# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

LINDIS BIOTECH, GMBH	
Plaintiff,	
v. AMGEN INC.,	C.A. No. 22-35-GBW
Defendant.	

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#### MEMORANDUM OPINION

July 27, 2023 Wilmington, Delaware

GREGORY B. WILLIAMS UNITED STATES DISTRICT JUDGE

Plaintiff Lindis Biotech, GmbH ("Lindis") filed a Complaint against Amgen Inc. ("Amgen") alleging direct, contributory, and induced infringement of one or more claims of three of Lindis' patents through Amgen's manufacture and sale of BLINCYTO®. See generally D.I. 1. The parties seek to construe claims terms from three patents— U.S. Patent Nos. 8,709,421 ("the '421 patent"), 10,071,158 ("the '158 patent"), and 10,576,149 ("the '149 patent") (collectively, the "Asserted Patents"). All three Asserted Patents share the same specification and title: "Combination of the Application of Antibodies for Immunostimulation Together with Glucocorticoids." See D.I. 86, Exs. A-C. "The present invention relates to methods for reducing or eliminating the non-specific release of a cytokine associated with a disease comprising administering at least one glucocorticoid and an immunostimulating antibody" and "relates to a pharmaceutical composition that contains at least one immunostimulating antibody and at least one glucocorticoid." D.I. 88, Ex. A (the '421 patent) at Abstract.

Before the Court is the issue of claim construction of multiple terms in the Asserted Patents. The Court has considered the parties' Joint Claim Construction Brief and the accompanying exhibits. D.I. 86. The Court also considered the parties' Claim Construction chart. D.I. 88. The Court held a *Markman* hearing on May 31, 2023 (the "Hearing").

¹On April 21, 2023, the parties filed a letter to this Court explaining that, while the parties could not agree on any more terms, both parties did make edits to a couple terms "to focus the dispute with respect to those terms." D.I. 89 at 2. Furthermore, the parties "stipulated and agreed without prejudice to Amgen's indefiniteness arguments that the claim terms which Amgen asserts as indefinite [] do not need to be construed by the Court at this time" and "the parties agree to defer addressing Amgen's indefiniteness arguments until later in the case when the record is more complete." *Id*.

#### I. LEGAL STANDARDS

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal quotation marks omitted); *see also Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989) ("A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention"). "[T]here is no magic formula or catechism for conducting claim construction." *Phillips*, 415 F.3d at 1324. The Court is free to attach the appropriate weight to appropriate sources "in light of the statutes and policies that inform patent law." *Id.* The ultimate question of the proper construction of a patent is a question of law, although "subsidiary factfinding is sometimes necessary." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 326-27 (2015) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996)).

"The words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history." *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (citing *Phillips*, 415 F.3d at 1312-13). A person of ordinary skill in the art "is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips*, 415 F.3d at at 1313.

"When construing claim terms, the court first looks to, and primarily rely on, the intrinsic evidence, including the claims themselves, the specification, and the prosecution history of the patent, which is usually dispositive." *Sunovion Pharms., Inc. v. Teva Pharms. USA, Inc.*, 731 F.3d 1271, 1276 (Fed. Cir. 2013). "Other claims of the patent in question, both asserted and unasserted,

can . . . be valuable" in discerning the meaning of a disputed claim term because "claim terms are normally used consistently throughout the patent," and so, "the usage of a term in one claim can often illuminate the meaning of the same term in other claims." *Phillips*, 415 F.3d at 1314. In addition, "[d]ifferences among claims can also be a useful guide[.]" *Id.* For example, "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1314-15.

In addition to the claim, the Court should analyze the specification, which "is always highly relevant to the claim construction analysis ... [as] it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. "Even when the specification describes only a single embodiment, [however,] the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (internal quotation marks omitted) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)). And the specification "is not a substitute for, nor can it be used to rewrite, the chosen claim language." *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

The Court "should also consider the patent's prosecution history, if it is in evidence." Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed. Cir. 1995), aff'd, 517 U.S. 370 (1996). The prosecution history "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution[.]" *Phillips*, 415 F.3d at 1317.

In some cases, the Court "will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva*, 574 U.S. at 331. Extrinsic evidence "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. Overall, while extrinsic evidence may be useful, it is "less significant than the intrinsic record in determining the legally operative meaning of claim language." *Phillips*, 415 F.3d at 1317 (internal quotation marks and citations omitted).

#### II. AGREED-UPON TERMS

The parties agreed upon the construction of four claim terms. First, "same day and prior time" in claims 1, 12, and 20 of the '158 patent and claims 1, 5, and 14 of the '149 patent means "same date and before." D.I. 88 at 1. Second, "separated from" in claim 14 of the '421 patent means "not in the same mixture." *Id.* Third, "bispecific immunostimulating antibody" in claims 1, 2, 13, and 15 of the '421 patent, claims 1, 7, 9-12, 14, 15, and 20 of the '158 patent, and claims 1-3, 5-7, 10, 14, 15, and 17 of the '149 patent means "an antibody that stimulates the immune system and is capable of binding to a target antigen and a CD marker at the same time." *Id.* Fourth, "Claim preambles" in claims 1, 13, and 15 of the '421 patent, claims 1, 12, and 20 of the '158 patent, and claims 1, 5, and 14 of the '149 patent means "the preambles to the Asserted Claims are limiting." *Id.* at 2. The Court will adopt the agreed-upon constructions.

