

Association between Serum Alp Levels and Pre-Operative LDH towards Clinical Prognosis of Osteosarcoma Patients in H. Adam Malik Hospital, Medan

Gerhard Christoffel Tampubolon^{1}, Otman Siregar², Andriandi²*

¹Resident of Surgery Department Universitas Sumatera Utara, Medan

²Consultant of Orthopaedic Surgery Department, Universitas Sumatera Utara, Medan

Abstract: Background: The prognosis of osteosarcoma is very unsatisfactory due to frequent tumor metastases to the lung or resistance to chemotherapy. A marker is needed to identify the prognosis of patients with osteosarcoma when diagnosed with the aim of being able to receive cancer treatment as soon as possible to improve a better prognosis. Alkaline phosphatase (ALP) and Lactate dehydrogenase (LDH) have potential in assessing the prognosis in osteosarcoma. Purpose and Objectives: The researcher wanted to investigate the relationship between preoperative serum ALP and LDH levels on the clinical prognosis of osteosarcoma patients.

Keyword: ALP, LDH, Prognosis, Osteosarcoma

Received date month year. | Revised date month year | Accepted date month year

1 Introduction

These instructions give you guidelines for preparing papers for Journal which is published by Talenta Publisher, Universitas Sumatera Utara. Use this document as a template if you are using Microsoft Word 6.0 or later. Otherwise, use this document as an instruction set. Instructions about final paper and figure submissions in this document are for Journal which is published by Talenta Publisher, Universitas Sumatera Utara. Please use this document as a “template” to prepare your manuscript.

The manuscript as the section body is written with Times New Roman font size 11 pt with 1.5 (one and half) line spacing between lines, 12 pt spacing among paragraphs, 24 pt spacing for the next heading, and on A4 paper (210 mm x 297 mm) with the upper margin of 1.75 cm, lower margin 1.55 cm, left and right 3 and 3 cm.

*Corresponding author at: Universitas Sumatera Utara, Medan

E-mail address: gerhardchristoffel@gmail.com

The manuscript including the graphic contents and tables should be between 4 to 10 pages. The manuscript is written in English. The Standard English grammar must be observed. The title of the article should be brief and informative and it should not exceed 12 words. The keywords are written after the abstract.

The section title use 12 pt, bold, Times, title case with 6 pt spacing to the body text. The first letter of section title is capitalized and headings are numbered in Arabic numerals. The organization of the manuscript includes Introduction, Methods, Results and Analysis, Conclusion and References. Acknowledgement (if any) is written after Conclusion and before References and not numbered. The use of subheadings is discouraged.

The use of abbreviation is permitted, but the abbreviation must be written in full and complete when it is mentioned for the first time and it should be written between parentheses. Terms/foreign words or regional words should be written in italics. Notations should be brief and clear and written according to the standardized writing style. Symbols/signs should be clear and distinguishable, such as the use of number 1 and letter l (also number 0 and letter O).

To set the style in whole manuscript, simply use this template and follow the instructions. We provide a number of predefined template styles, which can be accessed quickly and conveniently using the style menu in toolbar (see Figure 1). In order to format a paragraph, authors (writer) can click on the appropriate style name in the style toolbar.



Figure 1. Style Menu in Toolbar

2 Predefined Template Styles

The paragraph styles defined in the manuscript template can be seen in Table 1.

Table 1. Predefined Template Styles

Style	Example and Use
TP-Title	Style for the paper title
TP-Author	Style for the list of author names
TP-Affiliation	Style for the list of author's affiliation names. Meanwhile the affiliation address is described on the footer of 1 st page.
TP-AbstractKeyword-Head	Style for head of abstract or keyword in English.
TP-Abstract-Text	Style for abstract body in English

TP-Keywords-Eng	Style for lists of keyword in English
TP-AbsKey-Head-Indonesia	Style for head of abstract or keyword in Indonesian Language.
TP-Abs-Text-Indonesia	Style for abstract body in Indonesian Language.
TP-Keywords-Indonesia	Style for lists of keyword in Indonesian Language.
TP-Section	Style for head of section (1 st section) For Example: 1. Introduction
TP-Subsection	Style for head of subsection (2 nd section) For Example: 1.1. Problem Identification
TP-Subsubsection	Style for head of subsubsection (3 rd section) For Example: <i>A. Object</i>
TP-Sub Subsubsection	Style for head 4 th section (no number).
TP-body text	Style for body of section/subsection
TP-Table	Style for table caption. For Example: Table 1. The Experiment Result
TP-Figure	Style for figure caption. For Example: Figure 1. The Proposed Architecture
TP-acknowledgement	Style for head of acknowledgement.
TP-reference-head	Style for head of reference.

3 Formatting table, graphic content, Equation and reference.

Please read these instructions carefully, so all articles organized by JoCAI have the same style.

