第 39 回バイオ 問題・原文ファイル

★★★ ＜第 39 回知的財産翻訳検定試験【第 19 回英文和訳】＞ ★★★

≪バイオ分野≫

【解答にあたっての注意】

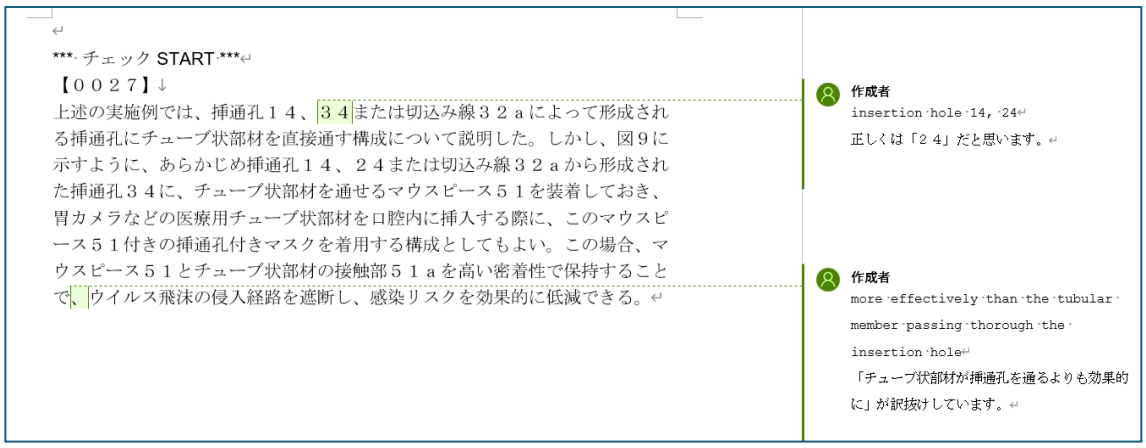
１．問題の指示により、「翻訳課題」と「チェック課題」があります。翻訳課題では翻訳し、チェック課題では既存の訳文をチェックしてください。解答は別紙「解答ファイル」に記載してください。

２．翻訳が求められる箇所は、*** 翻訳 START ***から*** 翻訳 END ***までの範囲です。

３．チェックが求められる箇所は、*** チェック START ***から*** チェック END ***までの範囲です。チェック対象の訳文は「解答ファイル」に記載されています。

４．チェック課題の解答方式

- 訳文の編集はせずに、訳文の不適切な箇所を指摘したうえで、正しい訳とその根拠を記載した「チェックコメント」を作成してください。
- チェックコメントの記載方式
  ①「解答ファイル」の該当箇所に Word コメント機能「吹き出し」で書く
  例：



  ②「解答ファイル」ではなく別途「チェックコメント」ファイルを作成しそちらに書く

  例：

受験番号：
氏名：
科目：機械工学

チェックコメント

問２
段落【００２７】
和訳の１行目「挿通孔１４、３４」
原文は「insertion hole 14, 24」ですので、「挿通孔１４、２４」の誤りだと思います。

問２
段落【００２７】
和訳の８行目
原文の「more effectively than the tubular member passing thorough the insertion hole」が訳抜けしています。「ウイルス飛沫の侵入経路を遮断し」の直前に「チューブ状部材が挿通孔を通るよりも効果的に」と入れるべきだと思います。

①②のどちらでも結構です。②の場合はファイル名を「チェックコメント（受験番号）」とし、対象箇所が分かるよう行や段落を明記してください。

５．全体の解答字数に特に制限はありません。適切な箇所で改行してください。

６．課題文に段落番号がある場合、これを訳文に記載してください。

７．設問は複数あります。それぞれの設問の指示に従い、すべて解答してください。

問１．以下の背景技術の記載を和訳してください。

***** 翻訳 START *****

[0008] The ability to modulate the immune system offers the prospect of treating wide range of conditions including those caused by inflammation, cancer, and viral infections. Beyond its established role in vaccine development, immunomodulation has therapeutic potential for various conditions including autoimmunity and cancer, as well as inflammatory including metabolic disorders, fibrotic and infectious diseases.

[0009] The immune cells play a crucial role in the tumor microenvironment (TME). The tumor-infiltrating immune cells are involved in the regulation of tumor development, progression, and response to treatment. The cellular and molecular profile of the immune TME impacts the disease response to therapy and its outcome by regulating the balance between suppressive versus cytotoxic responses in the vicinity of the tumor [15]. Specific immune cells, such as T cells and natural killer cells, can help suppress tumors' growth and contribute to the elimination of cancer cells. Conversely, the accumulation of immunosuppressive immune cells, such as regulatory T cells and myeloid-derived suppressor cells, can create an environment permissive to tumor growth and progression. The balance between immune-stimulating and immune-suppressive cells in the tumor microenvironment is crucial to the success of immunotherapy and other cancer treatments, Therefore, the ability to manipulate the complex interplay between immune cells and the tumor microenvironment is crucial for the development of more effective cancer therapies.