# III. DISPUTED TERMS<sup>2</sup>

Claim Term	Plaintiff Lindis'	Defendant Amgen's	The Court's		
	Construction	Construction	Construction		
"trifunctional, bispecific immunostimulating antibody"  ('421 patent at claims 1, 2, 13, 15)	A bispecific antibody having a function in addition to the two specific binding functions, namely 1) binding to a target antigen, and 2) binding to a CD marker	An antibody that stimulates the immune system and is capable of binding to a target antigen, a CD marker, and an accessory immune cell, all at the same time	A bispecific antibody having a function in addition to the two specific binding functions, namely 1) binding to a target antigen, and 2) binding to a CD marker		
"non-specific release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s]"	release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s] caused by any one of a/the trifunctional,	release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s] caused by [a/the trifunctional, bispecific	release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s] caused by [a/the trifunctional, bispecific		
('421 patent claims 1, 13, 15; '158 patent claims 1, 20; '149 patent claim 11)  "cytokine release"	bispecific immunostimulating antibody; or a bispecific antibody; or a bispecific immunostimulating antibody, binding to a	immunostimulating antibody/bispecific antibody/bispecific immunostimulating antibody] binding to the CD marker on a cell but independent of	immunostimulating antibody/bispecific antibody/bispecific immunostimulating antibody] binding to the CD marker on a cell but independent		
('158 patent claims 1, 12, 20)	CD marker on a cell independent of the antibody binding to the target antigen on the cancer cell	the antibody binding to the target antigen on a cell	of the antibody binding to the target antigen on a cell		
"immediately" as the term appears in the following phrases:	Administering a dose of glucocorticoid during any interval of time before or after administering a dose	Without any intervening time	Without any intervening time		

<sup>&</sup>lt;sup>2</sup> "The claim terms which Amgen asserts are indefinite (see Claim Terms 2, 6, 7 and 9 as identified in the Amended Joint Claim Construction Chart dated December 21, 2023 (D.I. 71)) are not included in this chart because the parties have stipulated and agreed without prejudice to Amgen's indefiniteness arguments that those claim terms do not need to be construed by the Court at this time." D.I. 88 at 3 n.2. See also D.I. 89 at 2 ("The parties agree to defer addressing Amgen's indefiniteness arguments until later in the case when the record is more complete.").

Claim Term Plaintiff Lindis' Construction		Defendant Amgen's Construction	The Court's Construction
administering a glucocorticoid "immediately before" or "immediately after" ('421 patent claims 1, 15)	of the antibody that would reduce the release of the cytokines that are released from cells independent of the specific binding of the antibody to the target		
"concurrently with"  Administering a dose of glucocorticoid at the same time as administering a dose of the antibody or during a treatment interval (i.e., along with "treatment")		At the same time as	At the same time as
"lymphoma" ('421 patent claim 5; '158 patent claims 2, 13; '149 patent claims 1, 5, 14)	CD19-positive cancerous B-cells, where such cells are present in the lymphatic system	Solid cancerous tumor present in the lymphatic system	Plain and ordinary meaning, which is a cancer of the lymphatic system

# 1. "trifunctional, bispecific immunostimulating antibody"

Plaintiff Lindis' Construction	Defendant Amgen's Construction	Court's Construction
A bispecific antibody having a function in addition to the two specific binding functions, namely 1) binding to a target antigen, and 2) binding to a CD marker	An antibody that stimulates the immune system and is capable of binding to a target antigen, a CD marker, and an accessory immune cell, all at the same time	A bispecific antibody having a function in addition to the two specific binding functions, namely 1) binding to a target antigen, and 2) binding to a CD marker

Plaintiff argues that a trifunctional, bispecific immunostimulating antibody should be denied as "a bispecific antibody having a function in addition to the two specific binding functions,

namely 1) binding to a target antigen, and 2) binding to a CD marker." D.I. 88 at 3. Defendant seeks to limit the capability third function of the antibody as capable of simultaneously binding to an accessory immune cell.

"It is axiomatic that we will not narrow a claim term beyond its plain and ordinary meaning unless there is support for the limitation in the words of the claim, the specification, or the prosecution history." 3M Innovative Props. Co. v. Tredegar Corp., 725 F.3d 1315, 1333 (Fed. Cir. 2013) (citations omitted). "If the intrinsic record supports several definitions of a term, the term may be construed to encompass all such consistent meanings." Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc., 853 F.3d 1272, 1281 (Fed. Cir. 2017) (citation omitted). "Therefore, absent a clear disavowal or alternative lexicography by a patentee, he or she 'is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning." Id. at 1282 (quoting Thorner, 669 F.3d at 1367).

The Court begins its analysis with the language of the claim itself. Use of the disputed term in claim 1 of the '421 patent is representative:

1. A method for reducing the non-specific release of cytokine in a subject which is associated with a treatment of a cancer or tumor with any antibody comprising administering to the subject at least one glucocorticoid immediately before or immediately after administering at least one trifunctional, bispecific immunostimulating antibody directed against a tumor antigen and a CD marker, which glucocorticoid reduces the non-specific release of the cytokine associated with the treatment of the cancer or tumor, wherein the CD marker is selected from the group consisting of CD2, CD3, CD4, CD5, CD6, CD8, CD28, and CD44.