3.1 Table

Tables are written with Times New Roman font size 11. The title of the table is written with font size 11 above the table without blank space (we can use **TP-Table** as the style). The table is numbered in Arabic numerals. There is one single space line between the table and the paragraph. The table is placed immediately after it is referred to in the text. The frame of the table uses 1 font-size line. If the title in each table column is long and complex, the columns are numbered and the notes are given below the table.

Table 1 Experiment Result

No	Data	Accuracy (%)
1	0011-A	60
2	0011-B	63
3	0011-C	70
4	0011-D	55
5	0011-E	84

3.2 Graphic Content

Graphic contents are placed symmetrically on the page and there is one blank single space line between the graphic content and the paragraphs. A graphic content is placed immediately after it is referred to in the body of the text and is numbered in Arabic numerals. Caption for the graphic content is written below it and there is one blank single space line between it and the graphic content. The caption is written in font size 11, and placed as in the example. Between the graphic content with the body of the text there are one blank single space lines. If the graphic content will be referred in the paragraph in brackets, please use no capital word, for example Figure 2.

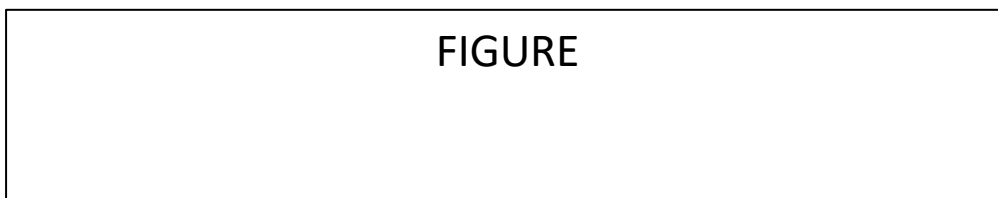


Figure 1 Type *Figure* in the style box. The caption should be typed in lower case. Choose *center* if the caption fit on one line.

3.3 Equation

The reaction or mathematical equation should be positioned symmetrically on the column, marked by sequential numbers written on the right corner within brackets. If the writing of equation takes more than one line, numbers should be written on the last line. Letters used as mathematical symbols in the text should be written in italics such as x . Equations in the text should be referred to as abbreviations, for example equation (1). Make sure the equation is made with equation function (in M.S. Word) or using LaTeX equation form (definitely we do not accept equation put as a picture).

$$f(x_d) = \sum_{i=1}^{N,S} \alpha_i y_i x_i x_d + b \quad (1)$$

3.4 References

References should be written following the order they appear in the text, using Arabic numbers in square brackets. The template will number citations consecutively within brackets [1]. The sentence punctuation follows the bracket [2]. Refer simply to the reference number, as in [3]—do not use “Ref. [3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] was the first ...”. This journal uses IEEE citation format.

Example:

"Aulia, et al. in [1] have developed a system, which is able to generate sentences based on the health surveillance data into an Indonesian Language Report"

“Natural Language Generation (NLG) is the natural language processing task of generating natural language from a machine representation system such as a knowledge base or a logical form. Psycholinguists prefer the term language production when such formal representations are interpreted as models for mental representations [1]-[6]”.

References should consist of initial and writers' names, names of journals or title of books, volumes, editors (if any), publishers and their cities, years of publication, and pages. All writer's names have to be mentioned. Use the abbreviation "Anon" if writers are anonymous. Names of journals should be written using the commonly-used abbreviations.

Number footnotes separately in superscripts. Place the actual footnote at the bottom of the column in which it was cited. Do not put footnotes in the abstract or reference list. Use letters for table footnotes.

We can use **TP-reference-head** as the style of reference title, namely:

REFERENCES

The example of references using the IEEE style can be seen as follows:

A. Internet Document

[#] A. Author, "Document title," <i>Webpage name</i> , Source/production information, Date of internet publication. [Format]. Available: internet address. [Accessed: Date of access].
--

Electronic document

- [1] European Telecommunications Standards Institute, "Digital Video Broadcasting (DVB): Implementation guidelines for DVB terrestrial services; transmission aspects," *European Telecommunications Standards Institute*, ETSI TR-101-190, 1997. [Online]. Available: <http://www.etsi.org>. [Accessed: Aug. 17, 1998].

Electronic document: no author

- [2] "A 'layman's' explanation of Ultra Narrow Band technology," Oct. 3, 2003. [Online]. Available: <http://www.vmsk.org/Layman.pdf>. [Accessed: Dec. 3, 2003].

Government publication: Australian Bureau of Statistics document

- [3] Australian Bureau of Statistics, *Engineering Construction Activity* (cat. no. 8762.0). Canberra: ABS, 2010. [Online]. Available from AusStats, <http://www.abs.gov.au/ausstats>. [Accessed: Sept. 7, 2010].

