

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

FEDERAL TRADE COMMISSION	)	
et al.,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	1:22cv828
	)	
SYNGENTA CROP PROTECTION AG	)	
et al.,	)	
	)	
Defendants.	)	

MEMORANDUM OPINION AND ORDER

THOMAS D. SCHROEDER, District Judge.

This is an antitrust case in which Plaintiffs challenge manufacturers' use of distributor loyalty rebate programs as an illegal restraint on trade. Before the court is the motion for summary judgment by Defendants Syngenta Crop Protection AG ("Syngenta AG"), Syngenta Corporation and Syngenta Crop Protection, LLC ("Syngenta"). (Doc. 380.) Plaintiffs, the Federal Trade Commission and the states of California, Colorado, Illinois, Indiana, Iowa, Minnesota, Nebraska, Oregon, Tennessee, Texas, Washington, and Wisconsin filed a response in opposition (Doc. 461.) Defendants replied. (Doc. 462). The motion is fully briefed, and the court heard argument on it on July 30, 2026. For the reasons that follow, Defendants' motion for summary judgment will be denied.

I. BACKGROUND

A. Factual Background

Construed in the light most favorable to Plaintiffs as the non-moving parties, the factual record shows the following:¹

Syngenta AG is among the world's leading agricultural technology companies and is headquartered in Switzerland. Syngenta is the company's United States regional entity. (Doc. 460-145 at ¶ 10.) Syngenta develops products such as herbicides, insecticides, and fungicides to protect crops from weeds, insects, and disease. (See Docs. 79 ¶¶ 37, 42; 460 at 17.) It invests significant sums annually toward research and development. (Doc. 463-2 at 6.) Much of that budget is spent on developing new active ingredients ("AIs") for its crop protection products. AI development companies must register new AIs and AI-formulated products with the United States Environmental Protection Agency. (Doc. 460-9 ¶ 6.) Companies typically take over twelve years to research, develop, test, and register a new AI at a cost of hundreds of millions of dollars. (Id. ¶ 4.)

¹ The parties have jointly moved to seal significant portions of the briefs and record, claiming several grounds including confidentiality. The motions to seal will be addressed by separate opinion. However, to the extent the court includes facts Defendants sought to be sealed, the court does so because they are necessary to the public's understanding of the court's decision. See SV Int'l, Inc. v. Fu Jian Quanyu Indus. Co., 820 F. Supp. 2d 677, 679 n.1 (M.D.N.C. 2011) (citing Stone v. Univ. of Md. Med. Sys. Corp., 855 F.2d 178, 182 (4th Cir. 1988)) (explaining "[w]here particular documents are important to a court's decision, the court may either use the information in an opinion or unseal the documents relied upon").

AI developers may obtain exclusive use rights to new AIs through two legal mechanisms. First, developers can register new-AI pesticides for exclusive use under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136 et seq. FIFRA also provides the developer with exclusive rights to cite data used to register the AI. Id. § 136a(c)(1)(F)(i). This provides exclusive-use protection that lasts ten years and can be extended. Id. § 136a(c)(1)(F)(i)-(ii). Developers can also obtain patents, which grant the developer exclusive use of the AI for twenty years. See 35 U.S.C. § 154(a)(2). Generic manufacturers are free to manufacture protected AIs after patent and FIFRA rights expire. Generics need not be identical to branded AIs. Instead, FIFRA requires that generics only be "substantially similar" or "differ in composition and labeling from such currently-registered pesticide only in ways that would not significantly increase the risk of unreasonable adverse effects on the environment." 7 U.S.C. § 136a(c)(3)(B).

Syngenta patented three AIs used to make crop protection products: azoxystrobin, mesotrione, and metolachlor.² As demonstrated below, Syngenta no longer possesses legal exclusivity for these AIs. Thus, generic versions of each AI are free to enter

² Syngenta explains that it produced two versions of this AI: "metolachlor" and "s-metolachlor." (Doc. 463 at 18 n.14.) The evidence also refers to s-metolachlor as "S-MOC," and "SMOC." The court will refer to both versions of this AI as "metolachlor" unless quoting a document that refers to the AI differently.

the market.

Crop-protection product manufacturers sell their products largely through a traditional channel: to distributors, who then sell to retailers, who sell to farmers, known as "growers" in the industry. (See Docs. 460-30 at ¶ 8; 460-36 at ¶ 12; 460-45 at ¶ 11.) The parties agree that these five distributors dominate the traditional channel. (See Doc. 454 at 36; 460 at 23.) These distributors control at least 61% of crop protection sales market through their integrated retail chains. (Doc. 460 at 23.) Syngenta understands distributors to "influenc[e] retailer product selection" and have "a tremendous amount of influence in the market with growers." (Docs. 454-3 at 95-97; 457-5 at 217.) Syngenta offers services to customers at each level of the traditional channel. Example services include training, grower financing, and product recycling. (Docs. 460-2 at 7; 460-65 at 9-10.) Internal Syngenta presentations demonstrate that Syngenta tracks market share percentage and sales figures for each AI. (See Doc. 457-3 at 8, 11, 13.)

Syngenta recognized that competition from generic AI manufacturers lowered revenue (Doc. 461-3 at 40), prices it could charge growers (Doc. 464-3 at 195), and market share (see id. at 17). In a 2001 presentation, Syngenta predicted an "[i]ndustry [u]nder [i]ncreasing [p]ressure" from "[o]ff-patent, substitutable products compos[ing] [a] majority of [the] product line[.]" (Doc.

464-2 at 882, 884.) Syngenta was concerned that generic competition would devalue the market for azoxystrobin, mesotrione, and metolachlor. (See Docs. 464-3 at 272; 465-3 at 73.)

Syngenta created strategies "[t]o manage share erosion" caused by generics entering the market. (Id. at 4, 17.) It aimed to "[m]aintain price premium" and "[k]eep strong market share leadership." (Id. at 191.) To this end, it developed a "[d]istribution [s]trategy" that "[e]nhanced incentive opportunities for strategic partners that are willing and able to align with Syngenta strategy and move share away from competitors to Syngenta." (Id. at 658.) The company told one of its distributors that generic competition would diminish its market share and value. (Id. at 671-73.) Syngenta also expressed concern that it would create "a vicious cycle of downward price pressure" if it were to discount prices to compete against generics. (Id. at 674.) This "[s]tatus [q]uo" would create a "[w]indfall for [t]he [g]rower" where "[f]arm [g]ate [p]rices [d]ecline!!" (Id. at 676.) It would also mean that "Syngenta and [the distributor] [l]ose!!" (Id.) Syngenta told the distributor that they had to work together to "preserve market value[.]" (Id. at 677.) In one presentation, Syngenta identified "[h]ow to keep generics below critical volumes and retain profitability for the AI?" as a "[c]ritical . . . [q]uestion." (Id. at 598.)

Syngenta created post-patent market-share strategy documents

specific to each AI. One presentation described Syngenta's "intent" to "[a]ggressively defend azoxystrobin share position while upholding market value[.]" (Doc. 464-4 at 53.) Another "Mesotrione Post Patent Workshop" discussed volume and value market share targets for generic mesotrione competition. (Doc. 464-3 at 516, 529.) And in Syngenta's "S-MOC Post Patent Strategy Update[,]" the company identified "generics" as one of "two main challenges to our S-Moc business." (Doc. 464-2 at 855-56.)

To address the threat of generic entry, Syngenta established "Key AI," a loyalty rebate program for all major pesticide distributors. (See Doc. 463-30 at 33.) Key AI would eventually reach a "critical mass" of the traditional channel. (Doc. 464-4 at 42.) At least one distributor recognized that "critical mass of distribution" was a "[c]ritical [s]uccess [f]actor" after patents expired. (Doc. 464-6 at 10, 25.)

A distributor is eligible for Key AI rebate payments if it sources a very high percentage of its annual AI consumption from Syngenta. Syngenta signs participating distributors to "marketing agreements." (Doc. 463-82 at 6.) These marketing agreements outline Key AI, distributor incentives, and threshold calculations. (See Doc. 463-85 at 8.) Syngenta added azoxystrobin, mesotrione, and metolachlor to the Key AI program between 2002 and 2014. (See Docs. 464-4 at 454, 468, 473; 464-2 at 888, 891.) In 2016, Syngenta required distributors to source over

90% of their azoxystrobin, mesotrione, and metolachlor from it to receive Key AI payments. (Doc. 464-6 at 343.) Similarly, in 2021, the thresholds were again over 90% for those same AIs. (Doc. 454-6 at 50.) Some payments are conditioned on meeting thresholds for multiple AIs. (See Doc. 464-7 at 240.)

Syngenta listed "Key AI Programs" as a hurdle generics must clear in a "Post Patent Strategy" presentation slide. (Doc. 464-4 at 434.) A former Syngenta employee and the "architect" of Syngenta's original loyalty program testified that prices would face severe erosion if generics captured 40% of the market. (Doc. 454-3 at 33, 48.) In a "Post Patent Guide" presentation, Syngenta stated that "[g]enerics will always have a lower price than the Branded product" and when Syngenta lowers its product's prices to meet generic prices, "they drop again, and again, and again." (Doc. 457-6 at 360, 419.) Syngenta attempted to "ensure loyalty through programs like Key AI." (Doc. 454-6 at 126.)

The parties contest Key AI's purpose. Syngenta contends the program allows distributors and retailers to pass savings to growers. (Doc. 460 at 39.) Syngenta also presents evidence that loyalty programs are common among manufacturers in the crop protection industry. (See Docs. 460-53 at 8-9; 460-60 at 9; 463-15 at 3; 463-155 at 3.) Plaintiffs insist that Key AI provides distributors an opportunity to share monopoly profits without requiring that any discounts be passed on to the growers. (See

Docs. 464-4 at 43; 464-6 at 848, 856.) To support this charge, Plaintiffs note a "Channel Strategy Summary Presentation" where Syngenta told distributors that one of its "objectives" was to "[i]ncrease/maintain farmgate prices" by "[r]educ[ing] local market price-based competition" and "[e]nlist[ing] distributors to support [its] portfolio and manage generics[.]" (Doc. 464-7 at 3, 9.) In that same presentation, Syngenta stated that a "focus on discounting" could lead to a "vicious cycle of downward price pressure." (Id. at 7.) The head of North America marketing for Syngenta testified that loyalty programs are designed to encourage distributors to "push" product through the traditional channel at desired prices, not a "price play" for growers. (Doc. 454-5 at 88, 104-05.) One distributor noted it appreciates loyalty programs because they "maintain market values and associated margins" and aim to "keep margins and market share at pre generic levels." (Doc. 464-6 at 40.) Another distributor's employee testified that the distributor does not pass discounts on to the grower. (Doc. 464-7 at 154-55.) Instead, the distributor keeps the loyalty payments as profits. (Id.; Docs. 464-2 at 278-79; 454-7 at 10.) One distributor stated that margins outside loyalty programs are unlikely and "[p]rogram dollars are too big to walk away" from. (Doc. 464-7 at 232.)

Plaintiffs point to a company-hosted mesotrione post-patent workshop in 2015. (Doc. 464-3 at 505). As part of the

presentation, Syngenta asked employees to consider “Heaven” and “Hell” scenarios two years after generics entered the market. (Id. at 592.) Employee participant notes from that workshop compared successful generic market entry to “hell[]” as opposed to “heaven” where “[r]etail Key AI [is] enforced” and “[g]eneric meso[trione] [is] not accepted.” (Id. at 508, 592.) Syngenta based its concerns on history: past generic competition with other AIs decreased price and market share. (See id. at 166, 263.)

Plaintiffs claim that Syngenta retaliated against distributors that sold both branded and generic products. (See Doc. 454 at 57-58.) One distributor failed to reach any Key AI threshold in both 2016 and 2017. (Doc. 465 at 297, 301.) Syngenta spoke about terminating the distributor’s marketing agreement in 2016 and ultimately terminated it in 2017. (Docs. 461-6 at 18, 22-23; 465 at 303.) A 2017 Syngenta internal meeting agenda states that if the distributor is “unwilling to sign on Key AI, [it] will get nothing other than a base retailer program.” (Doc. 465 at 342, 348.) However, Plaintiffs have provided evidence that termination prevented the distributor from directly purchasing Syngenta products and the distributor instead had to seek Syngenta products through another distributor or broker. (See Doc. 465-1 at 58-59; Doc. 465 at 338.) Syngenta did not resume business with this distributor until another company acquired the distributor in 2020. (See Doc. 464-5 at 400-06; 465 at 317-18, 321-22.) Syngenta

cancelled another distributor's contract under similar circumstances. That distributor had chosen not to pursue Syngenta's abamectin Key AI thresholds and focused on distributing a generic version. (Doc. 464-5 at 392-93.) Syngenta later terminated its contract with the distributor. (See Doc. 465 at 482-83.)

A distributor employee testified that contract termination was the "nuclear option" that incentivized the distributor to comply with Key AI. (Doc. 465-1 at 50-52.) He believed that not participating in Key AI would risk access to Syngenta products. (Id.) Another testified that if the distributor "kick[s] [the manufacturer] in the shins on those products that have loyalty programs," it is "naive" to think the manufacturer will "treat you like a trusted value partner on the rest of their portfolio." (Doc. 461-7 at 13.) Another believed "if we fight with a branded company on the stuff that is really important to them [and] in late life cycle products . . . we just are not going to be able to put programs [or] private labels or other types of . . . mechanisms for us to make money in place." (Doc. 461-3 at 16.) Another went so far as to say that leaving Key AI "would be suicide as far as our ability to sell Syngenta products." (Doc. 464-2 at 336.) Other executives made similar statements. (See, e.g., Docs. 461-9 at 54-56; 461-7 at 14; 465-1 at 80-81, 86-87.) Distributors that missed Key AI thresholds also risked losing access to private

label products (products sold under the distributor's label but containing an AI). (Doc. 461-3 at 16.)

Key AI also harmed competition and growers by affecting a product sold by Corteva, Inc. ("Corteva"), a co-defendant in this action. Corteva developed Resicore, a pesticide product that contained mesotrione pursuant to an exclusive supply agreement with Syngenta AG on behalf of Syngenta. (See Doc. 465-1 at 433-34; 458-1 at 403.) The supply agreement lasted between 2018 and 2022. (See Doc. 458-1 at 403, 424.) Syngenta provided Corteva with mesotrione but charged a higher price than the generic version. (See Docs. 457-2 at 525; 464-2 at 524; 465-1 at 407; 465-2 at 13.)