# D.I. 88, Ex. A (the '421 patent) at claim 1.

The parties agree that the antibody is "bispecific" and performs the two specific functions of binding to the target antigen and to the CD marker. D.I. 86 at 8. The parties disagree on if and how to define the third function. Lindis proposes that a "trifunctional bispecific

immunostimulating antibody" has three functions and two are the specific functions agreed to above. Id. Amgen seeks to clarify that the third function of the antibody that stimulates the immune system "is capable of binding to a target antigen, a CD marker, and an accessory immune cell, all at the same time." D.I. 89-1 at 1 (emphasis added). Notably, this language does not necessarily require the third function be binding to an accessory immune cell at the same time the antibody binds to a target antigen and a CD marker, but that it should be capable of doing so. See Finjan, Inc. v. Secure Comput. Corp., 626 F.3d 1197, 1204 (Fed. Cir. 2010) ("Accordingly, we have held that, to infringe a claim that recites capability and not actual operation, an accused device 'need only be capable of operating' in the described mode."). The Court asked the parties about the "capability," of the antibody to bind to an accessory cell as it initially read to the Court that the parties agreed on a construction—the antibody has three functions, two of which are specific to binding to the target antigen and the CD marker, and the third function. Thus, the crux of this disagreement becomes whether the antibody must have the ability and opportunity to 1) bind to an accessory immune cell, 2) and at the same the antibody binds to the target antigen and CD marker. The focus of the briefing was whether the term "requires binding to occur 'at the same time" or "requires actual 'binding' per se to an 'accessory immune cell[.]" D.I. 86 at 8.

Both parties cite to the language in the '158 patent's specification: "A particularly preferred example of a bispecific antibody is a trifunctional bispecific antibody, to the Fc portion of which, i.e., the portion of the antibody that is not directly involved in the antigen binding, accessory immune cells are able to bind." D.I. 88, Ex. B (the '158 patent) at 5:26-30. Amgen reads this language as defining what "trifunctional bispecific antibody" means, whereas Lindis reads this language as a preferred example of how a trifunctional bispecific antibody could function. Amgen cites to the specification again for a preferred embodiment that supports its construction. *Id.* at

5:59-66 ("Particularly preferred in this context is, as already mentioned, a variant of a bispecific antibody molecule that on the Fc portion exhibits one or more binding sites for accessory immune cells. This antibody type accordingly recruits not only the cell to be eliminated, for example a tumour cell, and T-cells, but at the same time also accessory immune cells such as monocytes or macrophages, and in this way forms a 'tri-cell complex'." (emphases added)). However, descriptions of preferred embodiments should not limit the claim language. It is bedrock principle that "it is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited." Liebel-Flarsheim Co., 358 F.3d at 913 (citation omitted); see also Phillips, 415 F.3d at 1323 (the Court has "expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to the embodiment.")

Amgen also argues that "Lindis repeatedly told the PTO that the third function is the ability to simultaneously bind accessory immune cells" during the prosecution history and acted as its own lexicographer and thus limited the term. D.I. 88 at 10. During the prosecution of the '421 patent, Lindis explained that an "unexpected advantage" of the "bispecific, trifunctional an[it]body" is that it "allows for special proximity of the tumor cell, the T-cell and an accessory cell." D.I. 88, Ex. D (the '421 patent file history) at 64-65. Lindis also stated that "[t]he trifunctional, bispecific antibody of the claimed methods allows for special proximity of, e.g., a tumor cell, a T-cell and an accessory cell." *Id.* at 111. Lindis also submitted a letter to the European Patent Office sent on August 5, 2008, which states:

But the antibodies of amended claim 1 of the present application, by contrast are bispecific and trifunctional, i.e. necessarily require two different Fa/b domains and one functional Fc domain which results in binding, for example to a cell. This trifunctionality of the bispecific antibody enables both specificity against an antigen

on a cell to be killed, for example a tumor cell, and against a CD marker by virtue of the two different Fa/b domains, and also binding of the Fc part of the antibody to, for example, an accessory immune cell.

D.I. 86, Ex. G at 4 (emphasis added). See also id. at 3 ("A clean distinction must be drawn here between merely bispecific antibodies [] and bispecific trifunctional antibodies, which, as well as bispecificity (two functions), also have a third function, for example, binding to a cell." (emphases added).)

The Court does not find that the statements made to the European Patent Office are an express disavowal. *Openwave Sys. v. Apple Inc.*, 808 F.3d 509, 513-14 (Fed. Cir. 2015) ("The standard for disavowal is exacting, requiring clear and unequivocal evidence that the claimed invention includes or does not include a particular feature."). Here, the prosecution language cited clearly states that binding to an accessory immune cell is an "example" of what the third function could be, not the sole function. Furthermore, Lindis points to the specification to show that binding to accessory cells is not the only function:

In particular, immunostimulating antibodies in the sense of the present invention are those which induce a T-cell activation. Particularly advantageous in this connection is an activation of cytotoxic T-cells (CTL, cytotoxic T-lymphocytes, so-called T killer cells). Also encompassed, however, are immunostimulating antibodies with antibody-mediated effects, which occur, for example, via an activation of T helper cells, accessory cells (macrophages), dendritic cells, B-cells or natural killer cells (NK cells).

D.I. 88, Ex. A (the '421 patent) at 4:59-67 (emphases added).

The Court agrees with Lindis' construction of "trifunctional bispecific immunostimulating antibody," as it most closely aligns with the plain and ordinary meaning. Nothing in the claim language limits the third function to be binding to an accessory immune cell at the same time it binds to a target antigen and a CD marker. The specification lays out preferred embodiments and possibilities but does not expressly limit the function to just what Amgen asserts it to be. And,

finally, the prosecution does not show Lindis limiting the scope of the claim term, but instead repeatedly asserting that the third function *could be* binding to an accessory immune cell. For the reasons above, the Court adopts Lindis' construction of "trifunctional bispecific immunostimulating antibody" to mean "a bispecific antibody having a function in addition to the two specific binding functions, namely 1) binding to a target antigen, and 2) binding to a CD marker."

