

EXCHANGE OF INFORMATION ON PENICILLIN

Exchange of notes at Washington January 25, 1946, with text of agreement

Entered into force January 25, 1946; operative from December 1, 1943

60 Stat. 1485; Treaties and Other
International Acts Series 1506

The Acting Secretary of State to the British Ambassador

DEPARTMENT OF STATE

WASHINGTON

January 25, 1946

EXCELLENCY:

Referring to the conversations which have been in progress between representatives of the Government of the United States of America and representatives of the Government of the United Kingdom of Great Britain and Northern Ireland with a view to the conclusion of an agreement between the two Governments on the principles applying to the exchange of information looking to the synthesis of penicillin, I have the honor to inform Your Excellency that the Government of the United States of America is prepared to enter into an agreement in accordance with the text enclosed herewith.

With particular reference to the provisions in Article II of the agreement, it is the understanding of the Government of the United States of America that the agreement is intended to and, when made effective, does confirm and formalize the terms on which, during the period December 1, 1943 to October 31, 1945, inclusive, scientific information pertaining to the purification, structure, or synthesis of penicillin, or a therapeutic equivalent, has been interchanged, to the same extent as though the agreement had been concluded and brought into force on the date of the commencement of that period.

Upon the receipt of a note from Your Excellency indicating that the agreement is acceptable to the Government of the United Kingdom of Great Britain and Northern Ireland, the Government of the United States of America will consider the agreement to be concluded and, in accordance

with Article VI thereof, the agreement will be deemed to have become effective on December 1, 1943.

Accept, Excellency, the renewed assurances of my highest consideration.

DEAN ACHESON
Acting Secretary of State

Enclosure:

Text of agreement.

His Excellency

The Right Honorable the EARL OF HALIFAX, K. G.,
British Ambassador.

AGREEMENT BETWEEN THE GOVERNMENTS OF THE UNITED STATES AND
OF THE UNITED KINGDOM ON THE PRINCIPLES APPLYING TO THE EX-
CHANGE OF INFORMATION LOOKING TO THE SYNTHESIS OF PENICILLIN

WHEREAS, the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland, declare that they are engaged in a common undertaking to secure as promptly as possible the production of an adequate supply of high quality synthetic penicillin, or a therapeutic equivalent, at reasonable prices; and,

WHEREAS, in furtherance of this common undertaking, the Government of the United States has entered into contractual arrangements with academic, industrial or governmental research workers in the United States to secure the effective participation of skilled scientists in a coordinated and concentrated effort synthetically to produce penicillin, or a therapeutic equivalent, including an arrangement for the exchange among the participants of information on the purification, structure, and synthesis of penicillin, or a therapeutic equivalent; and,

WHEREAS, the Government of the United States under these arrangements has, with respect to discoveries and inventions made in the course of the work pursuant to these arrangements, secured (a) the right to determine the relative value of the scientific contributions made to such discoveries and inventions by its participants, (b) the right to allocate among its participants the title to, and any and all rights in and under, patents covering such discoveries and inventions in such a manner as equitably to recognize their relative scientific contributions thereto, (c) the right to require the patentee of such discoveries and inventions to grant to the Government of the United States a non-exclusive, royalty-free license under any such patents for certain governmental purposes, and (d) the right to require the patentee of such discoveries and inventions to grant to others as may be determined to be in the national interest non-exclusive licenses at reasonable royalties; and,

WHEREAS, the Government of the United Kingdom has, for the same purpose and as part of the common undertaking, entered into similar arrangements with research workers in the United Kingdom; and,

WHEREAS, the Government of the United States and the Government of the United Kingdom, in order to increase the effectiveness of their common undertaking, have begun, for transmission to their respective participants, the interchange of scientific information pertaining to the purification, structure, or synthesis of penicillin, or a therapeutic equivalent; and,

WHEREAS, the Government of the United States and the Government of the United Kingdom now desire to formalize the terms on which such scientific information is being interchanged, and, in particular, desire both (a) to determine and recognize, in the allocation of the title to and rights in and under any and all patents covering discoveries or inventions relating to the purification, structure, or synthesis of penicillin, or a therapeutic equivalent, the relative value of the scientific contributions made to such inventions and discoveries by the participants of their respective Governments, and (b) to acquire, where deemed necessary to the national interest, the same right with regard to the other Government's participants as both Governments now have with regard to their own participants in the way of requiring the grant of licenses;

The two Governments have agreed as follows:

ARTICLE I

Definitions

For the purposes of this agreement, the following terms shall have the meaning herein given:

(a) "Penicillin" shall be deemed to mean any sulfur-containing antimicrobial compound, characterized by degradation to penicillamine, which may be obtained as a result of the growth of some strain of *Penicillium Notatum*.

