relied on as a benchmark"); *Loeffel Steel Prod., Inc. v. Delta Brands, Inc.*, 387 F. Supp. 2d 794, 810-17 (N.D. Ill. 2005) (excluding expert testimony where expert used eight companies in the same "industry" as the plaintiff as benchmarks but did not "consider[] such critical factors as what services the companies provided, their customer base, the products they sold, the geographic markets in which they operated, their prices and other

critical aspects of the business" to determine whether the plaintiff's "customer base and the services and products it offered approximated those of the eight companies"). Similarly, courts have excluded benchmarking analyses that attribute all of plaintiff's claimed losses to a defendant's misconduct, without making any effort to isolate the losses actually attributable to that conduct from the impact of other significant differences between the plaintiff and the chosen benchmark. *See, e.g., Herman Schwabe, Inc. v. United Shoe Mach. Corp.*, 297 F.2d 906, 911 (2d Cir. 1962) (affirming exclusion of analysis using the plaintiff-appellant's share of clicking machines in the non-shoe industry as a benchmark for sales it would have attained in the shoe industry but for the defendant's antitrust violations, where the expert failed to account for relevant differences between the two industries or for "entirely lawful" factors accounting for the defendant's large share of the shoe machinery market); *Weiner v. Snapple Beverage Corp.*, No. 07-cv-8742, 2010 WL 3119452, at *7, 2010 U.S. Dist. LEXIS 79647, at *23 (S.D.N.Y. Aug. 5, 2010) (finding an expert's testimony unreliable where the expert did "not explain how his approach would isolate the impact of [the anti-competitive conduct] from the other factors that purportedly affect the price of [defendant's product] and its competitors").[29]

Here, Dr. Frankel used PICC sales by Teleflex—which is Bard's only competitor in the navigation-enabled TLS space, and which does *not* engage in anticompetitive activity—as a benchmark for the PICC sales Bard would have made had *it* not engaged in that activity. This

[29] As noted, Bard also argues that courts have excluded benchmarking analyses where it found the proposed benchmarks to be "tainted" by the alleged misconduct at issue. However, the cases Bard cites for this proposition are distinguishable, as in contrast to Dr. Frankel, the excluded experts in those cases sought to use a defendant's anticompetitive profits as a benchmark for measuring the profits a competitor plaintiff would have made but for the defendant's conduct—in essence, seeking to reap the fruit of the defendant's anticompetitive conduct to provide a windfall to the plaintiff. *See, e.g.*, *Farmington Dowel Prod. Co. v. Forster Mfg. Co.*, 421 F.2d 61, 82 & n.48 (1969); *Admiral Theatre Corp. v. Douglas Theatre Co.*, 437 F. Supp. 1268, 1297-99 (D. Neb. 1977), *modified*, 585 F.2d 877 (8th Cir. 1978); *cf. In re Urethane Antitrust Litig.*, No. 04-cv-1616, 2012 WL 6681783, at *6, 2012 U.S. Dist. LEXIS 181506, at *42 (D. Kan. Dec. 21, 2012) ("[C]riticisms of [an expert's] consideration of possible taint from a conspiracy of potential benchmark years go to the weight of his opinions and not their admissibility."), *aff'd* 768 F.3d 1245 (10th Cir. 2014).

approach at least attempts to approximate a but-for world that "[has] not been affected by [Bard's alleged] antitrust violations," *Schwab v. Philip Morris USA, Inc.*, 449 F. Supp. 2d 992, 1062 (E.D.N.Y. 2006), *rev'd sub nom.*, *McLaughlin v. Am. Tobacco Co.*, 522 F.3d 215 (2d Cir. 2008), and to use a benchmark company that is comparable to Bard in some important ways, including the industry they compete in, the types of products they sell, and the customer base they serve, i.e. "hospitals that [] place PICCs," (Dkt. No. 132-3, at 283-94). Bard's arguments, however, raise valid questions about the reliability of Dr. Frankel's analysis, especially about whether he sufficiently considered important potential differences between the purchasing preferences of the two companies' customers that could impact the appropriateness of his benchmarks. The Court need not decide whether, standing alone, these issues would warrant exclusion of Dr. Frankel's opinion, or would be best addressed as questions of weight at trial. Given the Court's finding that the data on which Dr. Frankel's benchmarking analysis is based is so unreliable as to require exclusion, the Court grants Bard's motion to exclude that analysis without reaching Bard's remaining arguments.