2. "non-specific release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s]" and "cytokine release"

Plaintiff Lindis' Construction	Defendant Amgen's Construction	Court's Construction
release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s] caused by any one of a/the trifunctional, bispecific immunostimulating antibody; or a bispecific antibody; or a bispecific immunostimulating antibody, binding to a CD marker on a cell independent of the antibody binding to the target antigen on the cancer cell	release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s] caused by [a/the trifunctional, bispecific immunostimulating antibody/bispecific antibody/bispecific immunostimulating antibody] binding to the CD marker on a cell but independent of the antibody binding to the target antigen on a cell.	release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s] caused by [a/the trifunctional, bispecific immunostimulating antibody/bispecific antibody/bispecific immunostimulating antibody] binding to the CD marker on a cell but independent of the antibody binding to the target antigen on a cell.

The parties' dispute boils down to whether the term "non-specific release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s]" refers to release of cytokine[s] caused by any one of a/the trifunctional, bispecific immunostimulating antibody; or a bispecific antibody; or a bispecific immunostimulating antibody, binding to a CD marker on a cell independent of the antibody binding to the target antigen "on the cancer cell" (as Lindis proposes)

or "on a cell" (as Amgen proposes). D.I. 86 at 22. Use of the disputed term in claim 1 of the '421 patent is representative:

1. A method for reducing the *non-specific release of cytokine* in a subject which is associated with a treatment of a cancer or tumor with any antibody comprising administering to the subject at least one glucocorticoid immediately before or immediately after administering at least one trifunctional, bispecific immunostimulating antibody directed against a tumor antigen and a CD marker, which glucocorticoid reduces the *non-specific release of the cytokine* associated with the treatment of the cancer or tumor, wherein the CD marker is selected from the group consisting of CD2, CD3, CD4, CD5, CD6, CD8, CD28, and CD44.

#### D.I. 88, Ex. A (the '421 patent) at claim 1.

Amgen cites to the claim language itself to support its construction and show that Lindis' construction is too limiting. Claim 1 of the '421 patent describes a method that "reduc[es] the non-specific release of a cytokine in a subject which is associated with the treatment of a cancer or tumor." If Lindis' construction is limited only to interactions with a cancer cell, then the claims could not address the treatment of tumors unless cancer cells were also present. Because Lindis' construction would render claim language irrelevant, this Court must reject Lindis' construction. Biocon Inc. v. Straumann Co., 441 F.3d 945, 950-51 (Fed. Cir. 2016).

Lindis argues that a person of ordinary skill in the art ("POSA") would understand that "non-specific" release means the systemic or transient release of cytokines, independent of antibodies binding to target cancer cells.<sup>3</sup> D.I. 86 at 22 (quoting D.I. 88, Ex. B (the '158 patent) at 4:3-16 ("Surprisingly, the glucocorticoids to be employed in accordance with the invention only

<sup>&</sup>lt;sup>3</sup> In its briefing and during the Hearing, Lindis argues that "non-specific" means "systemic" or "transient." D.I. 86 at 22; May 31, 2023 Hearing Tr. at 46:6-51:15. Notably, neither systemic nor transient appear in Lindis' proposed construction, including the Amended Claim Chart filed after briefing. See D.I. 88. The Court will thus focus on the dispute raised by the proposed constructions and during the Hearing: whether the term should be limited to binding to the target antigen on the cancer cell or on a cell.

reduce the non-specific (systemic) release of cytokine, which is independent of the binding of the target antigen. . . Therefore the action of the immunostimulant antibodies by reason of this effect . . . is focused onto the site of the antigen binding without being influenced by systematically released cytokines.") *See also id.* at 22:50-24:23, 10:3-20)). Meanwhile, Amgen asserts that specific cytokine release is caused by binding a specific target antigen, not a specific cell time, and non-specific release does not involve binding to that target antigen. D.I. 86 at 23-24.

The Asserted Patents describe two different types of cytokine release: specific and non-specific. Specific release occurs when the antibody binds both the target antigen on a target cell and the CD marker on a T cell (a type of immune cell). D.I. 86 at 23-24. In contrast, the Asserted Patents characterize "non-specific (systemic) release of cytokine, which is independent of the binding of the target antigen." D.I. 88, Ex. B (the '158 patent) at 4:4-6 (emphases added).

Amgen also argues that specific cytokine release is not limited to the binding of a target antigen on cancer cells. "After all, an antibody has no idea if a cell it binds is cancerous or not. The specification discloses that the 'present invention relates to methods for reducing or eliminating the non-specific release of a cytokine associated with a disease." D.I. 86 at 25 (quoting D.I. 88, Ex. B (the '158 patent) at 1:25-27. See also id. at 1:35-37; 1:43-46; 2:33-36, 2:37-41; 4:64-5:2). Two disclosed examples are the "treatment and/or prophylaxis of cancerous diseases, tumorous diseases." Id. at 7:33-35 (emphases added). See also id. at 4:7-11 ("for example, at the site of [antigen] binding and intentional destruction of tumour cells"). A tumor may be benign, i.e., not cancerous, or malignant, i.e., cancerous. See D.I. 86, Ex. O (BASIC PATHOLOGY 166-67 (7th ed. 2003)) at 1. Therefore, as Amgen argues, this term should include instances where the antibody is bound to target antigen on cells other than cancer cells.