After mesotrione went off patent, Corteva contemplated using generic mesotrione at a lower cost, but both Syngenta and Corteva realized that doing so would harm both companies. It would cause Syngenta to lower its price on mesotrione, resulting in a "massive hit" for the company. (Doc. 465-1 at 438.) It would also be inconsistent with Corteva's efforts to maintain post-patent prices on its products and cooperate with other companies doing the same. While discussing mesotrione sourcing, a Corteva executive stated the company was "committed to continue work on the right value capture and supporting the post patent strategy for [m]esotrione" and that the deal will show the "market we are aligned and work well with each other globally and in the US." (Doc. 465-2 at 23.)

Corteva executives considered these potential loyalty issues for distributors if the company changed mesotrione suppliers. (See Doc. 465-2 at 13.) One executive argued that Resicore “would cost [Corteva] a lot more than the cost savings that Syngenta has offered [it].” (Id. at 23.) Though Corteva considered switching to generic mesotrione in anticipation of its exclusive supply agreement with Syngenta ending in 2022 (Doc. 465-2 at 13), Corteva acknowledged it would risk distributors who bought Resicore not getting Key AI loyalty credit for purchases of mesotrione, thus incentivizing them to purchase a different product to comply with Key AI. Syngenta agreed to count distributors’ Resicore purchases toward Key AI loyalty requirements because Resicore contained Syngenta’s mesotrione. (See Doc. 458-2 at 11-14.) At least one distributor feared that Corteva’s switch to generic mesotrione would jeopardize its loyalty requirements with Syngenta. (Id.) (describing potential distributor loyalty issues and confirming distributor’s understanding that if Corteva switched mesotrione sourcing to generics, it “would be a ‘baaaaad idea’ as there would be NO way it would fit in and the money would be too large to make up”).)

Syngenta’s rebate program also stopped a major pharmaceutical company from purchasing generics from other manufacturers. That pharmaceutical company determined that losing Syngenta’s loyalty rebates would cost more than it would gain by switching to generic

suppliers. (See id. at 30-31, 36-38.)

Plaintiffs allege that Key AI prevents generic suppliers from competing in the marketplace despite their lower prices because Key AI disincentivizes distributors from purchasing generics. (See Doc. 454 at 67.) If distributors purchased generics, they would lose out on Syngenta discounts and products. (See id. at 57.) Syngenta viewed Key AI as a “[c]ritical [c]omponent” of its defense strategy against generics. (Doc. 464-3 at 871.) There is evidence that Syngenta’s strategy worked. In a 2014 presentation slide, Syngenta stated, “AI share remains very high with some AI’s greater than 95%” “[e]ven multiple years . . . after patent fall.” (Id. at 842-43.) And in 2015, Syngenta stated it was “the only R&D company that has outpaced the biggest generic players in market share gain from 2006 onwards.” (Id. at 49, 52.) The company regarded Key AI as a “very strong lever” against generics. (Doc. 465-2 at 42.) Syngenta’s analysis showed that removing certain generics would result in “price degradation” and “[p]otential [r]evenue [l]oss.” (Id. at 61-62.) Syngenta’s analysis also predicted that removing certain AIs from Key AI would result in significant drops in market presence. (Id. at 66.)

There is evidence that distributors would buy generics if not for Key AI. One distributor executive testified that his company would buy less than 50% of its azoxystrobin and mesotrione from Syngenta if not for Key AI. (See Doc. 464-2 at 300-03.) The same

executive also stated his company would buy less than 60% or 50% of its metolachlor from Syngenta if not for Key AI. (Id.) Instead, the distributor purchased between 89.6% and 100% of these AI products from Syngenta. (Id.) Another distributor's executive testified that it steered customers away from generic azoxystrobin, mesotrione, and metolachlor products in part to "ensure compliance with Syngenta loyalty." (Id. at 282-84.) Other distributors chose not to sell generics to remain compliant with Key AI. (See Doc. 461-7 at 28-29; 461-10 at 40-43; 464-5 at 378-79, 382-83; 465 at 334-35; 465-1 at 46-47.) There is also evidence suggesting that distributors find the Key AI rebate program structure to be confusing as to whether they have the "headspace," i.e., met the high Key AI percentage required to qualify for a rebate, to purchase generic AIs. (Doc. 457-2 at 300-01.) That is because Key AI's percentage thresholds are based on sales and are high (leaving very little "headspace"), and distributors may not be able to calculate these sales percentages until the end of the year. (Id.) At least one distributor's employee testified that this dilemma prevents the distributor from purchasing generic AIs with the remaining percentage. (Id.)

Generic manufacturer executives testified that they were unable to enter the azoxystrobin, mesotrione, and metolachlor markets because Key AI disincentivized distributors from doing business with them. One generic manufacturer, for example, stopped

selling its product and exited the market because Key AI made it difficult to gain any traction. (Doc. 465-2 at 146-47.) Another stopped selling a mesotrione and metolachlor premix because loyalty programs kept distributors from purchasing it. (Doc. 461-5 at 146.) Other generic manufacturers could not break into markets dominated by loyalty programs. (See id. at 135-36, 190-91; Doc 465-2 at 155-56, 159-60.)

Even so, Plaintiffs concede that generics have made some progress breaking into the market. (See Doc. 454 at 19.) Yet, Plaintiffs maintain this entry is "limited." (Id.) They claim that generic entry was "prevented, delayed, and diminished" by Key AI. (Id. at 67.) Syngenta presents evidence that generic versions of the AIs have achieved higher than 30% market threshold. (Doc. 463-57 at ¶¶ 170-71.) According to Syngenta's expert Mr. Orszag, azoxystrobin reached 31%, mesotrione 32%, and metolachlor 36%. (Id.) Some generic manufacturers also offer loyalty programs, although the record is not clear as to their terms. (See Docs. 463-81; 463-83; 463-84.) Some manufacturers also sell generics through channels outside the five major distributors who participate in the loyalty programs. (See Doc. 461-5 at 159; 461-10 at 88-89.) Despite these inroads, Plaintiffs' evidence that manufacturers sell generics at higher rates in countries without loyalty programs supports their claims. (See Doc. 461-10 at 104-06; 464-5 at 466-67.)

Finally, and importantly, there is evidence that Key AI raises prices for growers. Syngenta's internal documents show that the company acknowledges that Key AI is designed to maintain higher prices. In 2015, Syngenta predicted azoxystrobin would suffer a 50% to 60% price erosion if loyalty partners did not support the brand and generics entered the market. (Doc. 465-3 at 3, 35.) In 2017, Syngenta employees predicted the company's "ability to sustain price premiums over generics will decline" with "less distributor support." (Doc. 465-2 at 66.) In a 2019 presentation, Syngenta predicted generic metolachlor would reduce "net sales and contribution loss" by \$174 million. (Doc. 465-3 at 73.) In 2020, a Syngenta employee predicted that reducing metolachlor's Key AI threshold from 90% to 85% would reduce profits by tens of millions of dollars. (Id. at 77.) Distributors also believed that Key AI raised prices for growers. One distributor's employee testified that if a competing distributor stopped participating in a loyalty program and sold a cheaper product, prices for growers would fall. (Doc. 464-2 at 819-20.)

B. Procedural Background

On September 29, 2022, Plaintiffs (except for the states of Tennessee and Washington) filed this action seeking declaratory, injunctive, equitable monetary relief, and civil penalties against all Defendants. (Doc. 1 at 82-83.) Defendants moved to dismiss the original complaint. (Docs. 64, 65.) Tennessee and Washington

joined as Plaintiffs in the amended complaint filed on December 23, 2022. (Docs. 79, 149 (lesser-redacted complaint).) The amended complaint seeks recovery on the following grounds: unfair competition under Section 5 of the FTC Act, 15 U.S.C. § 45(a); unlawful conditioning of payments under Section 3 of the Clayton Act, 15 U.S.C. § 14; unreasonable restraint of trade under Section 1 of the Sherman Act, 15 U.S.C. § 1; unlawful monopolization under Section 2 of the Sherman Act, 15 U.S.C. § 2; and violations of the consumer protection laws of a dozen states. (Doc. 79 at 69-82.)

Defendants moved to dismiss the amended complaint on January 13, 2023. (Docs. 94, 99.) The court denied the motion. Fed. Trade Comm'n v. Syngenta Crop Prot. AG, 711 F. Supp. 3d 545 (M.D.N.C. 2024); (Doc. 160.)

Following extensive discovery, Defendants brought the present motion for summary judgment on all of Plaintiffs' claims. (See Doc. 460 at 14-16.) Plaintiffs oppose all grounds (Doc. 454 at 21), and Defendants filed a reply (Doc. 462). Following the court's hearing on July 30, 2026 (Doc. 542), the motions are ready for decision.³

³ Defendant Corteva has since reached a proposed settlement with Plaintiffs, approval of which is pending before the court. (Doc. 540.) Therefore, further references to Defendants are only to the remaining Syngenta entities.

II. ANALYSIS

A. Standard of Review

Summary judgment is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). "A genuine issue of material fact exists 'if the evidence is such that a reasonable jury could return a verdict for the nonmoving party.'" Basnight v. Diamond Devs., Inc., 146 F. Supp. 2d 754, 760 (M.D.N.C. 2001) (quoting Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986)). In determining a motion for summary judgment, the "court views the evidence in the light most favorable to the non-moving party, according that party the benefit of all reasonable inferences." Id. Summary judgment should be denied "unless the entire record shows a right to judgment with such clarity as to leave no room for controversy and establishes affirmatively that the adverse party cannot prevail under any circumstances." Guessford v. Pa. Nat'l Mut. Cas. Ins. Co., 983 F. Supp. 2d 652, 659 (M.D.N.C. 2013) (quoting Campbell v. Hewitt, Coleman & Assocs., Inc., 21 F.3d 52, 55 (4th Cir. 1994)).

While the movant bears the initial burden of demonstrating the absence of a genuine dispute of material fact, once that burden has been met, the non-moving party must demonstrate the existence of a genuine dispute of material fact. Bouchat v. Balt. Ravens Football Club, Inc., 346 F.3d 514, 522 (4th Cir. 2003); Matsushita

Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586-87 (1986). A mere scintilla of evidence is insufficient to avoid summary judgment. Anderson, 477 U.S. at 252; Dash v. Mayweather, 731 F.3d 303, 311 (4th Cir. 2013) (“[T]he nonmoving party must rely on more than conclusory allegations, mere speculation, the building of one inference upon another, or the mere existence of a scintilla of evidence.” (citing Anderson, 477 U.S. at 252)); see also Felty v. Graves-Humphreys Co., 818 F.2d 1126, 1128 (4th Cir. 1987) (noting that there is an affirmative duty for “the trial judge to prevent factually unsupported claims and defenses from proceeding to trial” (citation and internal quotation marks omitted)). Instead, the nonmoving party must convince the court that, upon the record taken as a whole, a rational trier of fact could find for the nonmoving party. Anderson, 477 U.S. at 248-49. Trial is unnecessary only if “the facts are undisputed, or if disputed, the dispute is of no consequence to the dispositive question.” Mitchell v. Data Gen. Corp., 12 F.3d 1310, 1315-16 (4th Cir. 1993).

The Fourth Circuit has cautioned that “summary procedures should be used sparingly in complex antitrust litigation where motive and intent play leading roles.” Duke Energy Carolinas, LLC v. NTE Carolinas II, LLC, 111 F.4th 337, 367 (4th Cir. 2024) (in context of Sherman § 2 case) (quoting Dickson v. Microsoft Corp., 309 F.3d 193, 212 (4th Cir. 2002)).

B. Motion for Summary Judgment

Defendants argue the court should grant them summary judgment for three principal reasons. First, they contend that Plaintiffs' claims fail under the price-cost test. Second, even if the court analyzes Syngenta's loyalty program under the rule of reason, they argue, Plaintiffs have not carried their burden to show the existence of single-AI markets. Third, they contend there is insufficient evidence of market foreclosure and harm to competition to establish liability under the rule of reason. Defendants also ask the court to grant them summary judgment on all of Plaintiffs' state law claims on the grounds that they rise and fall with the federal claims.

Each argument will be addressed in turn.

C. Federal Antitrust Laws

Plaintiffs allege that Syngenta's Key AI loyalty rebate program violates federal and state antitrust laws as unlawful exclusive dealing. (Docs. 454 at 79; 79-81 at 69-85.) They claim violations of Sections 1 and 2 of the Sherman Act, Section 3 of the Clayton Act, and Section 5 of the FTC Act. (Docs. 454 at 79; 79 at 69-71.) Plaintiffs contend that their exclusive dealing claims must be analyzed under the "effects-based, burden-shifting framework of the rule of reason." (Id. at 82.) Defendants counter that Plaintiffs' claims must be analyzed instead under the price-cost test. (Doc. 460 at 45.) Under that test, Defendants contend,

the claims fail because liability attaches only if a defendant prices products below cost, which Syngenta does not.

1. Plaintiffs' Exclusive Dealing Claims

The court more extensively set out the law relative to Plaintiffs' claims in its decision on motion to dismiss and will not repeat it here. See Syngenta, 711 F. Supp. 3d at 562-81.

Section 1 of the Sherman Act prohibits "[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations." 15 U.S.C. § 1. Section 2 of the Sherman Act prohibits "monopoliz[ing], or attempt[ing] to monopolize, or combin[ing] or conspir[ing] with any other person or persons, to monopolize any part of the trade or commerce among the several States." 15 U.S.C. § 2. There are two elements to a Sherman Act Section 2 violation: "(1) possession of monopoly power and (2) 'maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.'" Syngenta, 711 F. Supp. 3d at 563 (quoting Eastman Kodak Co. v. Image Tech. Servs., Inc., 504 U.S. 451, 481 (1992)). "Monopoly power is defined as the ability 'to control prices or exclude competition.'" Id. (quoting United States v. Grinnell Corp., 384 U.S. 563 (1966)). Although it is rare to find evidence of this ability, courts can consider circumstantial evidence "such as a company's share of the

market . . . to determine whether monopoly power exists." Id. (citing United States v. Dentsply Int'l, Inc., 399 F.3d 181, 187 (3d Cir. 2005)). "Maintenance of that power requires some illegal conduct that forecloses competition, gains a competitive advantage, or destroys a competitor." Id. (citing Eastman Kodak, 504 U.S. at 482-83).

Section 3 of the Clayton Act makes it unlawful for

[A]ny person engaged in commerce . . . to lease or make a sale or contract for sale of goods . . . for use, consumption, or resale within the United States . . . or fix a price charged therefor, or discount from, or rebate upon, such price, on the condition, agreement, or understanding that the lessee or purchaser thereof shall not use or deal in the goods . . . of a competitor or competitors of the lessor or seller, where the effect of such lease, sale, or contract for sale or such condition, agreement, or understanding may be to substantially lessen competition or tend to create a monopoly in any line of commerce.