(b) "Therapeutic equivalent" shall be deemed to mean any substance which exerts antimicrobial action, irrespective of the degree of its potency, substantially similar to that of penicillin, and which possesses a structure analogous to, homologous with, or derived from that of penicillin, or which on degradation can yield either (i) penicillamine or a homolog or an analog or a derivative thereof, or (ii) penaldic acid or a homolog or an analog or a derivative thereof.

(c) "American Participants" shall be deemed to mean those juridical persons, including Government departments and agencies, which have participated, are now participating, or may hereafter participate under contract, or other arrangement, in the program of research on the purification, structure, or synthesis of penicillin, or a therapeutic equivalent thereof, sponsored by the Government of the United States, acting through the Office of Scientific Research and Development.

(d) "British Participants" shall be deemed to mean those juridical persons, including Government departments, which have participated, are now participating, or may hereafter participate under contract, or other arrange-

ment, in the program of research on the purification, structure, or synthesis of penicillin, or a therapeutic equivalent thereof, sponsored by the Government of the United Kingdom, acting through the Medical Research Council.

(e) "Period of Exchange" shall be deemed to mean for the purposes of Article I (f) and Article II of this agreement the period beginning December 1, 1943, and ending October 31, 1945, both dates inclusive.

(f) "Patents" shall be deemed to mean those Letters Patent and/or applications therefor covering discoveries or inventions made during the Period of Exchange by the American Participants and/or the British Participants, as well as by their employees or other persons working under their direction, in furtherance of the program of research on the purification, structure, or synthesis of penicillin, or a therapeutic equivalent and subject to the contractual arrangements between said Participants and either the Government of the United States or the Government of the United Kingdom.

(g) "United States Patents" shall be deemed to mean all Letters Patent for which applications are made to or which are issued by the Government of the United States.

(h) "British Patents" shall be deemed to mean all Letters Patent for which applications are made to or which are issued by the Government of the United Kingdom.

(i) "Foreign Patents" shall be deemed to mean all Letters Patent for which applications are made to or which are issued by Governments other than those of the United States and the United Kingdom.

ARTICLE II

Exchange of Information

(a) Each Government will, during the Period of Exchange, furnish to the other Government all information pertaining to the purification, structure, and synthesis of penicillin, and/or a therapeutic equivalent, obtained by it or its Participants during or prior to the said Period of Exchange. This information will be furnished once each month and more often as the discovery of new information may warrant.

(b) Each Government will, during the Period of Exchange, transmit such information to its own Participants.

(c) Neither Government will, during the Period of Exchange, transmit or permit the transmission of, such information to persons who have not conferred upon their respective Government rights and powers with regard to Patents comparable to those conferred upon the Government of the United States by the American Participants, as exemplified in the form of Agreement annexed hereto as "Appendix A".

(d) Each Government will, during the Period of Exchange, classify all such information secret. After the Period of Exchange all and any information, whether patented or not, may be published at the desire of either Gov-

ernment, after consultation with the other Government, unless reasons satisfactory to both Governments against such a course are advanced by a Government or by a Participant in respect to any particular item or items of information.

(e) Each Government will make provision for maintaining in secrecy during the Period of Exchange any and all applications for Patents filed by its own Participants and will not permit such applications to be filed if secrecy cannot be maintained.

ARTICLE III

Disposition of Patents

(a) The Government of the United States will decide whether or not discoveries and inventions made by the American Participants shall be the subject of patent applications anywhere in the world.

(b) The Government of the United Kingdom will decide whether or not discoveries and inventions made by the British Participants shall be the subject of completed patent applications in Great Britain or of patent applications in any other country.