3. Remaining Theories of Relief

While the Court excludes the benchmarking analysis that is the subject of Bard's motion in limine, the Court declines to grant Bard summary judgment on AngioDynamics' claim for damages under Section 4 of the Clayton Act at this time. At oral argument, the parties disagreed on whether the Court's granting of Bard's motion in limine would leave anything left of Dr. Frankel's testimony from which a jury could calculate a "just and reasonable" estimate of damages. As Bard has only moved to exclude Dr. Frankel's benchmarking analysis, and the reliability of that specific analysis is thus the only part of Dr. Frankel's analysis that is currently before the Court, the Court does not reach the question of whether other aspects of Dr. Frankel's analysis may serve as a valid basis for calculating damages. Moreover, even assuming

AngioDynamics is left with no evidence from which a just and reasonable damages estimate can be determined, this does not require dismissal of AngioDynamics' claim for damages under Section 4 of the Clayton Act. Where, as here, "there is insufficient proof of the amount of damages . . . proof of an antitrust violation and the fact of damage is a sufficient basis for an award of nominal damages" under Section 4. *Valassis Comms., Inc.*, 2019 WL 802093, at *12, 2019 U.S. Dist. LEXIS 27770, at *34-35 (citations omitted); *U.S. Football League v. Nat'l Football League*, 842 F.2d 1335, 1377 (2d Cir. 1988) (confirming district courts' ability to award nominal damages in antitrust cases).

Also, even if AngioDynamics does not have a viable theory by which it can quantify its past damages, this would not preclude AngioDynamics from continuing to pursue its claim for injunctive relief under Section 16 of the Clayton Act. "Typically, the inability to prove past damages does not compel a finding that the plaintiff faces no threat of antitrust injury in the future," and thus a plaintiff that failed to prove past damages may still pursue a claim for forward-looking injunctive relief. *Cash & Henderson Drugs, Inc. v. Johnson & Johnson*, 799 F.3d 202, 215 (2d Cir. 2015) (citing *Zenith Radio Corp.*, 395 U.S. at 130). "However, in certain situations, the lack of past injury may indicate that future injury is improbable." *Id.* For example, where the challenged conduct has been in place long enough for potential effects to manifest themselves and there is no evidence of injury, the difference between Clayton Act Section 4's requirement of actual injury and Section 16's requirement of threatened injury disappears. *Drug Mart Pharmacy Corp. v. Am. Home Prods. Corp.*, 2007 WL 4526618, at *10-15, 2007 U.S. Dist. LEXIS 93493, at *45-62 (E.D.N.Y. Dec. 20, 2007). Here, the Court has found that there is sufficient evidence in the record to create triable issues of fact as to whether AngioDynamics has

suffered injury as a result of an antitrust violation committed by Bard. Therefore, AngioDynamics may continue to pursue its claim for injunctive and declaratory relief.

V. CONCLUSION

For these reasons, it is hereby

ORDERED that Bard's motion in limine (Dkt. No. 132) is **GRANTED**; and it is further

ORDERED that Bard's motion for summary judgment (Dkt. No. 133) is **DENIED** in its entirety; and it is further

ORDERED that AngioDynamics' motion for summary judgment (Dkt. No. 134) is **DENIED** in its entirety.

IT IS SO ORDERED.

Dated: May 5, 2021
Syracuse, New York

Brenda K. Sannes
U.S. District Judge