Government publication: Government department

- [4] Australia. Department of Education, Employment and Workplace Relations, *Survey on Changes in Awareness and Understanding of Science, Engineering and Technology: Report on findings*. Canberra: The Department; 2008.

[Online]. Available: <http://www.dest.gov.au/NR/rdonlyres/241263CF-8585-4EEC-B104-C947C6C18029/23713/SurveyonChangesinawarenessunderstandingofSET.pdf>. [Accessed: Sept. 7, 2010].

Personal Internet site

- [5] G. Sussman, "Home page - Dr. Gerald Sussman," July 2002. [Online]. Available: <http://www.comm.pdx.edu/faculty/Sussman/sussmanpage.htm>. [Accessed: Sept. 12, 2004].

General Internet site

- [6] J. Gerald, "Sega Ends Production of Dreamcast," *vnunet.com*, para. 2, Jan. 31, 2001. [Online]. Available: <http://nl1.vnunet.com/news/1116995>. [Accessed: Sept. 12, 2004].

Blog entry

- [7] J. A. Specavek, "Fracking and the Stresses it Adds to Railroads," *It's the Rheo Thing*, May 18, 2015. [Online]. Available: <http://www.rheothing.com/2015/05/fracking-and-stress-adds-to-railroads.html>. [Accessed: Jun. 9, 2015].

B. Journal Article

[#] A. A. Author of article. "Title of article," <i>Title of Journal</i> , vol. #, no. #, pp. page number/s, Month year.
--

- [8] I. Thompson, "Women and feminism in technical communication," *Journal of Business and Technical Communication*, vol. 13, no. 2, pp.154–178. 1999.
- [9] G. Smith, "Paper Title" (to be published).

C. Electronic Publication, Information from the internet

- [10] L. Weiss, Instruction to Authors, Elsevier Publishing, <http://www.elsevier.com/authors.html>, 1999, retrieved May 13, 2010.

D. Electronic books

[#] A. Author, <i>Title of E-book</i> . Place: Publisher, Date of original publication. [Format] Available: Source.

- [11] L. Bass, P. Clements, and R. Kazman, *Software Architecture in Practice*, 2nd ed. Reading, MA: Addison Wesley, 2003. [Online] Available: Safari e-book.
- [12] T. Eckes, *The Developmental Social Psychology of Gender*. Mahwah NJ: Lawrence Erlbaum, 2000. [Online] Available: netLibrary e-book.

E. Chapter from an electronic book

- [13] D. Kawecki, "Fuel preparation," in *Combustion Engineering Issues for Solid Fuel Systems*, B.G. Miller and D.A. Tillman, Eds. Boston, MA: Academic Press, 2008, 199-240. [Online] Available: ScienceDirect.

F. Article from an electronic reference book

- [14] D. Ince, "Acoustic coupler," in *A Dictionary of the Internet*. Oxford: Oxford University Press, 2001. [Online]. Available: Oxford Reference Online.
- [15] W. D. Nance, "Management information system," in *The Blackwell Encyclopedic Dictionary of Management Information Systems*, G.B. Davis, Ed. Malden MA: Blackwell, 1999, pp. 138-144. [Online]. Available: NetLibrary e-book.

G. Article from an electronic encyclopaedia

- [16] G. S. Thompson and M. P. Harmer, "Nanoscale ceramic composites," in *Encyclopedia of Materials: Science and Technology*, K. H. J. Buschow, R. W. Cahn, M. C. Flemings, B. Ilshner, E.J. Kramer, S. Mahajan, and P. Veyssi re, Eds. Amsterdam: Elsevier, 2001, pp. 5927-5930. [Online]. Available: ScienceDirect.

H. Article from an electronic dictionary: No author

- [17] "Zenith telescope," in *A Dictionary of Astronomy*, 2nd ed. Oxford (UK): Oxford University Press; 2007. [Online]. Available from: Oxford Reference Online.

I. Conference Paper in Print Proceedings

[#] A. Author of Paper and B. Author of Paper, "Title of paper," in *Title of Published Proceedings: Proceedings of the Title of Conf.: Subtitle of conference, Month Date, Year, Location*, A. Editor and B. Editor, Eds. Place of publication: Publisher, Year. pp. inclusive page numbers.

- [18] L. Liu and H. Miao, "A specification based approach to testing polymorphic attributes," in *Formal Methods and Software Engineering: Proc. of the 6th Int. Conf. on Formal Engineering Methods, ICFEM 2004, Seattle, WA, USA, November 8-12, 2004*, J. Davies, W. Schulte, M. Barnett, Eds. Berlin: Springer, 2004. pp. 306-19.
- [19] S. Christensen and F. Oppacher, "An analysis of Koza's computational effort statistic for genetic programming," in *Genetic programming: EuroGP 2002: Proc. of the 5th Euro. Conf. on Genetic Programming, April 3-5, 2002, Kinsdale, Ireland*, J. A. Foster, E. Lutton, J. Miller, C. Ryan, A. G. Tettamanzi, Eds. Berlin: Springer, 2002. pp. 182-91.