Finally, Amgen asserts that:

Lindis concedes that normal and cancer cells share the same target antigens, explaining that "[t]umor-associated antigens (TAA) are present on cancer cells, but are also expressed at lower levels on the surface of healthy cells." And as Lindis points out, CD19 is a TAA. EpCAM, the target antigen discussed extensively in the specification, is also a TAA. Accordingly, anti-EpCAM antibodies could bind to normal cells expressing EpCAM on the cell surface, consistent with Amgen's construction. If those cells are destroyed, the release of cytokines leading to their destruction is no less "specific."

#### D.I. 86 at 26.

Because the patent seeks methods of reducing non-specific release of a cytokine associated with diseases other than cancer, and non-specific release is independent of the body binding to a cell, whether that is a cancerous cell, this Court will adopt Amgen's construction. *See* D.I. 88, Ex. B (the '158 patent) at 3:44-54.

#### 3. "immediately"

Plaintiff Lindis' Construction	Defendants Amgen's Construction	Court's Construction
administering a dose of glucocorticoid during any interval of time before or after administering a dose of the antibody that would reduce the release of the cytokines that are released from cells independent of the specific binding of the antibody to the target antigen on the cancer cell	without any intervening time	without any intervening time

The parties dispute (1) whether "immediately" should be construed to have its plain and ordinary meaning, and (2) whether the construction is dictated by the doctrine of prosecution disclaimer.

Lindis argues that its construction is in line with the specifications and a POSA would "understand [] that claim limitations relating to administering glucocorticoid immediately before

or immediately after administration of the antibodies should be based on whether the interval of time before or after administered where less undesirable side-effects arise by virtue of reduced release of the cytokines that are released from cells independent of the specific binding of the antibody to the target antigen on a cancer cell." D.I. 86 at 30.4 Additionally, Lindis argues that a POSA would understand that the antibody and glucocorticoid are "functionally unified by virtue of their targeted use" and thus reading "immediately before/after" in the claim language would mean to read the administration of the constituents in conjunction with the purpose of their combined use. D.I. 86 at 31-32 (quoting D.I. 88, Ex. A (the '421 patent) at 7:31-32). Amgen maintains that "immediately" should be construed to have its plain and ordinary meaning, which is "without any intervening time." D.I. 30. Amgen also argues that Lindis is essentially estopped from claiming its construction in light of statements made in the prosecution history.

"Under the doctrine of prosecution disclaimer, a patentee may limit the meaning of a claim term by making a clear and unmistakable disavowal of scope during prosecution." *Purdue Pharma L.P. v. Endo Pharms. Inc.*, 438 F.3d 1123, 1136 (Fed. Cir. 2006). Prosecution disclaimer can arise from both claim amendments and arguments made to the United States Patent and Trademark Office ("PTO"). *Biogen Idec, Inc. v. GlaxoSmithKline LLC*, 713 F.3d 1090, 1095 (Fed. Cir. 2013). The doctrine does not apply unless the disclaimer is "both clear and unmistakable to one of ordinary skill in the art." *Elbex Video, Ltd. v. Sensormatic Elecs. Corp.*, 508 F.3d 1366, 1371 (Fed. Cir. 2007) (quotations omitted).

Amgen points this Court to the prosecution history, wherein the original claim language read that the glucocorticoid administration be "before," "during," or "after" antibody administration. The amended claims added "immediately." See D.I. 88, Ex. D (the '421 patent

<sup>&</sup>lt;sup>4</sup> Quotations omitted in light of Lindis' letter, D.I. 91.

file history) at 10 ("Reasons for Allowance").<sup>5</sup> The examiner's statement of reasons for allowance read as follows: "Following a diligent search it was determined that the prior art neither teaches nor suggests a method comprising administering to a subject a glucocorticoid immediately before, concurrently, or immediately after treatment of the subject with the bispecific, trifunctional immunestimulating antibody[.]" *Id.* The prosecution history also includes an examiner-initiated interview summary, which reads "[t]he propose[d] claim amendments were accepted by applicants on 11/15/2013. Claims have been amended to recite administering to a subject a glucocorticoid immediately before, concurrently, or immediately after treatment of the subject with a bispecific, trifunctional immunestimulating antibody." *Id.* at 1.

In response to the prosecution history wherein the patentee added "immediately" to overcome prior art, Lindis notes that the prior art had intervals of time spanning a week or more, and thus its construction does provide weight to the word "immediately" and avoids prior art limitations. See D.I. 88, Ex. D (the '421 patent file history) at 11-12 (Examiner notes in its allowance that the present invention, which is a method "comprising administering to a subject a glucocorticoid immediately before, concurrently, or immediately after" treatment was now adequately distinguished from the prior art, namely Jung and Gast).

<sup>&</sup>lt;sup>5</sup> This Court considers the file histories of all Asserted Patents consistently, as they share a specification. D.I. 86 at 4-5. "Where multiple patents derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents." SightSound Techs., LLC v. Apple Inc., 809 F.3d 1307, 1316 (Fed. Cir. 2015). The Federal Circuit has also found that patentee's statements made during prosecution applied to the claims of an earlier issued, related patent. See Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340, 1349-50 (Fed. Cir. 2004). When construing claims, statements from the prosecution of patents in the same family are relevant when the statements "relat[e] to the same subject matter as the claim language at issue in the patent being construed." Ormco Corp. v. Align Tech., Inc., 498 F.3d 1307, 1314 (Fed. Cir. 2007).