(c) The Government of the United States will appraise and determine the value of the contributions made by both the American Participants and the British Participants to discoveries and inventions covered by United States Patents.

(d) The Government of the United Kingdom will appraise and determine the value of the contributions made by both the American Participants and the British Participants to discoveries and inventions covered by British Patents.

(e) The Governments of the United States and the United Kingdom will jointly appraise and determine the value of the contributions made by both the American Participants and the British Participants to discoveries and inventions covered by Foreign Patents.

(f) The Government of the United States will, after consultation with the Government of the United Kingdom, determine as between all Participants, whether British or American, on the basis of the relative value of their contributions to discoveries and inventions covered by United States Patents; the disposition of the title to and the rights in and under any and all such United States Patents. The Government of the United Kingdom will accept these determinations as its own and take all such action as may be necessary to make these determinations fully effective with regard to British Participants.

(g) The Government of the United Kingdom will, after consultation with the Government of the United States, determine as between all Participants, whether British or American, on the basis of the relative value of their contributions to discoveries and inventions covered by British Patents, the disposition of the title to, and the rights in and under, any and all such

British Patents. The Government of the United States will accept these determinations as its own and take all action that may be necessary to make these determinations fully effective with regard to American Participants.

(h) The Government of the United States and the Government of the United Kingdom will jointly determine as between all Participants, whether British or American, on the basis of the relative value of their contributions to discoveries and inventions covered by Foreign Patents, the disposition of the title to, and the rights in and under, any and all such Foreign Patents. It is recognized by both Governments that, to the extent consistent with the principles of disposition set forth in this agreement and in the contracts between the Government of the United States and the American Participants, attached hereto as Appendix "A", and in comparable agreements between the Government of the United Kingdom and the British Participants, Foreign Patent rights should not be exercised to hinder export by any Participant to any Foreign Country of Synthetic Penicillin or a Therapeutic Equivalent.

(i) Except as provided in this agreement, each Government shall be the sole and final judge on all questions of fact which arise out of or pertain to any relations between it and its own Participants.

ARTICLE IV

Grant of Licenses

(a) The Government of the United Kingdom will, at the request of the Government of the United States, require British Participants owning or controlling United States Patents to grant a license upon appropriate terms to be determined by the Government of the United Kingdom and at a total royalty rate not in excess of 5% of the lowest net wholesale price of penicillin, or a therapeutic equivalent thereof, charged by the licensee, to persons or organizations designated by the Government of the United States.

(b) The Government of the United States will, at the request of the Government of the United Kingdom, require American Participants owning or controlling British Patents to grant a license upon appropriate terms to be determined by the Government of the United States and at a total royalty rate not in excess of 5% of the lowest net wholesale price of penicillin, or a therapeutic equivalent thereof, charged by the licensee, to persons or organizations designated by the Government of the United Kingdom.

ARTICLE V

Implementation

The Government of the United States and the Government of the United Kingdom will, jointly and severally, take such action, execute such documents, and make or obtain such assignments, transfers, and dispositions of such rights and property of every kind as may be necessary fully to effectuate

this Agreement and to enable the Government of the United States and the Government of the United Kingdom to carry out the principles and further the objectives of this common undertaking.

ARTICLE VI

Duration

This agreement shall be deemed to have become effective on December 1, 1943, and the obligations of both Governments hereunder shall continue in full force and effect, except as herein otherwise specifically provided, until the last of the Patents herein referred to shall expire.

APPENDIX "A"

Contract No. OEMcmr-
Symbol No.

MEMORANDUM OF AGREEMENT made this day of 1943, effective as of the 15th day of December, 1943, between THE UNITED STATES OF AMERICA (hereinafter called "the Government"), represented by the Director (hereinafter called "the Contracting Officer"), Office of Scientific Research and Development in the Office for Emergency Management, Executive Office of the President, and (hereinafter called "the Contractor").

