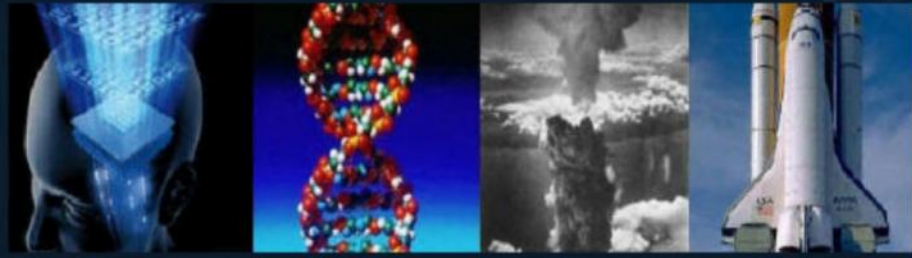


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The Changes is Mentioned by Red Highlight

4-13

Mohammadhossein Setayesh, Javad Hayati, Somayyeh Hosseini Nia and Golamreza Rezaei

Abstract:

The purpose of this paper is to examine relationship between the financial restatements and the auditor change in listed firms of Tehran Stock Exchange. So this study tries to answer this question that: has financial restatement any impact on auditor change. We include 66 firms listed in Tehran Stock Exchange during the period 2006 to 2012 as our study sample. Multivariate logistic regression analysis was used to test research hypothesis. Statistical hypothesis test results indicate that there is not any significant relationship between financial restatements and its intensity and audit change. This result points to difference in structure of audit firm's choice of customer by Iranian audit firms.

Keyword: financial restatements, financial restatements intensity, auditor change, the Tehran Stock Exchange.

Wording and Technical Terms' Translation

14-20

Gaida Al Rawashdeh

Abstract:

The goal of this study is to investigate the use of wording and technical terms translation from Arabic into English in postgraduate abstracts produced by students doing their Masters in Biology at Mu'tah University in Jordan for the academic year 2014/2015. This qualitative and quantitative research included 15 postgraduate abstracts as the sample of the study. The sample of this research was selected randomly. The researcher used two research instruments to elicit data from the participants. This involved textual analysis and semi-structured interview. The findings of this research showed that translator's background knowledge and lack of vocabularies have significant effect on the quality of text translation, particularly when translating technical terms in scientific texts such as biology abstracts. This study recommends that further future research be conducted to confirm and support the findings the current research and enrich body knowledge in the area of teaching translation in an EFL context in Jordan.

Keywords: Biology, Vocabulary, Translation, Scientific Text, Abstracts and Background Knowledge.

The Analysis of Effective Factors on Internet

21-31

Zeinab Bahmani

Abstract:

The main objective of this research is to analyze effective factors in internet shopping from the viewpoint of academic products shoppers in Tehran Metropolitan city. This research because of its application objective and the method of research, is descriptive and causative because in addition of describing the current situation, it has also made an attempt to discover the connection between the variables of the research since the expecting results can improve the operation of internet – based stores, this research is of academic products at Tehran metropolitan city who have shopped via internet at least once. Since the volume of the sample of the pool is unlimited, its formula is shown below in which for the determination of the volume, 30 questionnaires in the respected pool were distributed and after the calculation of the mean and standard deviation and placing them in the perspective formula the volume of the sample was calculated. The method used in this research was of clustering sampling method and improbable sampling is at hand. Thus, the city of Tehran was divided into four sections of north, south, east and west. Then, to be sure about the rate of return, the questionnaires, for each section 5 extra questionnaires were distributed in which the views of academic products purchasers about the variables of the research were measured. In this research, the questionnaires were used for the collection of the data. The data were analyzed after collecting the data using SPSS and LISREL software. The results indicate the usefulness and the easiness of using the internet.

Keywords: Cognitive usefulness, Easy use of the Internet, The Nature of the process of doing the Job.

Factors Affecting the Acquisition of CD34+ Cells from Umbilical Cord Blood

32-40

Tono Djuwantono, Ike Kristina, Ahmad Faried, Cynthia Retna Sartika, Bayu Winata Putera, Yanni Dirgantara and Firman F. Wirakusumah

Abstract:

Sufficient quantity of umbilical cord blood (UCB) affects the success of hematopoietic stem cell transplantation. This study was aimed to determine factors, which may influence the quantity of UCB. Those factors, in turn, might be controlled to optimize the acquisition of UCB. UCB samples were taken from 34 subjects, who delivered in Mother and Child Hospital Limijati, Bandung. Subjects were at term pregnancy and delivered either spontaneously or via caesarean section (C-section). Samples were phenotypically evaluated for stem cell potential with flow cytometric analysis for cell surface protein CD34+ marker. Functional characteristic of UCB hematopoietic stem cells were tested in vitro using colony forming unit (CFU) assay. Data gathered were analyzed statistically. Significant positive correlations were found between several parameters. Those correlations were between the volume of UCB and the number of total nucleated cells (TNC) ($r = 0.548$, $p < 0.001$), the concentration of CD34+ cells and the number of TNC ($r = 0.706$, $p < 0.001$), the hemoglobin level of the subject before delivery and the number of TNC ($r = 0.387$, $p < 0.05$), and the hemoglobin level of the subject before delivery and the concentration of CD34+ cells. The number of formed CFU was positively