15 U.S.C. § 14.

Section 5 of the FTC Act prohibits "[u]nfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce." Id. § 45(a)(1). The act does not exclusively focus on antitrust, but it is "nonetheless linked to the antitrust laws." Chuck's Feed & Seed Co., Inc. v. Ralston Purina Co., 810 F.2d 1289, 1293 (4th Cir. 1987). The Supreme Court has also said that the FTC Act was "designed to supplement and bolster the Sherman Act and the Clayton Act" "to stop in their incipency acts and practices which, when full blown,

would violate those Acts.” Fed. Trade Comm’n v. Motion Picture Advert. Serv. Co., 344 U.S. 392, 394-95 (1953). The FTC Act “functions as a kind of penumbra around the federal antitrust statutes[.]” Chuck’s Feed, 810 F.2d at 1292-93. Practices that violate the Sherman or Clayton Act also violate the FTC Act. Syngenta, 711 F. Supp 3d. at 563 (citing Fed. Trade Comm’n v. Ind. Fed’n of Dentists, 476 U.S. 447, 454 (1986)).

Plaintiffs claim Syngenta’s Key AI loyalty rebate program is an unlawful exclusive dealing arrangement. In an exclusive dealing arrangement, a “buyer agrees to purchase certain goods or services only from a particular seller for a certain period of time.” Syngenta, 711 F. Supp. 3d at 564 (citing Phillip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 1800a (4th & 5th ed. 2023)). “Neither absolute exclusivity nor an express agreement is necessary for an exclusive dealing arrangement to violate antitrust laws.” Id. (citing ZF Meritor, LLC v. Eaton Corp., 696 F.3d 254, 270, 282 (3d Cir. 2012); Tampa Elec. Co. v. Nashville Coal Co., 365 U.S. 320, 328 (1961)). Exclusive dealing is not necessarily unlawful, but these arrangements may give rise to claims under all four statutory provisions discussed above. See, e.g., Grinnell Corp., 384 U.S. at 576 (Sherman Act § 2); ZF Meritor, 696 F.3d at 281 (Sherman Act §§ 1 and 2, Clayton Act § 3); LePage’s Inc. v. 3M, 324 F.3d 141, 157 & n.10 (3d Cir. 2003) (same); Allied Orthopedic Appliances Inc. v. Tyco Health Care Grp.

LP, 592 F.3d 991, 996 (9th Cir. 2010) (Sherman Act § 1); McWane, Inc. v. Fed. Trade Comm'n, 783 F.3d 814, 827 (11th Cir. 2015) (FTC Act § 5).

Courts generally analyze exclusive dealing claims under the rule of reason test. Mylan Pharms. Inc. v. Sanofi-Aventis LLC, 2026 WL 201152, at *20 (W.D. Pa. Jan. 27, 2026); see also United States v. Brewbaker, 87 F.4th 563, 573 (4th Cir. 2023) (stating that the rule of reason is the default test under the Sherman Act); ZF Meritor, 696 F.3d at 269 (stating that the rule of reason is applicable to the plaintiff's exclusive dealing claims under Sections 1 and 2 of the Sherman Act and Section 3 of the Clayton Act); Chuck's Feed, 810 F.2d at 1294-95 (applying rule of reason to exclusive dealing claim under the FTC Act); In re Surescripts Antitrust Litig., 608 F. Supp. 3d 629, 642-43 (N.D. Ill. 2022) (rejecting price-cost test in favor of rule of reason because subject loyalty scheme allegedly increased, not lowered, prices through exclusive dealing requirements, and noting that the loyalty discount resulted in prices "well above market").

"Under the rule of reason, an exclusive dealing arrangement will be unlawful only if its 'probable effect' is to substantially lessen competition in the relevant market." ZF Meritor, 696 F.3d at 268 (emphasis added) (quoting Tampa Elec., 365 U.S. at 327-29). The following factors guide the court's analysis of an exclusive dealing arrangement:

[T]he probable effect of the contract on the relevant area of effective competition, taking into account the relative strength of the parties, the proportionate volume of commerce involved in relation to the total volume of commerce in the relevant market area, and the probable immediate and future effects which pre-emption of that share of the market might have on effective competition therein.

Tampa Elec., 365 U.S. at 329. "To succeed on an exclusive dealing claim, a plaintiff must prove (1) the relevant product market; (2) the geographical area of competition for the product market; and (3) that the arrangement at issue extends to a 'substantial share of the relevant market.'" Syngenta, 711 F. Supp. 3d at 545 (quoting Chuck's Feed, 810 F.2d at 1293).

2. The Price-Cost Test

Defendants argue that Syngenta's Key AI loyalty program should be analyzed under the price-cost test instead of (or as a particular application of) the rule of reason, based on two propositions. (Doc. 460 at 45-46.) They argue that (1) the price-cost test applies where price is the "clearly predominant mechanism of exclusion" (id. at 45), and thus should apply because (2) "Key AI is [q]uintessentially a [p]ricing [p]ractice" (id. at 48). According to Defendants, its rebates are "as a matter of law, 'nothing more than price reductions.'" (Id. at 48-49 (quoting NicSand, Inc. v. 3M Co., 507 F.3d 442, 452 (6th Cir. 2007)).) Defendants insist that "the payment of money is the only consideration that Syngenta provides to distributors and retailers

that 'increase business' for Syngenta by satisfying a share threshold." (Id. at 48 (emphasis in original).) It contends it only pays money to distributors through Key AI, so "price is the clearly predominant mechanism" of exclusion and the price-cost test governs. (Id. at 45 (quoting ZF Meritor, 696 F.3d at 275).)

Plaintiffs do not dispute that Syngenta prices its AIs above cost. (See Doc. 460 at 72.) Therefore, if the price-cost test applies, Plaintiffs understand that their claims would fail as a matter of law. (See id.) But Plaintiffs counter that anticompetitive conduct cannot escape rule of reason analysis just because a rebate program contains "a 'payment' or 'pricing' element" if it nevertheless operates as a form of exclusive dealing. (Doc. 454 at 84.) They contend they have produced evidence of additional methods of exclusion that render the price-cost test inapplicable. (Doc. 454 at 90.)

The court thus turns to an analysis of the price-cost test and Plaintiffs' evidence that Syngenta's Key AI loyalty rebate program includes exclusionary methods beyond pricing.

a. The Price-Cost Test in Exclusive Dealing Claims

It is instructive to understand that the price-cost test has been applied most commonly in cases involving predatory pricing. See ZF Meritor, 696 F.3d at 272. A price is predatory when a firm sets it "below an appropriate measure of cost for the purpose of

eliminating competitors in the short run and reducing competition in the long run.” Cargill, Inc. v. Monfort of Colo., Inc., 479 U.S. 104, 117 (1986). Firms that engage in predatory pricing later raise prices to offset losses after forcing competitors out of the market. See ZF Meritor, 696 F.3d at 272 (describing the typical price-cutting scheme). This scheme is difficult to execute, and commentators disagree whether it is ever rational for a firm to try. Cargill, 479 U.S. at 121 n.17 (citing Matsushita Elec., 475 U.S. at 588-93).

Although some pricing can be predatory, lower prices usually benefit consumers. Price cutting is “the very essence of competition.” Pac. Bell Tel. Co. v. LinkLine Commc’ns, Inc., 555 U.S. 438, 451 (2009) (quoting Matsushita Elec., 475 U.S. at 594). Predatory pricing, however, “is a practice that harms both competitors and competition.” Cargill, 479 U.S. at 117-18 (emphasis in original). Legitimate price cutting is “aimed simply at increasing market share,” whereas predatory pricing is aimed at “the elimination of competition.” Id. at 118.

Because legitimate price cutting benefits the consumer, the Supreme Court has “carefully limited the circumstances under which plaintiffs can state a Sherman Act claim by alleging that prices are too low.” Pac. Bell, 555 U.S. at 451. The Court has protected legitimate price cutting from predatory pricing claim interference. See Cargill, 479 U.S. at 116 (explaining that “[t]o

hold that antitrust laws protect competitors from the loss of profits due to such price competition would, in effect, render illegal any decision by a firm to cut prices in order to increase market share"); Brooke Grp. Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 223 (1993) (explaining "[a]s a general rule, the exclusionary effect of prices above a relevant measure of cost either reflects the lower cost structure of the alleged predator, and so represents competition on the merits, or is beyond the practical ability of a judicial tribunal to control without courting intolerable risks of chilling legitimate price-cutting").

In Brooke Group, the Supreme Court applied the price-cost test in the context of a predatory pricing claim. It stated that two elements make up the claim: (1) price must be below the seller's cost, and (2) the seller must seek to recoup the losses later after harming the competitor. See Brooke Grp., 509 U.S. at 222-24. The recoupment test requires the plaintiff to show that the defendant had a "reasonable prospect, or . . . a dangerous probability[] of recouping its investment in below-cost prices." Id. at 224. This occurs when the alleged predator reasonably expects to recover "monopoly profits" greater than the losses suffered. Id. (quoting Matsushita Elec., 475 U.S. at 588-89). A defendant can only be found liable for predatory pricing if both tests are satisfied. The burden of proof rests on the plaintiff. Id. at 225.

Courts occasionally apply the price-cost test even when plaintiffs do not pursue predatory pricing claims. As this court explained at the motion to dismiss stage, the "Supreme Court's price-cost line of cases demonstrates that the price-cost test applies at least where a pricing practice itself operates as the exclusionary tool, regardless of how the plaintiff styles its allegations." Syngenta, 711 F. Supp. 3d at 571-72. However, lower courts have grappled with the question of when to apply the test when it is not clear that a company engages merely in price-cutting. Id. at 572.

In ZF Meritor, for instance, the plaintiff brought an exclusive dealing claim against a monopolist who sold heavy-duty truck transmissions to the only four Original Equipment Manufacturers ("OEMs") in North America via five-year agreements. 696 F.3d at 263-65. Each agreement provided certain rebate qualifications. Id. at 265. These agreements required OEMs to purchase 80% to 97.5% of their needs from the monopolist, and the monopolist reserved the right to terminate the agreements if the OEMs failed to meet their requirements. Id. at 286-87. OEMs who failed to meet their requirements could also be required to repay a rebate already made. Id. at 265. In addition, some agreements required OEMs to remove the monopolist's competitors' products from the OEM's catalogs, some agreements required that the OEM list the monopolist's products at a "preferential price" below

that of competitors, and others allowed OEMs to purchase another supplier's transmissions only where the monopolist failed to match a supplier's lower price. Id. at 266.

On a competitor's challenge to the program, the Third Circuit concluded that the antitrust claims should be analyzed under the rule of reason. Id. at 268-69. It concluded that this was not a "'pricing practices' case, i.e., a case in which price is the clearly predominant mechanism of exclusion." Id. at 269. The challenger "did not rely solely on the exclusionary effect of [the monopolist's] prices, and instead highlighted a number of anticompetitive provisions in the [agreements]." Id. at 277. The court stated that it would apply the price-cost test if the case presented "solely a challenge to [the monopolist's] pricing practices" such as its "market-share rebates." Id. at 273-74. In other words, the exclusive dealing claim did not take the price-cost test "off the table." Id. at 275. In a footnote, the court observed that the "price-cost test applies to market-share or volume rebates offered by suppliers within a single-product market." Id. at 274 n.11 (citing NicSand, 507 F.3d at 452; Concord Boat Corp. v. Brunswick Corp., 207 F.3d 1039, 1061 (8th Cir. 2000); and Barry Wright Corp. v. ITT Grinnell Corp., 724 F.2d 227, 236 (1st Cir. 1983)).

Relevant here, the court found "sufficient evidence from which a jury could infer that, although the [long-term agreements]

did not expressly require the OEMs to meet the market penetration targets, the targets were as effective as mandatory purchase requirements.” Id. at 282. This included evidence the monopolist was the dominant supplier, OEMs believed that the monopolist might terminate their agreements for failing to comply with the long-term agreements, and “no OEM could satisfy customer demand without at least some [monopolist] products” such that “no OEM could afford to lose [the monopolist] as a supplier.” Id. at 283.

Other courts have found the ZF Meritor framework helpful in determining when to apply the price-cost test. See Syngenta, 711 F. Supp. 3d at 574-75 (collecting cases). Most prominently, the Third Circuit reaffirmed this framework in Eisai, Inc. v. Sanofi Aventis U.S., LLC, 821 F.3d 394 (3d Cir. 2016), involving the injectable anticoagulant drug market. Sanofi, a pharmaceutical company, marketed its anticoagulant drugs to American hospitals. Id. at 400. Sanofi encouraged hospitals to participate in its rebate program and offered increasingly higher discounts to hospitals through the program. Id. The discounts increased as hospital purchase volume and market share increased. Id. Like the long-term agreements in ZF Meritor, participation in the rebate program did not obligate hospitals to purchase anticoagulants from Sanofi. Id. Nor did they restrict hospitals from purchasing other drugs from Sanofi if the hospitals failed to reach anticoagulant thresholds. Id. Eisai sued, claiming Sanofi’s rebate program

amounted to a de facto exclusive dealing arrangement. Id. at 403.

The court invoked ZF Meritor to explain that rebate programs are typically analyzed under the price-cost test as a form of the rule of reason test. It reaffirmed that “when pricing predominates over other means of exclusivity, the price-cost test applies. This is usually the case when a firm uses a single-product loyalty discount or rebate to compete with similar products.” Id. at 409. But, as in ZF Meritor, Eisai argued that more than just pricing mechanisms were employed to reduce competition, as the discount increased if the hospital purchased more than 75% of its needs from Sanofi, thus “bundling” price with market share. Id. at 401, 409. The court refrained from concluding whether the price-cost test applied because the scheme survived even under the rule of reason as applied in ZF Meritor. The court noted that whether to apply the price-cost test may be different under different factual circumstances and that pricing may not predominate when a plaintiff challenges anticompetitive conduct beyond pricing. Id. at 409.

Defendants rely on both Brooke Group and NicSand. (Doc. 460 at 48-49.) Brooke Group arose out of this district and analyzed alleged anticompetitive conduct in the cigarette market. Brooke Grp., 509 U.S. at 212-17. One generic cigarette manufacturer, formerly Liggett, brought a predatory pricing claim against a brand manufacturer, Brown & Williamson Tobacco Corporation. Id. at 216-17. Liggett claimed that Brown & Williamson’s “volume rebates to

wholesalers amounted to price discrimination that had a reasonable possibility of injuring competition.” Id. at 216. Because Liggett did not allege any anticompetitive conduct beyond the pricing practices, the court applied the price-cost test. Id. at 222-24. Brooke Group thus stands for the proposition that the price-cost test applies to predatory anticompetitive pricing practices standing alone, because as long as a company charges a price above its cost, competition is served.