WHEREAS, the adequate production of penicillin, a new drug derived from *Penicillium Notatum*, is essential to the effective prosecution of the war and the protection of the public health and welfare; and

WHEREAS, the present production of penicillin is limited because of the lack of adequate knowledge concerning (i) penicillin and (ii) the synthesis of penicillin or a therapeutic equivalent; and

WHEREAS, in order to prosecute the war effectively and protect adequately the public health and welfare it is necessary to increase the supply of penicillin, and to do so it is necessary, in the opinion of the Government, for the Government to (i) be informed of all presently known information regarding the purification and chemical structure of penicillin and (ii) coordinate or sponsor all research activities in the United States by public and private organizations looking toward the discovery of a method of synthesizing penicillin or a therapeutic equivalent; and

WHEREAS, the Contractor states that since it has been conducting studies and investigations concerning penicillin; and

WHEREAS, the parties desire that the Contractor continue to conduct studies and investigations, using, if necessary, penicillin made available under Government allocation orders, concerning the chemical structure of penicillin and the synthesis of penicillin or a therapeutic equivalent; and

WHEREAS, the Government intends to enter into agreements containing provisions substantially similar to those herein with other organizations which will conduct similar studies and investigations; and

WHEREAS, the Government desires to (i) make available to such organizations the information now possessed by the Contractor concerning the purification and chemical structure of penicillin, and (ii) provide for an interchange through the Government between the Contractor and such organizations of information hereafter discovered concerning purification and chemical structure of penicillin and the synthesis of penicillin or a therapeutic equivalent;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

ARTICLE 1. *Definitions.* "Penicillin" refers to any sulfur-containing antimicrobial compound, characterized by degradation to penicillamine, which may be obtained as the result of the growth of some strain of *Penicillium Notatum*. "Therapeutic equivalent" refers to any substance which exerts antimicrobial action, irrespective of the degree of its potency, substantially similar to that of penicillin, and which possesses a structure analogous to, homologous with, or derived from that of penicillin, or which on degradation can yield either (i) penicillamine or a homolog or an analog or a derivative thereof, or (ii) penaldic acid or a homolog or an analog or a derivative thereof. "Contracting Officer" refers to the present Contracting Officer and his successors in office. An "authorized representative" can act hereunder only in the limited respects and to the extent specified in provisions of this contract wherein the term "authorized representative" is specifically used. "Authorized representative" refers to any person designated as such by the Contracting Office, who initially so designates: the Chairman of the Committee on Medical Research.

ARTICLE 2. (a) *Subject Work.* The Contractor shall, with the utmost dispatch, supply the necessary personnel and facilities for and conduct studies and experimental investigations in connection with (i) the chemical structure of penicillin and (ii) the synthesis of penicillin or a therapeutic equivalent. The Contractor shall also (iii) report to the Contracting Officer or an authorized representative immediately after the execution hereof its present knowledge concerning the purification and chemical structure of penicillin, including any such knowledge received under agreements with other organizations, (iv) report the progress of such studies and investigations on the 15th day of each month during the term hereof and from time to time upon discovering new information, (v) keep books and records showing the status of such studies and experimental investigations, and (vi) furnish to the Contracting Officer or an authorized representative a complete and final report of its findings and conclusions. Such reports shall be furnished in such quantity and form as may be required by the Contracting Officer or an authorized representative. The Contractor's undertakings under this paragraph are hereinafter called "the subject work."

(b) *Termination.* The subject work shall terminate either (i) on December 1, 1944, or (ii) upon the termination of the present hostilities between the Government and Germany and Japan, whichever period is longer, or (iii)

upon the earlier satisfactory completion of the subject work, but the rights and obligations of the parties hereto with respect to patent rights governed hereby shall continue during the life of such patent rights.

(c) *Acceleration of Termination.* The Contracting Officer may at any time advance the date fixed under paragraph (b) by giving the Contractor thirty (30) days' notice in writing that the subject work shall terminate at a specified earlier date.

(d) *Inspections.* The Contracting Officer or his authorized representatives may inspect the subject work and records thereon at all reasonable times.

(e) *Subcontracts.* The Contractor shall not enter into subcontracts involving research or development in connection with the subject work without obtaining the written approval of the Contracting Officer as to the substance and form thereof. The Contractor shall refer each prospective subcontract which might involve such research and development to the Contracting Officer or an authorized representative, who shall determine whether or not such research and development is involved.