The patentee made "a clear and unmistakable disavowal of scope during prosecution." Purdue Pharma L.P., 438 F.3d at 1136. The patentee accepted the proposed claim language and added "immediately" to the claims to overcome rejection on the basis of prior art, and thus surrendered claim scope over the acceptable time for administering the glucocorticoid. See S.O.I.TEC Silicon on Insulator Techs., S.A. v. MEMC Elec. Materials, Inc., 745 F. Supp. 2d 489, 499 n.11 (D. Del. 2010) ("Narrowing a claim in response to a § 112 rejection results in a surrender of the broader subject matter.") (citation omitted); see also Biogen Idec, Inc. v. GlaxoSmithKline LLC, 713 F.3d 1090, 1095 (Fed. Cir. 2013) ("[W]hen the patentee unequivocally and unambiguously disavows a certain meaning to obtain a patent, the doctrine of prosecution history disclaimer narrows the meaning of the claim consistent with the scope of the claim surrendered.").

For the reasons stated above, the patentee's statement was clear and unmistakable and, thus, the scope of the claim must be limited beyond Lindis' proposal that the glucocorticoid administration can be "during any interval of time" so long as it reduces the "non-specific release of cytokine." See Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 452 (Fed. Cir. 1985) (holding arguments made to convince the examiner of patentability "limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance").

#### The specification reads:

The constituents of the product according to the invention—at least one immunostimulatory or immunotherapeutic antibody as defined above (1st constituent) and at least one glucocorticoid according to the above definition (2nd constituent)—are functionally unified by virtual of their targeted use. The constituents of the product may not develop the advantageous action, described above, according to the invention independently of one another, so that despite the spatial separation of constituents 1 and 2 (for simultaneous, separate, or temporally staggered administration) their application is available in the form of a new combined product which is not described in the state of the art.

### D.I. 88, Ex. A (the '421 patent) at 7:27-37.

The language here, cited by both parties, does not support Linids' reasoning that "immediately" means when the side effects would be at their lowest. While the specification does leave open the practice of "temporally staggered administration," the claim language is "immediately" and thus the Court must read the claim to have a narrower interpretation of the administration that the patentee accepted. For the reasons above, the Court adopts Amgen's construction of "immediately" to mean "without any intervening time."

#### 4. "concurrently with"

Plaintiff Lindis' Construction	Defendant Amgen's  Construction	Court's Construction
administering a dose of glucocorticoid at the same time as administering a dose of the antibody or during a treatment interval (i.e., along with "treatment")"	at the same time as	at the same time as

Similar to the dispute with "immediately," the crux of the dispute is about timing of the administration of doses to the subject—in this case, whether "concurrently with" requires administration of both the glucocorticoid and the antibody simultaneously, or within a treatment interval.

# Claim 13 of the '421 patent recites:

A method for reducing the non-specific release of a cytokine in a subject which is associated with a treatment of a cancer or tumor with an antibody comprising administering to the subject at least one glucocorticoid concurrently with at least one trifunctional, bispecific immunostimulating antibody directed against a tumor antigen and a CD marker, which glucocorticoid reduces the non-specific release of a cytokine associated with the treatment of a cancer or tumor, wherein the CD

marker is selected from the group consisting of CD2, CD3, CD4, CD5, CD6, CD8, CD28, and CD44.

D.I. 88, Ex. A (the '421 patent) at claim 13.

Notably, "concurrently with" does not appear in the specification. Both parties agree that one reading of "concurrently with" is "at the same time." D.I. 86 at 34. But Lindis additionally seeks the option "or 'during a treatment interval (i.e., along with "treatment".)" *Id.* Lindis cites to two working examples in the specification that show treatment intervals that spanned days, 23 and 10 respectively. D.I. 88, Ex. B (the '158 patent) at 25:45-26:45 (Table 1) and 27:17-59 (Table 2).

With respect to Lindis' argument that the Tables in the Asserted Patents represent treatment of multiple days, the Court fails to understand the scope of Lindis' construction. Example 4 reads:

At the start of the therapy the antibody was administered without combination with glucocorticoid. After these two monotherapy experiments the antibody dose was distinctly increased, and at the same time dexamethasone was given. In the following table the course of therapy is summarized, with indication of side effects observed.

D.I. 88, Ex. B (the '158 patent) at 25:38-44.

Table 1, associated with Example 4, shows that two monotherapy experiments wherein the patent received antibodies on Day 0 and Day 4, but did not receive dexamethasone. *Id.* at Table 1. On Day 9, the patient received both the antibodies and 40 mg dexamethasone. *Id.* It reads to this Court that Day 9 describes the invention, and that the therapy applied on Days 0 and 4 cannot be read into the invention because there was no administration of a glucocorticoid. Therefore, the claim language cannot and should not be expanded to cover the entire treatment intervals, but specifically the time where the invention—the administration of antibodies and glucocorticoids—are practiced. It is unclear if Lindis is seeking to expand the scope of "concurrently with" to include administered therapies over multiple days and leads this Court to agree with Amgen's

concern that adopting Lindis' construction would require the additional construction of the term "treatment interval."

It is also worth noting that, like with "immediately," "concurrently with" was added to the claims to overcome prior art. *See* D.I. 88, Ex. D (the '421 patent file history) at 2 ("The examiner proposed amending claims to recite concurrently administering the glucocorticoid and the recited bispecific antibody.").

For the reasons above, this Court rejects Lindis' construction of "concurrently with," as the construction is not founded in the claim language or specification. Moreover, the prosecution history shows that its addition was integral and, thus, a definition that permits administration during some period of time (*i.e.*, a treatment interval) is improper.