In NicSand, NicSand, Inc. challenged 3M Company’s rebate program in the do-it-yourself automotive sandpaper market where six retailers controlled 80% of the market. 507 F.3d at 447. Five of the six retailers stocked only one company’s automotive sandpaper at a time and negotiated the single-brand agreements only once annually. Id. at 448. This gave the successful supplier a “‘de facto exclusive agreement’ with each retailer.” Id. at 448 (quoting the record). 3M offered the retailers large up-front payments to enter multi-year exclusive dealing arrangements, which the retailers accepted, thus shutting NicSand out of the market. Id. at 447-49. NicSand sued, claiming that 3M’s up-front payments and the exclusive, multi-year contracts violated antitrust laws. Id. at 451. As Defendants note, the court framed these payments as “price reductions.” (Doc. 460 at 49.) The court explained these were “offered to the buyers for the exclusive right to supply a set of stores under multi-year contracts.” NicSand, 507 F.3d at

452 (quoting Augusta News Co. v. Hudson News Co., 269 F.3d 41, 45 (1st Cir. 2001)).

The court concluded that “[r]ather than upsetting the competition-enhancing goals of the antitrust laws, the payments furthered them.” 507 F.3d at 452. The court found that, as NicSand conceded, 3M did not allege any form of predatory pricing because it did not sell automotive sandpaper below cost with the goal of recouping its losses by charging monopolistic prices later. Id. at 455. The court also found no basis to consider that the agreements themselves created market-entry barriers that caused a cognizable antitrust injury. Id. (citing Bell Atl. Corp. v. Twombly, 550 U.S. 544, 570 (2007)). Neither the exclusive nor multi-year nature of the contracts was anticompetitive because such provisions were customary in the market; indeed, NicSand had historically practiced them. Retailers only considered switching suppliers if the prospective supplier agreed to purchase the retailer’s existing (competitor’s) automotive sandpaper supply. Id. at 452. In this context, 3M could not compete without offering up-front payments. It was the retailers, moreover, who required would-be suppliers to enter into “one-year ‘de facto’ agreements.” Id. at 453. The court explained that “[i]f the buyers in a market demand one thing, the antitrust laws do not prohibit an entrant from offering that same thing on slightly different terms.” Id. (citing Verizon Commc’ns Inc. v. Law Offs. of Curtis V. Trinko,

LLP, 540 U.S. 398, 411 (2004)). The court noted, "Antitrust analysis must always be attuned to the particular structure and circumstances of the industry at issue.'" Id. at 454 (quoting Verizon Commc'ns, 540 U.S. at 411). By offering its exclusive, multi-year agreements, 3M merely sought to compete within a market where retailers already required "one-year 'de facto' agreements" and thus "did nothing more than compete on terms that the market already required." Id. at 453. In other words, "[i]f retailers have made supplier exclusivity a barrier to entry, one cannot bring an antitrust claim against a supplier for acquiescing to that requirement." Id.

Defendants argue that NicSand supports their position because, they contend, manufacturer loyalty programs are standard in the industry. (Doc. 460 at 58.) But, as Plaintiffs note, that is not quite what NicSand holds. (Doc. 454 at 88.) In NicSand, it was the retailer market that demanded exclusive arrangements. NicSand, 507 F.3d at 451-52. In the present case, it is Syngenta and other brand manufacturers who allegedly elect to engage in exclusive dealing arrangements in order to maintain prices by forcing out lower-priced generic competition. There is no evidence that the distributors or the retailers require loyalty programs. Instead, Plaintiffs present evidence that the reverse is true.

Though Eisai and NicSand are out-of-circuit cases, application of the price-cost test here would also be in tension

with recent Fourth Circuit precedent. In Duke Energy, the Fourth Circuit eschewed bright-line rules in antitrust cases: “when a court is faced with allegations of a complex or atypical exclusionary campaign, the individual components of which do not fit neatly within pre-established categories, its application of such specific conduct tests would prove too rigid.” 111 F.4th at 354. The court explained that “[t]his is because ‘the means of illicit exclusion, like the means of legitimate competition, are myriad.’” Id. (quoting Verizon Commc’ns, 540 U.S. at 414). There, the factually-complex arrangement involved Duke Energy agreeing to sell energy to the city of Fayetteville, North Carolina, with “massive discounts and rebates conditioned on a long-term renewal agreement” that included Duke Energy’s agreement to buy power from a Fayetteville power plant at “extraordinarily high prices – above market.” Id. at 356–57. The plaintiff argued that this was akin to an exclusive dealing or tying arrangement designed to freeze it out of the market. See id. at 357. Duke Energy characterized it as healthy price competition under the price-cost test, citing Brooke Group. Id. at 356. The district court granted Duke Energy summary judgment on the antitrust claims,⁴ and the competitor appealed.

⁴ The district court denied the motion as to Plaintiffs’ contract claims and Duke Energy’s contract counterclaims, which were later settled. Id. at 352.

The Fourth Circuit vacated and remanded. Id. at 342. Pertinent here, the court found that the plaintiff had provided evidence that Duke Energy's conduct was anticompetitive in three respects: (1) its "strategy hindered a new entrant's ability to compete on the basis of efficiency," (2) it "designed this strategy with the intent of foreclosing any new entrant from ever competing with it as the incumbent monopolist on the merits," and (3) "the structure of the offer was anticompetitive in that it was designed to expressly 'shift' the cost of the massive discount 'back to retail and wholesale customers.'" Id. at 357-58 (emphasis omitted).

To synthesize these cases, it can be said that the price-cost test applies where price clearly predominates, typically in a predatory pricing context. Price may not clearly predominate, however, when a defendant's alleged anticompetitive behavior goes beyond mere discounts, rebates, and pricing practices and where the result, if not design, harms competition. In the end, "there is no set formula, and courts must 'look at the practical effect of [the] exclusive dealing arrangement' in any given case." United States v. Visa, Inc., 788 F. Supp. 3d 585, 609 (S.D.N.Y. 2025) (alteration in original) (quoting McWane, 783 F.3d at 834).

The court turns, then, to an analysis of Plaintiffs' evidence of the alleged features of Syngenta's Key AI loyalty rebate program, including claimed anticompetitive conduct beyond pricing,

to determine if price is the clearly predominant mechanism of exclusion.

b. Evidence of Anticompetitive Conduct Beyond Pricing

Plaintiffs contend they have presented facts which, when construed in the light most favorable to them as the non-moving parties, create material disputes of fact whether price is the predominant mechanism of exclusion. (Doc. 454 at 90); see also ZF Meritor, 696 F.3d at 269. Plaintiffs argue that they have demonstrated evidence that Syngenta did not compete against generics by lowering prices but rather maintained higher grower prices and used non-pricing exclusionary methods to preclude generics from the market. (Doc. 457 at 82-83.) Defendants dispute both Plaintiffs' characterization of the facts and the inferences to be drawn from them.⁵ (See Doc. 460 at 53.)

i. Distributor Access

First, Plaintiffs contend that Syngenta conditioned

⁵ At oral argument, Syngenta argued that when considering applicability of the price-cost test, the court should look no further than Syngenta's sales to its distributors and not the effect on downstream purchasers. (Doc. 542 at 17-19.) Cabining the analysis in this fashion would foreclose consideration of Key AI's effect on competition throughout the channel of distribution, including the end-purchaser, which is the point of the Nation's antitrust laws. Duke Energy, 111 F.4th at 353 ("The Supreme Court has held that the purpose of [Sherman § 2] is not to protect competitors, but rather to safeguard the competitive process itself, ultimately for the benefit of consumers.") (citing Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 458-59 (1993)). Here, Plaintiffs charge that Key AI is designed to foreclose lower-priced entrants from entering the market, thus harming growers.

distributor access to the AIs and other products on compliance with Key AI. They point to evidence that one distributor ("Distributor A") carried branded products but also developed and sold its own line of generic products. (See Doc. 457 at 55-58.) When Distributor A failed to meet Key AI thresholds for two years, Syngenta "terminated their distributor contract." (Docs. 465 at 297, 303, 301; 461-6 at 18, 22-23.) A Syngenta presentation, attached to the email discussing Distributor A's termination, noted that Distributor A made "[n]o commitment to Key AI." (Doc. 465 at 308.) Syngenta did not resume business with this distributor until another company acquired the distributor in 2020. (See Docs. 464-5 at 400-06; 465 at 317-18, 321-22.) Another distributor testified that Distributor A "came to us to supply them what Syngenta product they felt like they had - they had to have" after its distributor contract was terminated. (Doc. 465-1 at 58-59.)

There is also evidence that Syngenta cancelled another distributor's contract under similar circumstances. The distributor chose not to pursue the abamectin Key AI thresholds and focused on distributing a generic version. (Doc. 464-5 at 392-93.) Syngenta subsequently terminated its contract with that distributor. (See Doc. 465 at 482-83.) While negotiating for a new contract, the distributor noted that its members (i.e., retailers) were forced to buy Syngenta products from the members'

own competitors and were required to buy the products "at price points that don't allow them the competitive positions needed in a hyper competitive market." (Id.)

Multiple distributors took notice. They understood that they also would lose access to Syngenta products if they flaunted Key AI thresholds. One distributor executive testified that his company was aware that Syngenta "cut off" Distributor A because Distributor A "went way off base as far as loyalty programs go selling generics, [and] private labels of those generic items." (Doc. 465-1 at 51.) Syngenta "cut ties with [Distributor A]. They canceled their contract," he explained. (Id.) The executive continued, noting how his company considered the possibility of being cut off when considering whether to comply with loyalty programs. (Id.) The executive said that termination is "always an ultimate nuclear option for the supplier. . . . [I]t's just as effective to give us access but not give us a good enough price net . . . that we can compete with. . . . [T]he end result's the same. You can't sell much. You can't compete." (Id.) The executive further testified that Distributor A's falling out with Syngenta was "top of my concern." (Id. at 52.) In another deposition, that same executive stated that leaving Key AI "would be suicide as far as our ability to sell Syngenta products." (Doc. 464-2 at 336.)

Another distributor manager believed not participating in Key

AI would risk access to Syngenta products. The manager testified that his company considered terminating its loyalty program agreement with Syngenta but the company was concerned that "if we do end the agreements and we can't sell their products, then we'll lose business." (Doc. 465-1 at 75.) The manager further explained that "[e]ach program is kind of the base agreement that we have [with suppliers including Syngenta], and they're somewhat linked in regards to the overall contracts that we had with [Syngenta and Corteva]." (Id. at 75-76.) Therefore, the company "wouldn't be able to access the products [it wanted from Syngenta]. . . . [T]hey wouldn't let me - they wouldn't sell them to me as being a distributor." (Id. at 75.) A different distributor's president testified that if the distributor "kick[s] [the manufacturer] in the shins on those products that have loyalty programs," it is "naive" to think the manufacturer will "treat you like a trusted value partner on the rest of their portfolio." (Doc. 461-7 at 13.) The distributor's president also testified that he believed participation in loyalty programs was important to keep access to supplier products and its competitive position. (Id. at 14.) Another distributor employee stated "if we fight with a branded company on the stuff that is really important to them [and] in late life cycle products . . . we just are not going to be able to put programs [or] private labels or other types of . . . mechanisms for us to make money in place." (Doc. 461-3 at 16.)

This evidence supports Plaintiff's assertion that Syngenta retaliated against distributors who did not participate in Key AI and that price was not the predominant mechanism of exclusion. See ZF Meritor, 696 F.3d at 282-83 (citing evidence from OEMs that they feared the defendant might terminate their agreements and prevent them from purchasing needed products for failing to comply with the long-term agreements).

ii. Key AI Design - Internal Documents

Second, Plaintiffs point to Syngenta's internal documents to show that the company designed Key AI to exclude generics from the market and prevent "a vicious cycle of downward price pressure" on its AIs. (Doc. 464-3 at 674.) This maintained higher grower prices. (See, e.g., id. at 195.) Syngenta admittedly used Key AI to "[m]aintain price premium[s,]" not lower prices. (Id. at 191.) In a "Channel Strategy Summary Presentation[,]" Syngenta told distributors that one of its "objectives" was to "[i]ncrease/maintain farmgate prices" by "[r]educ[ing] local market price-based competition" and "[e]nlist[ing] distributors to support [its] portfolio and manage generics[.]" (Doc. 464-7 at 3, 9.) Syngenta warned that generic market entry would create a "[w]indfall for [t]he [g]rower" where "[f]arm [g]ate [p]rices [d]ecline!!" (Doc. 464-3 at 676.) Syngenta listed "[h]ow to keep generics below critical volumes and retain profitability for the AI?" as a "[c]ritical . . . [q]uestion" and told distributors they

needed to work together to “preserve market value[.]” (Id. at 598, 677.)

Plaintiffs also point to evidence that Syngenta used Key AI to erect barriers to competitor market entry. Syngenta was concerned that generic competition would devalue the market for azoxystrobin, mesotrione, and metolachlor. (Docs. 464-3 at 272; 465-3 at 73.) Syngenta hosted a mesotrione post-patent strategy workshop that compared successful generic market entry to “hell.” (Doc. 464-3 at 508, 592.) That workshop listed “heaven” as where “[r]etail Key AI [is] enforced” and “[g]eneric meso[trione] [is] not accepted.” (Id. at 508.) Plaintiffs have presented documents that suggest Syngenta understood that past generic competition with other AIs decreased price and market share. (See id. at 166, 263.)

There is also evidence that Syngenta developed market-share preservation strategies specific to each AI. One presentation described Syngenta’s “intent” to “[a]ggressively defend azoxystrobin share position while upholding market value[.]” (Doc. 464-4 at 53.) Another “Mesotrione Post Patent Workshop” discussed volume and value market share targets for mesotrione. (Doc. 464-3 at 516, 529.) And in Syngenta’s “S-MOC Post Patent Strategy Update[,]” the company identified “generics” as one of “two main challenges to our S-Moc business.” (Doc. 464-2 at 855-56.) Concerned about generic market entry, Syngenta understood

Key AI to be a hurdle generics must surmount to enter the market. (Doc. 464-4 at 434.) Syngenta attempted to “ensure loyalty through programs like Key AI” (Doc. 454-6 at 126), noting it could “[m]aintain price premium[s,]” if it maintained control of the market and kept generics out (see Doc. 464-3 at 191).

