外　国　語

次の英文は *European Molecular Biology Organization Reports*, vol.2, no.5, 2001 に掲載された記事です。この文章をよく読んで，問題 1 から 5 に答えなさい。

解答は解答用紙の指定された欄に記入すること。

＊のついている語句の注は問題のあとに示されています。

The ultimate ethical standard among the medical profession demands that the physician use every means possible to cure the patient's illness—but does this apply in a clinical trial, which is understood to be experimental, not treatment? In a clinical trial, tension exists at the beginning between gaining knowledge that can be used in the longer term to benefit the public health, and the basic right of the patient to receive treatment.

For the scientific profession, the ultimate standard is to produce results that withstand scrutiny(ア). For physicians and researchers, the 'gold standard' in testing new drugs is a placebo-controlled* study in which some of the patients receive no treatment at all. These standards present an ethical dilemma as drug-approval agencies tend to lean toward the need for clear scientific data, which is best gained when a drug is tested against a control, or placebo. Furthermore, it becomes harder to convince patients in First World countries to participate in drug trials when there may be a 30 - 50 % chance of receiving only a sugar pill instead of a helpful medicine.

As a consequence, drug companies are looking increasingly to Third World countries to conduct placebo-controlled trials, and therefore raising much dissent in the medical community, with cries of 'medical imperialism'.

This issue has heated up following the World Medical Association (WMA)* revision in October 2000 of its guidelines, known as the Declaration of Helsinki. First issued in 1964 as the successor to the Nuremberg Code, which was created in response to Nazi doctors' abuses during World War II, the Declaration is generally

recognised as a universal foundation of human research ethics, although it does not have the force of law. The new version prohibits the use of placebos when an approved treatment exists, stating that the 'benefits, risks, burdens and effectiveness of a new method should be tested against those of the best current preventive, diagnostic* and therapeutic methods' and that every patient 'should be assured of the best proven diagnostic and therapeutic method.'

The most recent revision was the result of an AIDS drug trial, known as 076, conducted in Thailand and Africa in the mid-1990s, in which pregnant women were given either a placebo or AZT* to determine whether a low-dose treatment could prevent transmission of the disease to their(a) infants. The alternative would have been a non-inferiority trial, in which a drug candidate is tested against an approved medicine; the problem is that such trials may produce results that are more difficult to interpret than placebo-controlled studies.

Due to the accepted ethical standard that one must treat a patient with a life-threatening disease, or not expose her or her offspring to undue risk, trial 076 would have been forbidden in the USA and Europe. But its sponsors, the US Centers for Disease Control and the US National Institutes of Health maintained that it should be permitted in developing countries, since women in these regions generally have no access to anti-HIV medicines. Hence, their(b) thinking was that a 50 : 50 chance of treatment would be better than no treatment at all, and they argued that the treatment being tested was precisely for use in developing nations where healthcare is minimal. According to an opposing view, 'residents of poor, post-colonial countries must be protected from potential exploitation in research. Otherwise the terrible state of health care in these countries can be used to justify studies that could never pass the ethical standard of the sponsoring country,' maintained Peter Lurie from the Public Citizen Health Research Group.

While the EU and Japan strongly support the revised Declaration, the US Food and Drug Administration (FDA)*, the agency responsible for approving new drugs in the USA, has not yet taken a clear stand. In March 2001, the FDA issued a report in

which it stated that 'the FDA has not taken action to include this revision into its regulations.' Furthermore, it notes 'that the action of the World Medical Association did not change FDA regulations.' Paradoxically, the document also states that the FDA 'will accept a foreign clinical study only if the study conforms to the ethical principles contained in the Declaration of Helsinki, here referring to the previous version from 1989, or to laws of the country in which the research is conducted—whichever provides greater protection of human subjects.' In January 2001, the FDA held an internal meeting entitled, 'Use of placebo-controls in life-threatening diseases: Is the developing world the answer?' The subject of the discussion was a placebo-controlled study designed by Discovery Labs, a drug company in Pennsylvania, to be conducted in Latin America, to test a new surfactant* to treat premature infants* with respiratory distress syndrome (RDS)*, a life-threatening condition.

According to Robert Capetola, president of Discovery Labs, previous non-inferiority trials of other drugs had yielded ambiguous results, although they had ultimately been approved, so it was now necessary to test its(c) drug, Surfaxin, against a placebo. 'We had in mind several types of trials and conducted about nine months of discussion with the FDA,' said Capetola. Indeed, FDA documents state that 'a non-inferiority surfactant RDS European trial versus another surfactant is also planned by the sponsor.'