(f) *Exchange of Information.* The Contracting Officer or his authorized representative shall from time to time with the utmost dispatch disclose to the Contractor information theretofore disclosed to the Government concerning the progress of similar studies and experimental investigations made by or on behalf of (i) other Government contractors, (ii) Government agencies, and (iii) other Governments. The Contracting Officer or an authorized representative is hereby authorized to disclose the progress of the subject work hereunder to such other Government contractors, Government agencies and the Governments of countries the defense of which the President deems vital to the defense of the United States under the terms of the Act of March 11, 1941,¹ as amended (hereinafter called "Lend-Lease Governments"); *Provided*, That, prior to making any such disclosures to such other Government contractors and Government agencies, the Government shall enter into agreements with them containing provisions substantially similar to those herein, and, prior to making any such disclosures to Lend-Lease Government, the Government shall obtain assurances therefrom to the effect that such information will not be further disclosed by such Lend-Lease Government prior to entering into an agreement with each recipient of such information to govern such disclosure containing provisions substantially similar to the provisions of Article 3 (b) hereof.

ARTICLE 3. *Patent Provisions.* (a) The Contracting Officer shall have the right to require the Contractor to grant, subject to the payment of royalties at reasonable rates to be determined by the Contractor but not in excess of five per cent (5%) of the lowest net wholesale price of penicillin or a therapeutic equivalent charged by the licensee, to persons, corporations or other organizations designated by the Contracting Officer, non-exclusive licenses to make, have made, use, sell or otherwise dispose of, material, substances, articles, or apparatus, and to use processes, embodying the subject matter of any or all

¹ 55 Stat. 31.

United States and foreign patents or applications for patents owned or controlled by the Contractor covering patentable discoveries or inventions heretofore or hereafter made and concerned with or resulting from the subject work and not attributable in any way to information disclosed hereunder to the Contractor. The Contractor hereby grants to the Government a non-exclusive, irrevocable, royalty-free license, to make, have made, and use, for military, naval, and national defense purposes, and to sell or otherwise dispose of in accordance with law, material, substances, articles, or apparatus, and to use processes, embodying the subject matter of any or all patent rights covered by this paragraph (a).

(b) The Contracting Officer shall determine whether or not discoveries or inventions hereafter made are attributable in whole or in part to information disclosed hereunder to the Contractor. Whenever any patentable discovery or invention which is attributable in whole or in part to information disclosed hereunder to the Contractor is made by the Contractor, its employees, or other persons working under its direction, in the course of the subject work, the Contracting Officer shall have the sole power to determine whether or not a patent application shall be filed, and to determine, as between the Contractor and the persons, corporations or other organizations which contributed the information to which the patentable discovery or invention is attributable in whole or in part, the disposition of the title to and the rights, including without limitation licenses, royalty-free or otherwise, under any application or patent, United States or foreign, that may result; *Provided*, That the Government shall be granted a non-exclusive, irrevocable, royalty-free license, to make, have made, and use, for military, naval, and national defense purposes, and to sell or otherwise dispose of in accordance with law, material, substances, articles, or apparatus, and to use processes, embodying the subject matter of any or all patent rights covered by this paragraph (b); *Provided, further*, That the Contracting Officer shall retain the right to require the patentee to grant, subject to the payment of royalties at reasonable rates to be determined by the patentee but not in excess of five per cent (5%) of the lowest net wholesale price of penicillin or a therapeutic equivalent charged by the licensee, to persons, corporations or other organizations designated by the Contracting Officer, non-exclusive licenses to make, have made, use, sell or otherwise dispose of, material, substances, articles or apparatus, and to use processes, embodying the subject matter of any or all patent rights covered by this paragraph (b).

(c) The judgment of the Contracting Officer on matters to be determined under this Article shall be accepted as final, and the Contractor, for itself, its employees, and other persons working under its direction, agrees that the inventor or inventors will execute all documents and do all things necessary or proper to carry out the judgment of the Contracting Officer.

(d) Any and all licenses granted under the provisions of this Article

shall be restricted to the manufacture, use, sale or other disposition of penicillin or a therapeutic equivalent.

(e) The Contracting Officer shall recommend to the Commissioner of Patents any modification necessary to carry out the provisions of this Article of any secrecy orders issued against applications for patents covered by this Article.