As in Duke Energy, these facts provide evidence that the structure and purpose of Key AI was anticompetitive. See Duke Energy, 111 F.4th at 358 (noting that the defendant “designed [its] strategy with the intent of foreclosing any new entrant from ever competing with it as the incumbent monopolist on the merits”).

iii. Defendants’ Characterization

Defendants offer a contrary view of Plaintiffs’ evidence. For example, they maintain that “[d]istributors and retailers pass through savings earned through Key AI rebates, benefiting growers with lower prices.” (Doc. 460 at 39.) Furthermore, they respond that generic “barriers to entry are low and that Key AI has not prevented robust generic entry and expansion.” (Doc. 462 at 28.) Additionally, they dispute whether the distributor that failed to comply with Key AI lacked access to Syngenta products and maintain that the marketing agreement termination was mutual. (Doc. 466 at 24 & n.9.) Defendants also offer their own evidence to support their assertion that access to products does not require compliance with Key AI.

However, at this stage the court must draw all reasonable

inferences of the evidence in the light most favorable to Plaintiffs as the nonmoving parties. Their evidence, if believed, supports their claim that Syngenta's Key AI program employs sufficient mechanisms to suppress competition in the limited distributor market most available to retailers. While the financial cost of entry may be relatively low, there is evidence that Key AI seeks to foreclose competition in the most efficient channel of five key participants who control a majority of the distribution channel. Moreover, there is evidence that not all distributors pass on rebates to retailers, whether due to the structure of the program or otherwise. (See Docs. 464-7 at 154-55; 464-2 at 278-79; 454-7 at 10.) The evidence presented suggests distributors participated in Key AI because, among other reasons, they understood it was necessary to purchase Syngenta products. This makes the limited distributors' access to Syngenta's products contingent upon participation in the loyalty rebate program that results in higher retail/grower prices. Cf. Duke Energy, 111 F.4th at 358 (noting that "the structure of the offer was anticompetitive in that it was designed to expressly 'shift' the cost of the massive discount 'back to retail and wholesale customers'"). Put differently, there is evidence from which a reasonable jury could find that the program incentivizes the limited distributors to sell Syngenta AIs at higher prices than a purely competitive market would require while effectively dominating a significant share of

the market.

Whether a jury would agree must remain for trial. Defendants' motion for summary judgment on the ground that the price-cost test requires dismissal of Plaintiffs' claims will be denied.

D. Market Definition

Defendants argue that, even if the price-cost test does not apply, Plaintiffs' federal antitrust claims fail as a matter of law under the rule of reason. (Doc. 460 at 72.) This is so, Defendants contend, because the "uncontroverted evidence shows that the narrow single-AI product markets advanced by Plaintiffs are not cognizable as a matter of law." (Id. at 73.) Plaintiffs counter that Defendants failed to establish "that there is not 'sufficient evidence on which a trier of fact could adopt plaintiff[s'] market definition.'" (Doc. 454 at 117 (alteration in original) (emphasis in original) (quoting Meredith Corp. v. SESAC LLC, 1 F. Supp. 3d 180, 219 (S.D.N.Y. 2014)).)

1. Market Definition - an Antitrust Claim Threshold Requirement

"Proof of a relevant market is the threshold for" the federal antitrust claims at issue in this case. Consul, Ltd. v. Transco Energy Co., 805 F.2d 490, 493 (4th Cir. 1986) (requiring proof of a relevant market for Sherman Act Section 2 claims); see Ohio v. Am. Express Co., 585 U.S. 529, 541 (2018) (same for Sherman Act Section 1 claims); Apani Sw., Inc. v. Coca-Cola Enters., Inc., 300

F.3d 620, 625 (5th Cir. 2002) (same for Clayton Act Section 3 claims); Realcomp II, LTD. v. Fed. Trade Comm'n, 635 F.3d 815, 827 (6th Cir. 2011) (same for FTC Act Section 5 claims). A relevant product market is defined as "the area of effective competition." Am. Express Co., 585 U.S. at 543 (quoting 2 Julian O. von Kalinowski, Antitrust Laws and Trade Regulation § 24.01(4)(a) (2d ed. 2017)). "Typically this is the 'arena within which significant substitution in consumption or production occurs.'" Id. (quoting Phillip E. Areeda & Herbert Hovenkamp, Fundamentals of Antitrust Law § 5.02(4th ed. 2017)). In other words, a relevant market is one where consumers are willing to swap out one product for the next. Plaintiffs bear "the burden of proof and persuasion in defining the relevant market." Fed. Trade Comm'n v. RAG-Stiftung, 436 F. Supp. 3d 278, 291 (D.D.C. 2020) (quoting Fed. Trade Comm'n v. Arch Coal, Inc., 329 F. Supp. 2d 109, 119 (D.D.C. 2004)).

As this court previously explained, "[c]ourts begin with a preliminary inquiry into market definition because it serves as the frame through which the court analyzes monopoly power and substantial market foreclosure." Syngenta, 711 F. Supp. 3d at 565 (citing E.I. du Pont de Nemours & Co. v. Kolon Indus., Inc., 637 F.3d 435, 441 (4th Cir. 2011); Ind. Fed'n of Dentists, 476 U.S. at 460 (explaining "the purpose of the inquiries into market definition and market power is to determine whether an arrangement has the potential for genuine adverse effects on competition"))).

In Brown Shoe Co. v. United States, 370 U.S. 294 (1962), the Supreme Court explained that “[t]he outer boundaries of a product market are determined by the reasonable interchangeability of use or the cross-elasticity of demand between the product itself and substitutes for it.” Id. at 325. This test remains controlling. See It’s My Party, Inc. v. Live Nation, Inc., 811 F. 3d 676, 683 (4th Cir. 2016) (explaining reasonable interchangeability and cross-elasticity of demand determine whether a product commands distinct product markets).

Cross-elasticity of demand refers to “the extent to which consumers will change their consumption of one product in response to a price change in another.” Eastman Kodak, 504 U.S. at 469. Cross-elasticity is a method of proving reasonable interchangeability. Syngenta, 711 F. Supp. 3d at 566 (citing It’s My Party, 811 F.3d at 683; United States v. E.I. du Pont de Nemours & Co., 351 U.S. 377, 404 (1956)) (explaining a “relevant product market must include all reasonably interchangeable products. . . . The reasonable interchangeability of products is generally determined according to the cross-elasticity of demand for the product and its alternatives”). “Interchangeability of use and cross-elasticity of demand are not to be used to obscure competition but to ‘recognize competition where, in fact, competition exists.’” United States v. Cont’l Can Co., 378 U.S. 441, 453 (1964) (quoting Brown Shoe, 370 U.S. at 326).

Interchangeability requires more than mere "technical interchangeability" where one product could be substituted for another and achieve the same real-life function. Syngenta, 711 F. Supp. 3d at 566 (citing Rothery Storage & Van Co. v. Atlas Van Lines, Inc., 792 F.2d 210, 218 n.4 (D.C. Cir. 1986)). Instead, "courts look to the degree to which a defendant would sacrifice sales to alternative products by raising the price of its goods." Id. (citing Eastman Kodak, 504 U.S. at 469). The Supreme Court explained, in the context of cellophane and wrapping products, that "[i]f a slight decrease in the price of cellophane causes a considerable number of customers of other flexible wrappings to switch to cellophane, it would be an indication that a high cross-elasticity of demand exists between them; that the products compete in the same market." United States v. E.I. du Pont, 351 U.S. at 400. If that slight price decrease would not cause a considerable number of customers of other products to switch, cross-elasticity of demand is low and the products are not in the same market. "A relevant product market must include all reasonably interchangeable products." Syngenta, 711 F. Supp. 3d at 566 (citing United States v. E.I. du Pont, 351 U.S. at 404). Market definition is a question of fact. Kolon, 637 F.3d at 442.

2. Single-AI Product Markets

Here, Plaintiffs assert that "each relevant market is defined by reference to a Relevant AI." (Doc. 149 ¶ 155.) This creates

single-AI product markets. Plaintiffs allege two product markets for each AI:

(a) A relevant product market exists that is no broader than the active ingredient, consisting of (1) active ingredient included as a component of an EPA-registered finishing crop-protection product for sale in the United States, and (2) technical grade or manufacturing-use active ingredient to be formulated into an EPA-registered finished crop-protection product for sale in the United States; and (b) A relevant product market(s) also exists that is no broader than EPA-registered crop-protection products for sale in the United States that contain the active ingredient.

(Id.) Defendants counter that Plaintiffs' market definition is too narrow and "the uncontroverted evidence shows that the narrow single-AI product markets advanced by Plaintiffs are not cognizable as a matter of law." (Doc. 460 at 73). Plaintiffs respond that because other courts found narrower and broader markets, Plaintiffs have properly defined this market. (Doc. 454 at 117.)

As discussed above, the court must determine whether reasonably interchangeable products have been included in the relevant product market. See Brown Shoe, 370 U.S. at 325. And reasonable interchangeability is determined by cross-elasticity of demand. Syngenta, 711 F. Supp. 3d at 566 (citing It's My Party, 811 F.3d at 683). Defendants attack Plaintiffs' single-AI markets as too narrow as a matter of law, arguing Plaintiffs failed to include reasonably interchangeable products within the market.

(See Doc. 460 at 73-75.) Specifically, Defendants argue that Plaintiffs failed to include crop protection products that contain different AIs. Defendants claim growers use these products to treat the same threats to crops as they would with Syngenta's AI-based crop protection products. (Id. at 75-76.)

Defendants provide grower testimony that corroborates their understanding. Growers testified that they evaluate products for a number of factors, including purpose, function, and effectiveness. (Docs. 463-16 at ¶ 5; 463-45 at ¶ 3; 463-58 at 3.) Defendants assert that "no grower testified that only products containing one of the Syngenta AIs are substitutes for a product containing that AI." (Doc. 460 at 76 (emphasis omitted).) Instead, they present grower testimony indicating that close competition exists between Syngenta's branded products and the branded products of other companies containing different AIs. (See Doc. 460-37 at ¶¶ 7-10; 460-54 at ¶¶ 3, 9.) Defendants assert that Plaintiffs have not produced any testimony that growers prefer the AIs at issue. (Doc. 460 at 76.)

Courts consider "a variety of methods to determine if a product market is properly constituted." Syngenta, 711 F. Supp. 3d at 567. Here, Plaintiffs have offered three methodologies to evaluate their proposed single-AI markets at the motion to dismiss stage: "(1) the Defendant's own conduct; (2) the 'hypothetical monopolist test'; and (3) the factors set out in Brown Shoe." Id.

For the reasons set forth below, the court finds that Plaintiffs have offered sufficient evidence to create a trial issue as to (1) and (3), and thus it need not reach methodology (2).⁶ Multiple “lower courts have ruled that a brand-name drug and its generic analogs can comprise a relevant product market.” Syngenta, 711 F. Supp. 3d at 567 (citing In re Zetia (Ezetimibe) Antitrust Litig., MDL No. 2:18-md-2836, 2021 WL 6689718, at *18-20 (E.D. Va. Nov. 1, 2021), adopted in full by 587 F. Supp. 3d 356 (E.D. Va. 2022); In re Nexium (Esomeprazole) Antitrust Litig., 968 F. Supp. 2d 367, 387 (D. Mass. 2013) (rejecting defendants’ argument that the “proposed market—namely, brand Nexium and generic equivalents that also share its active ingredient, esomeprazole magnesium — is far too narrow because it excludes other products that are either similar in chemical composition or used to treat comparable medical conditions”); In re Cardizem CD Antitrust Litig., 105 F. Supp. 2d 618, 622, 680-81 (E.D. Mich. 2000) (accepting plaintiffs’ contention that branded and generic versions of a heart medication with the chemical compound diltiazem hydrochloride constitute a single market), aff’d, 332 F.3d 896 (6th Cir. 2003)); see also In re Terazosin Hydrochloride Antitrust Litig., 352 F. Supp. 2d 1279, 1319 n. 40 (S.D. Fla. 2005) (finding branded and generic

⁶ Because the court need not reach methodology (2), it need not resolve Syngenta’s motion to strike the report of Plaintiffs’ expert, Professor C. Scott Hemphill, whose testimony was offered to support that methodology. (Doc. 440.)

bioequivalent forms of terazosin hydrochloride to be a relevant market).

a. Syngenta's Conduct

As this court has previously observed, "[c]ourts generally consider . . . the Defendant's own conduct and recognition of the market." Syngenta, 711 F. Supp. at 567. Courts consider this factor because courts operate "under the assumption that 'economic actors usually have accurate perceptions of economic realities.'" Id. (quoting Todd v. Exxon Corp., 275 F.3d 191, 205 (2d Cir. 2001) (collecting cases)). As the Second Circuit explained in Todd, there is a "well-established probative value of defendants' perceptions in defining the market." Todd, 275 F.3d at 206. Even so, "[e]vidence of industry recognition[] . . . would not save an alleged market that was clearly implausible otherwise." Id. And "this factor alone is not dispositive of market definition in this type of case. It is merely one factor to consider in the subtle, fact-specific inquiry which focuses on the ultimate issue of cross-elasticity and interchangeability." Id.

Here, Plaintiffs have introduced evidence demonstrating that Syngenta tracks crop protection product sales and market share based on AI. (See Docs. 457-3 at 8, 11, 13; 464-3 at 843.) Syngenta also focuses Key AI and its marketing efforts at the AI-level by adding specific AIs to the Key AI program and requiring participating distributors to reach certain AI thresholds to

receive rebates. (See Docs. 464-4 at 454, 468, 473; 464-2 at 888, 891; 464-6 at 343; 454-6 at 50.) This incentivized distributors to purchase crop protection products categorized by the product's AI - not its control purpose, function, or effectiveness. Syngenta structured these marketing efforts to maintain the status quo and dominate particular AI markets. (See Doc. 464-3 at 191, 598, 676-77.) A sophisticated actor like Syngenta, a leader in pesticide research, development, and manufacturing, is expected to act in accord with its own financial self-interests. See Syngenta, 711 F. Supp. 3d at 568. Key AI's structure suggests that Syngenta recognized AI-specific sales were important for its market performance. Furthermore, Syngenta's marketing and loyalty program categorizes products by AI, rather than purpose, function, or effectiveness. This indicates Syngenta viewed the market defined by AIs. Even the name of the rebate program - Key AI - is some evidence of Syngenta's AI-by-AI evaluation of the market.