Furthermore, as an incentive for the countries that Discovery was targeting for the placebo-controlled trials, the company proposed to build neonatal* units in areas that lacked them and provide its drug for slightly above the production cost for 10 years, explained Capetola. One such unit(d) has already been built, he added. Capetola believes that the proposed placebo-controlled trial in Latin America was ethical because relatively few infants born with immature lungs are treated in that region. 'Effectively, in these nations, 80 - 90 % of those needing the drug do not receive any treatment,' he said, adding that representatives from a number of developing countries had asked Discovery to build neonatal units and conduct trials in their countries.

But, it is the regulatory agency that decides whether to accept the results of a placebo-controlled study or to demand a non-inferiority study from the drug's sponsor. And one of the strongest supporters of placebos is Robert Temple, Director of Medical Policy at the FDA's Center for Drug Evaluation and Research. Anticipating the Declaration's coming revision, Temple published a two-part article in September 2000 in the *Annals of Internal Medicine*, laying the groundwork for a scientific defence of placebo use in most trials. Temple—and most scientists—believe that placebo-controlled trials yield the strongest data in drug testing, and, therefore, in all but the most life-threatening situations, such a design (e) is necessary. He said that 'the revised Declaration is too rigid, and does not distinguish between the use of placebos in conditions such as headache, hair loss, allergies, heartburn, or other non-life-threatening conditions that do not place patients who have given their informed consent at a risk of damage or death.' In summary, for the FDA, public health needs in medical research in non-life-threatening situations must receive priority over the individual's right to treatment in a trial, Temple maintains.

In contrast, the World Medical Association holds that the rights of individual patients must always come before the needs of science, and, if not, there is a risk of research abuses like those in the AIDS trials and Nazi Germany, Delon Human, head of the WMA, has said. In other words, ethics and protection of the individual patient (イ) must take priority over the needs of science and public health. 'When a clear-cut result is reached in one or more placebo-controlled superiority trials, one ought not to undertake placebo-controlled trials,' Leroy Walters, Director of the Kennedy Institute of Ethics at Georgetown University, said. 'The next step should be an active control equivalence trial,' he added. Indeed, when the Harvard School of Public Health conducted a randomised equivalence trial of AZT in overseas patients, they reproduced the results of the previous placebo-controlled trial. 'In this case, all patients benefited by being in the study,' Walters said, although he admits that sometimes, some scientific information may be sacrificed in equivalence trials in the name of ethical research.

So, with the FDA's defence of the use of placebos in most circumstances, and the increase of overseas trials conducted by US drug companies, the dispute promises to continue. In June 2001, the new Office for Human Research Protections (OHRP) was created at the US Department of Health and Human Services, replacing the Office for Protection from Research Risks. In January 2001, OHRP's first director, Greg Koski, established a new office to oversee ethical problems caused by conducting trials in developing nations. (ウ) It may be just a matter of time before the USA decides to uphold the revised Declaration of Helsinki or challenge it.

Adapted from Vicki Brower (2001)

問　題

1 ***What do the following words and expressions, which are underlined in the text, refer to ? Answer in English.***

(a) their

(b) their

(c) its

(d) One such unit

(e) such a design

2 ***Decide whether the following statements are true (T) or false (F) and circle the correct answer.***

1) Nazi doctors were punished according to the Declaration of Helsinki.

2) The revised Declaration of Helsinki is unanimously accepted as the defining document on ethical standards related to drug testing.

3) The results of the testing of AZT in Africa and Thailand were ambiguous since a non-inferiority trial was used, rather than a placebo-controlled trial.

4) The US Centers for Disease Control supports studies, such as drug trial 076, where placebos are used in research in Third World Countries.

5) Robert Temple thinks that the use of placebos is essential to get the most useful data in drug testing research.

3 ***Answer the following questions in English.***

1) Why do some researchers prefer not to use non-inferiority trials?

2) Why do some drug companies say it is ethical to conduct placebo-controlled trials in Third World countries?

3) According to Leroy Walters, after a clear result of effectiveness of a drug in a placebo-controlled trial is found, what type of trial should be used in the next experiment, and what is the advantage of that type of trial?

4 下線部(ア)～(ウ)を日本語に訳しなさい。

5 この文章で指摘されている，現代の医療における問題点はどのようなものですか。「医療帝国主義」，「ヘルシンキ宣言」，「アメリカ食品医薬品局」という3つの言葉を必ず使って，600字以内でまとめなさい。

注

AZT: アジドチミジン(azidothymidine)。エイズ治療用に用いられる抗ウイルス薬のひとつ。

diagnostic(*adj.*)＜diagnosis: 診断

neonatal: 新生児の(生後4週間未満)

placebo: プラセボ。新薬テストの対照剤として用いられる有効成分のない偽薬。

premature infants: 未熟児

respiratory distress syndrome(RDS): 呼吸窮迫症候群。新生児，特に未熟児に見られる呼吸障害の総称。

surfactant: 界面活性物質

US Food and Drug Administration(FDA): アメリカ食品医薬品局

World Medical Association(WMA): 世界医師会