***** 翻訳 END *****

問２．以下の実施形態の訳文チェックをしてください。

***** チェック START *****

[0344] In some embodiments, a target of the nucleotide in a peptide oligonucleotide complex may be a central nervous system (CNS) target, such as a gene or pathways for which familial mutations are associated with a high risk of onset of neurodegenerative diseases. If disease is dominant (gain of function), the gene's transcript itself may be the target. If a disease is recessive (loss-of-function), a transcript or an ortholog may be modified to replace the lost function. For example, the gene target SMN2 may be targeted to replace loss of SMN1 function by altering splicing of SMN2 to convert the semi-functional ortholog to a fully functional replacement for SMN1. If the disease is associated with protein aggregation, clearing a portion of the target protein may be sufficient to alleviate symptoms of the disease. For example, targeting the poly-CAG (encoding poly-Q) expanded region of exon 1 of the aggregating form of Huntingtin may be used to achieve allele specificity for mutant Huntingtin over wild type Huntingtin. Peptide oligonucleotide complexes described herein (e.g., a peptide oligonucleotide complex comprising a TfR-binding peptide and a nucleotide that binds a gene target mRNA) that target CNS gene targets may be used to treat various neuronal or neurodegenerative disorders such as hereditary neurodegeneration, Huntington's disease, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis (ALS), frontotemporal dementia (FTD), epilepsy, neurodevelopmental disorders, and Dravet syndrome.

***** チェック END *****

問３．以下の実施例の記載を和訳してください。

***** 翻訳 START *****

[0161] Bispecific binding reagents can permit the selective ablation of human prostate cancer cells in vitro. STEAP1 is highly expressed on the cell surface of the human prostate cancer cell line LNCaP. Compared to LNCaP cells, human lung cancer NCI-H23 (H23) cells seem to express substantially lower STEAP1 mRNA and protein levels. Fold-change differences of the transcript levels may be calculated from the GENT U133A data: Based on four H23 samples and two LNCaP/LNCaP Clone FGC samples, STEAP 1 mRNA levels are 25-fold higher in LNCaP than in H23 cells. By comparing the STEAP 1 protein levels of H23 cells shown in Figure 3A of Hayashi et al, J Transl Med, 9: 191, 201 1 with those of LNCaP cells depicted in Figure 6A of WO 01/40276, STEAP 1 protein levels also appear to be substantially higher in LNCaP than in H23 cells. Given such differences, one would assume that TCT001 mediates a higher degree of cytotoxicity towards LNCaP than towards NCI-H23 cells. This hypothesis is confirmed by incubating serially diluted TCT001 with pre-activated human T cells and LNCaP or NCI-H23 target cells at a pre-established effector to target (E/T) cell ratio of 20:1. After four hours of treatment, cell viability was measured via a nonradioactive enzymatic assay.

[0162] The concentration of an anti-cancer agent that lyses 50% of the tumor cells relative to the maximal number of cancer cells that can be killed by the drug (at higher concentrations) is referred to as EC50 value.

***** 翻訳 END *****

第４問　以下の特許請求の範囲の記載を和訳してください。

***** 翻訳 START *****

1. A pharmaceutical composition comprising an expanded population of immunosuppressive regulatory T-cells and a pharmaceutically acceptable parenteral vehicle for administration by injection, wherein the expanded population of immunosuppressive regulatory T-cells is obtained according to a method comprising:

screening a sample comprising human T cells for the levels of cell surface expression of a CD4 marker and a CD127 marker to detect $CD4^{+}CD127^{lo/-}$cells, wherein the $CD4^{+}CD127^{lo/-}$cells have reduced or no levels of cell surface-expressed CD127 compared to other cells in the sample expressing greater amounts of CD127,

isolating the $CD4^{+}CD127^{lo/-}$cells from a sample to provide an isolated population of immunosuppressive regulatory T-cells,

expanding the isolated T-cell population of immunosuppressive regulatory T-cells to obtain the expanded population of immunosuppressive regulatory T-cells, and

formulating the expanded population of immunosuppressive regulatory T-cells with a pharmaceutically acceptable parenteral vehicle for administration by injection, wherein the vehicle comprises one or more additives in an effective amount to maintain isotonicity, physiological pH, or stability.

8. The pharmaceutical composition of claim 1, wherein the CD4+$CD127^{lo/-}$cells are cells that fall below the 50th percentile of fluorescence intensity for cells in the sample when contacted with a fluorescently labeled anti-CD127 antibody.

13. The pharmaceutical composition of claim 1, wherein the expanding step comprises contacting the isolated population of immunosuppressive regulatory T-cells with an antigen-specific or non-specific T cell receptor (TCR) stimulatory agent and a costimulatory agent.

***** 翻訳 END *****