Syngenta's internal documents reinforce Plaintiffs' claim that Syngenta viewed the market as AI-focused. For example, Syngenta conducted workshops and post-patent strategy presentations focused on retaining a dominant position in the sale of particular AIs after its patent protections expired. (See Docs. 464-3 at 505; 464-2 at 882, 884.) The associated documents reference concepts like the "market share" or "market value" of each AI - offering some evidence that Syngenta itself understands

there to be a market for each AI. (See, e.g., Doc. 457-4 at 53 (referencing Syngenta's "intent" to "[a]ggressively defend azoxystrobin share position while upholding market value"); id. at 63 (charting the market loss owing to "[a]zoxystrobin [p]ost [p]atent failure"); Doc. 457-3 at 516, 523 (noting, as part of a "Mesotrione Post Patent Workshop," mesotrione "Market Share" targets of 90% by volume and 95% by value); id. at 543 (discussing "[t]hreats impacting post patent market position," including "price erosion due to generic meso pricing").)

More generally, Syngenta noted the importance of "[p]lanning and [t]racking [its] [s]hare of AI in [e]ach [s]egment." (Id. at 573.) To accomplish this planning and tracking, Syngenta created the "AI ladder," which is comprised of the full range of products (such as branded products, "fighting brand" products, private label products, and third-party AI sales) Syngenta offered for a given AI. (Id.) The purpose of creating these AI ladders was, in Syngenta's words, to "develop a portfolio beyond the Brands that can maximize the AI share." (Id. (emphasis added).) The upshot is that Plaintiffs have introduced evidence that Syngenta conceptualized marketing efforts around individual AIs and worked to prolong its dominant position for the AIs after their patent protections expired.

Defendants respond that to focus on these marketing efforts is to "bootstrap a relevant market based upon one element of

Syngenta's business strategy." (Doc. 462 at 44 (emphasis added).) A more fulsome evaluation of its marketing programs and internal documents, according to Defendants, shows that Syngenta products compete both vertically (against lower-priced private labels and generics) and horizontally (against other branded products containing different AIs). (See Doc. 466 at 40-41 & n.21; 44.) By focusing on only a portion of Syngenta's business strategy, Defendants argue, Plaintiffs gerrymandered their way to an unduly narrow relevant market. Defendants also note that the Department of Justice previously defined crop protection product markets around function, rather than around the AIs contained therein. (Doc. 460 at 85.) The Department of Justice articulated these definitions in a 2017 merger between two major chemical companies and a 2018 merger between one of the largest global agricultural firms and a leading producer of agricultural products. (Docs. 463-161 at 2-3; 460-160 at 3-4.)

Though Plaintiffs' exhibits also show Syngenta's analysis of its products against competitors' products using different AIs, this does not preclude Plaintiffs' evidence that Syngenta sought to secure a dominant position with regard to the sales of each at-issue AI. Even if a broader market exists, as Defendants contend, it would not vitiate the existence of a narrower market. See Loren Data Corp. v. GXS, Inc., No. 10-3474, 2011 WL 3511003, at *7 (D. Md. Aug. 9, 2011) (explaining that "[w]ell-defined submarkets may

also exist within a broader market, 'which, in themselves,, constitute product markets for antitrust purposes'" (quoting Brown Shoe, 370 U.S. at 325)); Fed. Trade Comm'n v. Peabody Energy Corp., 492 F. Supp. 3d 865, 896 (E.D. Mo. 2020) (explaining the existence of a broader market does not affect whether a narrower market qualifies as a relevant product market).

Plaintiffs' evidence suggests that much of Syngenta's commercial efforts revolved around staving off the value loss associated with the fall of patent protection. Because patent protection applied to specific AIs, a jury could reasonably conclude that Syngenta organized its efforts on an AI-by-AI basis and understood itself to be competing for an individual market for each AI. Drawing all reasonable inferences in favor of Plaintiffs, as the court must, it concludes that Plaintiffs have demonstrated evidence, albeit contested, to support its claim. Thus, a jury must resolve the dispute.

b. Brown Shoe Factors

Plaintiffs' methodology also relies on the Brown Shoe factors. Brown Shoe endorsed consideration of certain factors when defining a product market. Syngenta, 711 F. Supp. 3d at 568. Although Brown Shoe applied these factors to submarkets that existed within broader product markets, these submarkets may "constitute product markets for antitrust purposes." Brown Shoe, 370 U.S. at 325. "The boundaries of such a submarket may be

determined by examining such practical indicia as industry or public recognition of the submarket as a separate economic entity, the product's peculiar characteristics and uses, unique production facilities, distinct customers, distinct prices, sensitivity to price changes, and specialized vendors." Id. These factors are "evidentiary proxies for direct proof of substitutability." Rothery, 792 F.2d at 218.

Many courts have explained that "[t]he indicia in Brown Shoe are instructive in determining the existence of a submarket, but the presence of some, and absence of others, is not dispositive." Se. Mo. Hosp. v. C.R. Bard, Inc., 642 F.3d 608, 614 (8th Cir. 2011); see also IGT v. All. Gaming Corp., 702 F.3d 1338, 1346 (Fed. Cir. 2012) (quoting Thurman Indus., Inc. v. Pay 'N Pak Stores, Inc., 875 F.2d 1369, 1375 (9th Cir. 1989)) (explaining "[t]he Brown Shoe indicia are practical aids for identifying the areas of actual or potential competition and . . . their presence or absence does not decide automatically the submarket issue"); United Food & Com. Workers Loc. 1776 & Participating Emps. Health & Welfare Fund v. Teikoku Pharma USA, 296 F. Supp. 3d 1142, 1166 n.24 (N.D. Cal. 2017) (quoting Thurman Indus., 875 F.2d at 135) (explaining the same).

In this case, Plaintiffs argue that "ample evidence" supports "the existence of single-AI markets with respect to at least three Brown Shoe factors: (1) 'peculiar uses or characteristics' of the

products; (2) 'industry or public recognition,' and (3) 'distinct prices [and] sensitivity to price changes.'" (Doc. 454 at 138.) Defendants disagree on each. Instead, they direct the court to testimony from retailers who advise their customers on which products are best suited to their particular challenges. (Doc. 460 at 87.) One retailer notes that "there are many different chemistries that growers can choose from to serve the same need." (Doc. 460-59 at ¶ 19.) In other words, products with different AIs may be effective at treating the same problem. (See Doc. 460 at 87.) As to distinct prices and sensitivity to price changes, Defendants argue that the branded products are more closely priced to the branded products of competing manufacturers containing different AIs than to generic products containing the same AI. (Id. at 90.) Their economic expert, Dr. Jonathan Orszag, concluded that "[t]he prices of major Syngenta [crop protection products] are closer to [crop protection products] supplied by Corteva, BASF and Bayer (most of them without at-issue AIs) than to generic [crop protection products] with at-issue AI[s]." (Doc. 460-57 at 81 (Orszag Rebuttal Rep.).) Defendants similarly argue that the price fluctuations of their products are more closely correlated to those of other branded products containing different AIs, rather than to the price changes of generic products containing the same AIs. (Doc. 460 at 90-92.) Defendants also argue that there is no evidence suggesting that there are distinct customer bases for

different AIs; instead, the same growers choose from among products with different AIs. (Id. at 87-90.)

The court now turns to analyzing the evidence under the Brown Shoe factors.

i. Peculiar Characteristics and Uses

First, Plaintiffs have offered evidence that the AIs have peculiar characteristics and uses, supportive of the existence of a single-AI product market. As the Rothery court explained, “[t]he ‘product’s peculiar characteristics’ refers to the general truth that substitutes in a market often have a strong physical and functional relationship.” 792 F.2d at 218 n.4. “‘[D]istinct customers’ and ‘specialized vendors’ may indicate unique product attributes[]” Id. Products sharing peculiar characteristics and uses generally do not compete with products that lack these characteristics and uses. See Brown Shoe, 370 U.S. at 326.

Plaintiffs present evidence that AIs have peculiar characteristics and uses. One distributor executive testified about the unique uses of the AIs at-issue. Azoxystrobin, according to the executive, is the most effective of the strobilurin class of AIs. (Doc. 454-2 at 293-94.) Rather than kill post-emergent fungus, azoxystrobin works prophylactically by preventing the emergence of fungal disease. (Id.) One advantage of azoxystrobin is its broad applicability; it is capable of treating myriad crop

types. (Id. at 294-95.) The executive testified there is grower demand for azoxystrobin specifically. (Id. at 294.) Mesotrione, for its part, is an herbicide. (Id. at 289.) That distributor sells mesotrione alongside other herbicides including acetochlor and metolachlor because mesotrione has certain advantages over those alternatives. (Id. at 289-90.) Mesotrione is "particularly adept at controlling for" broadleaf weeds, id. at 290, and allows for a longer period of weed control, id. at 289-90. There is grower demand for mesotrione products specifically. (Id. at 290.) Finally, metolachlor is also an herbicide. (Doc. 457-2 at 287.) The distributor carries metolachlor alongside other herbicides because different AIs have different ideal use cases. (Doc. 454-2 at 287.) Whether metolachlor is the best choice for the grower "depends on the market, cation exchange capacity, soil type, efficacy of that product on a particular weed species in that geography based on rainfall, environment, organic matter of the soil, the crop, when you plant the crop." (Id.) As a representative from another distributor explained, "most active ingredients perform differently in [different] cropping environments." (Id. at 325.) Although Defendants are not without evidence in their favor on this point, resolving whether the at-issue AIs have distinct characteristics and uses is for the factfinder.

ii. Industry or Public Recognition of the Market

Defendants argue that “the extensive discovery record shows that industry participants—including Syngenta, other R&D Companies, distributors and retailers—uniformly identify other AIs among the substitutes for each Syngenta AI.” (Doc. 460 at 79–80.) Plaintiffs argue they have offered sufficient evidence for a jury to find that there is “industry or public recognition of the [market] as a separate economic entity.” Fed. Trade Comm’n v. Tapestry, Inc., 755 F. Supp. 3d 386, 414 (S.D.N.Y. 2024) (quoting Brown Shoe, 370 U.S. at 325).

Industry or public recognition is “well established as a factor” and “significant because ‘we assume that the economic actors usually have accurate perceptions of economic realities.’” Todd, 275 F.3d at 205 (quoting Rothery, 792 F.2d at 219 n.4). A defendant’s “perceptions in defining the market” have probative value in defining the market. Todd, 275 F.3d at 206; see also Ansell Inc. v. Schmid Lab’ys, Inc., 757 F. Supp. 467, 472 (D.N.J. 1991) (explaining defendant’s, and other industry participants’, documents show they “view their sales to the retail trade as a separate economic entity”).

Here, Plaintiffs have presented evidence that Syngenta itself recognized the existence of, indeed encouraged if not created, markets for each AI. As described above, Plaintiffs show that

Syngenta tracks product sales and market share by AI. (See Docs. 457-3 at 8, 11; 464-3 at 843.) Syngenta markets products by AI and bases its Key AI rebate thresholds on AI sales. (See Docs. 464-4 at 454, 468, 473; 464-2 at 888, 891; 464-6 at 343; 454-6 at 50.) Syngenta hosted internal workshops on post-patent strategies for AIs. These workshops asked how Syngenta could maintain dominance in the AI market after AI patents expired. (See Docs. 464-3 at 505; 464-2 at 882, 884.)

Plaintiffs have also presented evidence that distributors and generic competitors recognize an AI-market definition. Participating Key AI distributors only receive rebate payments if they reach certain AI purchasing thresholds. (See Doc. 464-6 at 343.) Some distributors testified that, if not for Key AI, they would purchase generic versions of each AI. (Doc. 464-2 at 282-84, 300-03.) Distributors cannot source their products by AI without recognizing the existence of an AI market. Generic manufacturers understood they could not sell generic azoxystrobin, mesotrione, or metolachlor because Key-AI participation prevented distributors from doing business with them. (See Docs. 465-2 at 146-47, 155-56, 159-60; 461-5 at 135-36, 146, 190-91.) That the generic manufacturers believe they cannot break into the AI market suggests they recognize an AI market.

At this summary judgment stage, it will be for a jury to resolve whether to credit Defendants assertion that Syngenta's AIs

compete in a function-focused marketplace or a market that participants recognized as AI-specific. Because Plaintiffs have created a material dispute of fact on this issue, Defendants' motion for summary judgment on this basis will be denied.

iii. Distinct Prices and Sensitivity to Price Changes

Third, Plaintiffs offered evidence that Syngenta uses a distinct pricing scheme for azoxystrobin, mesotrione, and metolachlor and that Syngenta's pricing is sensitive to the price changes of products containing the same AIs. (Doc. 457 at 146.) A factfinder may conclude that a defendant's pricing scheme is sensitive to price changes when the defendant monitors competitor product prices and adjusts its own prices accordingly. See Fed. Trade Comm'n v. Kroger Co., No. 3:24-cv-00347, 2024 WL 5053016, at *9-11 (D. Or. Dec. 10, 2024).

Plaintiffs' evidence tends to show that Syngenta prices its crop protection products in reference to the AI prices. A Syngenta representative testified that when evaluating its premixes (which are products containing multiple AIs), he understands Syngenta to assign a value specific to each AI in the premix. (Doc. 454-2 at 401-02; see also Doc. 458-4 at 181-85 (assessing the pricing of Syngenta's Acuron GT product in relation to the value of AI bicyclopyrone contained therein).) Internal Syngenta documents suggest the company prices its products at a premium relative to

generic competitors using the same AIs. For example, one document notes that "Syngenta will target [azoxystrobin] fighting brands at a [percentage] premium to credible generic pricing." (Doc. 458-4 at 78.) A Syngenta presentation indicated an intent to "[u]tilize Callisto [which contains mesotrione (Doc. 460 at 81 n.221)] as price reference to market for the value of mesotrione and target a [percentage] premium and monitor gap," and "[u]tilize Explorer and private label offers to compete head to head with generic mesotrione with a [specified range of] premium per acre when compared to straight goods meso[trione]." (Id. at 214.) Syngenta also delivered an internal "SMOC Pricing Strategy" presentation in 2023 which analyzed the profitability of "SMOC Lead [AI] products" and offered portfolio pricing guidance for Syngenta's SMOC products. (Id. at 231, 238, 240.) That guidance advised pricing Syngenta's fighting brands and private label products at a [specified] premium to generics. (Id. at 240.)

Drawing all reasonable inferences in favor of Plaintiffs as the non-moving parties, the court concludes that they have demonstrated a material dispute of fact such that a jury could reasonably determine that the Brown Shoe factors establish that there is a market for each AI.

