United States District Court,
D. Delaware.

POLYMASC PHARMACEUTICALS, PLC,
Plaintiff.
v.
ALZA CORPORATION,
Defendant.

Civil Action No. 01-228-JJF

Dec. 3, 2002.

Thomas C. Grimm, Morris, Nichols, Arsht & Tunnell, Wilmington, DE, for Plaintiff.

Steven J. Balick, Ashby & Geddes, Wilmington, DE, for Defendant.

SUPPLEMENTAL CLAIM CONSTRUCTION ORDER

JOSEPH J. FARNAN, JR.**, District Judge.**

In a Memorandum Order dated December 2, 2002 the Court set forth its claim construction of two claim terms disputed by the parties which the parties represented were case dispositive.

In addition to these two case dispositive interpretations, the parties presented argument on several other claim terms which required interpretation. Below is the Court's interpretation of those remaining terms.

1) "Vesicle"

PolyMASC contends that "vesicle" as used in claim 1 of the '763 Patent means "[a] small bladder like vessel, sac, or cyst. In the liposome field specifically, a vesicle is a membrane surrounded sac in an aqueous space." (PolyMASC's Proposed Claim Construction Order, November 26, 2002). Alza contends that "vesicle" means "a lipid structure having an interior aqueous space that separates it from an external aqueous space by one or more membranes", alternatively Alza proposes that "vesicle" means "a lipid structure containing an interior aqueous compartment." (See D.I. 142 Tab B at 4; *see also* Alza Corporation's Presentation for *Markman* Hearing, November 26, 2002).

The term "vesicle" appears in claim 1 of the '763 patent. The Court adopts Alza's proffered interpretation of this term. "Vesicle" is construed to mean "a lipid structure containing an interior aqueous compartment."

The Court finds that both parties' experts support the Court's adopted interpretation of "vesicle." First, Dr. Vladimir Torchilin, PolyMASC's expert, stated in his expert report that "[i]n the liposome field, vesicles are defined as membrane surrounded sacs in an aqueous space." (D.I. 145, Tab B at para. 5). Similarly, Dr.

Derek Fisher, Alza's expert, described the meaning of a vesicle as follows:

Q. What is a vesicle?

A. It would be generally a membrane enclosing structure. A structure-an aqueous compartment enclosed by lipid, or-by anything.

Q. In a lipid vesicle what is the membrane made of? The lipid?

A. yes.

Q. Then there is something inside the membrane of the vesicle. That's what a vesicle is? ...

A. It has a compartment which would be, depending on how you made the vesicle, if you made it in water, would have water inside."

Dr. Derek Fisher, June 11, 2002, at 51:17-20; 52:23-53:10; *see also* Alza Corporation's Presentation for *Markman* Hearing, November 26, 2002. Also, Dr. Fisher noted that micelles, as vesicles, is "not a conventional interpretation of micelles." Dr. Derek Fisher, June 11, 2002, at 230:17-19; *see also* Alza Corporation's Presentation for *Markman* Hearing, November 26, 2002). The Court finds Dr. Fisher's opinion on this matter credible. Accordingly, the Court construes the term "vesicle" in claim 1 of the '763 Patent to mean "a lipid structure containing an interior aqueous compartment."

2) "Adsorption"

PolyMASC contends that "adsorption" as used in claim 11 of the '763 Patent means "attachment to, or depositing on, a surface." (PolyMASC's Proposed Claim Construction Order, November 26, 2002). Whereas, Alza proposes that "adsorption" should be construed as the "physical process of deposition of certain molecular particles on the surface resulting in a decrease of the free energy for the whole system." (D.I. 195, Tab 4 at 2).

The term "adsorption" appears in claim 11 of the '763 patent. The Court adopts Alza's proffered interpretation of this term which is supported by the credible testimony of PolyMASC's expert, Dr. Vladimir Torchilin. The Court finds that Dr. Torchilin's definition of adsorption agrees with Alza's proposed construction.

The Court construes "adsorption" in claim 11 of the '763 Patent to mean the "physical process of deposition of certain molecular particles on the surface resulting in a decrease of the free energy for the whole system."

3) "large unilamellar vesicles"

PolyMASC contends that "large unilamellar vesicles" means "[t]ypically, unilamellar vesicles with a lower size limit of approximately 100 nanometers in diameter. Unilamellar vesicles are a single phospholipid bilayer enclosing an aqueous compartment." (PolyMASC's Proposed Claim Construction Order, November 26, 2002). Alza asserts that the word "typically" should be deleted from the beginning of PolyMASC's definition, and instead each definition should include the statement, "[a] 11 unilamellar vesicles are either large or small. However, the dividing line between large and small is not specified in the art. Typically, the dividing line is 100 nm." (D.I. 195, Tab 4, at 1-2).

The term "large unilamellar vesicles" appears in claim 1 of the '763 Patent. The Court will adopt Alza's proffered interpretation of this language. The Court concludes that under PolyMASC's proposed construction some unilamellar vesicles are not necessarily large or small even though in the art unilamellar vesicles are considered either large or small. Therefore to avoid this ambiguity, the Court is persuaded that Alza's proposed construction is correct. Thus, the Court construes the term "large unilamellar vesicles" to mean "unilamellar vesicles with a lower size limit of approximately 100 nanometers in diameter. Unilamellar vesicles are a single phospholipid bilayer enclosing an aqueous compartment. All unilamellar vesicles are either large or small. However, the dividing line between large and small is not specified in the art. Typically the dividing line is 100 nanometers."

4) "small unilamellar vesicles"

PolyMASC contends that "small unilamellar vesicles" in claim 1 of the '763 Patent means "[t]ypically, unilamellar vesicles with an upper size limit of approximately 100 nanometers in diameter. Unilamellar vesicles are a single phospholipid bilayer enclosing an aqueous compartment." (PolyMASC's Proposed Claim Construction Order, November 26, 2002). Alza makes the same objection to this proposed construction as it did to PolyMASC's proposed construction of "large unilamellar vesicles." (D.I. 195, Tab 4, at 1-2).

The term "small unilamellar vesicles" appears in claim 1 of the '763 Patent. The Court will adopt Alza's proffered interpretation of this language for the same reasons as the Court set forth regarding its construction of "large unilamellar vesicles". Thus, the Court construes the term "small unilamellar vesicles" to mean "unilamellar vesicles with an upper size limit of approximately 100 nanometers in diameter. Unilamellar vesicles are a single phospholipid bilayer enclosing an aqueous compartment. All unilamellar vesicles are either large or small. However, the dividing line between large and small is not specified in the art. Typically the dividing line is 100 nanometers."

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