Amgen cites to the specification to support its construction that "concurrently with" be construed as "at the same time as". See D.I. 88, Ex. B (the '158 patent) at 25:40-42 ("After these two monotherapy experiments the antibody dose was distinctly increased, and at the same time dexamethasone was given." (emphases added)). However, generally "different words in a patent have different meanings and the same words have the same meaning." Liqwd, Inc. v. L'Oreal USA, Inc., C.A. No. 7-14-JFB-SRF, 2019 WL 1977367, at \*3 (D. Del. May 2, 2019), aff'd sub nom. Olaplex, Inc. v. L'Oreal USA, Inc., 845 F. App'x 943 (Fed. Cir. 2021) (citing Innova/Pure Water, Inc., v. Safari Water Filtration Systems, Inc., 381 F.3d 1111, 1119-20 (Fed. Cir. 2004)). Indeed, this Court notes that it was the examiner that prompted the addition of "concurrently with" and that the time interval for administering the glucocorticoid being "the same time as" the antibody is well-founded in the specification.

For the reasons above, the Court adopts Amgen's construction for "concurrently with," meaning "at the same time as."

### 5. "lymphoma"

Plaintiff Lindis' Construction	Defendants Amgen's Construction	Court's Construction
CD19-positive cancerous B-cells, where such cells are present in the lymphatic system	solid cancerous tumor present in the lymphatic system	plain and ordinary meaning: a cancer of the lymphatic system

The parties dispute whether "CD19-positive cancerous B-cells" captures too many diseases beyond lymphoma or whether "solid cancerous tumor" is too limiting.

The Court first turns to the claim language. The term is represented in claim 16 of the '149 patent:

1. A method of using a bispecific antibody for treating lymphoma in a subject, comprising:

administering dexamethasone to the subject on the same day as and prior in time to beginning administration of the bispecific antibody, wherein the specific antibody is directed against tumor antigen CD19 and T-cell marker CD3.

# D.I. 88, Ex. C (the '149 patent) at claim 1.

Lindis argues "lymphoma" should be construed to mean "CD19-positive cancerous B-cells, where such cells are present in the lymphatic system." D.I. 88 at 5-6. Conspicuously, such a definition would include forms of leukemia found in the lymphatic system. D.I. 86 at 42 ("The language of the claims requires that the term 'lymphoma' include acute lymphocytic leukemia."). Lindis argues that leukemia and lymphoma both refer to cancers of white blood cells known as lymphocytes (e.g., B-cells). *Id.* at 37-38. When B-cells are detected in the bone marrow and

<sup>&</sup>lt;sup>6</sup> The parties in this case agreed that "the preambles to the Asserted Patents are limiting." D.I. 88 at 2.

blood, it is considered B-cell leukemia. When cancerous B-cells are detected in the lymphatic system, they are referred to as B-cell lymphoma. *Id.* 

To support its construction, Lindis relies on disease classification by the World Health Organization ("WHO") which "classified acute lymphoblastic leukemia (ALL)/lymphoblastic lymphoma (LBL) as a clonal hematopoietic stem cell disorder of B or T cell origin," and because "there is overlap between ALL and LBL, [] it has been widely accepted to render a combined diagnosis." *Id.* at 38. Essentially, Lindis argues that because these two diseases behave similarly, a POSA would inherently understand that such a treatment for lymphoma could also apply to certain forms of leukemia. Lindis even notes that "the construction proposed by Lindis accurately reflects *current* medical opinion," D.I. 86 at 38 (emphases added), but "[t]he words of a claim are generally given their ordinary and customary meaning, which is the meaning a term would have to a person of ordinary skill in the art in question at the time of the invention." *Phillips*, 415 F.3d at 1313. Therefore, even if it is the common medical consensus today that "lymphoma" can reference leukemia presenting in the lymphatic system, Lindis has failed to show this Court why a POSA in 2014 would have this understanding.

Additionally, Amgen argues that "Lindis is precluded by the prosecution history from seeking a construction that covers CD19 lymphomas *and* leukemias." D.I. 86 at 40 (emphasis in original). During prosecution of the '149 patent, the examiner rejected the claims as lacking enablement, noting that "[e]xcept for B cell lymphoma and leukemia, CD19 is not overexpressed on other cancer cells." D.I. 86, Ex. E (the '149 patent file history) at 41. "Instead of amending its claims to encompass treatment of B cell lymphoma and leukemia, Lindis limited its claims to treating 'lymphoma' only[.]" D.I. 86 at 41. Amgen asserts again that Lindis cannot now recapture

leukemia. *Traxcell*, 15 F.4th at 1133 (finding that a party had surrendered claim scope during prosecution).

This Court finds that Lindis' construction of "lymphoma" is too broad, and the patentee should not be able to claim other diseases that are not classified as lymphomas, even if the diseases behave similarly. Nothing in the intrinsic evidence defines lymphoma to also include leukemia. Instead, this Court simply finds that patentee cannot expand the scope of "lymphoma" to include a scope of diseases that are not lymphoma. To support this finding, the Court notes that the extrinsic evidence is persuasive in that "lymphoma" and "leukemia" are referenced separately throughout medical literature. See, e.g., D.I. 86, Ex. JJ, B.J. Bain, & D. Catovsky, D., The Leukaemic Phase of Non-Hodgkin's Lymphoma, 48 J. CLIN. PATHOL, at 189-93 (1995) ("Cases are usually classified as [chronic lymphocytic leukaemia] CLL if there is peripheral blood lymphocytosis at presentation and as lymphocytic lymphoma if there is not."); Ex. KK, J.V. Melo, et al., Morphology And Immunology Of Circulating Cells In Leukaemic Phase Of Follicular Lymphoma, 41 J. CLIN. PATHOL, at 951-59 (1988); Ex. LL, Beverly P. 12 Nelson, et al., Leukemic Phase of B-Cell Lymphomas Mimicking Chronic Lymphocytic Leukemia and Variants at Presentation, 15 MOD PATHOL. 11, at 1111-20 (2002) ("We describe the clinical, morphologic, immunophenotypic, and cytogenetic findings of 6 cases of non-Hodgkin, B-cell lymphomas that presented with extensive peripheral blood involvement and that were morphologically indistinguishable from CLL, CLL/PLL [prolymphocytic leukemia], or PLL."), Amgen points out that, when the articles discuss both leukemia and lymphoma and their similarities, the articles treat the diseases as distinct from one another. See May 31, 2023 Hearing Tr. at 74:6-22.7