E. Anticompetitive Conduct and Injury

Defendants contend that Plaintiffs' allegations also fail under the rule of reason because Plaintiffs fail to present

sufficient evidence to find that Syngenta engaged in anticompetitive conduct resulting in anticompetitive effects. (Doc. 460 at 101.) This court recognized this requirement at the motion to dismiss stage. Syngenta, 711 F. Supp. 3d at 580. Plaintiffs must present facts sufficient for a jury to find that the anticompetitive effects were caused by Syngenta's anticompetitive conduct "as opposed to a multitude of other factors." Eisai Inc. v. Sanofi-Aventis U.S., LLC, No. 08-4168, 2014 WL 1343254, at *32 (D.N.J. Mar. 28, 2014), aff'd, 821 F.3d 394 (3d Cir. 2016). However, Plaintiffs need not provide "definitive proof" or "clear evidence[.]" McWane, 783 F.3d at 836.

Instead, Plaintiffs must present evidence that the anticompetitive harm is the "probable effect" of the anticompetitive conduct. Id.; ZF Meritor, 696 F.3d at 268 (citing Tampa Elec., 365 U.S. at 327-29; Dentsply, 399 F.3d at 191; Barr Lab'ys, Inc. v. Abbott Lab'ys, 978 F.2d 98, 110 (3d Cir. 1992)). Plaintiffs may do so with direct or indirect evidence. See Am. Express Co., 585 U.S. at 542. "Direct evidence of anticompetitive effects would be 'proof of actual detrimental effects [on competition],' such as reduced output, increased prices, or decreased quality in the relevant market." Id. (alteration in original) (citations omitted) (quoting Ind. Fed'n of Dentists, 476 U.S. at 460) (citing 1 Julian O. von Kalinowski, Antitrust Laws

and Trade Regulation § 12.02(2) (2d ed. 2017); Craftsmen Limousine, Inc. v. Ford Motor Co., 491 F.3d 380 (8th Cir. 2007); Virgin Atl. Airways Ltd. v. British Airways PLC, 257 F.3d 256, 264 (2d Cir. 2001)). "Indirect evidence would be proof of market power plus some evidence that the challenged restraint harms competition." Id. (citing 1 Julian O. von Kalinowski, Antitrust Laws and Trade Regulation § 12.02(2) (2d ed. 2017); Tops Mkts., Inc. v. Quality Mkts., Inc., 142 F.3d 90, 97 (2d Cir. 1998); Spanish Broad. Sys. of Fla., Inc. v. Clear Channel Commc'ns, Inc., 376 F.3d 1065, 1073 (11th Cir. 2004)).

For exclusive dealing claims, the challenged restraint must include substantial market foreclosure - a prerequisite to finding an exclusive dealing antitrust violation. The Fourth Circuit has held that "exclusive dealing arrangements violate the antitrust laws only if they are likely to foreclose the entry into a substantial part of the market of products that compete with the products benefiting from the exclusive dealing arrangement." Chuck's Feed, 810 F.2d at 1293; see also Kolon Indus. Inc. v. E.I. DuPont de Nemours & Co., 748 F.3d 160, 175 (4th Cir. 2014) (explaining "an exclusive dealing arrangement does not violate antitrust laws unless its probable effect is to 'foreclose competition in a substantial share of the line of commerce affected'" (quoting Tampa Elec., 365 U.S. at 327)); McWane, 783 F.3d at 837 ("Substantial foreclosure' continues to be a

requirement for exclusive dealing to run afoul of the antitrust statutes.”)).

As the Eleventh Circuit explained, “[f]oreclosure occurs when ‘the opportunities for other traders to enter into or remain in [the] market [are] significantly limited’ by the exclusive dealing arrangements.” McWane, 783 F.3d at 837 (alterations in original) (quoting United States v. Microsoft Corp., 253 F.3d 34, 69 (D.C. Cir. 2001)). Traditionally, the market foreclosure threshold must be at least 40% to be substantial. Id.; see also Microsoft, 253 F.3d at 70 (explaining that 40%-50% market foreclosure is substantial under Section 1 of the Sherman Act). Some courts have found the threshold may be lowered when the alleged antitrust violator is a monopolist. McWane, 783 F.3d at 837. Even with substantial foreclosure demonstrated, the plaintiff must also show harm to the “competitive process and thereby harm [to] consumers[]” resulted from that foreclosure. See id. at 835. The entry and growth of competitors is relevant to, but not necessarily dispositive of, both substantial foreclosure and anticompetitive harm. See id. at 822, 838, 840 (noting that a competitor in the domestic pipe fittings industry had grown to 10% of market in two years since its entry).

Defendants advance two main arguments. First, “[r]obust generic entry[]” is evidence both that the market is not substantially foreclosed and that there has been no harm to

competition. (Docs. 460 at 69, 103; 462 at 47-48.) Second, any “foreclosure” that occurred is only because Key AI creates “procompetitive price competition[,]” not anticompetitive conduct. (Doc. 462 at 50 (emphasis added).)

1. Generic Entry

Defendants assert that Plaintiffs cannot show generics failed to enter the market because “[n]o fewer than a dozen generic suppliers offer products containing each of Syngenta AIs, including premixes.” (Doc. 460 at 103.) Defendants’ expert, Mr. Orszag, testified that generic versions of the AIs achieved higher than 30% market threshold. (Doc. 463-57 at ¶¶ 170-72.) According to Mr. Orszag, azoxystrobin reached 31%, mesotrione 32%, and metolachlor 36%. (Id.)

However, Defendants acknowledge that Syngenta’s Key AI distributors control at least 60% of the crop protection product sales market. (Doc. 460 at 23.)⁷ As Plaintiffs note, Defendants’ admission that generic market penetration, at its height, reaches 36% means that generics have not penetrated at least 64% of the market. These two facts could support a jury finding that generic entry remains substantially foreclosed.

⁷ Plaintiffs also rely on Professor Hemphill’s expert testimony to calculate market foreclosure. Because Professor Hemphill’s testimony is unnecessary to evaluate the generic market entry evidence, the court here, too, need not reach Syngenta’s pending motion to exclude his testimony.

In a similar case, the Eleventh Circuit upheld findings made by the Federal Trade Commission and an administrative law judge that a ductile iron pipe fittings ("DIPF") producer substantially foreclosed the market. McWane, 783 F.3d at 819, 837-38. The DIPF producer implemented its "Full Support Program" to "protect [its] domestic brands and market position" after a competitor announced its impending market entry. Id. at 820 (alteration in original). "[D]istributors who bought domestic fittings from other companies . . . might lose their rebates or be cut off from purchasing [the producer's] domestic fittings for up to three months" under the program. Id. at 821. The Commission found this program caused substantial market foreclosure. Id. at 837. While it "did not quantify a [market foreclosure] percentage," "it did note that the two largest distributors, who together controlled approximately 50-60% of distribution, prohibited their branches from purchasing from [the competitor] (except through the Full Support Program exceptions) following" the program's announcement. Id. at 837. The court upheld this determination under its deferential standard of review. Id. at 838.

These facts mirror those in this case. Here, Plaintiffs present evidence that Key AI prohibits participating distributors from purchasing significant amounts of generic AIs. Plaintiffs present facts that distributors that failed to meet Key AI thresholds risked losing access to rebates and other Syngenta

products. (See, e.g., Docs. 461-3 at 16; 464-2 at 336; 464-6 at 343 465-1 at 58-59.) And, as in McWane, Plaintiffs present evidence that participating distributors control a majority of the market.

Defendants' assertion that generic manufacturers have penetrated the market does not mandate a different conclusion. Multiple "circuits have found monopolists liable for anticompetitive conduct where, as here, the targeted rival gained market share – but less than it likely would have absent the conduct." McWane, 783 F.3d at 838 (citing Conwood Co. v. U.S. Tobacco Co., 290 F.3d 768, 789-91 (6th Cir. 2002)). "[E]xclusive dealing measures that slow a rival's expansion can still produce consumer injury." Id. (citing Philip E. Areeda & Herbert Hovenkamp, Antitrust Law ¶ 1802c, at 76 (3d ed. 2008); Dentsply, 399 F.3d at 191; ZF Meritor, 696 F.3d at 271).

In Conwood, for instance, a moist snuff manufacturer "pursued strategies . . . to exclude competition in the moist snuff market." Conwood, 290 F.3d at 773, 775. The manufacturer did this by convincing major retailers to display its products on exclusive racks. Id. at 775. The manufacturer argued that the plaintiff "failed to show that it or competition was harmed in the national moist snuff sales market" because the number of moist snuff brands and the plaintiffs' own market share actually increased during the relevant time period. Id. at 788. The Sixth

Circuit noted that while there "was evidence at trial that total market output increased in the moist snuff industry during the relevant period," there was "sufficient evidence showing that [the plaintiff's] injury did flow from [the manufacturer's] anticompetitive injury." Id. at 789, 790-91 (citing Valley Prods. Co., Inc. v. Landmark, 128 F.3d 398, 404 (6th Cir. 1997)). This is because the evidence showed the manufacturer "caused higher prices and reduced consumer choice, both of which are harmful to competition" even while the plaintiff's market share rose. Id. at 789. Thus, increased market presence did not defeat the antitrust claim because in the "but for world of unimpeded competition, consumers and [the plaintiff] would have done substantially better." Id. at 781-82.

Defendants' assertion that generic AIs captured up to 36% of the market is probative but not dispositive. Plaintiffs have presented facts that show that generic manufacturers would have more opportunity to compete without Key AI acting as a barrier. Multiple generic manufacturer executives testified that their generic AIs failed to achieve any meaningful market presence because distributors wanted to maintain their Key AI standing. (See Docs. 465-2 at 146-47, 155-56, 159-60; 461-5 at 135-36, 146, 190-91.) Plaintiffs have also presented evidence that Key AI kept grower prices high. Syngenta's internal documents show that the company considered Key AI as a tool to do so. (See, e.g., Docs.

465-2 at 66; 465-3 at 3, 35, 73.) Furthermore, Plaintiffs have presented evidence that Syngenta and Corteva's mesotrione supply agreement prevented Corteva from purchasing generic mesotrione for its Resicore herbicide product. (See Docs. 464-2 at 524; 465-1 at 407; 465-2 at 13.) This evidence supports Plaintiffs' claim that, despite inroads by generic manufacturers, Key AI continues to restrain competition.

Defendants are correct that in this case there is greater generic penetration than in the cases relied upon by Plaintiffs. But they overstate Plaintiffs' burden to survive summary judgment. It is enough that the target of the anticompetitive conduct has gained less market share than it would have in a competitive environment because "exclusive dealing measures that slow a rival's expansion can still produce consumer injury." McWane, 783 F.3d at 838. Though Syngenta's market share might continue to erode over time to generics, Plaintiffs have met that burden at this summary judgment stage to establish foreclosure.

2. Procompetitive vs. Anticompetitive Evidence

Second, Defendants argue that Plaintiffs cannot show generic entry was harmed because "there is no indication the [generic company] testimony [claiming they would sell more generics if not for loyalty programs] refers to anything beyond the procompetitive price competition inherent in Key AI." (Doc. 462 at 50.) Defendants also contend that discovery failed to surface any

evidence of "direct harm through higher prices for farmers." (Doc. 463 at 105.) Plaintiffs point to evidence that suggests Syngenta used Key AI as a vehicle for anticompetitive conduct in pursuit of market dominance and that grower prices remained high. (Doc. 457 at 155-75.) This evidence was discussed in detail above in connection with the price-cost test's applicability.

Defendants' contention that there is no evidence of higher prices for growers is selective. Their contention is actually that the prices paid by growers for Syngenta's products "have declined significantly in response to generic entry." (Doc. 463 at 105-06.) That is consistent with Plaintiffs' contention and Syngenta's internal documents that generic entry threatened the company's higher prices. The question is whether Key AI's exclusive dealing requirements artificially propped up Syngenta's AI prices by suppressing competition. For the reasons noted above, Plaintiffs have provided evidence that tends to show: (1) Syngenta purposely constructed Key AI to prevent or slow generics from capturing a significant portion of the market, (2) key distributors refused to purchase generic versions of the AIs at issue, (3) generic manufacturers faced significant and sometimes prohibitive difficulties in introducing generic AIs to the market, and (4) Key AI kept prices higher for growers than they would have been in a competitive market. This showing, if believed, is sufficient to support a jury finding that Syngenta's conduct was intended to

result and did result in anticompetitive effects and harm.

F. State Law Claims

Defendants move for summary judgment on all state law claims at issue in this case. (Doc. 460 at 110.) These include (1) state antitrust law claims that Defendants argue rise and fall with the federal claims and (2) three distinct state law claims. (Id. at 110-11.) As to each state law antitrust claim Defendants “re-allege[] and incorporates by reference” the same allegations as the federal antitrust claims.” (Id. at 110.) Defendants contend that these claims rise and fall with Plaintiffs’ federal claims and that “the governing statutes require them to be interpreted consistent with federal antitrust law.” (Id. (collecting statutes).) Because the court has denied Defendants’ motion for summary judgment on the federal claims, it necessarily denies summary judgment as to the related state antitrust claims challenged on this same basis.⁸

Second, Defendants move for summary judgment on Plaintiffs’ California Unfair Competition Law (“UCL”) (Count V), Indiana Deceptive Consumer Sales Act (“IDCSA”) (Count VIII), and Iowa Consumer Fraud Act (“CFA”) (Count IX) claims. Each is addressed in turn.

⁸ This includes Defendants’ motion to dismiss Count V based on Plaintiffs’ claim under California’s Cartwright Act.

1. California UCL

The California UCL prohibits “any unlawful, unfair or fraudulent business act or practice.” Cal. Bus. & Prof. Code § 17200; Graham v. VCA Antech, Inc., No. 2:14-cv-08614, 2016 WL 5958252, at *5 (C.D. Cal. Sept. 12, 2016). Defendants move for summary judgment on this claim, arguing that Key AI is not an unlawful, unfair, or fraudulent practice. Plaintiffs respond that Defendants failed to “independently address” the California state law claims and that Syngenta’s conduct may be unfair even if it is not unlawful. (Doc. 454 at 189-90.)

As Defendants note, “[t]o be ‘unlawful’ under the UCL, the [challenged conduct] must violate another ‘borrowed’ law.” (Doc. 460 at 111 (quoting Davis v. HSBC Bank Nev., N.A., 691 F.3d 1152, 1168 (9th Cir. 2012).) The Ninth Circuit explained that “[v]irtually any state, federal or local law can serve as the predicate for an action under section 17200.” Davis, 691 F.3d at 1168 (quoting People ex rel. Bill Lockyer v. Fremont Life Ins. Co., 128 Cal. Rptr. 2d 463, 469 (Cal. Ct. App. 2002)). This includes federal antitrust statutes. See Nat’l Credit Reporting Ass’n, Inc. v. Experian Info. Sols., Inc., No. C04-01661, 2004 WL 1888769 (N.D. Cal. July 21, 2004) (examining a UCL claim predicated on a Sherman Act violation).