J. Conference Paper from the Internet

[#] A. Author of Paper and B. Author of Paper, "Title of paper," in *Proceedings of the Title of Conf.: Subtitle of conference, Month Date, Year, Location* [Format]. Place of publication: Publisher, Year. Available: Database Name (if appropriate), internet address. [Accessed: date of access].

- [20] J. Lach, "SBFS: Steganography based file system," in *Proc. of the 2008 1st Int. Conf. on Information Technology, IT 2008, 19-21 May 2008, Gdansk, Poland* [Online]. Available: IEEE Xplore, <http://www.ieee.org>. [Accessed: 10 Sept. 2010].

K. Unpublished Conference Paper

- [21] H. A. Nimr, "Defuzzification of the outputs of fuzzy controllers," presented at 5th Int. Conf. on Fuzzy Systems, 1996, Cairo, Egypt. 1996.

L. Conference Proceedings

[#] A. Editor and B. Editor, Eds., *Title of Conf.: Subtitle of conference, Month Date, Year, Location (optional)*. Place of publication: Name of Publisher, Year.

- [22] T. J. van Weert and R. K. Munro, Eds., *Informatics and the Digital Society: Social, ethical and cognitive issues: IFIP TC3/WG3.1&3.2 Open Conf. on Social, Ethical and Cognitive Issues of Informatics and ICT, July 22-26, 2002, Dortmund, Germany*. Boston: Kluwer Academic, 2003.
- [23] C.H. Perry, F. Lu, F. Namavar, N.M. Kalkhoran, & R.A. Soref, "Paper Title" *In Proceeding of ICACIS 2011*, pp. 456-541, 2010.

M. Monograph, edited book, book

- [24] M.J. Carr, C.E. Lyman, & J.M. Cowley, In: J.M. Cowley (Ed.), *Electron Diffraction Technique*, vol. 1, International Union of Crystallography/Oxford University Press, New York, p.122, 1999.
- [25] M.J. Adams, B.J. Briscoe, & S.K. Sinha, In: D. Dowson, C.M. Taylor, T.H.C. Childs, M. Godet, G. Dalmas (Eds.), *Dissipative Processes in Tribology*, Tribology Series, vol. 27, Elsevier, Amsterdam, p.223, 1994.
- [26] D. Palik (Ed.), *Handbook of Optical Constants of Solids II*, 3rd ed., Academic Press, New York, p.151, 1991.

N. Theses, Dissertation

Thesis in print: Unpublished

- [27] H. Zhang, "Delay-insensitive networks," M.S. thesis, Univ. of Waterloo, Waterloo, ON, Canada, 1997.
- [28] M. W. Dixon, "Application of neural networks to solve the routing problem in communication networks," Ph.D. dissertation, Murdoch Univ., Murdoch, WA, Australia, 1999

Thesis in print: Published

- [29] M. Lehmann, *Data Access in Workflow Management Systems*. Berlin: Aka, 2006.

Thesis from a full text database

- [30] F. Sudweeks, *Development and Leadership in Computer-Mediated Collaborative Groups*. PhD [Dissertation]. Murdoch, WA: Murdoch Univ., 2007. [Online]. Available: Australasian Digital Theses Program.

O. Patent

- [31] H. Yamagishi, A. Hiroe, H. Nishio, K. Miki, K. Tsuge, & Y. Tawada, U.S. Patent No. 5264710, 23 Nov. 1993.

P. Papers and Industrial Reports

- [32] J. Cleveland, Spring Constant Update, Digital Instruments, Santa Barbara, 1996 [if a website address available, it could be included in italic].
- [33] R.D. Nicholson, International Structures In Nickelbased Transition Joints After Long Term Service, Report RD/M/N1131, Central Electricity Generating Board, Marchwood, 1980.

Q. Special data (if written by a team or anonymously)

- [34] Joint Committee on Powder Diffraction Standards, Powder Diffraction File, ASTM, Philadelphia, Card 4301027, 1967.
- [35] Anon, 19-th Annual Book of ASTM Standards Part 17, ASTM, Philadelphia, p.636, 1969.

R. Unpublished reports (referred only if necessary)

- [36] R. Stumpf, X. Gonze, & M. Scheffler, Fritz-Haber Institute Research Report, 1990, unpublished.
- [37] D.H. Smith, Physics Department, Chicago University, Chicago, U.S.A., private communication, 1986.