However, this Court also disagrees with Amgen's proposed construction. Amgen seeks to construe the term "lymphoma" to mean "solid cancerous tumor present in the lymphatic system." D.I. 89-1 at 1. First, Amgen cites to the specification to show that its construction is proper because the term "lymphoma" is included in a list of other forms of cancer that cause solid tumors. D.I. 88, Ex. B (the '158 patent) at 3:9-16 ("For example the cancer [treated by the methods and/or pharmaceutical compositions of the invention] can include, but is not limited to, gastric carcinoma, adenocarcinoma, malignant melanoma, colonic carcinoma, pancreatic carcinoma, ovarian carcinoma, uterine carcinoma, hepatocellular carcinoma, all histological types of bronchial carcinoma, lymphomas, sarcomas, blastomas and gastrointestinal stromal tumour (GIST).").

A court may not read a limitation from the specification into the claims. *Liebel-Flarsheim* Co., 358 F.3d at 904; *Innovad Inc. v. Microsoft Corp.*, 260 F.3d 1326, 1332 (Fed. Cir. 2001) (noting that the "interpretative process forbids importing limitations from the specification into the defining language of the claims"). This Court cannot take a list from the specification, observe a common factor, and read that limiting factor into the claim language for a term in that list, and Amgen has failed to cite to any precedent to do so.

Amgen next cites to extrinsic evidence and dictionaries to show "oma" means "tumor."

D.I. 86 at 39. While the Court may consider extrinsic evidence, this definition also appears to be too limiting and unsupported by the intrinsic evidence. "The words of a claim are generally given

<sup>&</sup>lt;sup>7</sup> The Court reviewed Amgen's argument that Lindis is "precluded by the prosecution history from seeking a construction that covers CD19 lymphomas and leukemias." D.I. 86 at 40. However, the Court was persuaded by Amgen's arguments that the four corners of the patent precluded Lindis' construction and ultimately did not rely on a potential prosecution disclaimer in making its determination.

their ordinary and customary meaning," *Phillips*, 415 F.3d at 1313, and neither party has shown this Court why it should not simply adopt the plain and ordinary meaning of "lymphoma." Therefore, this Court rejects the proposed constructions of both parties and will construe "lymphoma" to have its plain and ordinary meaning, which is a cancer of the lymphatic system (but expressly excluding leukemia). *Phillips*, 415 F.3d at 1327.

# IV. CONCLUSION

For the reasons explained above, the Court adopts the constructions described herein. The Court will issue an Order consistent with this Memorandum Opinion.

# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

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Plaintiff,

v.

AMGEN INC.,

C.A. No. 22-35-GBW

Defendant.

# **ORDER**

At Wilmington this day of July 2023:

For the reasons set forth in the Memorandum Opinion issued this day, IT IS HEREBY ORDERED that the Court construes the following claim terms of U.S. Patent Nos. 8,709,421 (the '421 patent), 10,071,158 (the '158 patent), and 10,576,149 (the '149 patent) as follows:

Claim Term	Court's Construction
same day and prior in time	same date and before
('158 patent claims 1, 12, 20; '149 patent claims 1, 5, 14)	
separated from	not in the same mixture
('421 patent claim 14)	
Claim preambles	The preambles to the Asserted Claims are limiting
('421 patent claims 1, 13, 15; '158 claims 1, 12, 20; '149 patent claims 1, 5, 14)	
bispecific immunostimulating antibody	an antibody that stimulates the immune system and is capable of binding to a target
('421 patent claims 1, 2, 13, 15; '158 patent claims 1, 7, 9, 10, 11, 12, 14, 15, 20;	antigen and a CD marker at the same time

Claim Term	Court's Construction
'149 patent claims 1, 2, 3, 5, 6, 7, 10, 14, 15, 17)	
trifunctional, bispecific immunostimulating antibody  ('421 patent claims 1, 2, 13, 15)	a bispecific antibody having a function in addition to the two specific binding functions, namely 1) binding to a target antigen, and 2) binding to a CD marker
non-specific release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s]  ('421 patent claims 1, 13, 15; '158 patent claims 1, 12, 20; '149 patent claim 11)  "cytokine release"  ('158 patent claims 1, 12, 20)	release of [a/the/at least one/at least one of IL-6, TNF-alpha, and IFN-gamma] cytokine[s] caused by [a/the trifunctional, bispecific immunostimulating antibody/bispecific antibody/bispecific immunostimulating antibody] binding to the CD marker on a cell but independent of the antibody binding to the target antigen on a cell.
immediately as in the phrase: administering a glucocorticoid "immediately before" or "immediately after" ('421 patent claims 1, 15)	without any intervening time
concurrently with ('421 patent claims 13, 15)	at the same time as
"lymphoma"  ('421 patent claim 5; '158 patent claims 2, 13; '149 patent claims 1, 5, 14)	plain and ordinary meaning, which is a cancer of the lymphatic system

GREGORY B. WILLIAMS UNITED STATES DISTRICT JUDGE