Because the court denied Defendants' motion for summary judgment on Plaintiffs' federal claims it therefore denies their motion as to California's UCL claim.

2. IDCSA and Iowa CFA

Defendants argue Plaintiffs' claims under the IDCSA and Iowa CFA fail "for the same reasons" the California UCL claim fails. (Doc. 460 at 113.) These reasons are, as described above, that Key AI is not an unlawful, unfair, or fraudulent practice. (Id. at 112-13.) Defendants argue that this court recognized the IDCSA as covering the same unfair practices that the UCL targets. (Id. at 113.) Defendants also quote the Iowa code as "prohibiting 'unfair practice' undertaken with 'the intent that others rely upon the concealment, suppression, or omission in connection with the . . . sale . . . of any merchandise.'" (Id. (quoting Iowa Code Ann. § 714.16(2)(a).) Plaintiffs respond that the IDCSA does not incorporate the California UCL and the IDCSA broadly prohibits unfair practices. (Doc. 454 at 190-91.) Plaintiffs also counter that a practice may violate the Iowa CFA even if not deceptive. (Id. at 191.)

As with the other state law claims, the court rejects Defendants' argument that the IDCSA and Iowa CFA claims fail "for the same reasons" as the California UCL claims because Plaintiffs' federal antitrust claims survive the summary judgment stage. (See Doc. 460 at 113.) For the IDCSA, Defendants only provide an

explanatory parenthetical that this court recognized the IDCSA as prohibiting the same unfair practices as the California UCL and a short rebuttal against Plaintiffs' unfairness argument. (Docs. 460 at 113; 462 at 60.) The court did not so hold at the motion to dismiss stage, however. Instead, it declined to interpret the IDCSA because it found this question of statutory interpretation "inadequately briefed to facilitate a definitive resolution" at that stage, so the court simply held that "Defendants have not demonstrated for the purposes of this motion that Indiana has not stated a claim for relief." Syngenta, 711 F. Supp. 3d at 592. Defendants again fail to adequately brief this question, and the court declines to grant summary judgment.

Likewise, Defendants' Iowa CFA argument consists only of one sentence (plus a parenthetical) in its motion for summary judgment brief and four sentences in its reply brief. (See Docs. 460 at 113; 462 at 60.) Defendants only quote the Iowa CFA statute and attack Plaintiffs' argument that deception is not a necessary element of the statute. A single statutory quotation does not establish that Syngenta's conduct is not unfair under the statute. Neither does Defendants' rebuttal that deception is not an element. "Such cursory arguments made virtually in passing do not warrant an extended discussion by the [c]ourt, which need not undertake the analysis and legal research needed to support or rebut

perfunctory arguments.” Finch v. Covil Corp., 388 F. Supp. 3d 593, 614 (M.D.N.C. 2019) (collecting cases).

Therefore, the court denies Defendants’ motion for summary judgment as to these state law claims.

G. Syngenta Crop Protection AG and Syngenta Corporation

Finally, Defendants seek summary judgment on all claims against Syngenta AG and Syngenta Corporation. Plaintiffs argue that Syngenta AG and Syngenta Corporation “encouraged or participated in Syngenta’s anticompetitive conduct.” (Doc. 454 at 192.) Defendants claim that the record shows “neither [Syngenta AG nor Syngenta Corporation] has any involvement in, much less control over, the Key AI rebate program, which is administered solely by Syngenta.” (Doc. 460 at 113.)

To be sure, Plaintiffs do not allege a conspiracy between the Syngenta entities. Parents and subsidiaries are “incapable” of conspiring with one another under Sections 1 and 2 of the Sherman Act and Section 3 of the Clayton Act. See Copperweld Corp. v. Indep. Tube Corp., 467 U.S. 752, 768, 777 (1984) (parent-subsidiary under Section 1 of the Sherman Act); Lenox MacLaren Surgical Corp. v. Medtronic, Inc., 847 F.3d 1221, 1236 (10th Cir. 2017) (extending Copperweld to Section 2 of the Sherman Act); Advanced Health-Care Servs., Inc. v. Radford Cmty. Hosp., 910 F.2d 139, 146, 152 (4th Cir. 1990) (extending Copperweld to Section 3 of the Clayton Act).

Instead, “[t]he coordinated activity of a parent and its

wholly owned subsidiary must be viewed as that of a single enterprise.” Copperweld, 467 U.S. at 771. Although it ruled on other grounds, the Tenth Circuit explained that in coordinated activity cases courts err when they treat “each corporate affiliate as a separate entity rather than a ‘single enterprise.’” Syngenta, 711 F. Supp. 3d at 584 (quoting Lenox MacLaren, 847 F.3d at 1236).

The Tenth Circuit explained:

To hold otherwise – to require that each affiliated defendant independently satisfy every element in order to be held liable – would be difficult to justify in light of the Supreme Court’s direction that the ‘anticompetitive activities of corporations and their wholly owned subsidiaries meriting antitrust remedies may be policed adequately without resort to intra-enterprise conspiracy doctrine[]’”

Lenox MacLaren, 847 F.3d at 1236 (quoting Copperweld, 467 U.S. at 776-77).

Even so, “[a]ntitrust law doesn’t recognize guilt by mere association, imputing corporate liability to any affiliate company unlucky enough to be a bystander to its sister company’s alleged misdeeds.” SD3, LLC v. Black & Decker (U.S.) Inc., 801 F.3d 412, 423 (4th Cir. 2015). Instead, Plaintiffs must bring allegations of anticompetitive conduct against the affiliate. See Arnold Chevrolet LLC v. Tribune Co., 418 F. Supp. 2d 172, 178 (E.D.N.Y. 2006). The parties acknowledge that an affiliate may be liable for coordinated activity if it “controls, dictates or encourages” its affiliate’s anticompetitive conduct. (See Docs. 460 at 114;

454 at 192 (quoting Lenox MacLaren, 847 F.3d at 1237); see also Intell. Ventures I LLC v. Cap. One Fin. Corp., No. 14-111, 2016 WL 160263, at *5 (D. Md. Jan. 14, 2016) (explaining when “the parent controls, directs, or encourages the subsidiary’s anticompetitive conduct, the parent engages in sufficient independent conduct to be held directly liable as a single enterprise with the subsidiary under the Sherman Act” (quoting Nobody in Particular Presents, Inc. v. Clear Channel Commc’ns, Inc., 311 F. Supp. 2d 1048, 1070 (D. Colo. 2004))).) A parent company independently participates in the anticompetitive conduct when it controls, directs, or encourages a subsidiary’s anticompetitive conduct. Nobody in Particular, 311 F. Supp. 2d at 1070; Climax Molybdenum Co. v. Molychem, L.L.C., 414 F. Supp. 2d 1007, 1012 (D. Colo. 2005).

A parent company encourages its subsidiary’s anticompetitive conduct when it knows of and does not stop the subsidiary’s anticompetitive conduct. See In re Packaged Seafood Prods. Antitrust Litig., No. 15-MD-2670, 2022 WL 836951, at *10 (S.D. Cal. Mar. 21, 2022). In Seafood Products, a business that specialized in flipping companies purchased a packaged tuna fish producer. Id. at *1, 4. Dozens of plaintiffs filed suit against the packaged tuna fish producer and its parent after the Department of Justice announced a criminal antitrust investigation. Id. at *1. The court ruled that the plaintiffs sufficiently alleged that the parent “engaged in coordinated activity as a single

enterprise[]” at the pleading stage. Id. at *10. This is because the parent had encouraged the tuna fish producer to engage in anticompetitive conduct. The court found the parent had “knowledge of [the tuna fish producer’s] ongoing participation in the conspiracy and as the managing agent of the [tuna fish producer] investment, used [its affiliate] to assist in managing [the tuna fish producer] with the objective of maintaining supra-competitive profits.” Id. According to the court, this “coordinated activity furthered the conspiracy by encouraging [the tuna fish producer’s] continued participation and perpetuating the collusive agreements by policing and enforcing them.” Id.

Likewise, a subsidiary participates in and is liable for its parent’s scheme where it charges inflated prices for its products and passes profits up to the parent. Arandell Corp. v. Centerpoint Energy Servs., Inc., 900 F.3d 623, 634-35 (9th Cir. 2018). In Arandell, the plaintiffs alleged that certain natural gas companies conspired with each other to set anticompetitive natural gas prices in Wisconsin. Id. at 628. State law applied but incorporated the Sherman Act. Id. at 629. The plaintiffs included claims against one of the gas company’s subsidiaries. The plaintiffs presented evidence that the subsidiary participated in the anticompetitive conduct by selling gas “at rigged prices and then distribut[ing] the proceeds up to its parent’s coffers.” Id. at 634. The court held this evidence presented a material dispute

of fact to survive summary judgment. Id. The court explained that “selling gas at rigged prices and distributing the inflated profits to its parent, [the subsidiary] helped to carry out the inter-enterprise conspiracy with the other gas companies.” Id. at 635. This evidence created a “triable issue of liability under the Sherman Act.” Id. at 634.

Additionally, as Plaintiffs point out, it is not “require[d] that each affiliated defendant independently satisfy every element in order to be held liable.” Lenox MacLaren, 847 F.3d at 1236; see also Arandell, 900 F.3d at 632 (explaining that a “wholly owned subsidiary that engages in coordinated activity in furtherance of the anticompetitive scheme of its parent and/or commonly owned affiliates is deemed to engage in such coordinated activity with the purposes of the single ‘economic unit’ of which it is a part”).

Here, Syngenta AG wholly owns Syngenta Corporation. (Doc. 460-145 ¶ 6.) Syngenta Corporation owns Syngenta Seeds, LLC which owns Syngenta. (Id. ¶ 7.) Defendants argue that “the record undisputably shows that neither [Syngenta AG nor Syngenta Corporation] has any involvement in, much less control over, the Key AI rebate program.” (Doc. 460 at 113.) Defendants maintain that the only entity with control over or involvement in Key AI is Syngenta, the American agribusiness. (Id.)

Plaintiffs contend that Syngenta AG “explicitly and repeatedly discussed, approved, and encouraged [Syngenta’s] use of

Key AI both generally and for specific AIs.” (Doc. 454 at 193.) Plaintiffs present evidence to support this claim. First, Plaintiffs argue, and Defendants do not contest, that Syngenta AG created the “White Book,” a global strategy document related to loyalty programs. (See Docs. 457 at 193-94; 463 at 115-16; 466 at 61-62.) This supports Plaintiffs’ contention that Syngenta AG encouraged Syngenta in developing and administering loyalty programs, like Key AI. (See Doc. 457-3 at 190.) While insufficient alone, it is supported by Plaintiffs’ evidence that Syngenta AG oversaw post-patent strategies for AIs, including azoxystrobin and mesotrione. (See Doc. 458-5 at 676, 683, 704-08, 761.) This included a Key AI audit. (Id. at 861-62.) Plaintiffs have further presented evidence, as noted previously, that Syngenta AG negotiated directly with Corteva to sell it Syngenta’s mesotrione for Corteva’s Resicore pesticide, even though at Syngenta’s higher price than generic, to preserve both manufacturers’ post-patent strategy. (See Docs. 458-1 at 403; 464-2 at 524; 465-1 at 407; 465-2 at 13.) Together, this is sufficient to create a material dispute of fact whether Syngenta AG was involved in administering Key AI by controlling, directing, and/or encouraging it. Although Defendants provide evidence that may contradict Plaintiffs’ interpretation of the facts at trial, arguing that Syngenta AG reviews Syngenta’s budget “as a whole,” that no employee testified that he or she was aware of the White

Book, and that Syngenta AG's deal with Corteva was a global agreement that covered multiple countries, this is an issue for the jury, not the court at the summary judgment stage. (Doc. 460 at 115-16.)

Additionally, Plaintiffs argue that Syngenta Corporation. "encouraged and/or participated in Syngenta's anticompetitive conduct" because Syngenta (1) "regularly receive[d] updates on 'pricing strategy,' 'competitive pricing pressure' and 'generic impact' for specific AIs"; (2) received profits from Syngenta's loyalty program; and (3) company leaders worked as executives in both Syngenta and Syngenta Corporation. (Doc. 457 at 195-96.) Considering all three pieces of evidence together, a reasonable jury could find that Syngenta Corporation. encouraged Syngenta's anticompetitive Key AI conduct.

First, that Syngenta received updates on pricing strategy and competitive pricing; and because company leaders at the highest level worked as executives in both Syngenta and Syngenta Corporation, this is evidence that the latter knew of its subsidiary's Key AI program and alleged anticompetitive conduct. Plaintiffs have presented Syngenta Corporation meeting presentation slides that discuss Syngenta Corporation and its subsidiaries' income, pricing, and generic competition. (Docs. 458-3 at 451-53; 458-4 at 172-74; 458-5 at 32-34.) Moreover, the two entities shared the same leadership. Around the same time,

Jeffrey Rowe served as COO for both Syngenta Corporation and Syngenta, and Vern Hawkins served as President of both Syngenta Corporation and Syngenta. (Doc. 458-5 at 868.) Plaintiffs also present deposition testimony indicating that Hawkins made final decisions on which companies would receive Key AI contracts. (Doc. 458-5 at 923-24.) This evidence suggests that key executives who worked in the same roles at both companies participated in, or at least had knowledge of, Key AI's administration. Moreover, Syngenta Corporation monitored subsidiary profits - some significant portion of which would have come from Key AI. These facts suggest that Syngenta Corporation and its leadership knew of Key AI's administration and the alleged anticompetitive conduct and encouraged it. See Seafood Prods., 2022 WL 836951, at *10.

Second, Plaintiffs have presented balance sheets that condense Syngenta Corporation and its subsidiaries' profit and other financial information into single balance and income sheets. (Doc. 458-5 at 404-06, 565-67.) This suggests that Syngenta Corporation considered its subsidiary's profits as its own. See Arandell, 900 F.3d at 634-35.

For these reasons, a reasonable jury could find that these facts demonstrate that Plaintiffs have presented sufficient evidence to suggest "independent but coordinated activity for" Syngenta AG and Syngenta Corporation. Syngenta, 711 F. Supp. 3d at 585 (citing Black & Decker, 801 F.3d at 422). Additionally, a

jury could find that Syngenta AG and Syngenta Corporation encouraged Syngenta's alleged anticompetitive behavior. Therefore, the motion for summary judgment on claims against Syngenta AG and Syngenta Corporation will be denied.

III. CONCLUSION

For the reasons stated,

IT IS THEREFORE ORDERED that Defendants' motion for summary judgment (Doc. 380) is DENIED.

October 22, 2026

/s/ Thomas D. Schroeder
United States District Judge