Factors Affecting the Acquisition of CD34+ Cells from Umbilical Cord Blood

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Abstract

Sufficient quantity of umbilical cord blood (UCB) affects the success of hematopoietic stem cell transplantation. This study was aimed to determine factors, which may influence the quantity of UCB. Those factors, in turn, might be controlled to optimize the acquisition of UCB. UCB samples were taken from 34 subjects, who delivered in Mother and Child Hospital Limijati, Bandung. Subjects were at term pregnancy and delivered either spontaneously or via caesarean section (C-section). Samples were phenotypically evaluated for stem cell potential with flow cytometric analysis for cell

surface protein CD34+ marker. Functional characteristic of UCB hematopoietic stem cells were tested in vitro using colony forming unit (CFU) assay. Data gathered were analyzed statistically. Significant positive correlations were found between several parameters. Those correlations were between the volume of UCB and the number of total nucleated cells (TNC) ($r = 0.548$, $p < 0.001$), the concentration of CD34+ cells and the number of TNC ($r = 0.706$, $p < 0.001$), the hemoglobin level of the subject before delivery and the number of TNC ($r = 0.387$, $p < 0.05$), and the hemoglobin level of the subject before delivery and the concentration of CD34+ cells. The number of formed CFU was positively correlated with the number of TNC ($r = 0.425$, $p < 0.05$). However, it was not positively correlated with the concentration CD34+ cells. UCB with higher concentration of CD34+ cells can be acquired with larger volume of UCB and higher number of TNC. The amount of formed CFU was influenced by total number of TNC but it is not affected by concentration of CD34+ cells. Further investigations are needed to determine factors, which influence the volume of UCB and the number of TNC.

Keywords: CD34+, colony forming unit (CFU), umbilical cord blood (CB).

Introduction

Umbilical cord blood (UCB) is one of the potential sources of hematopoietic stem cells. Earlier studies have shown that UCB is more beneficial as a source of hematopoietic stem cells compared to peripheral blood. Compared with an adult peripheral blood, UCB has a larger number of progenitor cells¹⁻³. Also, the increment of the number of colony-forming unit-granulocyte-macrophage (CFU-GM) and colony-forming unit-granulocyte, erythrocyte, monocyte, megakaryocyte (CFU-GEMM) was shown to be higher in samples derived from UCB compared with samples derived from adult peripheral blood³⁻⁷. Furthermore, the CFU-GM and CFU-GEMM division rate were higher in samples obtained from UCB^{2, 8}. Studies have found that the success rate of stem cell transplantation is correlated with the total number of formed CFU; the higher number, the higher the success rate^{9, 10}. Additionally, stem cells from UCB are easier and non-invasive to obtain, and they pose lower risk of graft-versus-host disease and infectious diseases transmission¹¹⁻¹³.

Considering the aforementioned advantages, UCB can be considered as a potential source of stem cells for transplantation. The success of stem cell transplantation is influenced by several parameters, such as the number of total nucleated cells (TNC), the number of CD34+ cells, and the number of CFU formed^{9, 10, 14, 15}. There is a consensus, which stated that, for stem cell transplantation, the number of TNC needed is 1.5×10^7 cells/KgBW and the number of CD34+ cells needed is 1.7×10^5 cells/KgBW¹⁶. The success rate of transplantation decreased significantly when recipients received hematopoietic stem cells with the number of TNC and CD34+ cells that were lower than that standard¹⁶⁻¹⁸. Currently, it is recommended for UCB to have more than 2×10^7 cells/KgBW of nucleated cells (NC) for stem cell transplantation before it is cryopreserved¹⁹. The quantity of CD34+ cells and NC reflects the hematopoietic potential from CB¹⁷.

The success rate of UCB derived stem cell transplantation will be higher if the number of TNC and CD34+ is high. Therefore, it is important to do studies to determine factors that can influence the quantity of UCB, which include the number of TNC and CD34+, so that they can be optimized. This study was aimed to determine factors, both fetal and maternal, that may influence the quantity of UCB. Maternal factors investigated were maternal age, body weight changes during pregnancy, which represent maternal nutritional status, and hemoglobin (Hb) level before delivery. Meanwhile, fetal factors investigated were UCB volume, birth length, birth weight, and umbilical cord length. It is hoped that those factors that were correlated with the quantity and quality of UCB can be controlled and optimized. Hence, the success rate of stem cell transplantation can be increased.