ARTICLE 4. *Security Provisions.* (a) During the continuance of the present unlimited National Emergency, the Contractor shall not disclose any information concerning this contract or obtained as a result of the performance of its undertakings hereunder to any person, except employees assigned to such work, without the written consent of the Contracting Officer or an authorized representative. Subsequent to the termination of such Emergency, disclosure of such information shall be governed by the applicable laws and regulations governing the disclosure of classified information. Disclosure of information concerning this contract or such work to any person not entitled to receive it, or failure to safeguard all such classified matters within the Contractor's control, may subject the Contractor, its employees and subcontractors to criminal liability under the laws of the United States, including (i) 50 U.S.C. Chap. 4, (ii) 50 U.S.C. 45-45d, as supplemented by Executive Order 8381, dated March 22, 1940, and (iii) 35 U.S.C., 42c.

(b) The Contractor shall immediately submit a confidential report to the Contracting Officer whenever for any cause it has reason to believe that there is an active danger of espionage or sabotage affecting any of the subject work.

(c) The Contractor shall not employ any alien on or permit any alien to have access to the subject work or any plans, specifications or records relating to its undertakings hereunder without the written consent of the Contracting Officer as to each such alien.

(d) The Contractor, whenever requested by the Contracting Officer or an authorized representative, shall report to the Contracting Officer the citizenship, country of birth or alien status of any or all of its employees at the site of or having access to any of the subject work.

(e) The Contractor shall not employ or continue to employ on, and shall exclude from the site of, any of the subject work any person or persons designated in writing by the Contracting Officer or an authorized representative for cause as undesirable to have access to such work.

ARTICLE 5. *Public Policy Provisions.* (a) The Contractor warrants that it has not employed any person to solicit or secure this contract upon any agreement for a commission, percentage, brokerage or contingent fee. Breach of this warranty shall give the Government the right to annul the contract or, in its discretion, to deduct from the contract price or consideration the amount of such commission, percentage, brokerage or contingent fee. This warranty shall not apply to commissions payable by the Contractor upon contracts or sales secured or made through bona fide established commercial

or selling agencies maintained by the Contractor for the purpose of securing business.

(b) No Member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this contract or any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

(c) The Contractor shall not discriminate in any act performed hereunder against any person on the ground of race, creed, color or national origin, and shall include such provision in each subcontract.

ARTICLE 6. *Disputes.* All disputes concerning questions of fact arising hereunder shall be decided by the Contracting Officer, and his decisions and findings thereon shall be binding on the Contractor.

IN WITNESS WHEREOF, the Government and the Contractor have caused this contract to be signed and sealed, intending to be legally bound thereby.

THE UNITED STATES OF AMERICA

Witnesses:

By _____ (SEAL)
*Director, Office of Scientific
 Research and Development.
 (Contracting Officer)*

By _____ (SEAL)
(Contractor)

The British Ambassador to the Acting Secretary of State

BRITISH EMBASSY,
 WASHINGTON, D.C.

25th January, 1946

No. 62

SIR,

I have the honour to acknowledge your Note of today's date informing me that the Government of the United States of America is prepared to conclude with the Government of the United Kingdom of Great Britain and Northern Ireland an agreement on the principles applying to the exchange of information looking to the synthesis of penicillin, in accordance with the text enclosed therewith.

2. On instructions from His Majesty's Principal Secretary of State for Foreign Affairs, I have the honour to state that the terms of agreement contained in the text enclosed with your Note are acceptable to the Government of the United Kingdom and that, in accordance with the suggestion made in the

third paragraph of your Note, the Government of the United Kingdom considers the agreement as concluded between the two Governments on this date.

3. By virtue of Article VI thereof, the agreement is deemed to have become effective on December 1, 1943, and with particular reference to the provisions in Article II, it is the understanding of the Government of the United Kingdom that the agreement confirms and finalizes the terms on which, during the period December 1, 1943, to October 31, 1945, inclusive, scientific information pertaining to the purification, structure, or synthesis of penicillin, or a therapeutic equivalent, has been interchanged to the same extent as though the agreement had been concluded and brought into force on the date of the commencement of that period.

I have the honour to be, with the highest consideration, Sir,
Your most obedient, humble Servant,

HALIFAX

The Honourable DEAN ACHESON,
Acting Secretary of State of the United States,
Washington, D.C.