



October 20, 2016

Andrew Burke, Ph.D.,
Licensing and Patenting Manager
NCI Technology Transfer Center
9609 Medical Center Drive, RM 1E530 MSC 9702
Bethesda, MD 20892-9702
Telephone: (240) 276-5530
Facsimile: (240) 276-5504
Email: andy.burke@nih.gov

Re: 81 FR 69066. Exclusive Patent License to Kite Pharma, Inc.

Dear Dr. Burke,

Knowledge Ecology International (KEI) is responding to the Notice published in the Federal Register on October 5, 2016, entitled "Prospective Grant of Exclusive Patent License: Development of Anti-CD70 Chimeric Antigen Receptors for the Treatment of CD70 Expressing Cancers." The notice involves the following patents:

United States Provisional Patent Application No. 62/088,882, filed December 8, 2014, entitled "Anti-CD70 Chimeric Antigen Receptors" and PCT Application No. PCT/US2015/025047 filed April 9, 2015 entitled "Anti-CD70 Chimeric Antigen Receptors"

According to the Federal Register notice, the geographic area for the license is "worldwide," and the field of use is "the development, manufacture and commercialization of retrovirally-engineered anti-CD70 chimeric antigen receptor (CAR)-based autologous peripheral blood T cell therapy products . . . for the treatment of CD70 expressing cancers in humans."

About KEI

Knowledge Ecology International (KEI) is a non-profit, non-governmental organization based in Washington, DC, with an office in Geneva, Switzerland, that advocates for access to affordable medicines, with a focus on human rights and social justice. For more information, see: <http://keionline.org>.

Previous comments on license proposed to

KEI notes that we submitted comments on a different proposed license for the same patents on May 9, 2016, which were also addressed to you. KEI has also written about the NIH's collaborations with Kite here:

Zack Struver, "Kite Pharma Uses CRADAs to Conduct Important Clinical Research on New Cancer Treatments." October 18, 2016. <http://www.keionline.org/node/2640>

Comments on proposed license

In general, KEI opposes the grant of an exclusive license in this case unless:

1. The NIH conducts sufficient analysis and limits the terms and scope of the license as required under 37 CFR 404.7 (a)(1)(iiii);
2. The license contains sufficient safeguards regarding affordability and reasonable pricing of the products, users and/or services developed under the patent licenses;
3. The license places restrictions on charging US residents higher prices than the median prices charged in countries with the seven largest GDP and per capita incomes of 50 percent or more than the United States per capita income;
4. In any case, and in addition to any other considerations of what constitutes a reasonable price, the license holder is expected to limit the cost of the products or services to U.S. residents to *no more than* the lesser of either (a) the average annual per capita income in the United States, or (b) the amount of the average annual per capita income in the United States, per quality adjusted life year (QALY) benefit of the product;
5. The exclusive rights will extend to five years from the first sale of a product receiving approval by the U.S. FDA, or until the license holder recovers at least \$1 billion in cumulative global sales from the product, whichever is shorter, and thereafter, the license will become non-exclusive. After the first five years of exclusivity, the NIH can extend the exclusivity by another 3 years, upon a showing that such extension is reasonable in light of the risk adjusted R&D costs to bring the product market, and the net revenues from sales;
6. The license requires products and/or services are affordable in developing countries, and explicitly allows the NIH to grant licenses to the patents to the Medicines Patent Pool (MPP) for use in developing countries; and
7. The license requires transparent reporting on drug development costs, royalties and revenues.

Federal regulations on the use of exclusive licenses

As noted in the Federal Register notice, the licenses are expected to comply with the public safeguards found in 35 U.S.C. § 209 and 37 CFR § 404.

Specifically, we are concerned about the obligations in 35 U.S.C. § 209(a):

§209. Licensing federally owned inventions

(a) Authority.—A Federal agency may grant an exclusive or partially exclusive license on a federally owned invention under section 207(a)(2) only if—

(1) granting the license is a reasonable and necessary incentive to—

(A) call forth the investment capital and expenditures needed to bring the invention to practical application; or

(B) otherwise promote the invention's utilization by the public;

(2) the Federal agency finds that the public will be served by the granting of the license, as indicated by the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public, and that the proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application, as proposed by the applicant, or otherwise to promote the invention's utilization by the public;

(3) the applicant makes a commitment to achieve practical application of the invention within a reasonable time, which time may be extended by the agency upon the applicant's request and the applicant's demonstration that the refusal of such extension would be unreasonable;

(4) granting the license will not tend to substantially lessen competition or create or maintain a violation of the Federal antitrust laws; and

(5) in the case of an invention covered by a foreign patent application or patent, the interests of the Federal Government or United States industry in foreign commerce will be enhanced.

We also note that the term “practical application” is defined by 35 U.S.C. 201(f) as follows:

(f) The term "practical application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public **on reasonable terms.** [emphasis added]

Under 37 CFR 404.7(a), the NIH is required to make determinations regarding the necessity of the grant of an exclusive license:

(1) Exclusive, co-exclusive or partially exclusive domestic licenses may be granted on Government owned inventions, only if

...

(ii) After expiration of the period in § 404.7(a)(1)(i) and consideration of any written objections received during the period, the Federal agency has determined that;

(A) The public will be served by the granting of the license, in view of the applicant's intentions, plans and ability to bring the invention to the point of practical application or otherwise promote the invention's utilization by the public.

(B) Exclusive, co-exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the investment capital and expenditures needed to bring the invention to practical application or otherwise promote the invention's utilization by the public; and

(C) The proposed scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application, as proposed by the applicant, or otherwise to promote the invention's utilization by the public[.]

Number of years exclusive

Since the statute requires that the "scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the invention to practical application," we request a copy of the analysis, if any, that was done to consider how many years of exclusive rights were necessary to bring the invention to practical application. We also propose the following terms for the contract:

The exclusive rights will extend to five years from the first sale of a product receiving approval by the U.S. FDA, or until the license holder recovers at least \$1 billion in cumulative global sales from the product, whichever is shorter, and thereafter, the license will become non-exclusive. After the first five years of exclusivity, the NIH can extend the exclusivity by another 3 years, upon a showing that such extension is reasonable in light of the risk adjusted R&D costs to bring the product market, and the net revenues from sales.

KEI notes that the five year period, with possible extensions, follows NIH practice, prior to 1984, and that other NIH licenses have had terms shorter than the life of patent. For example, in October 2001, the NIH exercised an option to make the licenses for the AIDS drug DDI non-exclusive, ten years after the initial FDA registration (see: Videx® Expanding

Possibilities: A Case Study, NIH, National Institutes of Health Office of Technology Transfer, September 2003) in order to expand access to the drug, and to obtain lower cost supplies for federal programs.

The NIH could consider different time periods for exclusivity, but if the answer is always life of patent, no matter what the facts are, then the NIH is no longer meeting the requirements of 35 U.S.C. § 209 to ensure that the “scope of exclusivity is not greater than reasonably necessary.

Available to Public on Reasonable Terms

We ask the NIH to provide additional assurances that the products and/or services developed under this license be made available to the public at prices that are reasonable and affordable.

KEI suggests the following provision or something similar be included in the license to ensure that U.S. residents do not pay more for the invention than residents of other high income countries:

The NIH will normally expect the licensee to make products available to the public in the United States at prices no higher than the median price charged in the seven countries with the largest GDP, that have per capita incomes of at least half that of the United States.

KEI also suggests the license contain language which sets caps on the prices that can be charged. For example, we propose that the following language be inserted in the license:

In any case, and in addition to any other considerations of what constitutes a reasonable price, the license holder is expected to limit the cost of the products or services to U.S. residents to *no more than* the lesser of either (a) the average annual per capita income in the United States, or (b) the amount of the average annual per capita income in the United States, per quality adjusted life year (QALY) benefit of the product.

Developing Countries

If the geographic area includes worldwide rights, the products and/or services should be made available at affordable prices in developing countries, including in particular countries with per capita incomes that are less than one third of the U.S. per capita incomes.

The NIH should retain sufficient rights to provide non-exclusive licenses to the Medicines Patent Pool (MPP), in order to permit competitive supply by generic drug manufacturers for use in developing countries. Here we note that GSK has recently announced it has begun negotiations with the MPP to license the patents for its oncology products. Certainly the NIH

can be at least as sensitive to the health needs of patients living in developing countries as is the big pharma company GSK.

What analysis establishes an exclusive license is needed?

This has been mentioned above, but it merits elaboration. The NIH has not published any analysis that demonstrates an exclusive license to the company is necessary. We request that the NIH provide public evidence that an exclusive license is necessary for the development of the patented inventions, and there exists a written analysis which establishes that this evaluation has been done.

Calling for public comments on the license, but not providing the relevant information to evaluate the decision to make the license exclusive makes the public comment process ineffective.

The public cannot evaluate the decision to make the license exclusive, without knowing how the decision was reached to grant an exclusive license, and also, to evaluate the specific terms of the exclusive license, including, for example, the number of years of exclusivity, provisions addressing reasonable pricing, how the license addresses access in developing countries, or other public interest issues.

Transparency

KEI is also asking for more transparency regarding the costs of developing new products, uses of products and/or services, and the pricing, sales and royalty payments on products, uses of products and/or services.

We object to any license that is not made public. Moreover, all reports specified in the license, including those described in the license appendices, should be public. If the NIH insists on transparency (as was common practice and acceptable in earlier years), Kite would agree, given the potential value of the technology to the company. Note the NIH's invention may be worth several billion dollars, and companies share the texts of licenses with inventors when the information is material to share values.

We ask the NIH to create a requirement for annual reports on R&D outlays, including an obligation that the company reports the following for each clinical trial that tests products covered by the patents:

1. ClinicalTrials.Gov identifier
2. Phase
3. Conditions
4. Interventions
5. Title Acronym/Titles
6. Outcome Measures
7. Sponsor/Collaborators

8. Other Study IDs
9. Expenditure (for that year)

With regard to sales prices, we request an annual report that provides data on the following variables:

1. Units of sales, by country
2. Revenue for sales, by country

With regard to government subsidies for research, we request a report that provides data for the following, by year:

1. Grants and research contracts from government agencies, with data on the funding agency, the identifier of the grant or contract, and the amount of the grant or contract;
2. Tax credits associated with R&D for the product, including the U.S. orphan drug tax credit, broken out by the type of credit and the expenditure the credit was associated with (such as a specific trial); and
3. Other government R&D subsidies.

Sincerely

A handwritten signature in blue ink that reads "James Love". The signature is written in a cursive, flowing style.

James Love, Director
Knowledge Ecology International
1621 Connecticut Avenue, Suite 500, Washington, DC 20009
+1.202.332.2670, email:James.love@keionline.oprg, <http://keionline.org>